[CEREALS 1](#_Toc135894837)

[01003 Foxtail millet, glutinous cake 1](#_Toc135894838)

[01008 Barley, dried noodles, raw 1](#_Toc135894839)

[01015 Common wheat, soft flour, first grade 1](#_Toc135894840)

[01016 Common wheat, soft flour, second grade 1](#_Toc135894841)

[01018 Common wheat, medium-strength flour, first grade 1](#_Toc135894842)

[01019 Common wheat, medium-strength flour, Second grade 1](#_Toc135894843)

[01020 Common wheat, hard flour, first grade 1](#_Toc135894844)

[01021 Common wheat, hard flour, second grade 1](#_Toc135894845)

[01023 Common wheat, hard flour, whole grain 2](#_Toc135894846)

[01024 Common wheat, premixed flour for pancake 2](#_Toc135894847)

[01024 Common wheat, premixed flour for pancake 2](#_Toc135894848)

[01147 Common wheat, premixed flour for fried food 2](#_Toc135894849)

[01025 Common wheat, premixed flour for Tempura 3](#_Toc135894850)

[01026 Common wheat, bread, white 3](#_Toc135894851)

[01206 Common wheat, bread, lean type 3](#_Toc135894852)

[01207 Common wheat, bread, rich type 4](#_Toc135894853)

[01205 Common wheat, bread, white, round top 4](#_Toc135894854)

[01028 Common wheat, bread, white long roll 4](#_Toc135894855)

[01030 Common wheat, bread, hardtack 4](#_Toc135894856)

[01031 Common wheat, bread, French bread 5](#_Toc135894857)

[01032 Common wheat, bread, rye and wheat bread 5](#_Toc135894858)

[01208 Common wheat, bread, whole wheat bread 5](#_Toc135894859)

[01033 Common wheat, bread, raisin bread 5](#_Toc135894860)

[01034 Common wheat, bread, soft rolls 6](#_Toc135894861)

[01035 Common wheat, bread, croissants 6](#_Toc135894862)

[01209 Common wheat, bread, croissant regular type 6](#_Toc135894863)

[01210 Common wheat, bread, walnut bread 6](#_Toc135894864)

[01036 Common wheat, bread, English muffins 7](#_Toc135894865)

[01037 Common wheat, bread, naan 7](#_Toc135894866)

[01148 Common wheat, bread, bagel 7](#_Toc135894867)

[01038 Common wheat, "Udon" (thick wheat noodles), uncooked 7](#_Toc135894868)

[01041 Common wheat, "Udon" (thick wheat noodles), dried noodles, uncooked 8](#_Toc135894869)

[01043 Common wheat, "Somen and Hiyamugi" (thin wheat noodles), dried noodles, uncooked 8](#_Toc135894870)

[01045 Common wheat, "Somen and Hiyamugi" (thin wheat noodles), dried noodles, produced manually, raw 8](#_Toc135894871)

[01047 Common wheat, yellow alkaline noodles, uncooked 9](#_Toc135894872)

[01049 Common wheat, yellow alkaline noodles, steamed noodles 9](#_Toc135894873)

[01050 Common wheat, yellow alkaline noodles, dried noodles, uncooked 9](#_Toc135894874)

[01052 Common wheat, Okinawa noodles, uncooked 9](#_Toc135894875)

[01054 Common wheat, Okinawa noodles, dried noodles, uncooked 10](#_Toc135894876)

[01056 Common wheat, instant Chinese noodles, dried by frying, seasoned 10](#_Toc135894877)

[01057 Common wheat, instant Chinese noodles, dried by frying, not seasoned 11](#_Toc135894878)

[01058 Common wheat, instant Chinese noodles, dried without frying 11](#_Toc135894879)

[01059 Common wheat, instant Chinese noodles, dried by frying and packed in cups 11](#_Toc135894880)

[01060 Common wheat, "Yakisoba", instant Chinese oil-fried noodles, dried by frying and in cups 12](#_Toc135894881)

[01061 Common wheat, instant, Chinese noodles, dried by without frying and packed in cups 12](#_Toc135894882)

[01062 Common wheat, instant, "Udon" noodles, Japanese thick wheat noodles, dried by frying and packed in cups 13](#_Toc135894883)

[01063 Durum wheat, macaroni and spaghetti, dry pasta, uncooked 13](#_Toc135894884)

[01149 Durum wheat, macaroni and spaghetti, wet pasta, uncooked 13](#_Toc135894885)

[01065 Common wheat, "Fu" (wheat gluten cake), "Namafu" (steamed dough made from gluten and glutinous rice flour) 13](#_Toc135894886)

[01066 Common wheat, "Fu" (wheat gluten cake), "Kamayakifu" (dried by baking in oven) 14](#_Toc135894887)

[01067 Common wheat, "Fu" (wheat gluten cake), "Itafu" (dried gluten sheet by baking) 14](#_Toc135894888)

[01068 Common wheat, "Fu" (wheat gluten cake), "Kurumafu" (dried gluten cake by baking ring-shaped) 14](#_Toc135894889)

[01074 Common wheat, Outer steamed wheat dough of "Jiaozi", Chibese meat dumpling 15](#_Toc135894890)

[01075 Common wheat, Outer steamed wheat dough of "Shumai (Chinese steamed dumpling)", Chinese meat dumpling 15](#_Toc135894891)

[01076 Common wheat, pizza crust 15](#_Toc135894892)

[01069 Common wheat, "Chikuwabu" (tube-shaped steamed wheat dough) 15](#_Toc135894893)

[01077 Common wheat, bread crumbs, fresh 16](#_Toc135894894)

[01078 Common wheat, bread crumbs, semi-dry 16](#_Toc135894895)

[01079 Common wheat, bread crumbs, dry 16](#_Toc135894896)

[01150 Common wheat, cold noodles, uncooked 16](#_Toc135894897)

[01110 Rice, non-glutinous rice products, quick-cooking rice, regular, raw 16](#_Toc135894898)

[01156 Rice, non-glutinous rice products, quick-cooking rice, fortified product for school lunch, raw 17](#_Toc135894899)

[01111 Rice, non-glutinous rice products, "Onigiri" (rice ball) 17](#_Toc135894900)

[01112 Rice, non-glutinous rice products, "Yaki-onigiri" (baked rice ball) 17](#_Toc135894901)

[01113 Rice, non-glutinous rice products, "Kiritanpo" (baked tube-shaped cooked rice) 17](#_Toc135894902)

[01159 Rice, non-glutinous rice products, rice bread 18](#_Toc135894903)

[01160 Rice, non-glutinous rice products, wet noodles, rice noodle, raw 18](#_Toc135894904)

[01115 Rice, non-glutinous rice products, dried noodles, raw 18](#_Toc135894905)

[01116 Rice, non-glutinous rice products, rice-koji 18](#_Toc135894906)

[01169 Rice, non-glutinous rice products, rice paper 18](#_Toc135894907)

[01117 Rice, glutinous rice products, rice cake 19](#_Toc135894908)

[01118 Rice, glutinous rice products, "Sekihan" (steamed rice with adzuki beans or cowpeas) 19](#_Toc135894909)

[01119 Rice, glutinous rice products, "Akumaki" (lye-soaked and cooked rice in bamboo leaf wrapping) 19](#_Toc135894910)

[01127 Buckwheat, wet noodles, uncooked 19](#_Toc135894911)

[01129 Buckwheat, dried noodles, uncooked 19](#_Toc135894912)

[01135 Corn, cultivar: Cuzco, oil-roasted and salted 19](#_Toc135894913)

[01136 Corn, popcorn, oil-popped and salted 20](#_Toc135894914)

[01137 Corn, cornflakes 20](#_Toc135894915)

[Potatoes and starches 20](#_Toc135894916)

[02002 Konjac, fine powder 21](#_Toc135894917)

[02003 Konjac, block, made from fine powder 21](#_Toc135894918)

[02004 Konjac, block, made from corm 21](#_Toc135894919)

[02042 Konjac, block, red 21](#_Toc135894920)

[02043 Konjac, freeze-dried, raw 21](#_Toc135894921)

[02005 Konjac, noodles 22](#_Toc135894922)

[02009 Sweet potato, Mushikiriboshi (sliced and dried after steaming) 22](#_Toc135894923)

[02020 Potatoes, fried potato 22](#_Toc135894924)

[02021 Potatoes, dehydrated mashed potato 22](#_Toc135894925)

[02039 Starch products, "Harusame" (thin starch noodles), made from mung bean starch, dried, uncooked 22](#_Toc135894926)

[02040 Starch products, "Harusame" (thin starch noodles), made from potato and sweet potato starches, dried, uncooked 23](#_Toc135894927)

[PULSES 23](#_Toc135894928)

[04003 Adzuki beans, mature seeds, whole, boiled, canned in syrup 23](#_Toc135894929)

[04004 Adzuki beans, mature seeds, "An" (bean paste), "Koshi-an"(strained bean paste) 23](#_Toc135894930)

[04005 Adzuki beans, mature seeds, "An" (bean paste), "Sarashi-an" (powder of strained bean paste) 23](#_Toc135894931)

[04101 Adzuki beans, mature seeds, “An” (bean paste), “Koshineri-an” (“Nami-an”) 24](#_Toc135894932)

[04102 Adzuki beans, mature seeds, “An” (bean paste), “Koshineri-an” (“Chu-wari-an”) 24](#_Toc135894933)

[04103 Adzuki beans, mature seeds, “An” (bean paste), “Koshineri-an”(“Monaka-an”) 24](#_Toc135894934)

[04006 Adzuki beans, mature seeds, “An” (bean paste), “Tsubushi-an” (mushed sweet bean paste) 24](#_Toc135894935)

[04009 Kidney beans, mature seeds, “Uzura-mame” (beans cooked with sugar and salt) 24](#_Toc135894936)

[04010 Kidney beans, mature seeds, “Koshi-an” (strained sweet bean paste) 25](#_Toc135894937)

[04011 Kidney beans, mature seeds, “Mame-kinton” (sweetened whole beans with bean paste) 25](#_Toc135894938)

[04014 Peas, mature seeds, oil-roasted and salted 25](#_Toc135894939)

[04015 Peas, mature seeds, “Shio-mame” (peas roasted and coated with calcium carbonate and salt) 26](#_Toc135894940)

[04016 Peas, mature seeds, “Uguisu-mame” (green peas cooked with sugar and salt) 26](#_Toc135894941)

[04020 Broad beans, mature seeds, oil-roasted and salted 26](#_Toc135894942)

[04021 Broad beans, mature seeds, “Otafuku-mame” (beans cooked with sugar and salt or soy sauce) 27](#_Toc135894943)

[04022 Broad beans, mature seeds, “Fuki-mame” (hulled beans cooked with sugar and salt) 27](#_Toc135894944)

[04076 Broad beans, mature seeds, “Shoyu-mame” (roasted beans soaked in sugar and soy sauce) 27](#_Toc135894945)

[04078 Soybeans, mature seeds, whole, yellow seed coats, roasted 28](#_Toc135894946)

[04079 Soybeans, mature seeds, whole, black seed coats, roasted 28](#_Toc135894947)

[04028 Soybeans, mature seeds, whole, yellow seed coats, boiled, canned in water, drained 28](#_Toc135894948)

[04081 Soybeans, mature seeds, whole, yellow seed coats, steamed, retort packed 28](#_Toc135894949)

[04029 Soybeans, “Kinako” (roasted and ground beans), made from whole beans with yellow seed coats 28](#_Toc135894950)

[04030 Soybeans, “Kinako” (roasted and ground beans), made from hulled beans with yellow seed coats 29](#_Toc135894951)

[04031 Soybeans, “Budo-mame” (beans cooked with sugar and salt) 29](#_Toc135894952)

[04032 Soybeans, tofu, “Momen-tofu” (regular tofu) 29](#_Toc135894953)

[04097 Soybeans, tofu, “Momen-tofu” (regular tofu), (Coagulant: magnesium chloride) 29](#_Toc135894954)

[04098 Soybeans, tofu, “Momen-tofu” (regular tofu), (Coagulant: calcium sulfate) 29](#_Toc135894955)

[04033 Soybeans, tofu, “Kinugoshi-tofu” (silken tofu) 30](#_Toc135894956)

[04099 Soybeans, tofu, “Kinugoshi-tofu” (silken tofu), (Coagulant: magnesium chloride) 30](#_Toc135894957)

[04100 Soybeans, tofu, “Kinugoshi-tofu” (silken tofu), (Coagulant: calcium sulfate) 30](#_Toc135894958)

[04034 Soybeans, tofu, soft tofu 30](#_Toc135894959)

[04035 Soybeans, tofu, “Juten-tofu” (packaged tofu) 30](#_Toc135894960)

[04036 Soybeans, tofu, “Okinawa-tofu” (firm tofu made in Okinawa prefecture) 31](#_Toc135894961)

[04037 Soybeans, tofu, “Yushi-dofu” (unmoulded tofu) 31](#_Toc135894962)

[04038 Soybeans, tofu, “Yaki-tofu” (grilled tofu) 31](#_Toc135894963)

[04039 Soybeans, tofu, “Nama-age” (fried slices of drained tofu) 31](#_Toc135894964)

[04040 Soybeans, tofu, “Abura-age” (fried thin slices of pressed tofu), uncooked 32](#_Toc135894965)

[04041 Soybeans, tofu, “Ganmodoki” (fried mixture of crushed tofu, vegetables and ground yam) 32](#_Toc135894966)

[04042 Soybeans, tofu, “Kori-dofu” (freeze dried tofu), uncooked 32](#_Toc135894967)

[04043 Soybeans, tofu, “Tofu-yo” (fermented tofu) 32](#_Toc135894968)

[04044 Soybeans, tofu, “Tofu-chikuwa” (tubular tofu made with surimi), steamed type 33](#_Toc135894969)

[04045 Soybeans, tofu, “Tofu-chikuwa” (tubular tofu made with surimi), baked type 33](#_Toc135894970)

[04088 Soybeans, tofu, “Rokujo-tofu” (salted and sun-dried tofu) 33](#_Toc135894971)

[04046 Soybeans, natto, “Itohiki-natto” (fermented whole soybeans) 34](#_Toc135894972)

[04047 Soybeans, natto, “Hikiwari-natto” (fermented dehulled and split soybeans) 34](#_Toc135894973)

[04048 Soybeans, natto, “Goto-natto” (natto fermented with rice-koji and salt) 34](#_Toc135894974)

[04049 Soybeans, natto, “Tera-natto” (koji-molded, salted, steamed soybeans) 34](#_Toc135894975)

[04051 Soybeans, “Okara” (insoluble residue from soy milk processing), fresh 34](#_Toc135894976)

[04052 Soybeans, soy milk, regular 35](#_Toc135894977)

[04053 Soybeans, soy milk, reconstituted 35](#_Toc135894978)

[04054 Soybeans, soy milk based beverage, coffee flavored 35](#_Toc135894979)

[04059 Soybeans, “Yuba” (film formed on surface of warmed soy milk), fresh 36](#_Toc135894980)

[04060 Soybeans, “Yuba” (film formed on surface of warmed soy milk), dried, uncooked 36](#_Toc135894981)

[04061 Soybeans, “Kinzanji-miso” (fermented roasted soybeans, barley or wheat, vegetable and salt with koji mold) 36](#_Toc135894982)

[04062 Soybeans, “Hishio-miso” (fermented soybeans, barley or wheat, and vegetable with koji mold) 36](#_Toc135894983)

[04063 Soybeans, Tempeh (fermented soybeans with Rhizopus oligospore) 37](#_Toc135894984)

[04067 Chickpeas\*, mature seeds, whole, oil-roasted and salted [\*Syn. Garbanzo beans] 37](#_Toc135894985)

[NUTS AND SEEDS 37](#_Toc135894986)

[05002 Almonds, oil-roasted and salted 37](#_Toc135894987)

[05012 Chestnuts, Japanese chestnuts, Kanroni (boiled and sweetened), drained 38](#_Toc135894988)

[05036 Peanuts, mature seeds, oil-roasted and salted 38](#_Toc135894989)

[05037 Peanuts, peanut butter 38](#_Toc135894990)

[VEGETABLES 39](#_Toc135894991)

[06029 Non-heading Chinese cabbage, “Osaka-shirona”, leaves, salted pickles 39](#_Toc135894992)

[06040 Turnip, pickles, salted pickles, leaves 39](#_Toc135894993)

[06041 Turnip, pickles, salted pickles, root with skin 39](#_Toc135894994)

[06042 Turnip, pickles, salted pickles, root without skin 40](#_Toc135894995)

[06043 Turnip, pickles, “Nukamiso-zuke” (pickled in salty rice bran paste), leaves 40](#_Toc135894996)

[06044 Turnip, pickles, “Nukamiso-zuke” (pickled in salty rice bran paste), root with skin 40](#_Toc135894997)

[06045 Turnip, pickles, “Nukamiso-zuke” (pickled in salty rice bran paste), root without skin 40](#_Toc135894998)

[06066 Cucumber, fruit, pickles, salted pickles 41](#_Toc135894999)

[06067 Cucumber, fruit, pickles, pickled in soy sauce 41](#_Toc135895000)

[06068 Cucumber, fruit, pickles, “Nukamiso-zuke” (pickled in salty rice bran paste) 41](#_Toc135895001)

[06069 Cucumber, fruit, pickles, sweet type (pickled with seasoned vinegar) 41](#_Toc135895002)

[06070 Cucumber, fruit, pickles, sour type (processed by lactic acid fermentation) 42](#_Toc135895003)

[06091 Non-heading Chinese cabbage, “Santosai”, leaves, salted pickles 42](#_Toc135895004)

[06104 Ginger, mature rhizome, pickles 42](#_Toc135895005)

[06105 Ginger, mature rhizome, pickles, sweetened 42](#_Toc135895006)

[06107 Oriental pickling melon, fruits, pickles, salted pickles 43](#_Toc135895007)

[06108 Oriental pickling melon, fruits, pickles, “Nara-zuke” (pickled with Sake lees) 43](#_Toc135895008)

[06115 Turnip, “Sugukina”, leaves and root, pickles 43](#_Toc135895009)

[06137 Japanese radishes, Daikon, root, pickles, “Nukamiso-zuke” (pickled in salty rice bran paste) 43](#_Toc135895010)

[06138 Japanese radishes, Daikon, root, pickles, “Takuan-zuke” (pickled with rice bran and salt), made of salted Daikon 43](#_Toc135895011)

[06139 Japanese radishes, Daikon, root, pickles, “Takuan-zuke” (pickled with rice bran and salt), made of sun-dried Daikon 44](#_Toc135895012)

[06140 Japanese radishes, Daikon, root, pickles, “Moriguchi-zuke” (slender root cultivar pickled with Sake lees) 44](#_Toc135895013)

[06141 Japanese radishes, Daikon, root, pickles, “Bettara-zuke” (pickled with rice koji) 45](#_Toc135895014)

[06142 Japanese radishes, Daikon, root, pickles, “Miso-zuke” (pickled with miso) 45](#_Toc135895015)

[06143 Japanese radishes, Daikon, root, pickles, “Fukujin-zuke” (pickled with Daikon, eggplant, immature sword pods and east Indian lotus rhizome) 46](#_Toc135895016)

[06146 Chinese mustard, “Taisai”, leaves, salted pickles 47](#_Toc135895017)

[06184 Tomatoes, canned products, whole, without salt 47](#_Toc135895018)

[06185 Tomatoes, canned products, juice, with salt 47](#_Toc135895019)

[06341 Tomatoes, canned products, tomato-based vegetable juice, without salt 47](#_Toc135895020)

[06186 Tomatoes, canned products, tomato-based vegetable juice, with salt 48](#_Toc135895021)

[06342 Tomatoes, canned products, tomato-based vegetable juice, without salt 48](#_Toc135895022)

[06195 Eggplant\*, pickles, salted pickles [\*Syn. Aubergine] 48](#_Toc135895023)

[06196 Eggplant\*, pickles, “Nukamiso-zuke” (pickled with salty rice bran paste) [\*Syn. Aubergine] 48](#_Toc135895024)

[06197 Eggplant\*, pickles, “Koji-zuke” (pickled small oval type with rice koji) [\*Syn. Aubergine] 49](#_Toc135895025)

[06198 Eggplant\*, pickles, “Karashi-zuke” (pickled small oval type with mustard) [\*Syn. Aubergine] 49](#_Toc135895026)

[06199 Eggplant\*, pickles, “Shiba-zuke” (pickled with perilla leaf, cucumber and Myoga, etc.) [\*Syn. Aubergine] 49](#_Toc135895027)

[06217 Carrot, regular (European type), juice, canned 50](#_Toc135895028)

[06230 Turnip green, “Nozawana”, leaves, pickles, salted pickles 50](#_Toc135895029)

[06235 Heading Chinese cabbage, head, pickles, salted pickles 50](#_Toc135895030)

[06236 Heading Chinese cabbage, head, pickles, Kimchi 50](#_Toc135895031)

[06242 Chayote, fruit, salted pickles 50](#_Toc135895032)

[06253 Turnip, “Hinona”, root with tops, pickles, sweetened 50](#_Toc135895033)

[06273 Turnip green, “Mizukakena”, leaves, salted pickles 51](#_Toc135895034)

[06074 Leaf green, “Mizuna”, leaves, salted pickles 51](#_Toc135895035)

[06306 Japanese scallion, “Rakkyo”, mature bulb, pickles, sweetened 51](#_Toc135895036)

[06371 East Indian lotus root, rhizome, cooked with sweet and sour sauce 52](#_Toc135895037)

[FRUITS 52](#_Toc135895038)

[07004 Acerola, 10 % fruit juice beverage 52](#_Toc135895039)

[07008 Apricots, dried 53](#_Toc135895040)

[07009 Apricots, canned in heavy syrup 53](#_Toc135895041)

[07010 Apricots, jam, heavily sweetened 53](#_Toc135895042)

[07011 Apricots, jam, lightly sweetened 53](#_Toc135895043)

[07013 Strawberries, jam, heavily sweetened 53](#_Toc135895044)

[07014 Strawberries, jam, lightly sweetened 54](#_Toc135895045)

[07016 Figs, dried 54](#_Toc135895046)

[07017 Figs, canned in heavy syrup 54](#_Toc135895047)

[07020 Mume\*, salted pickles [\*Syn. Japanese apricots] 54](#_Toc135895048)

[07021 Mume\*, pickles, seasoned [\*Syn. Japanese apricots] 54](#_Toc135895049)

[07022 Mume\*, “Umeboshi” (pickled and dried mume), salted pickles [\*Syn. Japanese apricots] 54](#_Toc135895050)

[07023 Mume\*, “Umeboshi” (pickled and dried mume), seasoned pickles [\*Syn. Japanese apricots] 55](#_Toc135895051)

[07024 Mume\*, ”Umebishio” (sweetened puree of pickled mume) [\*Syn. Japanese apricots] 55](#_Toc135895052)

[07025 Mume\*, 20 % fruit juice beverage [\*Syn. Japanese apricots] 55](#_Toc135895053)

[07030 Satsuma mandarins, straight fruit juice 55](#_Toc135895054)

[07031 Satsuma mandarins, reconstituted fruit juice 56](#_Toc135895055)

[07032 Satsuma mandarins, juice with juice sacs 56](#_Toc135895056)

[07033 Satsuma mandarins, 50 % fruit juice beverage 56](#_Toc135895057)

[07034 Satsuma mandarins, 20 % fruit juice beverage 56](#_Toc135895058)

[07035 Satsuma mandarins, canned in light syrup, solids 57](#_Toc135895059)

[07042 Oranges, Valencia, straight fruit juice 57](#_Toc135895060)

[07043 Oranges, Valencia, reconstituted fruit juice 57](#_Toc135895061)

[07044 Oranges, Valencia, 50 % fruit juice beverage 57](#_Toc135895062)

[07045 Oranges, Valencia, 30 % fruit juice beverage 58](#_Toc135895063)

[07046 Oranges, Valencia, marmalade, heavily sweetened 58](#_Toc135895064)

[07047 Oranges, Valencia, marmalade, lightly sweetened 58](#_Toc135895065)

[07063 Grapefruit, straight fruit juice 58](#_Toc135895066)

[07064 Grapefruit, reconstituted fruit juice 58](#_Toc135895067)

[07065 Grapefruit, 50 % fruit juice beverage 59](#_Toc135895068)

[07066 Grapefruit, 20 % fruit juice beverage 59](#_Toc135895069)

[07067 Grapefruit, canned in light syrup 59](#_Toc135895070)

[07076 Citrus, "Shiikuwasha", 10 % fruit juice beverage 59](#_Toc135895071)

[07094 Citrus, "Natsudaidai", canned in heavy syrup 60](#_Toc135895072)

[07082 Plums, European plums, dried 60](#_Toc135895073)

[07092 Pears, European pears, canned in heavy syrup 60](#_Toc135895074)

[07098 Pineapple, straight fruit juice 60](#_Toc135895075)

[07099 Pineapple, reconstituted fruit juice 61](#_Toc135895076)

[07100 Pineapple, 50 % fruit juice beverage 61](#_Toc135895077)

[07101 Pineapple, 10 % fruit juice beverage 61](#_Toc135895078)

[07102 Pineapple, canned in heavy syrup 61](#_Toc135895079)

[07103 Pineapple, candied 62](#_Toc135895080)

[07108 Bananas, dried 62](#_Toc135895081)

[07117 Grapes, raisins 62](#_Toc135895082)

[07118 Grapes, straight fruit juice 62](#_Toc135895083)

[07119 Grapes, reconstituted fruit juice 62](#_Toc135895084)

[07120 Grapes, 70 % fruit juice beverage 62](#_Toc135895085)

[07121 Grapes, 10 % fruit juice beverage 63](#_Toc135895086)

[07122 Grapes, canned in heavy syrup 63](#_Toc135895087)

[07123 Grapes, jam 63](#_Toc135895088)

[07125 Blueberries, jam 63](#_Toc135895089)

[07172 Blueberries, dried 64](#_Toc135895090)

[07179 Mangoes, green flesh type, dried 64](#_Toc135895091)

[07137 Peaches, 30 % fruit juice beverage (nectar) 64](#_Toc135895092)

[07149 Apples, straight fruit juice 64](#_Toc135895093)

[07150 Apples, reconstituted fruit juice 64](#_Toc135895094)

[07151 Apples, 50 % fruit juice beverage 64](#_Toc135895095)

[07152 Apples, 30 % fruit juice beverage 65](#_Toc135895096)

[07153 Apples, canned in heavy syrup 65](#_Toc135895097)

[07154 Apples, jam 65](#_Toc135895098)

[MUSHROOMS 66](#_Toc135895099)

[08003 Mushrooms, winter mushrooms\*, bottled in seasoning [\*Syn. Enokitake, Enoki] 66](#_Toc135895100)

[08022 Mushrooms, “Nameko”, canned in brine 66](#_Toc135895101)

[ALGAE 66](#_Toc135895102)

[09004 Algae, purple laver, dried, toasted 66](#_Toc135895103)

[09005 Algae, purple laver, dried, seasoned and toasted 66](#_Toc135895104)

[09009 Algae, “Ego-nori”, “Okyuto” (algae jelly) 67](#_Toc135895105)

[09020 Algae, kombu, “Kizami-kombu” (dried and cut into thin strips) 67](#_Toc135895106)

[09021 Algae, kombu, “Kezuri-kombu” (dried and thinly shaved) 67](#_Toc135895107)

[09022 Algae, kombu, “Shio-kombu” (seasoned and dried) 67](#_Toc135895108)

[09023 Algae, kombu, “Tsukudani” (simmered in soy sauce and sugar) 68](#_Toc135895109)

[09026 Algae, "Tengusa", "Tokoroten" (Gelidium jelly) 68](#_Toc135895110)

[09027 Algae, "Tengusa", agar-agar 68](#_Toc135895111)

[09028 Algae, "Tengusa", agar jelly 68](#_Toc135895112)

[09049 Algae, "Tengusa", agar-agar powder 69](#_Toc135895113)

[09033 Algae, “Hitoegusa”, “Tsukudani” (simmered in soy sauce and sugar) 69](#_Toc135895114)

[FISH, MOLLUSKS AND CRUSTACEANS 69](#_Toc135895115)

[10013 Fish, horse mackerel, brownstriped mackerel scad, “Hirakiboshi” (salted and semi-dried split) 69](#_Toc135895116)

[10014 Fish, horse mackerel, brownstriped mackerel scad, “Kusaya” (brine-soaked and dried scad) 69](#_Toc135895117)

[10034 Fish, Japanese sand lance, “Niboshi” (boiled and dried whole) 70](#_Toc135895118)

[10035 Fish, Japanese sand lance, “Tsukudani” (simmered whole in soy sauce and sugar) 70](#_Toc135895119)

[10036 Fish, Japanese sand lance, “Ameni” (simmered whole in glucose syrup and soy sauce) 70](#_Toc135895120)

[10043 Fish, sardine, Pacific round herring\*, “Maruboshi” (salted and dried whole), raw [\*Syn. red-eye round herring] 71](#_Toc135895121)

[10045 Fish, sardine, Japanese anchovy, “Niboshi” (boiled and dried whole) 71](#_Toc135895122)

[10046 Fish, sardine, Japanese anchovy, “Tazukuri” (dried young anchovy) 71](#_Toc135895123)

[10050 Fish, sardine, Japanese pilchard, “Shioiwashi” (salted pilchard), raw 71](#_Toc135895124)

[10051 Fish, sardine, Japanese pilchard, “Namaboshi” (mild salted and semi-dried whole), raw 71](#_Toc135895125)

[10052 Fish, sardine, Japanese pilchard, “Maruboshi” (salted and dried whole), raw 72](#_Toc135895126)

[10055 Fish, sardine, “Shirasuboshi” (boiled and dried whitebait), mild dried 72](#_Toc135895127)

[10056 Fish, sardine, “Shirasuboshi” (boiled and dried whitebait), semi-dried 72](#_Toc135895128)

[10057 Fish, sardine, “Tatamiiwashi” (sheet of dried whitebait) 72](#_Toc135895129)

[10058 Fish, sardine, Japanese anchovy, “Mirinboshi” (split seasoned with Mirin and dried) 72](#_Toc135895130)

[10059 Fish, sardine, Japanese pilchard, “Mirinboshi” (split seasoned with Mirin and dried) 73](#_Toc135895131)

[10060 Fish, sardine, Japanese pilchard, canned products, in brine 73](#_Toc135895132)

[10061 Fish, sardine, Japanese pilchard, canned products, with seasoning 74](#_Toc135895133)

[10062 Fish, sardine, Japanese pilchard, canned products, in tomato sauce 74](#_Toc135895134)

[10063 Fish, sardine, Japanese pilchard, canned products, in oil 74](#_Toc135895135)

[10064 Fish, sardine, Japanese pilchard, “Kabayaki” (baked and seasoned fillet), canned products, 74](#_Toc135895136)

[10397 Fish, sardine, anchovy, canned products, in oil 75](#_Toc135895137)

[10070 Fish, eel, “Kabayaki” (seasoned and baked fillet) 75](#_Toc135895138)

[10072 Fish, black scraper\*, “Ajitsuke-hirakiboshi” (seasoned and dried fillet) [\*Syn. filefish] 75](#_Toc135895139)

[10082 Fish, Japanese sculpin\*, “Tsukudani” (simmered whole fish in soy sauce and sugar) [\*Syn. Japanese fluvial sculpin] 76](#_Toc135895140)

[10089 Fish, skipjack tuna, processed products, “Namari” (boiled meat) 76](#_Toc135895141)

[10090 Fish, skipjack tuna, processed products, “Namari-bushi” (boiled and semi-dried fillet) 76](#_Toc135895142)

[10091 Fish, skipjack tuna, processed products, “Katsuo-bushi” (boiled, smoke-dried and fermented skipjack tuna fillet) 76](#_Toc135895143)

[10092 Fish, skipjack tuna and frigate mackerel, processed products, “Kezuri-bushi” (shaved “Katsuo-bushi”), uncooked (cf. 10091” Katsuo-bushi”) 76](#_Toc135895144)

[10093 Fish, skipjack tuna and frigate mackerel, processed products, “Kezuri-bushi” (shaved “Katsuo-bushi”), simmered in soy sauce and sugar (cf. 10091” Katsuo-bushi”) 77](#_Toc135895145)

[10094 Fish, skipjack tuna and frigate mackerel, processed products, “Kakuni” (meat cube boiled in soy sauce and sugar) 77](#_Toc135895146)

[10096 Fish, skipjack tuna and frigate mackerel, canned products, flaked meat with seasoning 77](#_Toc135895147)

[10097 Fish, skipjack tuna and frigate mackerel, canned products, flaked meat in oil 78](#_Toc135895148)

[10106 Fish, righteye flounder, dried 78](#_Toc135895149)

[10112 Fish, blue sprat, seasoned and dried 78](#_Toc135895150)

[10125 Fish, dotted gizzard shad\*, “Amazu-zuke” (marinated in vinegar and sugar) [\*Syn. gizzard shad] 79](#_Toc135895151)

[10128 Fish, salmon and trout, pink salmon, salted 79](#_Toc135895152)

[10129 Fish, salmon and trout, pink salmon, canned in brine 79](#_Toc135895153)

[10137 Fish, salmon and trout, chum salmon, “Aramaki” (salted whole body), raw 80](#_Toc135895154)

[10139 Fish, salmon and trout, chum salmon, “Shiozake” (salted salmon), raw 80](#_Toc135895155)

[10143 Fish, salmon and trout, chum salmon, canned in brine 80](#_Toc135895156)

[10151 Fish, salmon and trout, sockeye salmon, smoked 80](#_Toc135895157)

[10165 Fish, mackerel, canned products, boiled with miso 81](#_Toc135895158)

[10157 Fish, mackerel, chub mackerel\*, “Saba-bushi” (boiled, smoke-dried and fermented mackerel fillet) [\*Syn. mackerel] 81](#_Toc135895159)

[10161 Fish, mackerel, processed products, “Shiosaba” (plain salted fillet) 81](#_Toc135895160)

[10162 Fish, mackerel, processed products, “Hirakiboshi” (mild salted and semi-dried split) 81](#_Toc135895161)

[10163 Fish, mackerels, processed products, “Shimesaba” (vinegar marinated fillet) 82](#_Toc135895162)

[10164 Fish, mackerel, canned products, boiled in brine 82](#_Toc135895163)

[10166 Fish, mackerel, canned products, boiled with seasoning 82](#_Toc135895164)

[10175 Fish, Pacific saury, “Hirakiboshi” (mild salted and semi-dried split) 83](#_Toc135895165)

[10176 Fish, Pacific saury, “Mirinboshi” (seasoned with Mirin and dried fillet) 83](#_Toc135895166)

[10177 Fish, Pacific saury, canned products, boiled with seasoning 83](#_Toc135895167)

[10178 Fish, Pacific saury, canned products, “Kabayaki” (baked and seasoned fillet) 84](#_Toc135895168)

[10201 Fish, cod, walleye pollock\*, “Sukimidara” (skinned, salted and dried fillet)　[\*Syn. Alaska pollock] 84](#_Toc135895169)

[10204 Fish, cod, walleye pollock\*, “Karashi-mentaiko” (salted roe with red hot pepper powder) [\*Syn. Alaska pollock] 84](#_Toc135895170)

[10208 Fish, cod, Pacific cod, salted fillet 85](#_Toc135895171)

[10209 Fish, cod, Pacific cod, dried split 85](#_Toc135895172)

[10210 Fish, cod, Pacific cod, “Denbu” (mashed and seasoned meat) 85](#_Toc135895173)

[10219 Fish, Pacific herring, “Migaki-nishin” (dried fillet) 86](#_Toc135895174)

[10220 Fish, Pacific herring, “Hirakiboshi” (dried split) 86](#_Toc135895175)

[10221 Fish, Pacific herring, smoked 86](#_Toc135895176)

[10226 Fish, yellowfin goby, “Tsukudani” (boiled whole in soy sauce) 86](#_Toc135895177)

[10227 Fish, yellowfin goby, “Kanroni” (simmered whole in soy sauce and sugar) 87](#_Toc135895178)

[10260 Fish, tuna, canned products, flaked light meat in brine 87](#_Toc135895179)

[10261 Fish, tuna, canned products, flaked white meat in brine 87](#_Toc135895180)

[10262 Fish, tuna, canned products, flaked meat with seasoning 87](#_Toc135895181)

[10263 Fish, tuna, canned products, flaked light meat in oil 88](#_Toc135895182)

[10264 Fish, tuna, canned products, flaked white meat in oil 88](#_Toc135895183)

[10274 Fish, lamprey, dried 88](#_Toc135895184)

[10277 Fish, Japanese smelt\*, “Tsukudani” (simmered whole in soy sauce and sugar) [\*Syn. Pond smelt] 88](#_Toc135895185)

[10278 Fish, Japanese smelt\*, “Ameni” (simmered whole in glucose syrup and soy sauce) [\*Syn. Pond smelt] 89](#_Toc135895186)

[10282 Mollusks, short-necked clam\*, “Tsukudani” (simmered meat in soy sauce and sugar) [\*Syn. baby-neck clam, Manila clam, Japanese littleneck] 89](#_Toc135895187)

[10283 Mollusks, short-necked clam\*, canned products, boiled in brine [\*Syn. baby-neck clam, Manila clam, Japanese littleneck] 89](#_Toc135895188)

[10284 Mollusks, short-necked clam\*, canned products, boiled with seasoning [\*Syn. baby-neck clam, Manila clam, Japanese littleneck] 90](#_Toc135895189)

[10286 Mollusks, abalone, steamed and dried 90](#_Toc135895190)

[10288 Mollusks, abalone, canned in brine 90](#_Toc135895191)

[10294 Mollusks, Pacific oyster, canned in oil, smoked 90](#_Toc135895192)

[10309 Mollusks, hard clam, “Tsukudani” (simmered meat in soy sauce and sugar) 90](#_Toc135895193)

[10314 Mollusks, giant ezo-scallop\*, adductor muscle, “Niboshi” (boiled and dried) [\*Syn. common scallop, Japanese scallop] 91](#_Toc135895194)

[10315 Mollusks, giant ezo-scallop\*, adductor muscle, canned products, boiled in brine [\*Syn. common scallop, Japanese scallop] 91](#_Toc135895195)

[10325 Crustacean, Sakura shrimp, dried 91](#_Toc135895196)

[10326 Crustacean, Sakura shrimp, “Niboshi” (boiled and dried) 91](#_Toc135895197)

[10331 Crustacean, processed shrimp, “Tsukudani” (simmered whole in soy sauce and sugar) 92](#_Toc135895198)

[10337 Crustacean, snow crab\*, canned products, boiled in brine [\*Syn. tanner crab] 92](#_Toc135895199)

[10340 Crustacean, red king crab\*, canned products, boiled in brine [\*Syn. king crab] 92](#_Toc135895200)

[10350 Mollusks, firefly squid, seasoned and smoked 93](#_Toc135895201)

[10351 Mollusks, firefly squid, “Tsukudani” (simmered whole in soy sauce and sugar) 93](#_Toc135895202)

[10353 Mollusks, processed squid, “Surume” (dried squid) 93](#_Toc135895203)

[10354 Mollusks, processed squid, “Saki-ika” (dried, seasoned and shredded squid) 93](#_Toc135895204)

[10355 Mollusks, processed squid, seasoned and smoked 94](#_Toc135895205)

[10356 Mollusks, processed squid, “Kiriika-ameni” (dried shredded squid, simmered in glucose syrup and soy sauce) 94](#_Toc135895206)

[10357 Mollusks, processed squid, “Ika-arare” (dried squid flakes, simmered in glucose syrup and soy sauce) 94](#_Toc135895207)

[10359 Mollusks, processed squid, canned with seasoning 95](#_Toc135895208)

[10366 Sea urchin, “Tsubu-uni” (salted whole gonads) 95](#_Toc135895209)

[10367 Sea urchin, “Neri-uni” (salted whole gonad paste) 95](#_Toc135895210)

[10376 Surimi products, “Kanifumi-kamaboko” (imitation crab meat made from surimi) 96](#_Toc135895211)

[10377 Surimi products, “Kobumaki-kamaboko” (surimi rolled by kombu, steamed) 96](#_Toc135895212)

[10378 Surimi products, “Sumaki-kamaboko” (steamed kamaboko covered with straw) 97](#_Toc135895213)

[10379 Surimi products, “Mushi-kamaboko” (steamed kamaboko) 97](#_Toc135895214)

[10380 Surimi products, “Yakinuki-kamaboko” (baked kamaboko) 97](#_Toc135895215)

[10381 Surimi products, “Yaki-chikuwa” (baked tubular kamaboko) 98](#_Toc135895216)

[10382 Surimi products, “Datemaki” (sweet rolled omelet made of egg and surimi) 98](#_Toc135895217)

[10383 Surimi products, “Tsumire” (boiled red meat fish paste) 99](#_Toc135895218)

[10384 Surimi products, “Naruto” (boiled stick kamaboko with cross section of red swirl) 99](#_Toc135895219)

[10385 Surimi products, “Hanpen” (boiled fishcake made of surimi, yam paste and starch) 99](#_Toc135895220)

[10423 Surimi products, “Kuro-hanpen” (boiled fishcake made of surimi, yam paste and starch) 100](#_Toc135895221)

[10386 Surimi products, “Satsuma-age” (fried surimi) 100](#_Toc135895222)

[10387 Surimi products, fish ham 100](#_Toc135895223)

[10388 Surimi products, fish sausage 100](#_Toc135895224)

[MEAT 101](#_Toc135895225)

[11104 Beef products, roast beef 101](#_Toc135895226)

[11105 Beef products, corned beef, canned 101](#_Toc135895227)

[11106 Beef products, canned with seasoning 101](#_Toc135895228)

[11107 Beef products, beef jerky 102](#_Toc135895229)

[11108 Beef products, smoked tongue 102](#_Toc135895230)

[11174 Pork, ham, bone-in 102](#_Toc135895231)

[11175 Pork, ham, boneless 103](#_Toc135895232)

[11176 Pork, ham, loin 103](#_Toc135895233)

[11177 Pork, ham, shoulder 103](#_Toc135895234)

[11181 Pork, ham, uncooked ham, fresh 104](#_Toc135895235)

[11182 Pork, ham, uncooked ham, ripened 104](#_Toc135895236)

[11178 Pork, ham, pressed 104](#_Toc135895237)

[11180 Pork, ham, chopped 105](#_Toc135895238)

[11183 Pork, bacon 105](#_Toc135895239)

[11184 Pork, bacon loin 105](#_Toc135895240)

[11185 Pork, shoulder bacon 106](#_Toc135895241)

[11186 Pork, sausage, Vienna 106](#_Toc135895242)

[11187 Pork, sausage, semi-dry 106](#_Toc135895243)

[11188 Pork, sausage, dry 106](#_Toc135895244)

[11189 Pork, sausage, Frankfurter 107](#_Toc135895245)

[11190 Pork, sausage, Bologna 107](#_Toc135895246)

[11191 Pork, sausage, Lyoner 107](#_Toc135895247)

[11192 Pork, sausage, liver 108](#_Toc135895248)

[11193 Pork, sausage, mixed with fish meat 108](#_Toc135895249)

[11194 Pork, sausage, fresh sausage 108](#_Toc135895250)

[11195 Pork, roast pork 109](#_Toc135895251)

[11196 Pork, liver paste 109](#_Toc135895252)

[11197 Pork, smoked liver 109](#_Toc135895253)

[11198 Pork, gelatin 110](#_Toc135895254)

[11179 Mutton, ham, pressed, mixed with fish meat 110](#_Toc135895255)

[11237 Chicken, canned products, roast meat with seasoning 110](#_Toc135895256)

[11292 Chicken, nuggets 111](#_Toc135895257)

[11293 Chicken, “Tsukune” (Japanese chicken meatball) 111](#_Toc135895258)

[EGGS 111](#_Toc135895259)

[12017 Eggs, hen, Tamago-dofu (cold savory egg custard) 111](#_Toc135895260)

[12018 Eggs, hen, Tamago-yaki (Rolled omelet), Atsuyaki-tamago (sweet rolled omelet with Katsuo-bushi and kombu dashi) 111](#_Toc135895261)

[12019 Eggs, hen, Tamago-yaki (Rolled omelet), Dashimaki-tamago (rolled omelet with Katsuo-bushi and kombu dashi) (or omelet with dashi) 111](#_Toc135895262)

[MILK AND MILK PRODUCTS 112](#_Toc135895263)

[13007 Milk beverages, coffee flavored 112](#_Toc135895264)

[13008 Milk beverages, fruit flavored 112](#_Toc135895265)

[13009 Milk powder, whole milk powder 112](#_Toc135895266)

[13010 Milk powder, skimmed milk powder 112](#_Toc135895267)

[13011 Milk powder, infant formula 113](#_Toc135895268)

[13012 Evaporated whole milk 113](#_Toc135895269)

[13013 Condensed whole milk, sweetened 113](#_Toc135895270)

[13014 Cream, milk fat 113](#_Toc135895271)

[13015 Cream substitute, milk and vegetable fats 113](#_Toc135895272)

[13016 Cream substitute, vegetable fat 113](#_Toc135895273)

[13017 Whipping cream, milk fat, with added sugar 114](#_Toc135895274)

[13018 Whipping cream substitute, milk and vegetable fats, with added sugar 114](#_Toc135895275)

[13019 Whipping cream substitute, vegetable fat, with added sugar 114](#_Toc135895276)

[13020 Coffee whitener, liquid, milk fat 114](#_Toc135895277)

[13021 Coffee whitener, liquid, milk and vegetable fats 114](#_Toc135895278)

[13022 Coffee whitener, liquid, vegetable fat 115](#_Toc135895279)

[13023 Coffee whitener, powder, milk fat 115](#_Toc135895280)

[13024 Coffee whitener, powder, vegetable fat 115](#_Toc135895281)

[13025 Yogurt, whole milk, unsweetened 115](#_Toc135895282)

[13053 Yogurt, low fat, unsweetened 115](#_Toc135895283)

[13054 Yogurt, fat free, unsweetened 116](#_Toc135895284)

[13026 Yogurt, skimmed, sweetened 116](#_Toc135895285)

[13027 Yogurt, liquid, sweetened 116](#_Toc135895286)

[13028 Lactic acid bacteria beverages, not pasteurized after fermentation, milk solids-nonfat ≥ 3.0% 116](#_Toc135895287)

[13029 Lactic acid bacteria beverages, pasteurized after fermentation, milk solids-nonfat ≥ 3.0% 117](#_Toc135895288)

[13030 Lactic acid bacteria beverages, milk solids-nonfat < 3.0% 117](#_Toc135895289)

[13031 Cheese, Edam 117](#_Toc135895290)

[13032 Cheese, Emmental 117](#_Toc135895291)

[13033 Cheese, cottage 118](#_Toc135895292)

[13034 Cheese, Camembert 118](#_Toc135895293)

[13035 Cheese, cream 118](#_Toc135895294)

[13036 Cheese, Gouda 118](#_Toc135895295)

[13037 Cheese, Cheddar 119](#_Toc135895296)

[13038 Cheese, Parmesan 119](#_Toc135895297)

[13039 Cheese, blue 119](#_Toc135895298)

[13055 Cheese, Mascarpone 119](#_Toc135895299)

[13056 Cheese, mozzarella 119](#_Toc135895300)

[13057 Cheese, goat milk 120](#_Toc135895301)

[13058 Cheese, Ricotta 120](#_Toc135895302)

[13040 Cheeses, processed 120](#_Toc135895303)

[13041 Cheeses, spreadable 120](#_Toc135895304)

[13042 Ice cream, high fat (milk solids ≥ 15%, milk fat ≥12%) 121](#_Toc135895305)

[13043 Ice cream, regular (milk solids ≥ 15%, milk fat = 8%) 121](#_Toc135895306)

[13044 Ice cream, ice milk (milk solids ≥ 10%, milk fat≥ 3%, including vegetable fat) 121](#_Toc135895307)

[13045 Ice cream, lacto-ice, regular (milk solids ≥ 3%, main lipid: vegetable fat) 122](#_Toc135895308)

[13046 Ice cream, lacto-ice, low fat (milk solids ≥ 3% main lipid: vegetable fat) 122](#_Toc135895309)

[13047 Ice cream, soft-serve 122](#_Toc135895310)

[13049 Sherbet [\*Syn. Sorbet] 123](#_Toc135895311)

[FATS AND OILS 123](#_Toc135895312)

[14023 Linseed oil [\*Syn. Flaxseed oil] 123](#_Toc135895313)

[14024 Perilla oil 123](#_Toc135895314)

[14001 Olive oil 123](#_Toc135895315)

[14002 Sesame oil 124](#_Toc135895316)

[14003 Rice bran oil 124](#_Toc135895317)

[14004 Safflower oil, high oleic 124](#_Toc135895318)

[14025 Safflower oil, high linoleic 124](#_Toc135895319)

[14005 Soybean oil 124](#_Toc135895320)

[14006 Vegetable oil, blend 124](#_Toc135895321)

[14007 Corn oil 124](#_Toc135895322)

[14008 Rapeseed oil 125](#_Toc135895323)

[14011 Sunflower oil, high linoleic 125](#_Toc135895324)

[14026 Sunflower oil, mid-oleic 125](#_Toc135895325)

[14027 Sunflower oil, high oleic 125](#_Toc135895326)

[14028 Grape seed oil 125](#_Toc135895327)

[14012 Cottonseed oil 126](#_Toc135895328)

[14013 Coconut oil 126](#_Toc135895329)

[14014 Peanut oil 126](#_Toc135895330)

[14017 Butter, salted butter 126](#_Toc135895331)

[14018 Butter, unsalted butter 126](#_Toc135895332)

[14019 Butter, cultured butter 127](#_Toc135895333)

[14020 Margarine, soft type, home use 127](#_Toc135895334)

[14029 Margarine, soft type, commercial use 127](#_Toc135895335)

[14021 Fat spread 127](#_Toc135895336)

[14022 Shortening, home use 128](#_Toc135895337)

[14030 Shortening, commercial use for confectionery 128](#_Toc135895338)

[14031 Shortening, commercial use for frying 128](#_Toc135895339)

[CONFECTIONARIES 128](#_Toc135895340)

[15001 Traditional confectionery, “Amanatto, adzuki beans” (candied adzuki beans) 129](#_Toc135895341)

[15002 Traditional confectionery, “Amanatto, kidney beans” (candied kidney beans) 129](#_Toc135895342)

[15003 Traditional confectionery, “Amanatto, peas” (candied green peas) 129](#_Toc135895343)

[15005 Traditional confectionery, “Imagawayaki” (Japanese waffle stuffed with sweet adzuki bean paste) 129](#_Toc135895344)

[15006 Traditional confectionery, “Uiro” (steamed sweet rice dough) 130](#_Toc135895345)

[15007 Traditional confectionery, “Uguisu-mochi” (sweet rice cake, filled with sweet adzuki bean paste, coated by roasted green soy flour) 130](#_Toc135895346)

[15008 Traditional confectionery, “Kashiwa-mochi” (Leaf-wrapped rice cake with sweet adzuki bean paste filling) 130](#_Toc135895347)

[15009 Traditional confectionery, “Kasutera” (rectangle sponge cake) 130](#_Toc135895348)

[15010 Traditional confectionery, “Kanoko” (sweet adzuki bean jelly wrapped with sweet adzuki bean paste, sweet adzuki bean compote and agar) 131](#_Toc135895349)

[15011 Traditional confectionery, “Karukan” (white steamed cake made from rice flour, grated yam and sugar) 131](#_Toc135895350)

[15012 Traditional confectionery, “Kibi-dango” (sweet dumpling made from “Gyuhi” (kneaded glutinous rice flour with sugar, steamed) 131](#_Toc135895351)

[15013 Traditional confectionery, “Gyuhi” (kneaded glutinous rice flour with sugar, steamed) 131](#_Toc135895352)

[15014 Traditional confectionery, “Kirizansho” (Sweet rice cake flavored by Japanese pepper “Sansho”) 131](#_Toc135895353)

[15015 Traditional confectionery, “Kingyokuto” (Sweet agar jelly) 131](#_Toc135895354)

[15016 Traditional confectionery, “Kintsuba” (sweet adzuki bean paste covered with dough, baked) 131](#_Toc135895355)

[15017 Traditional confectionery, “Kusa-mochi” (green rice cake, stuffed with sweet adzuki bean paste, flavored by Japanese wormwood “Yomogi”) 132](#_Toc135895356)

[15018 Traditional confectionery, “Kushi-dango, An” (skewered rice dumplings, steamed, coated by sweet adzuki bean paste) 132](#_Toc135895357)

[15019 Traditional confectionery, “Kushi-dango, soy sauce” (skewered rice dumplings, steamed, seasoned with sugar and soy sauce) 132](#_Toc135895358)

[15121 Traditional confectionery, “Kudzu-mochi” (sweetened gel made from kudzu starch, with roasted soybean flour and brown sugar syrup) 132](#_Toc135895359)

[15122 Traditional confectionery, “Kudzu-mochi” (gel made from wheat starch, with roasted soybean flour and brown sugar syrup) 132](#_Toc135895360)

[15020 Traditional confectionery, Moon cake (Yue bing), stuffed with sweet adzuki bean paste 132](#_Toc135895361)

[15123 “Gohei-mochi” (rice cake, grilled with soy sauce, miso, sugar and sesame paste) 133](#_Toc135895362)

[15021 Traditional confectionery, “Sakura-mochi, Kanto style” (pink small pancake roll with sweet adzuki bean paste filling, wrapped by a salted cherry leaf. Dough is made from wheat and rice flour.) 133](#_Toc135895363)

[15022 Traditional confectionery, “Sakura-mochi, Kansai style” (pink rice cake stuffed with sweet adzuki bean paste, wrapped with a salted cherry leaf. Dough is made from glutinous rice flour.) 133](#_Toc135895364)

[15124 Traditional confectionery, “Sasa-dango” (sweet rice cake stuffed with sweet adzuki bean paste, wrapped in sasa-bamboo leaves) 134](#_Toc135895365)

[15023 Traditional confectionery, “Daifuku-mochi” (sweet rice cake stuffed with sweet adzuki bean paste) 134](#_Toc135895366)

[15024 Traditional confectionery, “Taruto” (Swiss roll with sweet adzuki bean paste filling) 134](#_Toc135895367)

[15025 Traditional confectionery, “Chimaki” (bamboo-leaf-wrapped sweet rice dough, steamed) 135](#_Toc135895368)

[15026 Traditional confectionery, “Chatsu” (sweet adzuki bean paste covered with green tea flavored dough, baked) 135](#_Toc135895369)

[15027 Traditional confectionery, “Dorayaki” (Japanese pancake sandwich with sweet adzuki bean paste filling) 135](#_Toc135895370)

[15004 Traditional confectionery, “Aniri-nama-yatsuhashi” (Cinnamon-flavored sweet rice dough, steamed, with sweet adzuki bean paste filling) 135](#_Toc135895371)

[15028 Traditional confectionery, “Nerikiri” (“Gyuhi “ kneaded with colored bean paste, molded) (cf. 15013”Gyuhi”) 135](#_Toc135895372)

[15029 Traditional confectionery, “Kasutera-manju” (sponge cake stuffed with sweet adzuki bean paste) 136](#_Toc135895373)

[15030 Traditional confectionery, “Kudzu-manju” (sweetened gelatin made from kudzu starch, stuffed with sweet adzuki bean paste) 136](#_Toc135895374)

[15031 Traditional confectionery, “Kuri-manju” (baked sweet dough stuffed with sweet adzuki bean paste and candied chestnuts) 136](#_Toc135895375)

[15032 Traditional confectionery, “To-manju” (baked sweet dough stuffed with sweet adzuki bean paste) 136](#_Toc135895376)

[15033 Traditional confectionery, “Mushi-manju” (steamed sweet dough stuffed with sweet adzuki bean paste) 136](#_Toc135895377)

[15034 Chinese style steamed bun, stuffed with sweet adzuki bean paste 137](#_Toc135895378)

[15035 Chinese style steamed bun, stuffed with meat and vegetable 137](#_Toc135895379)

[15036 Traditional confectionery, “Monaka” (glutinous rice wafers with sweet adzuki bean paste filling) 138](#_Toc135895380)

[15037 Traditional confectionery, “Yubeshi” (steamed sweet dough made from rice flour, walnuts, soy sauce and citrus “Yuzu” juice) 138](#_Toc135895381)

[15038 Traditional confectionery, “Neri-yokan” (hardened sweet adzuki bean agar bar) 138](#_Toc135895382)

[15039 Traditional confectionery, “Mizu-yokan” (soft sweet adzuki bean jelly) 138](#_Toc135895383)

[15040 Traditional confectionery, “Mushi-yokan” (steamed sweet adzuki bean paste bar) 138](#_Toc135895384)

[15041 Traditional confectionery, “Amedama” (sugar candy) 139](#_Toc135895385)

[15042 Traditional confectionery, “Imo-karinto” (deep fried sweet potato chips, coated with sugar syrup) 139](#_Toc135895386)

[15043 Traditional confectionery, “Okoshi” (puffed sweet rice cake) 139](#_Toc135895387)

[15044 Traditional confectionery, “Onoroke-mame” (roasted peanuts coated with rice dough, baked) 139](#_Toc135895388)

[15045 Traditional confectionery, “Karinto, black” (crunchy deep fried wheat flour dough coated with brown sugar” 139](#_Toc135895389)

[15046 Traditional confectionery, “Karinto, white” (crunchy deep fried wheat flour dough coated with white sugar) 139](#_Toc135895390)

[15047 Traditional confectionery, “Gokabo” (roasted glutinous rice stick covered with roasted soy powder and sugar) 140](#_Toc135895391)

[15048 Traditional confectionery, “Isobe-senbei” (soft wheat flour cracker using soda water of Isobe hot spring) 140](#_Toc135895392)

[15049 Traditional confectionery, “Kawara senbei” (hard wheat flour cracker shaped like a Japanese traditional roof tile) 140](#_Toc135895393)

[15050 Traditional confectionery, “Maki-senbei” (light wheat cracker roll with sugar confectionary filling) 140](#_Toc135895394)

[15051 Traditional confectionery, “Nanbu-Senbei, Sesame” (round wheat flour cracker, with sesame seeds) 140](#_Toc135895395)

[15052 Traditional confectionery, “Nanbu-Senbei, Peanut” (round wheat flour cracker, with peanuts) 141](#_Toc135895396)

[15053 Traditional confectionery, “Shiogama” (molded confectionary made from sugar, glutinous rice flour and perilla leaf powder) 141](#_Toc135895397)

[15055 Traditional confectionery, “Hina-arare, Kanto style” (roasted and sugared rice dough with candied adzuki beans and roasted soybeans for Doll’s festival) 141](#_Toc135895398)

[15056 Traditional confectionery, “Hina-arare, Kansai style”(roasted rice dough for Doll’s festival) 141](#_Toc135895399)

[15057 Traditional confectionery, “Age-senbei” (fried and salted rice cracker) 141](#_Toc135895400)

[15058 Traditional confectionery, “Amakara-senbei” (rice cracker coated with soy sauce and grain sugar) 141](#_Toc135895401)

[15059 Traditional confectionery, “Arare” (glutinous rice cracker) 142](#_Toc135895402)

[15060 Traditional confectionery, “Shoyu-senbei” (soy sauce flavored rice cracker) 142](#_Toc135895403)

[15061 Traditional confectionery, “Boro, small” (Small balls of baked starch dough) 142](#_Toc135895404)

[15062 Traditional confectionery, “Soba-boro” (Baked sweet dough made from buckwheat and wheat flour) 142](#_Toc135895405)

[15063 Traditional confectionery, “Matsukaze” (Baked sweet dough, topped with poppy seeds) 142](#_Toc135895406)

[15064 Traditional confectionery, “Mishima-mame” (Sugar-coated roasted soybeans) 142](#_Toc135895407)

[15065 Traditional confectionery, “Yatsuhashi” (Cinnamon-flavored sweet rice dough, baked 143](#_Toc135895408)

[15066 Traditional confectionery, "Rakugan, regular" (molded dry confectionary made from fine roasted glutinous rice flour and sugar) 143](#_Toc135895409)

[15067 Traditional confectionery, "Mugi-rakugan" (molded dry confectionary made from roasted barley flour and sugar) 143](#_Toc135895410)

[15068 Traditional confectionery, "Morokoshi-rakugan" (molded dry confectionary made from powdered adzuki bean paste and sugar) 143](#_Toc135895411)

[15125 Bun with filling, fried bun 143](#_Toc135895412)

[15069 Bun with filling, baked bun with sweet adzuki bean paste filling regular type 144](#_Toc135895413)

[15126 Bun with filling, baked bun with sweet adzuki bean paste filling thin dough type 144](#_Toc135895414)

[15127 Bun with filling, fried bun with curry filling 144](#_Toc135895415)

[15070 Bun with filling, baked bun with custard cream filling regular type 144](#_Toc135895416)

[15130 Bun with filling, baked bun with custard cream filling thin dough type 144](#_Toc135895417)

[15071 Bun with filling, baked bun with strawberry jam filling 144](#_Toc135895418)

[15072 Bun with filling, “Korone” (horn-shaped bread), with chocolate cream filling 144](#_Toc135895419)

[15131 Bun with filling, baked bun with chocolate cream filling thin dough type 144](#_Toc135895420)

[15132 Bun with filling, ”Melon-pan” (sweet bun covered in a thin layer of crisp cookie dough) 144](#_Toc135895421)

[15073 Cake and pastry, custard cream puff 145](#_Toc135895422)

[15074 Cake and pastry, sponge cake 145](#_Toc135895423)

[15075 Cake and pastry, cream cake without fruits 146](#_Toc135895424)

[15133 Cake and pastry, tart 146](#_Toc135895425)

[15134 Cake and pastry, cheesecake, baked 146](#_Toc135895426)

[15135 Cake and pastry, cheesecake, unbaked 146](#_Toc135895427)

[15076 Cake and pastry, Danish pastry 147](#_Toc135895428)

[15077 Cake and pastry, doughnuts, yeast-leavened 147](#_Toc135895429)

[15078 Cake and pastry, doughnuts, cake-type 147](#_Toc135895430)

[15079 Cake and pastry, pie pastry 148](#_Toc135895431)

[15080 Cake and pastry, apple pie 148](#_Toc135895432)

[15081 Cake and pastry, meat pie 148](#_Toc135895433)

[15082 Cake and pastry, butter cake 148](#_Toc135895434)

[15083 Cake and pastry, thick pancake 148](#_Toc135895435)

[15084 Cake and pastry, waffles, with custard cream filling 148](#_Toc135895436)

[15085 Cake and pastry, waffles, with strawberry jam filling 149](#_Toc135895437)

[15086 Pudding and chilled dessert, caramel custard 149](#_Toc135895438)

[15136 Pudding and chilled dessert, Milk pudding 149](#_Toc135895439)

[15087 Pudding and chilled dessert, orange jelly 149](#_Toc135895440)

[15088 Pudding and chilled dessert, coffee jelly 149](#_Toc135895441)

[15089 Pudding and chilled dessert, milk jelly 149](#_Toc135895442)

[15090 Pudding and chilled dessert, wine flavored jelly 150](#_Toc135895443)

[15091 Pudding and chilled dessert, Bavarian cream 150](#_Toc135895444)

[15092 Biscuits, wafers 150](#_Toc135895445)

[15141 Biscuits, wafers with cream 150](#_Toc135895446)

[15093 Biscuits, crackers, oil-sprayed 150](#_Toc135895447)

[15094 Biscuits, crackers, soda 151](#_Toc135895448)

[15095 Biscuits, Sablé shortbread 151](#_Toc135895449)

[15054 Biscuits, Chinese cookies containing lard 151](#_Toc135895450)

[15097 Biscuits, hard biscuits 151](#_Toc135895451)

[15098 Biscuits, soft biscuits 152](#_Toc135895452)

[15099 Biscuits, hard pretzel 152](#_Toc135895453)

[15096 Biscuits, puff pastry biscuits 153](#_Toc135895454)

[15100 Biscuits, biscuits with jam topping 153](#_Toc135895455)

[15101 Snacks, wheat flour snack, extruded 153](#_Toc135895456)

[15102 Snacks, corn snack, extruded 153](#_Toc135895457)

[15103 Snacks, potato chips, regular 154](#_Toc135895458)

[15104 Snacks, potato chips, fabricated 154](#_Toc135895459)

[15109 Candy, color changing candy 154](#_Toc135895460)

[15105 Candy, caramel soft candy 154](#_Toc135895461)

[15107 Candy, jelly candy 155](#_Toc135895462)

[15108 Candy, jelly beans 155](#_Toc135895463)

[15110 Candy, sugar candy 155](#_Toc135895464)

[15111 Candy, butterscotch hard candy 155](#_Toc135895465)

[15112 Candy, brittles 155](#_Toc135895466)

[15113 Candy, marshmallows 156](#_Toc135895467)

[15106 Candy, compressed tablet candy 156](#_Toc135895468)

[15137 Chocolate, chocolate with almonds 156](#_Toc135895469)

[15114 Chocolate, chocolate-covered biscuit 156](#_Toc135895470)

[15115 Chocolate, white chocolate 156](#_Toc135895471)

[15116 Chocolate, milk chocolate 157](#_Toc135895472)

[15117 Candied fruits, Marron glacé (candied chestnuts) 157](#_Toc135895473)

[15118 Chewing gum, stick 157](#_Toc135895474)

[15119 Chewing gum, sugar-coated 158](#_Toc135895475)

[15120 Chewing gum, bubble gum 158](#_Toc135895476)

[15138 Pastry cream 158](#_Toc135895477)

[15139 Sweet adzuki bean soup made from strained bean paste 158](#_Toc135895478)

[15140 Sweet adzuki bean soup made from mushed bean paste 158](#_Toc135895479)

[BEVERAGES 158](#_Toc135895480)

[16001 Fermented alcoholic beverage, “Sake”, regular 158](#_Toc135895481)

[16002 Fermented alcoholic beverage, “Sake”, “Junmai” (made with only rice, water and koji) 159](#_Toc135895482)

[16003 Fermented alcoholic beverage, “Sake”, “Honjozo” (made with rice, water, koji and distilled alcohol. The rice used must be polished to at least 70%) 159](#_Toc135895483)

[16004 Fermented alcoholic beverage, “Sake”, “Ginjo” (brewed with labor-intensive steps, using highly polished rice) 159](#_Toc135895484)

[16005 Fermented alcoholic beverage, “Sake”, “Junmai-ginjo” (made with only rice, water and koji, brewed with labor-intensive steps, using highly polished rice) 159](#_Toc135895485)

[16006 Fermented alcoholic beverage, beer, pale 160](#_Toc135895486)

[16007 Fermented alcoholic beverage, beer, black 160](#_Toc135895487)

[16008 Fermented alcoholic beverage, beer, stout 160](#_Toc135895488)

[16009 Fermented alcoholic beverage, “Happoshu” (beer-like beverage with less than 67% malt content) 160](#_Toc135895489)

[16010 Fermented alcoholic beverage, wine, white 161](#_Toc135895490)

[16011 Fermented alcoholic beverage, wine, red 161](#_Toc135895491)

[16012 Fermented alcoholic beverage, wine, rose 161](#_Toc135895492)

[16013 Fermented alcoholic beverage, Shaoxing wine 161](#_Toc135895493)

[16014 Distilled alcoholic beverage, “Shochu”, distilled through a continuous still 162](#_Toc135895494)

[16015 Distilled alcoholic beverage, “Shochu”, distilled through a pot still 162](#_Toc135895495)

[16016 Distilled alcoholic beverage, whisky 162](#_Toc135895496)

[16017 Distilled alcoholic beverage, brandy 162](#_Toc135895497)

[16018 Distilled alcoholic beverage, vodka 162](#_Toc135895498)

[16019 Distilled alcoholic beverage, gin 163](#_Toc135895499)

[16020 Distilled alcoholic beverage, rum 163](#_Toc135895500)

[16021 Distilled alcoholic beverage, Maotai 163](#_Toc135895501)

[16022 Compound alcoholic beverage, “Umeshu” (plum liquor made from Japanese apricots) 163](#_Toc135895502)

[16023 Compound alcoholic beverage, synthetic “Sake” 163](#_Toc135895503)

[16024 Compound alcoholic beverage, “Shiro-zake” (white Sake-like liquor made from steamed rice, rice koji and “Shochu”) 163](#_Toc135895504)

[16025 Compound alcoholic beverage, “Mirin” (sweet liquor made from rice, rice koji and Shochu or distilled alcohol), regular 164](#_Toc135895505)

[16026 Compound alcoholic beverage, “Honnaoshi” (sweet liquor made of “Shochu” and “Mirin”) 164](#_Toc135895506)

[16027 Compound alcoholic beverage, medicinal liqueur 164](#_Toc135895507)

[16028 Compound alcoholic beverage, curacao 165](#_Toc135895508)

[16029 Compound alcoholic beverage, fortified wine, sweet type 165](#_Toc135895509)

[16030 Compound alcoholic beverage, peppermint liqueur 165](#_Toc135895510)

[16031 Compound alcoholic beverage, vermouth, sweet type 165](#_Toc135895511)

[16032 Compound alcoholic beverage, vermouth, dry type 166](#_Toc135895512)

[16034 Green tea, “Gyokuro” (high grade tea made from shade-grown leaves), infusion 166](#_Toc135895513)

[16037 Green tea, “Sencha” (common grade tea), infusion 166](#_Toc135895514)

[16038 Green tea, “Kamairi-cha” (pan-fried tea), infusion 166](#_Toc135895515)

[16039 Green tea, “Ban-cha” (coarse grade tea), infusion 166](#_Toc135895516)

[16040 Green tea, “Hoji-cha” (roasted tea), infusion 166](#_Toc135895517)

[16041 Green tea, “Genmai-cha” (mixture of tea and roasted brown rice), infusion 166](#_Toc135895518)

[16042 Fermented tea, Oolong tea, infusion 166](#_Toc135895519)

[16044 Fermented tea, black tea, infusion 166](#_Toc135895520)

[16045 Coffee, infusion 166](#_Toc135895521)

[16047 Coffee, ready-to-drink coffee with milk and sugar, canned 167](#_Toc135895522)

[16049 Cocoa, chocolate milk powder 167](#_Toc135895523)

[16050 “Ama-zake” (sweet beverage made from rice koji) 167](#_Toc135895524)

[16051 “Kobu-cha” (kombu powder for drink) 167](#_Toc135895525)

[16057 Sports drink 168](#_Toc135895526)

[16052 Carbonated beverage, fruit flavored and colored drink 168](#_Toc135895527)

[16053 Carbonated beverage, cola 168](#_Toc135895528)

[16054 Carbonated beverage, clear soda 168](#_Toc135895529)

[16058 Carbonated beverage, beer-flavored drink, alcohol free 168](#_Toc135895530)

[16055 “Mugi-cha” (roasted barley tea), infusion 169](#_Toc135895531)

[SEASONINGS AND SPICES 169](#_Toc135895532)

[17001 Japanese Worcester sauce, common type 169](#_Toc135895533)

[17002 Japanese Worcester sauce, semi-thick type 169](#_Toc135895534)

[17003 Japanese Worcester sauce, thick type 170](#_Toc135895535)

[17085 Japanese Worcester sauce, sweet thick type for “Okonomiyaki” (Japanese-style savory pancake with various ingredients) 170](#_Toc135895536)

[17004 Hot seasoning, Doubanjiang 171](#_Toc135895537)

[17005 Hot seasoning, hot pepper sauce 171](#_Toc135895538)

[17006 Hot seasoning, Chinese chili oil 171](#_Toc135895539)

[17007 Soy sauce, “Koikuchi-shoyu” (common soy sauce) 171](#_Toc135895540)

[17008 Soy sauce, “Usukuchi-shoyu” (light color soy sauce) 172](#_Toc135895541)

[17086 Soy sauce, salt reduced 172](#_Toc135895542)

[17139 Soy sauce, “Teien-Usukuchi-shoyu” (less sodium light color soy sauce) 172](#_Toc135895543)

[17009 Soy sauce, “Tamari-shoyu” (full-bodied soy sauce) 173](#_Toc135895544)

[17010 Soy sauce, “Saishikomi-shoyu” (refermented soy sauce) 173](#_Toc135895545)

[17011 Soy sauce, “Shiro-shoyu” (extra light color soy sauce) 173](#_Toc135895546)

[17087 Soy sauce, pre-seasoned with soup stock 173](#_Toc135895547)

[17088 Soy sauce, soy glazed 174](#_Toc135895548)

[17090 Vinegar, black rice vinegar 174](#_Toc135895549)

[17015 Vinegar, grain vinegar 174](#_Toc135895550)

[17016 Vinegar, rice vinegar 174](#_Toc135895551)

[17091 Vinegar, fruit vinegar, Balsamic vinegar 174](#_Toc135895552)

[17017 Vinegar, fruit vinegar, wine vinegar 175](#_Toc135895553)

[17018 Vinegar, fruit vinegar, cider vinegar 175](#_Toc135895554)

[17130 Soup stock, “Ago-bushi dashi” (stock of dried Japanese flying fish) 175](#_Toc135895555)

[17019 Soup stock, “Katsuo-bushi dashi” (stock of “Katsuo-bushi”) 175](#_Toc135895556)

[17131 Soup stock, “Katsuo-bushi dashi” (stock of “Hon-kare-bushi”) 175](#_Toc135895557)

[17020 Soup stock, “kombu dashi” (stock of dried kombu) 175](#_Toc135895558)

[17132 Soup stock, “Kombu-ni-dashi” (stock of dried kombu taken with boiling water) 175](#_Toc135895559)

[17021 Soup stock, “Katsuo-bushi and kombu dashi” (stock of “Katsuo-bushi” and dried kombu) 175](#_Toc135895560)

[17148 Soup stock, “Katsuo-bushi and kombu dashi” (stock of “Hon-kare-bushi” and dried kombu) 176](#_Toc135895561)

[17022 Soup stock, “Shiitake dashi” (stock of dried Shiitake mushroom) 176](#_Toc135895562)

[17023 Soup stock, “Niboshi dashi” (stock of small dried sardine) 176](#_Toc135895563)

[17024 Soup stock, chicken bone stock 176](#_Toc135895564)

[17025 Soup stock, chicken, pork and vegetable stock 176](#_Toc135895565)

[17026 Soup stock, beef and vegetable stock 176](#_Toc135895566)

[17027 Stock cubes, meat and vegetable 176](#_Toc135895567)

[17092 Stock powder, for “Oden” (Japanese winter hodgepodge) 176](#_Toc135895568)

[17093 Stock powder, chicken, pork and vegetable 177](#_Toc135895569)

[17028 Stock powder, “Katsuo-bushi” 177](#_Toc135895570)

[17140 Nabe stock, non-concentrated (soy sauce base) 177](#_Toc135895571)

[17029 Japanese noodle soup, non-concentrated (soy sauce base) 177](#_Toc135895572)

[17141 Japanese noodle soup, double-concentrated (soy sauce base) 178](#_Toc135895573)

[17030 Japanese noodle soup, triple-concentrated (soy sauce base) 178](#_Toc135895574)

[17142 Ramen soup, concentrated (soy sauce base) 178](#_Toc135895575)

[17143 Ramen soup, concentrated (miso base) 178](#_Toc135895576)

[17094 Seasoning sauce, sweet vinegar 179](#_Toc135895577)

[17095 Seasoning sauce, sauce for “Ebichiri” (shrimp with chili sauce) 179](#_Toc135895578)

[17031 Seasoning sauce, oyster sauce 179](#_Toc135895579)

[17096 Seasoning sauce, “Kimizu” (seasoning containing vinegar and egg yolk) 179](#_Toc135895580)

[17097 Seasoning sauce, “Gomasu” (vinegar mixture containing sesame, soy sauce and sugar) 179](#_Toc135895581)

[17098 Seasoning sauce, sesame sauce 180](#_Toc135895582)

[17099 Seasoning sauce, “Sanbaizu” (vinegar mixture containing sugar, soy sauce, and stock) 180](#_Toc135895583)

[17100 Seasoning sauce “Nihaizu” (vinegar mixture containing soy sauce) 180](#_Toc135895584)

[17101 Seasoning sauce, sweetened vinegar for “Inarizushi” (fried tofu pouch filled with sushi rice) 180](#_Toc135895585)

[17102 Seasoning sauce, sweetened vinegar for “Nigirizushi” (hand-pressed sushi) 180](#_Toc135895586)

[17103 Seasoning sauce, sweetened vinegar for “Makizushi” (rolled sushi) and “Hakozushi” (Pressed sushi) 181](#_Toc135895587)

[17104 Seasoning sauce, Chinese style vinegar 181](#_Toc135895588)

[17105 Seasoning sauce, demi-glace sauce 181](#_Toc135895589)

[17106 Seasoning sauce, Tian Mian Jiang (sweet soybeans paste) 181](#_Toc135895590)

[17107 Seasoning sauce, Nam pla (fish sauce) 182](#_Toc135895591)

[17108 Seasoning sauce, for “Hiyashi-chuka” (ramen noodles in a cold sweet soy sauce broth topped with meat and vegetables) 182](#_Toc135895592)

[17109 Seasoning sauce, white sauce 182](#_Toc135895593)

[17110 Seasoning sauce, ponzu vinegar with soy sauce 183](#_Toc135895594)

[17137 Seasoning sauce, ponzu vinegar with soy sauce (commercially available) 183](#_Toc135895595)

[17032 Seasoning sauce, Mapo tofu sauce 183](#_Toc135895596)

[17111 Seasoning sauce, marinade 184](#_Toc135895597)

[17033 Seasoning sauce, meat sauce 184](#_Toc135895598)

[17112 Seasoning sauce, for “Yakitori” (grilled chicken skewers ) 184](#_Toc135895599)

[17113 Seasoning sauce, barbecue sauce, soy sauce based 184](#_Toc135895600)

[17114 Seasoning sauce, for “Mitarashi” (skewed rice dumplings in a sweet soy glaze) 185](#_Toc135895601)

[17115 Seasoning sauce, “Yuzu kosho” (spicy paste made from chili, yuzu zest and salt) 185](#_Toc135895602)

[17133 Fish sauce, “Ikanago-shoyu” (Fish sauce made from Japanese sand lance) 185](#_Toc135895603)

[17134 Fish sauce, “Ishiru” (Fish sauce) 185](#_Toc135895604)

[17135 Fish sauce, “Shottsuru” (Fish sauce) 186](#_Toc135895605)

[17107 Seasoning sauce, Nam pla (fish sauce) 186](#_Toc135895606)

[17034 Tomato products, puree 186](#_Toc135895607)

[17035 Tomato products, paste 186](#_Toc135895608)

[17036 Tomato products, ketchup 187](#_Toc135895609)

[17037 Tomato products, tomato sauce 187](#_Toc135895610)

[17038 Tomato products, chili sauce 187](#_Toc135895611)

[17039 Dressing, soy sauce based, fat-free 188](#_Toc135895612)

[17040 Dressing, French dressing 188](#_Toc135895613)

[17116 Dressing, soy sauce based, with oil 188](#_Toc135895614)

[17117 Dressing, sesame dressing 188](#_Toc135895615)

[17041 Dressing, thousand island dressing 188](#_Toc135895616)

[17042 Dressing, mayonnaise, whole egg type 189](#_Toc135895617)

[17043 Dressing, mayonnaise, egg yolk type 189](#_Toc135895618)

[17118 Dressing, mayonnaise, low calorie type 190](#_Toc135895619)

[17044 Miso, rice-koji miso, sweet type 190](#_Toc135895620)

[17045 Miso, rice-koji miso, light yellow type 191](#_Toc135895621)

[17046 Miso, rice-koji miso, red type 191](#_Toc135895622)

[17120 Miso, pre-seasoned with soup stock 192](#_Toc135895623)

[17145 Miso, pre-seasoned with soup stock and salt reduced 192](#_Toc135895624)

[17047 Miso, barley-koji miso 192](#_Toc135895625)

[17048 Miso, soybeans-koji miso 193](#_Toc135895626)

[17119 Miso, salt reduced 193](#_Toc135895627)

[17049 Miso, instant miso soup, powdered type 193](#_Toc135895628)

[17050 Miso, instant miso soup, Paste type 194](#_Toc135895629)

[17121 Miso, “Karashi-sumiso” (miso sauce containing mustard, vinegar and sugar) 194](#_Toc135895630)

[17122 Miso, “Goma-miso” (miso sauce containing sesame) 194](#_Toc135895631)

[17123 Miso, “Su-miso” (miso sauce containing vinegar and mustard) 194](#_Toc135895632)

[17124 Miso, “Neri-miso” (miso sauce containing egg and mirin) 194](#_Toc135895633)

[17051 Roux, Japanese curry roux, instant 194](#_Toc135895634)

[17052 Roux, hash and rice roux, instant 195](#_Toc135895635)

[17125 Seasoning mix for “Ochazuke” (bowl of rice soaked in dashi broth) 195](#_Toc135895636)

[17136 Mixed seasoning, “Kimchi no Moto” (made from red pepper, salt, garlic, ginger, and fruits (such as apples)) 196](#_Toc135895637)

[17053 “Sakekasu” (sake lees) 196](#_Toc135895638)

[17126 Instant soup mix, “Sumashi-jiru” (Japanese traditional clear-soup) 196](#_Toc135895639)

[17127 “Furikake” (Seasoning mix for rice, containing dried seaweed and egg) 197](#_Toc135895640)

[17054 Mirin-like sweet cooking seasoning 197](#_Toc135895641)

[17138 Seasonings, cooking sake (ryorishu) 197](#_Toc135895642)

# CEREALS

## 01003 Foxtail millet, glutinous cake

The raw material mix ratios are: foxtail millet at 50 and glutinous rice at 50. Thus, the RF values are: foxtail millet = , glutinous rice = = 0.500.

## 01008 Barley, dried noodles, raw

The raw material mix ratios are: dried barley flour at 50 and common wheat, hard flour, first grade at 50. Thus, the RF values are: dried barley flour = = 0.500, common wheat, hard flour, first grade = = 0.500.

## 01015 Common wheat, soft flour, first grade

The main raw material of this item is the endosperm of common wheat, imported, soft flour (85% of wheat grain) according to *Komuginokinoutokagaku* (ISBN: 978-4254435474, in Japanese). Thus, the RF value is: common wheat, imported, soft flour = 1/0.85 = 1.176.

## 01016 Common wheat, soft flour, second grade

The main raw material of this item is the endosperm of common wheat, imported, soft flour (85% of wheat grain) according to *Komuginokinoutokagaku* (ISBN: 978-4254435474, in Japanese). Thus, the RF value is: common wheat, imported, soft flour = 1/0.85 = 1.176.

## 01018 Common wheat, medium-strength flour, first grade

The main raw material of this item is the endosperm of common wheat, imported, soft flour (85% of wheat grain) according to *Komuginokinoutokagaku* (ISBN: 978-4254435474, in Japanese). Thus, the RF value is: common wheat, imported, soft flour = 1/0.85 = 1.176.

## 01019 Common wheat, medium-strength flour, Second grade

The main raw material of this item is the endosperm of common wheat, imported, soft flour (85% of wheat grain) according to *Komuginokinoutokagaku* (ISBN: 978-4254435474, in Japanese). Thus, the RF value is: common wheat, imported, soft flour = 1/0.85 = 1.176.

## 01020 Common wheat, hard flour, first grade

The main raw material of this item is the endosperm of common wheat, imported, hard flour (85% of wheat grain) according to *Komuginokinoutokagaku* (ISBN: 978-4254435474, in Japanese). Thus, the RF value is: common wheat, imported, hard flour = 1/0.85 = 1.176.

## 01021 Common wheat, hard flour, second grade

The main raw material of this item is the endosperm of common wheat, imported, hard flour (85% of wheat grain) according to *Komuginokinoutokagaku* (ISBN: 978-4254435474, in Japanese). Thus, the RF value is: common wheat, imported, hard flour = 1/0.85 = 1.176.

## 01023 Common wheat, hard flour, whole grain

The main raw material of common wheat, hard flour, whole grain is common wheat, imported, hard flour.

## 01024 Common wheat, premixed flour for pancake

The main raw materials of this item are: common wheat, soft flour, first grade; common salt and; sugar (white sugar). First assume that 100 g of this item consist of x (g) of common wheat (soft flour), y (g) of common salt and z (g) of sugar. One-hundred grams of this item has 352 kcal, containing 73.6 g of carbohydrate and 3.7 g of sodium content. The same weight of common wheat, soft flour, first grade has 367 kcal, containing 75.8 g of carbohydrate but no sodium content. That of common salt 100 g has 0 kcal, containing no carbohydrate but 99.5 g of sodium content, while that of sugar (white sugar) has 384 kcal, containing 99.3 g of carbohydrate but no sodium content. Therefore, the following equation is established:

From the above, x = 91.2 g, y = 3.7 g, and z = 4.5 g.

## 01024 Common wheat, premixed flour for pancake

The main raw materials of this item are: common wheat, soft flour, first grade; sugar (white sugar); rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of (x) g of common wheat, y (g) of sugar, z (g) of oil and w (g) of common salt. One-hundred grams of this item contains 7.8 g of protein, 4.0 g of fat, 74.4 g of carbohydrate, and 1.0 g of sodium content, while the same weight of common wheat (soft flour) has 8.3 g of protein, 1.5 g of fat, 75.8 g of carbohydrate, but no sodium content. That of sugar has no protein, fat or sodium content, but contains 99.3 g of carbohydrate, while that of rapeseed oil has no protein, carbohydrate or sodium content, but contains 100.0 g of fat, and that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 94.0 g, y = 3.2 g, z = 2.6 g, and w = 1.0 g.

## 01147 Common wheat, premixed flour for fried food

The main raw materials of this item are: common wheat, soft flour, first grade; potato starch; rapeseed oil and; dark soy sauce. First assume that 100 g of premixed flour wheat consist of x (g) of common wheat (soft flour), y (g) of potato starch, z (g) of rapeseed oil, and w (g) of dark soy sauce. One-hundred grams of this item contains 10.2 g of protein, 1.2 g of fat, 70.0 g of carbohydrate, and 9.7 g of sodium content, while the same weight of common wheat (soft flour) has 8.3 g of protein, 1.5 g of fat, 75.8 g of carbohydrate, but no sodium content. That of potato starch contains 0.1 g of protein, 0.1 g of fat, 81.6 g of carbohydrate, but no sodium content, while that of rapeseed oil has no protein, carbohydrate or sodium content, but contains 100.0 g of fat, and that of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, but no fat. Therefore, the following equation is established:

From the above, x = 60.6 g, y = 23.1 g, z = 0.3 g, w =66.9 g.

## 01025 Common wheat, premixed flour for Tempura

The main raw materials of this item are common wheat, soft flour, first grade and corn starch. First assume that 100 g of premixed flour constitute of x (g) of common wheat and y (g) of corn starch. One-hundred grams of this item has 351 kcal, containing 76.1 g of carbohydrate. The same weight of common wheat has 367 kcal, containing 75.8 g of carbohydrate, while that of starch has 354 kcal, containing 75.8 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 69.3 (g) g, y = 27.3 (g).

## 01026 Common wheat, bread, white

The raw material mix ratios are: common wheat, hard flour, first grade at 100, yeast (compressed) at 2, common salt at 2, sugar (white sugar) at 6, shortening at skimmed milk powder at 78 2, and water at 70. Thus, the RF values are: common wheat, hard flour, first grade = , yeast (compressed) = , common salt = , sugar (white sugar) = , shortening = , skimmed milk powder = , water = .

## 01206 Common wheat, bread, lean type

The raw material mix ratios are: common wheat, hard flour, first grade at 100: yeast (dried) at 0.7, common salt at 2, shortening at 4, malt syrup at 0.8, and water at 68. Thus, the RF values are: common wheat, hard flour, first grade = , yeast (dried) = , common salt = , shortening = , malt syrup = , water = .

## 01207 Common wheat, bread, rich type

The raw material mix ratios are: common wheat, hard flour, first grade at 100, yeast (compressed) at 3, common salt at 1.8, sugar (white sugar) at 10, unsalted butter at 10, skimmed milk powder at 2, hen egg at 10, water at 58. Thus, the RF values are: common wheat, hard flour, first grade = , yeast (compressed) = , common salt = , sugar (white sugar) = , unsalted butter = , skimmed milk powder = , hen egg = , water = .

## 01205 Common wheat, bread, white, round top

The raw material mix ratios are: common wheat, hard flour, first grade at 100, yeast (compressed) at 2, common salt at 2, sugar (white sugar) at 4, shortening at 4, skimmed milk powder at 1, water at 68. Thus, the RF values are: common wheat, hard flour, first grade = , yeast (compressed) = , common salt = , sugar (white sugar) = , shortening = , skimmed milk powder = , water = .

## 01028 Common wheat, bread, white long roll

The raw material mix ratios are: common wheat, hard flour, first grade at 100, yeast (compressed) at 2.5, common salt at 1.5, sugar (white sugar) at 10, shortening at 10, skimmed milk powder at 2, and water at 63. Thus, the RF values are: common wheat, hard flour, first grade = , yeast (compressed) = , common salt = , sugar (white sugar) = , shortening = , skimmed milk powder = , water = .

## 01030 Common wheat, bread, hardtack

The raw material mix ratios are: common wheat, hard flour, first grade at 140, common wheat, soft flour, first grade at 60, sugar (white sugar) at 16, shortening at 6, sesame seed at 3, common salt at 3, yeast at 4. Thus, the RF values are: common wheat, hard flour, first grade = 140/(140+60+16+6+3+3+4), common wheat, soft flour, first grade = 60/(140+60+16+6+3+3+4), sugar (white sugar) = 16/(140+60+16+6+3+3+4), shortening = 6/(140+60+16+6+3+3+4), sesame seed = 3/(140+60+16+6+3+3+4), common salt = 3/(140+60+16+6+3+3+4), yeast = 4/(140+60+16+6+3+3+4)

## 01031 Common wheat, bread, French bread

The raw material mix ratios are: common wheat, medium-strength flour, first grade at 100, yeast (dried) at 0.7, common salt at 2, and malt syrup at 0.3. Thus, the RF values are: common wheat, medium-strength flour, first grade = 100/(100+0.7+2+0.3), yeast (dried) = 0.7/(100+0.7+2+0.3), common salt = 2/(100+0.7+2+0.3), malt syrup = 0.3/(100+0.7+2+0.3)

## 01032 Common wheat, bread, rye and wheat bread

The raw material mix ratios are: common wheat, hard flour, first grade at 50, rye flour at 50, yeast (compressed) at 2, common salt at 2, shortening at 4, and water at 70. Thus, the RF values are: common wheat, hard flour, first grade = 50/(50+50+2+2+4+70), rye flour = 50/(50+50+2+2+4+70), yeast (compressed) = 2/(50+50+2+2+4+70), common salt = 2/(50+50+2+2+4+70), shortening = 4/(50+50+2+2+4+70), water = 70/(50+50+2+2+4+70)

## 01208 Common wheat, bread, whole wheat bread

The raw material mix ratios are: common wheat, hard flour, first grade at 50, common wheat, hard flour, whole grain at 50, yeast (compressed) at 2.5, common salt at 1.7, sugar (white sugar) at 3, shortening at 7, and water at 68. Thus, the RF values are: common wheat, hard flour, first grade = 50/(50+50+2.5+1.7+3+7+68), common wheat, hard flour, whole grain = 50/(50+50+2.5+1.7+3+7+68), yeast (compressed) = 2.5/(50+50+2.5+1.7+3+7+68), common salt = 1.7/(50+50+2.5+1.7+3+7+68), sugar (white sugar) = 3/(50+50+2.5+1.7+3+7+68), shortening = 7/(50+50+2.5+1.7+3+7+68), water = 68/(50+50+2.5+1.7+3+7+68)

## 01033 Common wheat, bread, raisin bread

The raw material mix ratios are: common wheat, hard flour, first grade at 100, yeast (compressed) at 3, common salt at 1.5, sugar (white sugar) at 8, unsalted butter at 6, skimmed milk powder at 3, hen egg at 5, raisins at 40, and water at 57. Thus, the RF values are: common wheat, hard flour, first grade = 100/(100+3+1.5+8+6+3+5+40+57), yeast (compressed) = 3/(100+3+1.5+8+6+3+5+40+57), common salt = 1.5/(100+3+1.5+8+6+3+5+40+57), sugar (white sugar) = 8/(100+3+1.5+8+6+3+5+40+57), unsalted butter = 6/(100+3+1.5+8+6+3+5+40+57), skimmed milk powder = 3/(100+3+1.5+8+6+3+5+40+57), hen egg = 5/(100+3+1.5+8+6+3+5+40+57), raisins = 40/(100+3+1.5+8+6+3+5+40+57), water = 57/(100+3+1.5+8+6+3+5+40+57)

## 01034 Common wheat, bread, soft rolls

The raw material mix ratios are: common wheat, hard flour, first grade at 100, yeast (compressed) at 3, common salt at 1.5, sugar (white sugar) at 12, unsalted butter at 15, skimmed milk powder at 2, hen egg at 15, and water at 50. Thus, the RF values are: common wheat, hard flour, first grade = 100/(100+3+1.5+12+15+2+15+50), yeast (compressed)= 3/(100+3+1.5+12+15+2+15+50), common salt = 1.5/(100+3+1.5+12+15+2+15+50), sugar (white sugar) = 12/(100+3+1.5+12+15+2+15+50), unsalted butter = 15/(100+3+1.5+12+15+2+15+50), skimmed milk powder = 2/(100+3+1.5+12+15+2+15+50), hen egg = 15/(100+3+1.5+12+15+2+15+50), and water = 50/(100+3+1.5+12+15+2+15+50)

## 01035 Common wheat, bread, croissants

The raw material mix ratios are: common wheat, medium-strength flour, first grade at 100, yeast (compressed) at 3.5, common salt at 2, sugar (white sugar) at 10, unsalted butter at 6, roll-in fat at 50, hen egg at 8, and water at 48. Thus, the RF values are: common wheat, medium-strength flour, first grade = 100/(100+3.5+2+10+6+50+8+48), yeast (compressed)= 3.5/(100+3.5+2+10+6+50+8+48), common salt = 2/(100+3.5+2+10+6+50+8+48), sugar (white sugar) = 10/(100+3.5+2+10+6+50+8+48), unsalted butter = 6/(100+3.5+2+10+6+50+8+48), roll-in fat = 50/(100+3.5+2+10+6+50+8+48), hen egg = 8/(100+3.5+2+10+6+50+8+48), and water = 48/(100+3.5+2+10+6+50+8+48)

## 01209 Common wheat, bread, croissant regular type

The raw material mix ratios are: common wheat, medium-strength flour, first grade at 100, yeast (compressed) at 4, common salt at 2, sugar (white sugar) at 10, margarine at 6, roll-in fat at 30, hen egg at 5, and water at 53. Thus, the RF values are: common wheat, medium-strength flour, first grade = 100/(100+4+2+10+6+30+5+53), yeast (compressed) = 4/(100+4+2+10+6+30+5+53), common salt= 2/(100+4+2+10+6+30+5+53), sugar (white sugar) = 10/(100+4+2+10+6+30+5+53), margarine= 6/(100+4+2+10+6+30+5+53), roll-in fat= 30/(100+4+2+10+6+30+5+53), hen egg= 5/(100+4+2+10+6+30+5+53), and water= 53/(100+4+2+10+6+30+5+53)

## 01210 Common wheat, bread, walnut bread

The raw material mix ratios are: common wheat, hard flour, first grade at 100, yeast (compressed) at 3, common salt at 1.7, sugar (white sugar) at 10, shortening at 3, unsalted butter at 3, skimmed milk powder at 3, hen egg at 5, walnuts at 30, and water at 60. Thus, the RF values are:

common wheat, hard flour, first grade = 100/(100+3+1.7+10+3+3+5+30+60),

yeast (compressed) = 3/(100+3+1.7+10+3+3+5+30+60),

common salt = 1.7/(100+3+1.7+10+3+3+5+30+60),

sugar (white sugar) = 10/(100+3+1.7+10+3+3+5+30+60),

shortening = 3/(100+3+1.7+10+3+3+5+30+60),

unsalted butter= 3/(100+3+1.7+10+3+3+5+30+60),

skimmed milk powder 3/(100+3+1.7+10+3+3+5+30+60),

hen egg = 5/(100+3+1.7+10+3+3+5+30+60),

walnuts = 30/(100+3+1.7+10+3+3+5+30+60),

water = 60/(100+3+1.7+10+3+3+5+30+60)

## 01036 Common wheat, bread, English muffins

The raw material mix ratios are: common wheat, hard flour, first grade at 250, sugar (white sugar) at 7, common salt at 4, water at 180, yeast (dried) at 5, and unsalted butter at 5. Thus, the RF values are: common wheat, hard flour, first grade = 250/(250+7+4+180+5+5), sugar (white sugar) = 7/(250+7+4+180+5+5), common salt = 4/(250+7+4+180+5+5), water = 180/(250+7+4+180+5+5), yeast (dried) = 5/(250+7+4+180+5+5), unsalted butter = 5/(250+7+4+180+5+5)

## 01037 Common wheat, bread, naan

The raw material mix ratios are: common wheat, hard flour, first grade at 200, sugar (white sugar) at 9, yeast (dried) at 5, common salt at 3, unsalted butter at 10, and water at 150. Thus, the RF values are: common wheat, hard flour, first grade = 200/(200+9+5+3+10+150), sugar (white sugar) = 9/(200+9+5+3+10+150), yeast (dried) = 5/(200+9+5+3+10+150), common salt = 3/(200+9+5+3+10+150), unsalted butter = 10/(200+9+5+3+10+150), and water = 150/(200+9+5+3+10+150)

## 01148 Common wheat, bread, bagel

The raw material mix ratios are: common wheat, hard flour, first grade at 250, yeast (dried) at 2, sugar (white sugar) at 20, common salt at 5, water at 140, and malt syrup at 15. Thus, the RF values are: common wheat, hard flour, first grade = 250/(250+2+20+5+140+15), yeast (dried) = 2/(250+2+20+5+140+15), sugar (white sugar) = 20/(250+2+20+5+140+15), common salt = 5/(250+2+20+5+140+15), water = 140/(250+2+20+5+140+15), malt syrup = 15/(250+2+20+5+140+15)

## 01038 Common wheat, "Udon" (thick wheat noodles), uncooked

The main raw materials of this item are common wheat, medium-strength flour, first grade and common salt. First assume that 100 g of this item mainly consists of x (g) of common wheat (medium-strength flour) and y (g) of common salt. One-hundred grams of this item contains 56.8 g of carbohydrate and 2.5 g of sodium content. The same weight of common wheat (medium-strength flour) contains 75.1 g of carbohydrate but no sodium content, while that of common salt has no carbohydrate but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 75.6 g, y = 2.5 g.

## 01041 Common wheat, "Udon" (thick wheat noodles), dried noodles, uncooked

The main raw materials of this item are common wheat, medium-strength flour, first grade and common salt. First assume that 100 g of this item mainly consists of x (g) of common wheat (medium-strength flour) and y (g) of common salt. One-hundred grams of this item contains 71.9 g of carbohydrate and 4.3 g of sodium content. The same weight of common wheat (medium-strength flour) contains 75.1 g of carbohydrate but no sodium content, while that of common salt has no carbohydrate but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 95.7 g, y = 4.3 g.

## 01043 Common wheat, "Somen and Hiyamugi" (thin wheat noodles), dried noodles, uncooked

The main raw materials of this item are common wheat, medium-strength flour, first grade, and common salt. First assume that 100 g of this item mainly consists of x (g) of common wheat (medium-strength flour) and y (g) of common salt. One-hundred grams of this item contains 72.7 g of carbohydrate and 3.8 g of sodium content. The same weight of common wheat contains 75.1 g of carbohydrate but no sodium content, while that of common salt has no carbohydrate but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 96.8 g, y = 3.8 g.

## 01045 Common wheat, "Somen and Hiyamugi" (thin wheat noodles), dried noodles, produced manually, raw

The main raw materials of this item are: common wheat, medium-strength flour, first grade; common salt, and; rapeseed oil. First assume that 100 g of this item mainly consists of x (g) of common wheat (medium-strength flour), y (g) of common salt and z (g) of rapeseed oil. One-hundred grams of this item contains 1.5 g of fat, 68.9 g of carbohydrate, and 5.8 g of sodium content. The same weight of common wheat (medium-strength flour) contains 1.6 g of fat, 75.1 g of carbohydrate, but no sodium content, while that of common salt has no fat or carbohydrate, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 91.7 g, y = 5.8 g, z = 3.8 g.

## 01047 Common wheat, yellow alkaline noodles, uncooked

The main raw materials of this item are common wheat, hard flour, first grade, and common salt. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour), and y (g) of common salt. One-hundred grams of this item has 55.7 g of carbohydrate and 1.0 g of sodium content. The same weight of common wheat (hard flour) contains 71.7 g of carbohydrate but no sodium content, while that of common salt has no carbohydrate but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 77.7 g, y = 1.0 g.

## 01049 Common wheat, yellow alkaline noodles, steamed noodles

The main raw materials of this item are: common wheat, hard flour, first grade; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour), y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item has 1.7 g of fat, 38.4 g of carbohydrate, and 0.4 g of sodium content. The same weight of common wheat (hard flour) contains 1.5 g of fat, 71.7 g of carbohydrate, but no sodium content, while that of oil has no carbohydrate or sodium content, but contains 100.0 g of fat. That of common salt contains no fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 53.6 g, y = 0.90 g, z = 0.4 g.

## 01050 Common wheat, yellow alkaline noodles, dried noodles, uncooked

The main raw materials of this item are common wheat, hard flour, first grade and common salt. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour) and y (g) of common salt. One-hundred grams of this item contains 70.2 g of carbohydrate and 1.3 g of sodium content. The same weight of common wheat (hard flour) contains 71.7 g of carbohydrate, but no sodium content. That of common salt has no carbohydrate but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 104.0 g, y = 1.3 g.

## 01052 Common wheat, Okinawa noodles, uncooked

The main raw materials of this item are: common wheat, hard flour, first grade; whole hen egg, and; common salt. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour) and y (g) of whole hen egg, and z (g) of common salt. One-hundred grams of this item contains 9.2 g of protein, 54.2 g of carbohydrate, and 2.1 g of sodium content, while the same weight of common wheat (hard flour) contains 11.8 g of protein, 71.7 g of carbohydrate, but no sodium content. That of hen egg has 12.3 g of protein, 0.3 g of carbohydrate, and 0.4 g of sodium content, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 75.6 g, y = 2.3 g, z = 2.1 g.

## 01054 Common wheat, Okinawa noodles, dried noodles, uncooked

The main raw materials of this item are: common wheat, hard flour, first grade; whole hen egg, and; common salt. First assume that 100 g of this item consist of x (g) of common wheat (hard flour), y (g) of whole hen egg, and z (g) of common salt. One-hundred grams of this item contains 12.0 g of protein, 67.8 g of carbohydrate, and 4.3 g of sodium content, while the same weight of common wheat (hard flour) contains 11.8 g of protein, 71.7 g of carbohydrate, but no sodium content. That of hen egg has 12.3 g of protein, 0.3 g of carbohydrate, and 0.4 g of sodium content, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 94.5 g, y = 6.8 g, z = 4.3 g.

## 01056 Common wheat, instant Chinese noodles, dried by frying, seasoned

The main raw materials of this item are: common wheat, hard flour, first grade; common wheat, medium-strength flour, first grade; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour), y (g) of common wheat (medium-strength flour), z (g) of rapeseed oil, and w (g) of common salt. One-hundred grams of this item contains 10.1 g of protein, 16.7 g of fat, 63.5 g of carbohydrate, and 6.4 g of sodium content. The same weight of common wheat (hard flour) contains 11.8 g of protein, 1.5 g of fat, 71.7 g of carbohydrate, but no sodium content, while that of common wheat (medium-strength flour) has 9.0 g of protein, 1.6 g of fat, 75.1 g of carbohydrate, but no sodium content. That of rapeseed oil has no protein, carbohydrate or sodium content, but contains 100.0 g of fat, while that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 77.6 g, y = 10.4 g, z = 15.4 g, w =6.4 g.

## 01057 Common wheat, instant Chinese noodles, dried by frying, not seasoned

The main raw materials of this item are: common wheat, hard flour, first grade; common wheat, medium-strength flour, first grade; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour), y (g) of common wheat (medium-strength flour), z (g) of rapeseed oil, and w (g) of common salt. One-hundred grams of this item contains 10.1 g of protein, 19.1 g of fat, 61.4 g of carbohydrate, and 5.6 g of sodium content, while the same weight of common wheat (hard flour) contains 11.8 g of protein, 1.5 g of fat, 71.7 g of carbohydrate, but no sodium content. That of common wheat (medium-strength flour) has 9.0 g of protein, 1.6 g of fat, 75.1 g of carbohydrate, but no sodium content, while that of rapeseed oil has no protein, carbohydrate or sodium content, but contains 100.0 g of fat, and that of common salt has no protein, fat or carbohydrate, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 85.5 g, y = 0.2 g, z = 17.8 g, w =5.6 g.

## 01058 Common wheat, instant Chinese noodles, dried without frying

The main raw materials of this item are: common wheat, hard flour, first grade; corn starch; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour), y (g) of starch, z (g) of oil, and w (g) of common salt. One-hundred grams of this item contains 10.3 g of protein, 5.2 g of fat, 67.4 g of carbohydrate, and 6.9 g of sodium content. The same weight of common wheat (hard flour) contains 11.8 g of protein, 1.5 g of fat, 71.7 g of carbohydrate, but no sodium content, while that of corn starch has 0.1g of protein, 0.7 g of fat, 86.3 g of carbohydrate, but no sodium content. That of rapeseed oil has no protein, carbohydrate or sodium content, but contains 100.0 g of fat, while that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 87.2 g, y = 5.3 g, z = 3.9 g, w =6.9 g.

## 01059 Common wheat, instant Chinese noodles, dried by frying and packed in cups

The main raw materials of this item are: common wheat, hard flour, first grade; rapeseed oil, and common salt. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour), y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item contains 19.7 g of fat, 56.9 g of carbohydrate, and 6.9 g of sodium content. while the same weight of common wheat (hard flour) contains 1.5 g of fat, 71.7 g of carbohydrate, but no sodium content. That of rapeseed oil has no carbohydrate or sodium content, but contains 100.0 g of fat, while that of common salt contains no fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 79.4 g, y = 18.5 g, z = 6.9 g.

## 01060 Common wheat, "Yakisoba", instant Chinese oil-fried noodles, dried by frying and in cups

The main raw materials of this item are: common wheat, hard flour, first grade; rapeseed oil; common salt, and; Worcester sauce. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour), y (g) of rapeseed oil, z (g) of common salt, and w (g) of Worcester sauce. One-hundred grams of this item contains 8.4 g of protein, 18.9 g of fat, 58.1 g of carbohydrate, and 3.8 g of sodium content. while the same weight of common wheat (hard flour) contains 11.8 g of protein, 1.5 g of fat, 71.7 g of carbohydrate, but no sodium content. That of rapeseed oil has no protein, carbohydrate or sodium content, but contains 100.0 g of fat. That of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content, while that of Worcester sauce has 1.0 g of protein, 0.1 g of fat, 27.1 g of carbohydrate, and 8.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 68.3 g, y = 17.8 g, z = 1.0 g, w =33.6 g.

## 01061 Common wheat, instant, Chinese noodles, dried by without frying and packed in cups

The main raw materials of this item are: common wheat, hard flour, first grade; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour), y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item contains 6.4 g of fat, 62.2 g of carbohydrate, and 6.9 g of sodium content, while the same weight of common wheat (hard flour) contains 1.5 g of fat, 71.7 g of carbohydrate, but no sodium content. That of rapeseed oil has no carbohydrate or sodium content, but contains 100.0 g of fat, while that of common salt contains no fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 86.8 g, y = 5.1 g, z = 6.9 g.

## 01062 Common wheat, instant, "Udon" noodles, Japanese thick wheat noodles, dried by frying and packed in cups

The main raw materials of this item are: common wheat, hard flour, first grade; rapeseed oil; common salt, and; dark soy sauce. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour), y (g) of rapeseed oil, z (g) of common salt, and w (g) of dark soy sauce. One-hundred grams of this item contains 10.9 g of protein, 20.1 g of fat, 56.6 g of carbohydrate, and 6.9 g of sodium content, while the same weight of common wheat (hard flour) contains 11.8 g of protein, 1.5 g of fat, 71.7 g of carbohydrate, but no sodium content. That of rapeseed oil has no protein, carbohydrate or sodium content, but contains 100.0 g of fat, while that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content, and that of soy sauce has no fat, but contains 7.7 g of protein, 7.9 g of carbohydrate, and 14.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 76.2 g, y = 19.0 g, z = 3.3 g, w =24.8 g.

## 01063 Durum wheat, macaroni and spaghetti, dry pasta, uncooked

The main raw material of this item is durum semolina wheat. One-hundred grams of this item contains 73.1 g of carbohydrate, while the same weight of durum semolina contains 71.1 g of carbohydrate according to USDA Food Data Central, while that of this item. Therefore, the required amount of durum semolina wheat to make 100 g of this item is:

## 01149 Durum wheat, macaroni and spaghetti, wet pasta, uncooked

The main raw materials of this item are durum semolina wheat and common salt. First assume that 100 g of this item mainly consists of x (g) of durum semolina wheat and z (g) of common salt. One-hundred grams of this item contains 46.9 g of carbohydrate and 1.2 g of sodium content. The same weight of durum semolina wheat contains 71.1 g of carbohydrate but no sodium content according to USDA Food Data Central, while that of common salt contains no carbohydrate but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 66.0 g, y = 1.2 g.

## 01065 Common wheat, "Fu" (wheat gluten cake), "Namafu" (steamed dough made from gluten and glutinous rice flour)

The main raw materials of this item are: common wheat, hard flour, first grade, and; paddy rice, glutinous rice, well-milled, raw. First assume that 100 g of this item mainly consists of x (g) of common wheat gluten (paste type) and ｙ (g) of glutinous rice. One-hundred grams of this item contains 12.7 g of protein, 26.2 g of carbohydrate. The same weight of common wheat gluten (paste type) contains 69.3 g of protein and 16.0 g of carbohydrate, while that of glutinous rice has 6.4 g of protein and 77.2 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 15.5 g, y = 30.7 g.

## 01066 Common wheat, "Fu" (wheat gluten cake), "Kamayakifu" (dried by baking in oven)

The main raw materials of this item are: common wheat, hard flour, first grade, and; wheat gluten (paste type). First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour) and y (g) of wheat gluten (paste type). One-hundred grams of this item contains 28.5 g of protein and 56.9 g of carbohydrate. The same weight of common wheat (hard flour) contains 11.8 g of protein and 71.7 g of carbohydrate, while that of wheat gluten (paste type) has 69.3 g of protein and 16.0 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 56.2 g, y = 103.7 g.

## 01067 Common wheat, "Fu" (wheat gluten cake), "Itafu" (dried gluten sheet by baking)

The main raw materials of this item are: common wheat, hard flour, first grade, and; wheat gluten (paste type). First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour) and y (g) of wheat gluten (paste type). One-hundred grams of this item contains 25.6 g of protein and 57.3 g of carbohydrate. The same weight of common wheat (hard flour) contains 11.8 g of protein and 71.7 g of carbohydrate, while that of wheat gluten (paste type) has 69.3 g of protein and 16.0 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 74.5 g, y = 24.3 g.

## 01068 Common wheat, "Fu" (wheat gluten cake), "Kurumafu" (dried gluten cake by baking ring-shaped)

The main raw materials of this item are: common wheat, hard flour, first grade, and; wheat gluten (paste type). First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour) and y (g) of wheat gluten (paste type). One-hundred grams of this item contains 30.2 g of protein and 54.2 g of carbohydrate. The same weight of common wheat (hard flour) contains 11.8 g of protein and 71.7 g of carbohydrate, while that of wheat gluten (paste type) has 69.3 g of protein and 16.0 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 68.5 g, y = 31.9 g.

## 01074 Common wheat, Outer steamed wheat dough of "Jiaozi", Chibese meat dumpling

The main raw material of this item is common wheat, hard flour, first grade. One-hundred grams of this item contains 57.0 g of carbohydrate, while the same weight of common wheat (hard flour) has 71.7 g of carbohydrate. Therefore, the required weight of common wheat (hard flour) to make 100 g of this item is:

## 01075 Common wheat, Outer steamed wheat dough of "Shumai (Chinese steamed dumpling)", Chinese meat dumpling

The main raw materials of this item are: common wheat, hard flour, first grade, and; common wheat, medium-strength flour, first grade. Both flours are mixed in the same amount. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour) and x (g) of common wheat (medium-strength flour). One-hundred grams of this item contains 58.9 g of carbohydrate. The same weight of common wheat (hard flour) contains 71.7 g of carbohydrate, while that of common wheat (medium-strength flour) has 75.1 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 40.1 g.

## 01076 Common wheat, pizza crust

The raw material mix ratios are: common wheat, hard flour, first grade at 150, common wheat, soft flour, first grade at 150, dry yeast at 6, sugar (white sugar) at 6, and olive oil at 24. Thus, the RF values are: common wheat, hard flour, first grade = 150/(150+150+6+6+24) = 44.6, common wheat, soft flour, first grade = 150/(150+150+6+6+24) = 44.6, dry yeast = 6/(150+150+6+6+24) = 1.8, sugar (white sugar) = 6/(150+150+6+6+24) = 1.8, and olive oil = 24/(150+150+6+6+24) = 7.1.

## 01069 Common wheat, "Chikuwabu" (tube-shaped steamed wheat dough)

The main raw material of this item is common wheat, hard flour, first grade. One-hundred grams of this item contains 31.1 g of carbohydrate, while the same weight of common wheat (hard flour) contains 71.7 g of carbohydrate. Therefore, the required weight of common wheat (hard flour) to make 100 g of this item is:

## 01077 Common wheat, bread crumbs, fresh

The main raw material of this item is white bread. One-hundred grams of this item contains 47.6 g of carbohydrate, while the same weight of white bread contains 46.6 g of carbohydrate. Therefore, the required weight of white bread to make 100 g of this item is:

## 01078 Common wheat, bread crumbs, semi-dry

The main raw material of this item is white bread. One-hundred grams of this item contains 54.3 g of carbohydrate, while the same weight of white bread contains 46.6 g of carbohydrate. Therefore, the required weight of white bread to make 100 g of this item is:

## 01079 Common wheat, bread crumbs, dry

The main raw material of this item is white bread. One-hundred grams of this item contains 63.4 g of carbohydrate, while the same weight of white bread contains 46.6 g of carbohydrate. Therefore, the required weight of white bread to make 100 g of this item is:

## 01150 Common wheat, cold noodles, uncooked

The main raw materials of this item are: common wheat, hard flour, first grade; potato starch, and; common salt. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour), y (g) of potato starch, and z (g) of common salt. One-hundred grams of this item contains 3.9 g of protein, 57.6 g of carbohydrate, and 1.3 g of sodium content, while the same weight of common wheat (hard flour) contains 11.8 g of protein, 71.7 g of carbohydrate, but no sodium content. That of potato starch has 0.1 g of protein, 81.6 g of carbohydrate, but no sodium content, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 32.7 g, y = 41.9 g, z = 1.3 g.

## 01110 Rice, non-glutinous rice products, quick-cooking rice, regular, raw

The main raw material of this item is paddy rice, non-glutinous, well-milled, raw. One-hundred grams of this item contains 84.8 g of carbohydrate, while the same weight of non-glutinous rice has 77.6 g of carbohydrate. Therefore, the required weight of non-glutinous rice to make 100 g of this item is:

## 01156 Rice, non-glutinous rice products, quick-cooking rice, fortified product for school lunch, raw

The main raw material of this item is paddy rice, non-glutinous, well-milled, raw. One-hundred grams of this item contains 84.8 g of carbohydrate, while the same weight of non-glutinous rice has 77.6 g of carbohydrate. Therefore, the required weight of non-glutinous rice to make 100 g of this item is:

## 01111 Rice, non-glutinous rice products, "Onigiri" (rice ball)

The main raw materials of this item are: paddy rice, non-glutinous, well-milled, raw, and; common salt. First assume that 100 g of this item mainly consists of x (g) of non-glutinous rice and y (g) of common salt. One-hundred grams of this item contains 39.4 g carbohydrate and 0.5 g of sodium content. The same weight of non-glutinous rice has 77.6 g of carbohydrate but no sodium content, while that of common salt contains no carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 50.8 g, y = 0.5 g.

## 01112 Rice, non-glutinous rice products, "Yaki-onigiri" (baked rice ball)

The main raw materials of this item are: paddy rice, non-glutinous rice, well-milled, "meshi" (cooked rice), and; dark soy sauce. One-hundred grams of this item contains 6.5 g of dark soy sauce, whose calorie is 5 kcal. One-hundred grams of this item has 181 kcal, while that of non-glutinous rice has 168 kcal. Therefore, the required weight of non-glutinous rice to make 100 g of this item is:

## 01113 Rice, non-glutinous rice products, "Kiritanpo" (baked tube-shaped cooked rice)

The main raw material of this item is paddy rice, non-glutinous, well-milled, raw. One-hundred grams of this item contains 46.2 g of carbohydrate, while the same weight of non-glutinous rice has 77.6 g of carbohydrate. Therefore, the required weight of non-glutinous rice to make 100 g of this item is:

## 01159 Rice, non-glutinous rice products, rice bread

The raw material mix ratios are: non-glutinous rice flour at 300, cane sugar at 20, common salt at 5, dry yeast at 4, and rapeseed oil at 12. Thus, the RF values are: non-glutinous rice flour= 300/(300+20+5+4+12) = 88.0, cane sugar = 20/(300+20+5+4+12) = 5.9, common salt = 5/(300+20+5+4+12) = 1.5, dry yeast = 4/(300+20+5+4+12), and rapeseed oil = 12/(300+20+5+4+12).

## 01160 Rice, non-glutinous rice products, wet noodles, rice noodle, raw

The main raw materials of this item are paddy rice, non-glutinous, well-milled, raw, and potato starch. First assume that 100 g of this item mainly consists of x (g) of non-glutinous rice and y (g) of potato starch. One-hundred grams of this item contains 3.6 g of protein and 58.4 g of carbohydrate. The same weight of non-glutinous rice has 6.1 g of protein and 77.6 g of carbohydrate, while that of potato starch contains 0.1 g of protein and 81.6 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 58.8 g, y = 15.7 g.

## 01115 Rice, non-glutinous rice products, dried noodles, raw

The main raw material of this item is paddy rice, Indica rice, well-milled, raw. One-hundred grams of this item contains 79.9 g of carbohydrate, while the same weight of Indica rice has 77.7 g of carbohydrate. Therefore, the required weight of Indica rice to make 100 g of this item is:

## 01116 Rice, non-glutinous rice products, rice-koji

The main raw material of this item is paddy rice, non-glutinous rice, well-milled, raw. One-hundred grams of this item contains 5.8 g of protein, while the same weight of non-glutinous rice has 6.1 g of protein. Therefore, the required weight of non-glutinous rice to make 100 g of this item is:

## 01169 Rice, non-glutinous rice products, rice paper

The main raw materials of this item are: Indica rice; cassava starch, and; common salt. First assume that 100 g of this item mainly consists of x (g) of Indica rice, y (g) of cassava starch, and z (g) of common salt. One-hundred grams of this item contains 0.5 g of protein, 84.3 g of carbohydrate, and 1.7 g of sodium content, while the same weight of Indica rice has 7.4 g of protein, 77.7 g of carbohydrate, but no sodium content. That of cassava starch contains 0.1 g of protein, 85.3 g of carbohydrate, but no sodium content, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 5.5 g, y = 93.8 g, z = 1.7 g.

## 01117 Rice, glutinous rice products, rice cake

The main raw material of this item is paddy rice, glutinous rice, well-milled, raw. One-hundred grams of this item contains 50.8 g of carbohydrate, while the same weight of glutinous rice has 77.2 g of carbohydrate. Therefore, the required weight of glutinous rice to make 100 g of this item is:

## 01118 Rice, glutinous rice products, "Sekihan" (steamed rice with adzuki beans or cowpeas)

The raw material mix ratios are: glutinous rice at 100, and cowpeas/mature seeds, whole, raw at 10. Thus, the RF values are: glutinous rice = 100/(100+10) = 0.909, cowpeas = 10/(100+10) = 0.091.

## 01119 Rice, glutinous rice products, "Akumaki" (lye-soaked and cooked rice in bamboo leaf wrapping)

The main raw material of this item is paddy rice, glutinous rice, well-milled, raw. One-hundred grams of this item contains 25.7 g of carbohydrate, while the same weight of glutinous rice has 77.2 g of carbohydrate. Therefore, the required weight of glutinous rice to make 100 g of this item is:

## 01127 Buckwheat, wet noodles, uncooked

The raw material mix ratios are: common wheat, hard flour, first grade at 65, and buckwheat flour, inner layer at 35. Thus, the RF values are: common wheat, hard flour, first grade = 65/(65+35) = 0.65, and buckwheat flour, inner layer = 35/(65+35) = 0.35.

## 01129 Buckwheat, dried noodles, uncooked

The raw material mix ratios are: common wheat, hard flour, first grade at 65, and buckwheat flour, inner layer at 35. Thus, the RF values are: common wheat, hard flour, first grade = 65/(65+35) = 0.65, and buckwheat flour, inner layer = 35/(65+35) = 0.35.

## 01135 Corn, cultivar: Cuzco, oil-roasted and salted

The main raw materials of this item are: corn, whole grain, white kernel, raw, rapeseed oil, common salt. First assume that 100 g of this item mainly consists of x (g) of corn, y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item contains 11.8 g of fat, 76.6 g of carbohydrate, and 1.1 g of sodium content, while the same weight of corn has 5.0 g of fat, 70.6 g of carbohydrate, but no sodium content. That of rapeseed oil contains no carbohydrate or sodium content, but has 100.0 g of fat, while that of common salt has no fat or carbohydrate, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 108.5 g, y = 6.4 g, z = 1.1 g.

## 01136 Corn, popcorn, oil-popped and salted

The main raw materials of this item are: corn, whole grain, yellow kernel, raw; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of corn, y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item contains 22.8 g of fat, 59.6 g of carbohydrate, and 1.4 g of sodium content, while the same weight of corn has 5.0 g of fat, 70.6 g of carbohydrate, but no sodium content. That of rapeseed oil contains no carbohydrate or sodium content, but has 100.0 g of fat, while that of common salt contains no fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 84.4 g, y = 18.6 g, z = 1.4 g.

## 01137 Corn, cornflakes

The main raw materials of this item are: corn grits; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of corn grits, y (g) of white sugar, and z (g) of common salt. One-hundred grams of this item contains 7.8 g of protein, 83.6 g of carbohydrate, and 2.1 g of sodium content, while the same weight of corn grits contains 8.2 g of protein, 76.4 g of carbohydrate, but no sodium content. That of white sugar has no protein or sodium content, but contains 99.3 g of carbohydrate, while that of common salt has no protein or carbohydrate, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 95.1 g, y = 4.1 g, z = 2.1 g.

# Potatoes and starches

|  |
| --- |
| About konjac (answers from Japan Konnyaku Association)  1. How much is the required weight of konjac potato (corm) to make 100 g of fine powder?  Making 100 g of fine powder of konjac requires about 1 kg konjac potato (corm), as the yield of production, or making powders from konjac of indigenous species is around 10%.  2. How much is the required weight of konjac potato (corm) to make 100 g of konjac block made from corm?  Our website describes materials for konjac block made from corm as follows: The required weight of konjac potato (corm) to make approximately 2 kg to 2.5 kg of konjac block made from corm is 500 g. In other words, about 20 to 25 g of konjac potato (corm) is required to make 100 g of konjac block made from corm.  (Materials to make 2 kg to 2.5 kg of konjac block made from corm)  Konjac potato (corm) (raw) (weighing about 500 g): 1  Water: 1.3 to 1.8L  Lime hydrate (calcium hydroxide): 2 to 3 g  Lukewarm water: 200mL |

## 02002 Konjac, fine powder

The main raw material of this item is konjac potato (corm). According to answers from Japan Konnyaku Association, 1,000 g of konjac potato (corm) is required to make 100 g of konjac (fine powder).

## 02003 Konjac, block, made from fine powder

The main raw material of this item is konjac (fine powder). One-hundred grams of this item contains 2.3 g of carbohydrate, while the same weight of konjac (fine powder) has 77.2 g carbohydrate. Therefore, the required weight of konjac (fine powder) to make 100 g of this item is:

## 02004 Konjac, block, made from corm

The main raw material of this item is konjac potato (corm). According to answers from Japan Konnyaku Association, 22.5 g of konjac potato (corm) is required to make 100 g of konjac made from corm.

## 02042 Konjac, block, red

The main raw material of this item is konjac (fine powder). One-hundred grams of this item contains 2.5 g of carbohydrate, while the same weight of fine powder has 77.2 g carbohydrate. Therefore, the required weight of fine powder to make 100 g of this item is:

## 02043 Konjac, freeze-dried, raw

The main raw material of this item is konjac (fine powder). One-hundred grams of this item contains 77.1 g of carbohydrate, while the same weight of konjac (fine powder) has 77.2 g carbohydrate. Therefore, the required weight of konjac (fine powder) to make 100 g of this item is:

## 02005 Konjac, noodles

The main raw material of this item is konjac (fine powder). One-hundred grams of this item contains 3.0 g of carbohydrate, while the same weight of konjac (fine powder) has 77.2 g carbohydrate. Therefore, the required weight of konjac (fine powder) to make 100 g of this item is:

## 02009 Sweet potato, Mushikiriboshi (sliced and dried after steaming)

The main raw material of this item is sweet potato, tuberous root, without skin， steamed. One-hundred grams of this item contains 71.9 g of carbohydrate, while the same weight of sweet potato has 31.9 g carbohydrate. Therefore, the required weight of sweet potato to make 100 g of this item is:

## 02020 Potatoes, fried potato

fried potato

The main raw materials of this item are potato, tuber, without skin, raw, and rapeseed oil. First assume that 100 g of this item mainly consists of x (g) of potato and y (g) of rapeseed oil. One-hundred grams of this item contains 10.6 g of fat and 32.4 g of carbohydrate. The same weight of potato has 0.1 g of fat and 17.3 g of carbohydrate, while that of rapeseed oil has no carbohydrate but contains 100.0 g of fat. Therefore, the following equation is established:

From the above, x = 187.3 g, y = 10.4 g.

## 02021 Potatoes, dehydrated mashed potato

The main raw material of this item is potato, tuber, without skin, raw. One-hundred grams of this item contains 82.8 g of carbohydrate, while the same weight of potato has17.3 g of carbohydrate. Therefore, the required weight of potato to make 100 g of this item is:

## 02039 Starch products, "Harusame" (thin starch noodles), made from mung bean starch, dried, uncooked

The main raw material of this item is mung bean starch, dried. One-hundred grams of this item contains 87.5 g of carbohydrate, while the same weight of mung bean starch has 59.1 g of carbohydrate. Therefore, the required weight of mung bean starch to make 100 g of this item is:

## 02040 Starch products, "Harusame" (thin starch noodles), made from potato and sweet potato starches, dried, uncooked

The main raw materials of this item are sweet potato starch and potato starch. First assume that 100 g of this item mainly consists of x (g) of sweet potato starch and y (g) of potato starch. One-hundred grams of this item contains 0.2 g of fat and 86.6 g of carbohydrate. The same weight of sweet potato starch has 0.2 g of fat and 82.0 g of carbohydrate, while that of potato starch contains 0.1 g of fat and 81.6 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 94.3 g, y = 11.3 g

# PULSES

## 04003 Adzuki beans, mature seeds, whole, boiled, canned in syrup

The main raw materials of this item are: adzuki beans; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of adzuki beans, y (g) of white sugar, and z (g) of common salt. One-hundred grams of this item contains 4.4 g of protein, 49.2 g of carbohydrate, and 0.2 g of sodium content, while the same weight of adzuki beans contain 20.3 g of protein, 58.7 g of carbohydrate, but no sodium content. That of white sugar has no protein or sodium content, but contains 99.3 g of carbohydrate, while that of common salt has no protein or carbohydrate, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 21.7 g, y = 36.7 g, z = 0.2 g.

## 04004 Adzuki beans, mature seeds, "An" (bean paste), "Koshi-an"(strained bean paste)

The main raw material of this item is adzuki beans. One-hundred grams of this item contains 27.1 g of carbohydrate, while the same weight of adzuki beans has 59.6 g of carbohydrate. Therefore, the required weight of adzuki beans to make 100 g of this item is:

## 04005 Adzuki beans, mature seeds, "An" (bean paste), "Sarashi-an" (powder of strained bean paste)

The main raw material of this item is adzuki beans. One-hundred grams of this item contains 66.8 g of carbohydrate, while the same weight of adzuki beans has 59.6 g of carbohydrate. Therefore, the required weight of adzuki beans to make 100 g of this item is:

## 04101 Adzuki beans, mature seeds, “An” (bean paste), “Koshineri-an” (“Nami-an”)

The raw material mix ratios are: non-sweetened adzuki bean paste at 100, sugar (white sugar) at 70, and starch syrup at 7. Thus, the RF values are: non-sweetened adzuki bean paste = 100/(100+70+7) = 56.5, sugar (white sugar) = 70/(100+70+7) = 39.5, starch syrup = 7/(100+70+7) =4.0.

## 04102 Adzuki beans, mature seeds, “An” (bean paste), “Koshineri-an” (“Chu-wari-an”)

The raw material mix ratios are: non-sweetened adzuki bean paste at 100, sugar (white sugar) at 85, and starch syrup at 7. Thus, the RF values are: non-sweetened adzuki bean paste = 100/(100+85+7) = 52.1, sugar (white sugar) = 70/(100+85+7) = 44.3, starch syrup = 7/(100+85+7) = 3.6.

## 04103 Adzuki beans, mature seeds, “An” (bean paste), “Koshineri-an”(“Monaka-an”)

The raw material mix ratios are: non-sweetened adzuki bean paste at 100, sugar (white sugar) at 100, and starch syrup at 7. Thus, the RF values are: non-sweetened adzuki bean paste = 100/(100+100+7) = 48.3, sugar (white sugar) = 70/(100+100+7) = 48.3, starch syrup = 7/(100+100+7) =3.4.

## 04006 Adzuki beans, mature seeds, “An” (bean paste), “Tsubushi-an” (mushed sweet bean paste)

The main raw materials of this item are adzuki beans and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of adzuki beans and y (g) of white sugar. One-hundred grams of this item contains 5.6 g of protein and 54.0 g of carbohydrate. The same weight of adzuki beans has 20.8 g of protein and 59.6 g of carbohydrate, while that of white sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 26.9 g, y = 38.2 g.

## 04009 Kidney beans, mature seeds, “Uzura-mame” (beans cooked with sugar and salt)

The main raw materials of this item are: kidney beans; sugar (white sugar), and; dark soy sauce. First assume that 100 g of this item mainly consists of x (g) of kidney beans, y (g) of white sugar, and z (g) of dark soy sauce. One-hundred grams of this item contains 6.7 g of protein, 49.6 g of carbohydrate, and 0.3 g of sodium content, while the same weight of kidney beans has 22.1 g of protein, 57.8 g of carbohydrate, but no sodium content. That of white sugar has no protein or sodium content, but contains 99.3 g of carbohydrate, while that of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate, and 14.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 29.9 g, y = 30.7 g, z = 2.1 g.

## 04010 Kidney beans, mature seeds, “Koshi-an” (strained sweet bean paste)

The main raw materials of this item are kidney beans and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of kidney beans and y (g) of white sugar. One-hundred grams of this item contains 9.4 g of protein and 27.0 g of carbohydrate. The same weight of kidney beans has 22.1 g of protein and 56.4 g of carbohydrate, while that of white sugar has no protein, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 42.5 g, y = 3.0 g.

## 04011 Kidney beans, mature seeds, “Mame-kinton” (sweetened whole beans with bean paste)

The main raw materials of this item are: kidney beans; scarlet runner beans; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of kidney beans, y (g) of scarlet runner beans, z (g) of white sugar, and w (g) of common salt. One-hundred grams of this item contains 4.9 g of protein, 0.5 g of fat, 56.2 g of carbohydrate, and 0.3 g of sodium content, while the same weight of kidney beans has 22.1 g of protein, 2.2 g of fat, 57.8 g of carbohydrate, but no sodium content. That of scarlet runner beans contains 17.2 g of protein, 1.7 g of fat, 61.2 g of carbohydrate, but no sodium content., while that of white sugar has no protein, fat or sodium content, but contains 99.3 g of carbohydrate, and that of common salt has no protein, fat or carbohydrate, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 6.7 g, y = 20.7 g, z = 39.9 g, w =0.3 g.

## 04014 Peas, mature seeds, oil-roasted and salted

The main raw materials of this item are: green peas; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of green peas, y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item contains 11.6 g of fat, 58.8 g of carbohydrate, and 0.9 g of sodium content, while the same weight of green peas contains 2.3 g of fat, 60.4 g of carbohydrate, but no sodium content. That of rapeseed oil has no carbohydrate or sodium content, but contains 100.0 g of fat, while that of common salt has no fat and carbohydrate, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 97.4 g, y = 9.4 g, z = 0.9 g.

## 04015 Peas, mature seeds, “Shio-mame” (peas roasted and coated with calcium carbonate and salt)

The main raw materials of this item are green peas and common salt. First assume that 100 g of this item mainly consists of x (g) of green peas and y (g) of common salt. One-hundred grams of this item contains 61.5 g of carbohydrate and 1.5 g of sodium content. The same weight of green peas has 60.4 g of carbohydrate but no sodium content, while that of common salt contains no carbohydrate but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 101.8 g, y = 1.5 g.

## 04016 Peas, mature seeds, “Uguisu-mame” (green peas cooked with sugar and salt)

The main raw materials of this item are: green peas; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of green peas, y (g) of white sugar, and z (g) of common salt. One-hundred grams of this item contains 5.6 g of protein, 52.9 g of carbohydrate and 0.4 g of sodium content, while the same weight of green peas contains 21.7 g of protein, 60.4 g of carbohydrate, but no sodium content. That of white sugar has no protein or sodium content, but contains 99.3 g of carbohydrate, while that of common salt has no protein or carbohydrate but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 25.8 g, y = 37.6 g, z = 0.4 g.

## 04020 Broad beans, mature seeds, oil-roasted and salted

The main raw materials of this item are: broad beans; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of broad beans, y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item contains 20.8 g of fat, 46.4 g of carbohydrate and 1.8 g of sodium content, while the same weight of broad beans contains 2.0 g of fat, 55.9 g of carbohydrate, but no sodium content. That of rapeseed oil has no carbohydrate or sodium content, but contains 100.0 g of fat, while that of common salt has no fat or carbohydrate but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 83.0 g, y = 19.1 g, z = 1.8 g.

## 04021 Broad beans, mature seeds, “Otafuku-mame” (beans cooked with sugar and salt or soy sauce)

The main raw materials of this item are: broad beans; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of broad beans, y (g) of white sugar, and z (g) of common salt. One-hundred grams of this item contains 7.9 g of protein, 52.2 g of carbohydrate and 0.4 g of sodium content, while the same weight of broad beans contains 26.0 g of protein, 55.9 g of carbohydrate, but no sodium content. That of white sugar has no protein or sodium content, but contains 99.3 g of carbohydrate, while that of common salt has no protein or carbohydrate but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 30.4 g, y = 35.5 g, z = 0.4 g.

## 04022 Broad beans, mature seeds, “Fuki-mame” (hulled beans cooked with sugar and salt)

The main raw materials of this item are: broad beans; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of broad beans, y (g) of white sugar, and z (g) of common salt. One-hundred grams of this item contains 5.6 g of protein, 52.9 g of carbohydrate and 0.4 g of sodium content, while the same weight of broad beans contains 26.0 g of protein, 55.9 g of carbohydrate, but no sodium content. That of white sugar has no protein or sodium content, but contains 99.3 g of carbohydrate, while that of common salt has no protein or carbohydrate but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 36.9 g, y = 32.1 g, z = 0.8 g

## 04076 Broad beans, mature seeds, “Shoyu-mame” (roasted beans soaked in sugar and soy sauce)

The main raw materials of this item are: broad beans; sugar (white sugar), and; dark soy sauce. First assume that 100 g of this item mainly consists of x (g) of broad beans, y (g) of white sugar, and z (g) of dark soy sauce. One-hundred grams of this item contains 9.8 g of protein, 37.1 g of carbohydrate and 1.2 g of sodium content, while the same weight of broad beans contains 26.0 g of protein, 55.9 g of carbohydrate, but no sodium content. That of white sugar has no protein or sodium content, but contains 99.3 g of carbohydrate, while that of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate, and 14.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 35.2, y = 16.7 g, z = 8.3 g.

## 04078 Soybeans, mature seeds, whole, yellow seed coats, roasted

The main raw material of this item is soybeans. One-hundred grams of this item contains 37.5 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04079 Soybeans, mature seeds, whole, black seed coats, roasted

The main raw material of this item is soybeans. One-hundred grams of this item contains 36.4 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04028 Soybeans, mature seeds, whole, yellow seed coats, boiled, canned in water, drained

The main raw material of this item is soybeans. One-hundred grams of this item contains 12.9 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04081 Soybeans, mature seeds, whole, yellow seed coats, steamed, retort packed

The main raw material of this item is soybeans. One-hundred grams of this item contains 16.6 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04029 Soybeans, “Kinako” (roasted and ground beans), made from whole beans with yellow seed coats

The main raw material of this item is soybeans. One-hundred grams of this item contains 36.7 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04030 Soybeans, “Kinako” (roasted and ground beans), made from hulled beans with yellow seed coats

The main raw material of this item is soybeans. One-hundred grams of this item contains 25.1 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04031 Soybeans, “Budo-mame” (beans cooked with sugar and salt)

The main raw materials of this item are: soybeans; sugar (white sugar), and; dark soy sauce. First assume that 100 g of this item mainly consists of x (g) of soybeans, y (g) of white sugar, and z (g) of dark soy sauce. One-hundred grams of this item contains 14.1 g of protein, 37.0 g of carbohydrate, and 1.6 g of sodium content, while the same weight of soybeans has 33.8 g of protein and 29.5 g of carbohydrate, but no sodium content. That of white sugar has no protein or sodium content, but contains 99.3 g of carbohydrate, while that of soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 27.1 g, y = 28.6 g, z = 8.3 g.

## 04032 Soybeans, tofu, “Momen-tofu” (regular tofu)

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw material of this item is soybeans. One-hundred grams of this item contains 6.6 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04097 Soybeans, tofu, “Momen-tofu” (regular tofu), (Coagulant: magnesium chloride)

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw material of this item is soybeans. One-hundred grams of this item contains 6.6 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04098 Soybeans, tofu, “Momen-tofu” (regular tofu), (Coagulant: calcium sulfate)

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw material of this item is soybeans. One-hundred grams of this item contains 6.6 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04033 Soybeans, tofu, “Kinugoshi-tofu” (silken tofu)

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw material of this item is soybeans. One-hundred grams of this item contains 4.9 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04099 Soybeans, tofu, “Kinugoshi-tofu” (silken tofu), (Coagulant: magnesium chloride)

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw material of this item is soybeans. One-hundred grams of this item contains 4.9 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04100 Soybeans, tofu, “Kinugoshi-tofu” (silken tofu), (Coagulant: calcium sulfate)

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw material of this item is soybeans. One-hundred grams of this item contains 4.9 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04034 Soybeans, tofu, soft tofu

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw material of this item is soybeans. One-hundred grams of this item contains 5.1 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04035 Soybeans, tofu, “Juten-tofu” (packaged tofu)

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw material of this item is soybeans. One-hundred grams of this item contains 5.0 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04036 Soybeans, tofu, “Okinawa-tofu” (firm tofu made in Okinawa prefecture)

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw material of this item is soybeans. One-hundred grams of this item contains 9.1 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04037 Soybeans, tofu, “Yushi-dofu” (unmoulded tofu)

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw materials of this item are soybeans and common salt. First assume that 100 g of this item mainly consists of x (g) of soybeans and y (g) of common salt. One-hundred grams of this item contains 4.3 g of protein and 0.6 g of sodium content. The same weight of soybeans has 33.8 g of protein but no sodium content, while same weight of common salt contains no protein, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 12.7 g, y = 0.6 g.

## 04038 Soybeans, tofu, “Yaki-tofu” (grilled tofu)

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw material of this item is soybeans. One-hundred grams of this item contains 7.8 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04039 Soybeans, tofu, “Nama-age” (fried slices of drained tofu)

The main raw materials of this item are soybeans and rapeseed oil. First assume that 100 g of this item mainly consists of x (g) of soybeans and y (g) of rapeseed oil. One-hundred grams of this item contains 10.7 g of protein and 11.3 g of fat. The same weight of soybeans has 33.8 g of protein and 19.7 g of fat, while that of rapeseed oil has no protein, but contains 100.0 g of fat. Therefore, the following equation is established:

From the above, x = 31.7 g, y = 5.1 g.

## 04040 Soybeans, tofu, “Abura-age” (fried thin slices of pressed tofu), uncooked

The main raw materials of this item are soybeans and rapeseed oil. First assume that 100 g of this item mainly consists of x (g) of soybeans and y (g) of rapeseed oil. One-hundred grams of this item contains 23.4 g of protein and 34.4 g of fat. The same weight of soybeans has 33.8 g of protein and 19.7 g of fat, while that of rapeseed oil has no protein, but contains 100.0 g of fat. Therefore, the following equation is established:

From the above, x = 69.2 g, y = 20.8 g.

## 04041 Soybeans, tofu, “Ganmodoki” (fried mixture of crushed tofu, vegetables and ground yam)

The raw material mix ratios are: Momen-tofu at 17.5, Japanese yam at 15, hen egg at 12.5, salt at 0.5, cloud ear at 0.75, carrot at 15, snow peas (immature pods) at 10, and oil at 10.5. Thus, the RF values are:

Momen-tofu = 17.5/(17.5+15+12.5+0.5+0.75+15+10+10.5),

Japanese yam = 15/(17.5+15+12.5+0.5+0.75+15+10+10.5),

hen egg = 12.5/(17.5+15+12.5+0.5+0.75+15+10+10.5),

salt = 0.5/(17.5+15+12.5+0.5+0.75+15+10+10.5),

cloud ear = 0.75/(17.5+15+12.5+0.5+0.75+15+10+10.5),

carrot = 15/(17.5+15+12.5+0.5+0.75+15+10+10.5),

snow peas (immature pods) = 10/(17.5+15+12.5+0.5+0.75+15+10+10.5),

oil = 10.5/(17.5+15+12.5+0.5+0.75+15+10+10.5).

## 04042 Soybeans, tofu, “Kori-dofu” (freeze dried tofu), uncooked

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw materials of this item are soybeans. One-hundred grams of this item contains 50.5 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04043 Soybeans, tofu, “Tofu-yo” (fermented tofu)

The main raw materials of this item are: dried tofu; rice koji and; Awamori (strong Okinawan distilled liquor); according to Masako Katsura, *J*ournal *of Cookery Science of Japan* (29-4), The Japan Society of Cookery Science, 1996, pp. 314-322. Water and protein are decreased while salt and carbohydrate are increased during the manufacture of dried tofu from Okinawa-tofu. First assume that 100 g of this item mainly consists of x (g) of soybeans and y (g) common salt. One-hundred grams of dried tofu contains 13.5 g of protein but no sodium content. The same weight of this item has 1.9 g of sodium content, while that of soybeans contains 33.8 g of protein but no sodium content. Therefore, the following equation is established:

Assuming that the increase in carbohydrate from that in dried tofu to that in Okinawa-tofu ( g/100 g) is from rice koji, since Awamori is distilled liquor having no carbohydrate, and considering that 100 g of rice koji contains 59.2 g of carbohydrate, the required weight of rice koji (z (g)) to make 100 g of this item is:

## 04044 Soybeans, tofu, “Tofu-chikuwa” (tubular tofu made with surimi), steamed type

The main raw materials of this item are: Momen-tofu; fish paste (walleye pollock), and; common salt. Considering the ratio of Momen-tofu to fish paste at 2:1, assume that 100 g of this item mainly consists of 2x (g) of Momen-tofu, x(g) of fish paste, and y (g) of common salt. One-hundred grams of this item contains 14.9 g of protein and 1.9 g of sodium content, while the same weight of Momen-tofu has 6.6 g of protein but no sodium content. That of fish paste contains 17.5 g of protein and 0.3 g of sodium content, while that of common salt contains no protein but has 99.5 g of sodium content. Therefore, the following equation is established:

## 04045 Soybeans, tofu, “Tofu-chikuwa” (tubular tofu made with surimi), baked type

The main raw materials of this item are: Momen-tofu; fish paste (walleye pollock), and; common salt. Considering the ratio of Momen-tofu to fish paste at 2:1, assume that 100 g of this item mainly consists of 2x (g) of Momen-tofu, x(g) of fish paste, and y (g) of common salt. One-hundred grams of this item contains 16.1 g of protein and 2.3 g of sodium content, while the same weight of Momen-tofu has 6.6 g of protein but no sodium content. That of fish paste contains 17.5 g of protein and 0.3 g of sodium content, while that of common salt contains no protein but has 99.5 g of sodium content. Therefore, the following equation is established:

## 04088 Soybeans, tofu, “Rokujo-tofu” (salted and sun-dried tofu)

The main raw materials of this item are soybeans and common salt. First assume that 100 g of this item mainly consists of x (g) of soybeans and y (g) of common salt. One-hundred grams of this item contains 34.7 g of protein and 11.0 g of sodium content. The same weight of soybeans contains 33.8 g of protein but no sodium content, while that of common salt contains no protein, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 102.7 g, y = 11.1 g.

## 04046 Soybeans, natto, “Itohiki-natto” (fermented whole soybeans)

The main raw material of this item is soybeans. One-hundred grams of this item contains 16.5 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04047 Soybeans, natto, “Hikiwari-natto” (fermented dehulled and split soybeans)

The main raw material of this item is soybeans. One-hundred grams of this item contains 16.6 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04048 Soybeans, natto, “Goto-natto” (natto fermented with rice-koji and salt)

The main raw materials of this item are: fermented dehulled and split soybeans; rice koji, and; common salt. First assume that 100 g of this item mainly consists of x (g) of fermented dehulled and split soybeans, y (g) of rice koji, and z (g) of common salt. One-hundred grams of this item contains 15.3 g of protein, 24.0 g of carbohydrate, and 5.8 g of sodium content, while the same weight of fermented dehulled and split soybeans has 16.6 g of protein, 10.5 g of carbohydrate, but no sodium content. That of rice koji contains 5.8 g of protein, 59.2 g of carbohydrate, but no sodium content, while that of common salt has no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 83.2 g, y = 25.8 g, z = 5.8 g.

## 04049 Soybeans, natto, “Tera-natto” (koji-molded, salted, steamed soybeans)

Making 3 kg of this item requires 1170 g of soybeans, 900 g of dried barley flour and 450 g of common salt. To make 100 g of this item, therefore, g of soybeans, g of dried barley flour and g of common salt are required.

## 04051 Soybeans, “Okara” (insoluble residue from soy milk processing), fresh

The main raw material of this item is soybeans. One-hundred grams of this item contains 6.1 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04052 Soybeans, soy milk, regular

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw material of this item is soybeans. One-hundred grams of this item contains 3.6 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04053 Soybeans, soy milk, reconstituted

The main raw materials of this item are: soy milk; rapeseed oil; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of soy milk, y (g) of rapeseed oil, z (g) of white sugar, and w (g) of common salt. One-hundred grams of this item contains 3.2 g of protein, 3.6 g of fat, 4.8 g of carbohydrate, and 0.1g of sodium content, while the same weight of regular soy milk has 3.6 g of protein, 2.0 g of fat, 3.1 g of carbohydrate, but no sodium content. That of rapeseed oil has no protein, carbohydrate or sodium content, but contains 100.0 g of fat, while that of sugar has no protein, fat or sodium content, but contains 99.3 g of carbohydrate, and that of common salt has no protein, fat or carbohydrate, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 88.9, y = 1.8, z = 2.0, w = 0.1 g.

## 04054 Soybeans, soy milk based beverage, coffee flavored

The main raw materials of this item are: soy milk; rapeseed oil; sugar, and; common salt. First assume that 100 g of this item mainly consists of x (g) of soy milk, y (g) of rapeseed oil, z (g) of sugar, and w (g) of common salt. One-hundred grams of this item contains 2.2 g of protein, 7.8 g of carbohydrate, and 0.1 g of sodium content, while the same weight of soy milk has 3.6 g of protein, 2.0 g of fat, 3.1 g of carbohydrate, but no sodium content. That of rapeseed oil has no protein, carbohydrate or sodium content, but contains 100.0 g of fat, while that of sugar has no protein, fat or sodium content, but contains 99.3 g of carbohydrate, and that of common salt has no protein, fat or carbohydrate, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 61.1, y = 1.0, z = 5.9, w = 0.6 g.

(We did not calculate the weights of malt extract and coffee extract soy milk, as they are less than the weight of rapeseed oil at 0.97 g calculated from the above equation, and the total weight of 4 raw materials, namely soy milk, rapeseed oil, sugar and salt, roughly coincides with the listed value for soy milk based beverages with other flavors.)

## 04059 Soybeans, “Yuba” (film formed on surface of warmed soy milk), fresh

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw material of this item is soybeans. One-hundred grams of this item contains 21.8 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04060 Soybeans, “Yuba” (film formed on surface of warmed soy milk), dried, uncooked

Soy milk and related products are classified by the content of soy protein, in accordance with Japanese Agricultural Standards. The main raw material of this item is soybeans. One-hundred grams of this item contains 50.4 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the required weight of soybeans to make 100 g of this item is:

## 04061 Soybeans, “Kinzanji-miso” (fermented roasted soybeans, barley or wheat, vegetable and salt with koji mold)

Since the details of mixture of vegetables are unknown, we equally distribute the weight of vegetables to each one, thereby determining that 1 kg of this item consists of 20 g rice koji, 20 g of barley koji, 20 g of soybean koji, 5 g of eggplant, 5 g of cucumber, 5 g of carrot, 5 g of ginger, 5 g of perilla, 5 g of Japanese ginger, 5 g of green perilla, 6.5 g of salt, 9 g of sugar, 3.6 g of "mirin", and 8.5 g of honey.

## 04062 Soybeans, “Hishio-miso” (fermented soybeans, barley or wheat, and vegetable with koji mold)

The main raw materials of this item are dark soy sauce and rice koji. As the weights of protein and sodium content do not change in the manufacturing process, first assume that 100 g of this item mainly consists of x (g) of dark soy sauce and y (g) of rice koji. One-hundred grams of this item contains 6.5 g of protein and 4.8 g of sodium content. The same weight of dark soy sauce has 7.7 g of protein and 14.5 g of sodium content, while that of rice koji contains 5.8 g of protein but no sodium content. Therefore, the following equation is established:

From the above, x = 33.1 g, y = 68.1 g.

## 04063 Soybeans, Tempeh (fermented soybeans with Rhizopus oligospore)

The main raw materials of this item are soybeans and Rhizopus oligosporus (fermenter). When soaking soybeans in about 0.2% acetate solution for 3 to 4 hours, then draining soybeans, and steaming each 0.8 kg/cm3 of them for 3 to 7 minutes, the weight of steamed soybeans will become 1.82 times the original value, according to Matsumoto et.al, "Processing of Soybeans in Manufacturing Tempeh," *Journal of Food Science and Technology* (37), Japan Society for Food Engineering, 1990, pp.497-507, Table.3. During this fermentation, part of soy protein is dissolved, since the total nitrogen of finished products that are fermented for 20 to 22 hours is decreased from 3.4% to 3.3%, according to Matsumoto et.al., "Composition Change during Fermentation to Manufacture Tempeh," *Journal of Food Science and Technology,* Japan Society for Food Engineering, 1990, pp.130-138, Fig.5. Thus, assume that the required weight of soybeans to make 100 g of this item as x (g). One-hundred grams of this item contains 15.8 g of protein, while the same weight of soybeans has 33.8 g of protein. Therefore, the following equation is established:

From the above, x = 26.5 g.

## 04067 Chickpeas\*, mature seeds, whole, oil-roasted and salted [\*Syn. Garbanzo beans]

The main raw materials of this item are: garbanzo beans; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of garbanzo beans, y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item contains 10.4 g of fat, 62.6 g of carbohydrate, and 1.8 g of sodium content, while the same weight of garbanzo beans has 5.2 g of fat, 61.5 g of carbohydrate, but no sodium content. That of rapeseed oil contains no carbohydrate or sodium content, but contains 100.0 g of fat, while that of common salt has no fat or carbohydrate, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 101.8 g, y = 5.1 g, z = 1.8 g.

# NUTS AND SEEDS

## 05002 Almonds, oil-roasted and salted

The main raw materials of this item are: almond; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of almond, y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item contains 55.7 g of fat, 17.9 g of carbohydrate, and 0.3 g of sodium content, while the same weight of almond has 51.8 g of fat, 20.9 g of carbohydrate, but no sodium content. That of rapeseed oil has no carbohydrate or sodium content, but contains 100.0 g of fat, while that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 85.6 g, y = 11.4 g, z = 0.3 g.

## 05012 Chestnuts, Japanese chestnuts, Kanroni (boiled and sweetened), drained

The main raw materials of this item are Japanese chestnuts and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Japanese chestnuts and y (g) of white sugar. One-hundred grams of this item contains 1.8 g of protein and 56.8 g of carbohydrate. The same weight of Japanese chestnuts has 2.8 g of protein and 36.9 g of carbohydrate, while that of white sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 64.3 g, y = 33.3 g.

## 05036 Peanuts, mature seeds, oil-roasted and salted

The main raw materials of this item are: peanut of Virginia type; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of peanut, y (g) of rapeseed oil and z (g) of common salt. One-hundred grams of this item contains 23.3 g of protein, 53.2 g of fat, and 0.3 g of sodium content, while the same weight of peanuts has 25.2 g of protein, 47.0 g of fat, but no sodium content. That of rapeseed oil has no protein or sodium content, but contains 100.0 g of fat, while that of common salt contains no protein or fat, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 92.5 g, y = 9.7 g, z = 0.3 g.

## 05037 Peanuts, peanut butter

The main raw materials of this item are: peanut of Virginia type; sugar (white sugar); common salt, and; shortening, commercial use for confectionary. First assume that 100 g of this item mainly consists of x (g) of peanuts, y (g) of white sugar, z (g) of common salt, and w (g) of shortening. One-hundred grams of this item contains 20.6 g of protein, 50.4 g of fat, 24.9 g of carbohydrate, and 0.9 g of sodium content, while the same weight of peanuts have 25.2 g of protein, 47.0 g of fat, 19.4 g of carbohydrate, but no sodium content. That of sugar has no protein, fat or sodium content, but contains 99.3 g of carbohydrate, while that of common salt has no protein, fat or carbohydrate, but contains 99.5 g of sodium content and that of shortening has no protein, carbohydrate or sodium content, but contains 99.9 g of fat. Therefore, the following equation is established:

From the above, x = 81.7 g, y = 4.6 g, z = 0.9 g, w =10.8 g.

# VEGETABLES

|  |
| --- |
| (Method of calculating the weights of raw materials before salted)  When assuming that vegetables with the water content at before salting becomes to have the water content of ) after removing water by salted with common salt, causing migration of salt by the water contents before and after salting can be expressed in the following equations  Before:  After:  Therefore, the required weight of vegetables to make 100 g of salted vegetables can be determined by the following equation. |

## 06029 Non-heading Chinese cabbage, “Osaka-shirona”, leaves, salted pickles

This item has the water content of 91.0%, and sodium content of 1.6%, while raw Osaka-shirona leaves have the water content of 94.9%. Therefore, the required weight of the leaves to make 100 g of this item is 145.1 g.

## 06040 Turnip, pickles, salted pickles, leaves

This item has the water content of 87.9%, and sodium content of 2.3%, while raw turnip leaves have the water content of 92.3%. Therefore, the required weight of the leaves to make 100 g of this item is 127.3 g.

## 06041 Turnip, pickles, salted pickles, root with skin

This item has the water content of 90.5%, and sodium content of 2.8%, while raw turnip root with skin has the water content of 93.8%. Therefore, the required weight of turnip root with skin to make 100 g of this item is 108.1 g.

## 06042 Turnip, pickles, salted pickles, root without skin

This item has the water content of 89.4%, and sodium content of 4.3%, while raw turnip root without skin has the water content of 93.9%. Therefore, the required weight of turnip root without skin to make 100 g of this item is 103.3 g.

## 06043 Turnip, pickles, “Nukamiso-zuke” (pickled in salty rice bran paste), leaves

This item has the water content of 83.5%, and sodium content of 3.8%, while raw turnip leaves have the water content of 92.3%. Therefore, the required weight of the turnip leaves to make 100 g of this item is 164.9 g.

When assuming that increase in vitamin B1 in this item is from rice bran, vitamin B1 in 100 g of this item is 0.31 mg, while that in the same weight of raw turnip leaves and rice bran are 0.08 mg and 3.12 mg, respectively. Therefore, the required weight of rice bran to make 100 g of this item is:

## 06044 Turnip, pickles, “Nukamiso-zuke” (pickled in salty rice bran paste), root with skin

This item has the water content of 89.5%, and sodium content of 2.2%, while raw turnip root with skin has the water content of 93.9%. Therefore, the required weight of turnip root with skin to make 100 g of this item is 136.1 g.

When assuming that increase in vitamin B1 in this item is from rice bran, vitamin B1 in 100 g of this item is 0.25 mg, while that in the same weight of raw turnip root with skin and rice bran are 0.03 mg and 3.12 mg, respectively. Therefore, the required weight of rice bran to make 100 g of this item is:

## 06045 Turnip, pickles, “Nukamiso-zuke” (pickled in salty rice bran paste), root without skin

This item has the water content of 83.5%, and sodium content of 6.9%, while raw turnip root without skin has the water content of 95.4%. Therefore, the required weight of turnip root without skin to make 100 g of this item is 157.4 g.

When assuming that increase in vitamin B1 in this item is from rice bran, vitamin B1 in 100 g of this item is 0.45 mg, while that in the same weight of raw turnip root without skin and rice bran are 0.03 mg and 3.12 mg, respectively. Therefore, the required weight of rice bran to make 100 g of this item is:

## 06066 Cucumber, fruit, pickles, salted pickles

This item has the water content of 92.1%, and sodium content of 2.5%, while raw cucumber has the water content of 95.4%. Therefore, the required weight of cucumber to make 100 g of this item is 117.4 g.

## 06067 Cucumber, fruit, pickles, pickled in soy sauce

The main raw materials of this item are: cucumber； dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of cucumber, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 3.2 g of protein, 10.8 g of carbohydrate, and 4.1 g of sodium content, while the same weight of cucumber has 1.0g of protein, 3.0 g of carbohydrate, but no sodium content. That of soy sauce contains 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 102.3 g, y = 28.3 g, z = 5.5 g.

## 06068 Cucumber, fruit, pickles, “Nukamiso-zuke” (pickled in salty rice bran paste)

This item has the water content of 85.6%, and sodium content of 5.3%, while raw cucumber has the water content of 95.4%. Therefore, the required weight of cucumber to make 100 g of this item is 197.8 g.

When assuming that increase in vitamin B1 in this item is from rice bran, vitamin B1 in 100 g of this item is 0.26 mg, while that in the same weight of cucumber and rice bran are 0.03 mg and 3.12 mg, respectively. Therefore, the required weight of rice bran to make 100 g of this item is:

## 06069 Cucumber, fruit, pickles, sweet type (pickled with seasoned vinegar)

The main raw materials of this item are: cucumber; salt; grain vinegar, and; sugar (white sugar). This item has the water content of 80.0%, and sodium content of 1.1%, while raw cucumber has the water content of 95.4%. Therefore, the required weight of cucumber to make 100 g of this item is 410.9 g.

Sucrosein 100 g of this item increases to 4.9 g from 0.1 g in the same weight of cucumber: when assuming that this increase is from sugar having 97.9 g of sucrose, as 100 g of grain vinegar has no sucrose, the required weight of sugar to make 100 g of this item is:

Moreover, when assuming that the increase in carbohydrate from 3.0g in cucumber to 18.3 g in this item is caused by sugar having 99.3 g of carbohydrate and vinegar having 2.4 g of carbohydrate, the required weight of vinegar to make 100 g of this item is:

## 06070 Cucumber, fruit, pickles, sour type (processed by lactic acid fermentation)

This item has the water content of 93.4%, and sodium content of 2.5%, while raw cucumber has the water content of 95.4%. Therefore, the required weight of cucumber to make 100 g of this item is 89.1 g.

## 06091 Non-heading Chinese cabbage, “Santosai”, leaves, salted pickles

This item has the water content of 90.3%, and sodium content of 2.3%, while raw Santosai leaves have the water content of 94.7%. Therefore, the required weight of Santosai leaves to make 100 g of this item is 139.6 g.

## 06104 Ginger, mature rhizome, pickles

The main raw materials of this item are: ginger; grain vinegar, and; common salt. This item has the water content of 88.2% and sodium content of 7.1%, while ginger has the water content of 91.4%. Therefore, the required weight of ginger to make 100 g of this item is154.6 g. One-hundred grams of this item contains 4.0 g of carbohydrate, while the same weight of ginger and vinegar have 6.6 g and 2.4 g of carbohydrate, respectively. When assuming that the increase in carbohydrate is from vinegar, the required weight of ginger to make 100 g of this item is:

## 06105 Ginger, mature rhizome, pickles, sweetened

The main raw materials of this item are: ginger; salt; grain vinegar, and; sugar (white sugar). This item has the water content of 83.9% and sodium content of 3.0%, while ginger has the water content of 91.4%. Therefore, the required weight of ginger to make 100 g of this item is 152.3 g.

Sucrosein 100 g of this item increases to 5.3 g from 0.1 g in the same weight of ginger: when assuming that this increase is from sugar having 97.9 g of sucrose, as 100 g of grain vinegar has no sucrose, according to Yuri Takada and Mika Kobayashi, "Development of Method of Evaluating Carbohydrate Intake in Japanese*,*" *International Journal of Human Culture Studies* (2013.23), 2013, pp. 47-76, the required weight of sugar to make 100 g of this item is:

The required weight of vinegar for this item is twice the weight of sugar, according to basic data. Therefore, the required weight of vinegar to make 100 g of this item is:

## 06107 Oriental pickling melon, fruits, pickles, salted pickles

This item has the water content of 92.8%, and sodium content of 2.0%, while oriental pickling melon has the water content of 95.3%. Therefore, the required weight of oriental pickling melon to make 100 g of this item is 110.6 g.

## 06108 Oriental pickling melon, fruits, pickles, “Nara-zuke” (pickled with Sake lees)

The main raw materials of this item are: oriental pickling melon; sake lees, and; common salt. This item has the water content of 49.9%, and sodium content of 4.3%, while oriental pickling melon has the water content of 95.3%. Therefore, the required weight of oriental pickling melon to make 100 g of this item is 974.5 g.

One-hundred grams of this item contains 40.8 g of carbohydrate, while the same weight of oriental pickling melon and sake lees have 3.3 g and 23.8 g of carbohydrate, respectively. When assuming that the increase in carbohydrate is from sake lees, the required weight of sake lees to make 100 g of this item is:

## 06115 Turnip, “Sugukina”, leaves and root, pickles

This item has the water content of 87.4%, and sodium content of 2.2%, while Sugukina leaves and root have the water content of 93.7%. Therefore, the required weight of Sugukina leaves and root to make 100 g of this item is 165.1 g.

## 06137 Japanese radishes, Daikon, root, pickles, “Nukamiso-zuke” (pickled in salty rice bran paste)

This item has the water content of 87.1%, and sodium content of 3.8%, while Japanese radish root without skin has the water content of 94.6%. Therefore, the required weight of Japanese radish root without skin to make 100 g of this item is 168.5 g.

When assuming that increase in vitamin B1 in this item is from rice bran, vitamin B1 in 100 g of this item is 0.33 mg, while that in the same weight of Japanese radish root without skin and rice bran are 0.02 mg and 3.12 mg, respectively. Therefore, the required weight of rice bran to make 100 g of this item is:

## 06138 Japanese radishes, Daikon, root, pickles, “Takuan-zuke” (pickled with rice bran and salt), made of salted Daikon

The main raw materials of this item are: Japanese radish root without skin; rice bran; common salt, and; sugar (white sugar). This item has the water content of 78.2%, and sodium content of 4.3%, while Japanese radish root without skin has the water content of 94.6%. Therefore, the required weight of Japanese radish root without skin to make 100 g of this item is 324.1 g.

When assuming that increase in vitamin B1 in this item is from rice bran, vitamin B1 in 100 g of this item is 0.21 mg, while that in the same weight of Japanese radish root without skin and rice bran are 0.02 mg and 3.12 mg, respectively. Therefore, the required weight of rice bran to make 100 g of this item is:

One-hundred grams of this item contains 15.2 g of carbohydrate, while the same weight of Japanese radish root without skin and sugar have 3.3 g and 99.3 g of carbohydrate, respectively. When assuming that the increase in carbohydrate is from sugar, the required weight of sugar to make 100 g of this item is:

## 06139 Japanese radishes, Daikon, root, pickles, “Takuan-zuke” (pickled with rice bran and salt), made of sun-dried Daikon

The main raw materials of this item are: Japanese radish root without skin; rice bran, and; common salt. This item has the water content of 88.8%, and sodium content of 2.5%, while Japanese radish root without skin has the water content of 94.6%. Therefore, the required weight of Japanese radish root without skin to make 100 g of this item is 161.1 g.

When assuming that increase in vitamin B1 in this item is from rice bran, vitamin B1 in 100 g of this item is 0.21 mg, while that in the same weight of Japanese radish root without skin and rice bran are 0.02 mg and 3.12 mg, respectively. Therefore, the required weight of rice bran to make 100 g of this item is:

## 06140 Japanese radishes, Daikon, root, pickles, “Moriguchi-zuke” (slender root cultivar pickled with Sake lees)

The main raw materials of this item are: Japanese radish root without skin; sake lees, and; common salt. This item has the water content of 46.2%, and sodium content of 3.6%, while Japanese radish root without skin has the water content of 94.6%. Therefore, the required weight of oriental pickling melon to make 100 g of this item is 929.6 g.

One-hundred grams of this item contains 44.3 g of carbohydrate, while the same weight of Japanese radish root without skin and sake lees have 4.1 g and 23.8 g of carbohydrate, respectively. When assuming that the increase in carbohydrate is from sake lees, the required weight of sake lees to make 100 g of this item is:

## 06141 Japanese radishes, Daikon, root, pickles, “Bettara-zuke” (pickled with rice koji)

The main raw materials of this item are: Japanese radish root without skin; rice koji, and; common salt. This item has the water content of 81.3%, and sodium content of 3.0%, while Japanese radish root without skin has the water content of 94.6%. Therefore, the required weight of Japanese radish root without skin to make 100 g of this item is 290.7 g.

One-hundred grams of this item contains 14.0 g of carbohydrate, while the same weight of Japanese radish root without skin and rice koji have 4.1 g and 59.2 g of carbohydrate, respectively. When assuming that the increase in carbohydrate is from rice koji, the required weight of rice koji to make 100 g of this item is:

## 06142 Japanese radishes, Daikon, root, pickles, “Miso-zuke” (pickled with miso)

The main raw materials of this item are: Japanese radish root without skin; light yellow-type miso; sugar, and; common salt. This item has the water content of 67.3%, and sodium content of 11.2 %, while Japanese radish root without skin has the water content of 94.6%. Therefore, the required weight of Japanese radish root to make 100 g of this item is 398.1 g.

One-hundred grams of this item contains 4.5 g of protein, while the same weight of Japanese radish root without skin and light yellow-type miso have 0.4 g and 12.5 g of protein, respectively. When assuming that the increase in protein is from light yellow-type miso, the required weight of light yellow-type miso to make 100 g of this item is:

One-hundred grams of this item contains 16.3 g of carbohydrate, while the same weight of Japanese radish root without skin, light yellow-type miso and sugar have 4.1 g, 21.9 g and 99.3 g of carbohydrate, respectively. When assuming that the increase in carbohydrate is from light yellow-type miso and sugar, the required weight of sugar to make 100 g of this item is:

Moreover, 100 g of this item contains 11.2 g of sodium content, while the same weight of Japanese radish root without skin, light yellow-type miso and salt have 0.0 g, 12.4 g and 99.5 g of sodium content, respectively. When assuming that the increase in sodium content is from light yellow-type miso and salt, the required weight of salt to make 100 g of this item is:

## 06143 Japanese radishes, Daikon, root, pickles, “Fukujin-zuke” (pickled with Daikon, eggplant, immature sword pods and east Indian lotus rhizome)

The main raw materials of this item are: Japanese radish root without skin; east Indian lotus root; eggplant; cucumber; ginger; dark soy sauce, and; sugar (white sugar). The raw material mix ratios of Japanese radish, east Indian lotus root, eggplant, cucumber, and ginger are 200:100:50:50:10. Japanese radish root without skin, east Indian lotus root, eggplant, cucumber and ginger have the water content of 94.6%, 81.5%, 93.2%, 95.4%, and 91.4%, respectively. Therefore, the water content in vegetables before pickled is:

This item has the water content of 58.6%, and sodium content of 5.1 %, Therefore, the required weight of vegetables to make 100 g of this item is 414.86 g. Accordingly, that of Japanese radish root without skin is:

That of east Indian lotus root is:

That of eggplant is:

That of cucumber is:

And that of ginger is:

When assuming that the sodium contentin this item is from soy sauce, the sodium content in 100 g of this item is 5.1 g, while that in soy sauce is 14.5 g. Therefore, the required weight of soy sauce to make 100 g of this item is:

One-hundred grams of this item contains 33.3 g of carbohydrate, while the same weight of Japanese radish root without skin, east Indian lotus root, eggplant, cucumber, ginger, soy sauce and sugar have 4.1 g, 15.5 g, 5.1 g, 3.0 g, 6.6 g, 7.9 g and 99.3g of carbohydrate, respectively. When assuming that the increase in carbohydrate is from soy sauce and sugar, the required weight of sugar to make 100 g of this item is:

## 06146 Chinese mustard, “Taisai”, leaves, salted pickles

This item has the water content of 90.9%, and sodium content of 1.8%, while Chinese mustard leaves have the water content of 93.7%. Therefore, the required weight of Chinese mustard leaves to make 100 g of this item is 115.9 g.

## 06184 Tomatoes, canned products, whole, without salt

The main raw material of this item is tomato. One-hundred grams of this item contains 3.6 g of available carbohydrate, while the same weight of tomato has 3.1 g of available carbohydrate. Therefore, the required weight of tomato to make 100 g of this item is:

## 06185 Tomatoes, canned products, juice, with salt

The main raw materials of this item are tomato and common salt. First assume that 100 g of this item mainly consists of x (g) of tomato and y (g) of common salt. One-hundred grams of this item contains 2.9 g of available carbohydrate and 0.3 g of sodium content. The same weight of tomato has 3.1 g of available carbohydrate but no sodium content, and that of common salt contains no available carbohydrate but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 93.5 g, y = 0.30 g.

## 06341 Tomatoes, canned products, tomato-based vegetable juice, without salt

The main raw material of this item is tomato. One-hundred grams of this item contains 2.9 g of available carbohydrate, while the same weight of tomato has 3.1 g of available carbohydrate. Therefore, the required weight of tomato to make 100 g of this item is:

## 06186 Tomatoes, canned products, tomato-based vegetable juice, with salt

The main raw materials of this item are: tomato; carrot without skin, and; common salt. First assume that 100 g of this item mainly consists of x (g) of tomato, y (g) of carrot, and z (g) of common salt. One-hundred grams of this item contains 3.6 g of available carbohydrate (carbohydrate - dietary fiber), 200 mg of potassium, and 0.2 g of sodium content, while the same weight of tomato has 3.1 g of available carbohydrate, 210 mg of potassium, but no sodium content. That of carrot contains 5.8 g of available carbohydrate, 270 mg of potassium, but no sodium content, while that of common salt contains no available carbohydrate or potassium, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 49.3 g, y = 35.7 g, z = 0.20 g.

## 06342 Tomatoes, canned products, tomato-based vegetable juice, without salt

The main raw materials of this item are tomato and carrot without skin. First assume that 100 g of this item mainly consists of x (g) of tomato and y (g) of carrot. One-hundred grams of this item contains 3.6 g of available carbohydrate (carbohydrate - dietary fiber), and 200 mg of potassium, The same weight of tomato has 3.1 g of available carbohydrate and 210 mg of potassium, while that of carrot contains 5.8 g of available carbohydrate and 270 mg of potassium. Therefore, the following equation is established:

From the above, x = 49.3 g, y = 35.7 g.

## 06195 Eggplant\*, pickles, salted pickles [\*Syn. Aubergine]

This item has the water content of 90.4%, and sodium content of 2.2 %, while eggplant has the water content of 93.2%. Therefore, the required weight of eggplant to make 100 g of this item is 108.8 g.

## 06196 Eggplant\*, pickles, “Nukamiso-zuke” (pickled with salty rice bran paste) [\*Syn. Aubergine]

This item has the water content of 88.7%, and sodium content of 2.5 %, while eggplant has the water content of 93.2%. Therefore, the required weight of eggplant to make 100 g of this item is 129.4 g.

When assuming that increase in vitamin B1 in this item is from rice bran, vitamin B1 in 100 g of this item is 0.10 mg, while that in the same weight of eggplant and rice bran are 0.05 mg and 3.12 mg, respectively. Therefore, the required weight of rice bran to make 100 g of this item is:

## 06197 Eggplant\*, pickles, “Koji-zuke” (pickled small oval type with rice koji) [\*Syn. Aubergine]

The main raw materials of this item are: eggplant; dark soy sauce, and; rice koji. First assume that 100 g of this item mainly consists of x (g) of eggplant, y (g) of dark soy sauce, and z (g) of ice koji. One-hundred grams of this item contains 5.5 g of protein, 18.2 g of carbohydrate, and 6.6 g of sodium content, while the same weight of eggplant contains 1.1 g of protein, 5.1 g of carbohydrate, but no sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of rice koji contains 5.8 g of protein and 59.2 g carbohydrate, but has no sodium content. Therefore, the following equation is established:

From the above, x = 110.3 g, y = 13.5 g, z = 45.5 g.

## 06198 Eggplant\*, pickles, “Karashi-zuke” (pickled small oval type with mustard) [\*Syn. Aubergine]

The main raw materials of this item are: eggplant; sake lees, and; common salt. This item has the water content of 61.2%, and sodium content of 4.8 %, while eggplant has the water content of 93.2%. Therefore, the required weight of eggplant to make 100 g of this item is 500.0 g.

One-hundred grams of this item contains 30.7 g of carbohydrate, while the same weight of sake lees has 14.9 g of carbohydrate. When assuming that the increase in carbohydrate is from sake lees, the required weight of sake lees to make 100 g of this item is:

## 06199 Eggplant\*, pickles, “Shiba-zuke” (pickled with perilla leaf, cucumber and Myoga, etc.) [\*Syn. Aubergine]

The main raw materials of this item are: eggplant; cucumber; Japanese ginger, and; common salt.

The raw material mix ratios of eggplant, cucumber, and Japanese ginger are: 240:200:60. Eggplant, cucumber and Japanese ginger have the water content of 93.2%, 95.4%, and 95.6%, respectively. Therefore, the water content in vegetables before pickled is:

This item has the water content of 86.4%, and sodium content of 4.1 %. Therefore, the required weight of vegetables to make 100 g of this item is 168.74 g. Accordingly, that of eggplant is:

That of cucumber is:

That of Japanese ginger is:

## 06217 Carrot, regular (European type), juice, canned

The main raw material of this item is carrot without skin. One-hundred grams of this item contains 5.9 g of available carbohydrate, while the same weight of carrot has 5.8 g of available carbohydrate. Therefore, the required weight of carrot to make 100 g of this item is:

## 06230 Turnip green, “Nozawana”, leaves, pickles, salted pickles

This item has the water content of 91.8%, and sodium content of 1.5 %, while turnip green leaves have the water content of 93.2%. Therefore, the required weight of turnip green leaves to make 100 g of this item is 111.7 g.

## 06235 Heading Chinese cabbage, head, pickles, salted pickles

This item has the water content of 92.2%, and sodium content of 2.3%, while Chinese cabbage (head) has the water content of 95.2%. Therefore, the required weight of Chinese cabbage (head) to make 100 g of this item is 114.6 g.

## 06236 Heading Chinese cabbage, head, pickles, Kimchi

This item has the water content of 85.8%, and sodium content of 2.2%, while Chinese cabbage (head) has the water content of 95.2%. Therefore, the required weight of Chinese cabbage (head) to make 100 g of this item is 250.0 g.

## 06242 Chayote, fruit, salted pickles

This item has the water content of 91.0%, and sodium content of 3.6%, while Chayote has the water content of 94.0%. Therefore, the required weight of Chayote to make 100 g of this item is 90.0 g.

## 06253 Turnip, “Hinona”, root with tops, pickles, sweetened

The main raw materials of this item are: "Hinona" root with tops; grain vinegar; sugar (white sugar), and; common salt. This item has the water content of 76.4%, and sodium content of 2.8%, while "Hinona" root with tops has the water content of 92.5%. Therefore, the required weight of "Hinona" root with tops to make 100 g of this item is 277.3 g.

First assume that increase in sucrose in this item is from sugar, since 100 g of grain vinegar contains no sucrose. One-hundred grams of this item contains 5.3 g of sucrose, while the same weight of "Hinona" root with tops has 0.8 g of sucrose, according to Yuri Takada and Minatsu Kobayashi, "The development of a way to evaluate sugar intake in Japan," *International Journal of Human Culture Studies* (2013.23), 2013, pp.47-76. The same weight of sugar contains 97.9 g of sucrose. Therefore, the required weight of sugar to make 100 g of this item is:

One-hundred grams of this item contains 17.3 g of carbohydrate, while the same weight of "Hinona" root with tops, sugar, and vinegar have 4.7 g, 99.3 g and 2.4 g of carbohydrate, respectively. Therefore, the required weight of grain vinegar to make 100 g of this item is:

## 06273 Turnip green, “Mizukakena”, leaves, salted pickles

This item has the water content of 85.6%, and sodium content of 2.35%, while Mizukakena" leaves have the water content of 91.1%. Therefore, the required weight of Mizukakena" leaves to make 100 g of this item is 133.7 g.

## 06074 Leaf green, “Mizuna”, leaves, salted pickles

This item has the water content of 88.2%, and sodium content of 2.3%, while "Mizuna" leaves have the water content of 91.4%. Therefore, the required weight of "Mizuna" leaves to make 100 g of this item is 110.5 g.

## 06306 Japanese scallion, “Rakkyo”, mature bulb, pickles, sweetened

The main raw materials of this item are: Japanese scallion; grain vinegar; sugar (white sugar), and; common salt. This item has the water content of 67.8%, and sodium content of 2.2%, while Japanese scallion has the water content of 68.3%. Therefore, the required weight of Japanese scallion to make 100 g of this item is 94.6 g.

First assume that increase in reducing sugar in this item is from sugar, since 100 g of grain vinegar contains no reducing sugar. One-hundred grams of this item contains 12.8 g of reducing sugar, while the same weight of Japanese scallion has 0.8 g of reducing sugar, according to Seiko Okuda, et. al, "Variation in the Chemical Constituents, Hardness and Acceptability of Pickled Scallions According to Preparation Method," *Journal of Japanese Society of Nutrition and Food Science* (42.4), 1989, pp. 326-330. The same weight of sugar contains 97.9 g of reducing sugar. Therefore, the required weight of sugar to make 100 g of this item is:

One-hundred grams of this item contains 1.27 g of acetic acid, according to Seiko Okuda, et. al, "Variation in the Chemical Constituents, Hardness and Acceptability of Pickled Scallions According to Preparation Method," *Journal of Japanese Society of Nutrition and Food Science* (42.4), 1989, pp. 326-330. The same weight of Japanese scallion, sugar, and vinegar have 0.21 g, 0.0 g and 4.2g of acetic acid, respectively. Assuming that the increase in acetic acid in this item is from grain vinegar, the required weight of grain vinegar to make 100 g of this item is:

## 06371 East Indian lotus root, rhizome, cooked with sweet and sour sauce

The main raw materials of this item are: east Indian lotus root; grain vinegar; sugar (white sugar), and; common salt. This item has the water content of 80.8%, and sodium content of 1.4%, while east Indian lotus root has the water content of 81.5%. Therefore, the required weight of east Indian lotus root to make 100 g of this item is 96.2 g.

First assume that increase in sucrose in this item is from sugar, since 100 g of grain vinegar contains no sucrose. One-hundred grams of this item contains 0.5 g of sucrose, while the same weight of sugar contains 97.9 g of sucrose. Therefore, the required weight of sugar to make 100 g of this item is:

First assume that acetic acid in this item is from grain vinegar, since 100 g of East Indian lotus root and sugar has no acetic acid. One-hundred grams of this item contains 0.5 g of acetic acid, while the same weight of grain vinegar has 4.2g of acetic acid. Therefore, the required weight of grain vinegar to make 100 g of this item is:

# FRUITS

## 07004 Acerola, 10 % fruit juice beverage

The main raw materials of this item are acerola and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of acerola and y (g) of fructose glucose syrup. One-hundred grams of this item contains 10.5 g of carbohydrate and 13 mg of potassium. The same weight of acerola contains 9.0 g of available carbohydrate, and 130 g of potassium, while that of fructose glucose syrup has 75.0 g of carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 10.0 g, y = 12.8 g.

The mix ratio of acerola of sour type and that of sweet type is 6:4. Therefore, 100 g of this item contains 6.0 g of sour type and 4.0 g of sweet type.

## 07008 Apricots, dried

This item has the water content of 16.8%, while raw apricot has the water content of 89.8%. Therefore, the required weight of raw apricots to make 100 g of this item is 815.7 g.

## 07009 Apricots, canned in heavy syrup

The main raw materials of this item are apricot and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of apricot and y (g) of white sugar. One-hundred grams of this item contains 0.3 g of protein and 18.9 g of carbohydrate. The same weight of apricot has 1.0 g of protein and 8.5 g of carbohydrate, while that of sugar contains no protein, but has 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 50.0 g, y = 14.8 g.

## 07010 Apricots, jam, heavily sweetened

The main raw materials of this item are apricot and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of apricot and y (g) of white sugar. One-hundred grams of this item contains 0.3 g of protein and 64.9 g of carbohydrate. The same weight of apricot has 1.0 g of protein and 8.5 g of carbohydrate, while that of sugar contains no protein, but has 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 30.0 g, y = 62.8 g

## 07011 Apricots, jam, lightly sweetened

The main raw materials of this item are apricot and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of apricot and y (g) of white sugar. One-hundred grams of this item contains 0.4 g of protein and 50.5 g of carbohydrate. The same weight of apricot has 1.0 g of protein and 8.5 g of carbohydrate, while that of sugar contains no protein, but has 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 40.0 g, y = 50.5 g.

## 07013 Strawberries, jam, heavily sweetened

The main raw materials of this item are strawberry and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of strawberry and y (g) of white sugar. One-hundred grams of this item contains 0.4 g of protein and 63.3 g of carbohydrate. The same weight of strawberry has 0.9 g of protein and 8.5 g of carbohydrate, while that of sugar contains no protein, but has 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 44.4 g, y = 59.9 g.

## 07014 Strawberries, jam, lightly sweetened

The main raw materials of this item are strawberry and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of strawberry and y (g) of white sugar. One-hundred grams of this item contains 0.5 g of protein and 48.4 g of carbohydrate. The same weight of strawberry has 0.9 g of protein and 8.5 g of carbohydrate, while that of sugar contains no protein, but has 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 55.6 g, y = 44.0 g.

## 07016 Figs, dried

This item has the water content of 18.0%, while raw fig has the water content of 84.6%. Therefore, the required weight of fig to make 100 g of this item is 532.5 g.

## 07017 Figs, canned in heavy syrup

The main raw materials of this item are fig and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of fig and y (g) of white sugar. One-hundred grams of this item contains 0.5 g of protein and 19.4 g of carbohydrate. The same weight of fig has 0.6 g of protein and 14.3 g of carbohydrate, while that of sugar contains no protein, but has 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 83.3 g, y = 7.5 g.

## 07020 Mume\*, salted pickles [\*Syn. Japanese apricots]

This item has the water content of 72.3% and sodium content of 19.3%, while mume has the water content of 90.4%. Therefore, the required weight of mume to make 100 g of this item is 187.5 g.

## 07021 Mume\*, pickles, seasoned [\*Syn. Japanese apricots]

The main raw materials of this item are mume and salt. This item has the water content of 80.2% and sodium content of 6.9%, while mume has the water content of 90.4%. Therefore, the required weight of mume to make 100 g of this item is 137.5 g.

## 07022 Mume\*, “Umeboshi” (pickled and dried mume), salted pickles [\*Syn. Japanese apricots]

This item has the water content of 72.2% and sodium content of 18.2%, while mume has the water content of 90.4%. Therefore, the required weight of mume to make 100 g of this item is 100.0 g.

## 07023 Mume\*, “Umeboshi” (pickled and dried mume), seasoned pickles [\*Syn. Japanese apricots]

The main raw materials of this item are: mume; salt, and; sugar (white sugar). This item has the water content of 68.7% and sodium content of 7.6%, while mume has the water content of 90.4%. Therefore, the required weight of mume to make 100 g of this item is 246.9 g.

One-hundred grams of this item contains 21.1 g of carbohydrate, while the same weight of mume and sugar have 7.9 g and 99.3 g of carbohydrate, respectively. When assuming that the increase in carbohydrate is from sugar, the required weight of sugar to make 100 g of this item is:

## 07024 Mume\*, ”Umebishio” (sweetened puree of pickled mume) [\*Syn. Japanese apricots]

The main raw materials of this item are pickled and dried mume and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of pickled and dried mume and y (g) of white sugar. One-hundred grams of this item contains 48.1g of carbohydrate and 7.9 g of sodium content, while the same weight of pickled and dried mume has 8.6 g of carbohydrate and 18.2 g of sodium content, and that of sugar has 99.3 g of carbohydrate but no sodium content. Therefore, the following equation is established:

From the above, x = 43.4 g, y = 44.7 g.

The required weight of mume to make 100 g of pickled and dried mume is 100.0 g, and that of common salt is 18.2 g. Therefore, the required weight of salt to make 100 g of this item is:

## 07025 Mume\*, 20 % fruit juice beverage [\*Syn. Japanese apricots]

The main raw materials of this item are mume and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of mume and y (g) of fructose glucose syrup. One-hundred grams of this item contains 12.3 g of carbohydrate and 30 mg of potassium. The same weight of mume has 7.9 g of carbohydrate and 240 mg of potassium, while that of fructose glucose syrup has 75.0 g of carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 12.5 g, y = 15.1 g.

## 07030 Satsuma mandarins, straight fruit juice

The main raw material of this item is Satsuma mandarin, juice sacs, normal ripening type. One-hundred grams of this item contains 9.2 g of available carbohydrate, while the same weight of Satsuma mandarin has 9.8 g of available carbohydrate. Therefore, the required weight of Satsuma mandarin to make 100 g of this item is:

## 07031 Satsuma mandarins, reconstituted fruit juice

The main raw material of this item is Satsuma mandarin, juice sacs, normal ripening type. One-hundred grams of this item contains 8.5 g of available carbohydrate, while the same weight of Satsuma mandarin has 9.8 g of available carbohydrate. Therefore, the required weight of Satsuma mandarin to make 100 g of this item is:

## 07032 Satsuma mandarins, juice with juice sacs

The main raw material of this item is Satsuma mandarin, juice sacs, normal ripening type. One-hundred grams of this item contains 13.0 g of available carbohydrate, while the same weight of Satsuma mandarin has 9.8 g of available carbohydrate. Therefore, the required weight of Satsuma mandarin to make 100 g of this item is:

## 07033 Satsuma mandarins, 50 % fruit juice beverage

The main raw materials of this item are Satsuma mandarin, juice sacs, normal ripening type and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of Satsuma mandarin and y (g) of fructose glucose syrup. One-hundred grams of this item contains 14.7 g of carbohydrate and 63 mg of potassium. The same weight of Satsuma mandarin has 9.8 g of carbohydrate and 150 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 42.0 g, y = 14.4 g.

## 07034 Satsuma mandarins, 20 % fruit juice beverage

The main raw materials of this item are Satsuma mandarin, juice sacs, normal ripening type and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of Satsuma mandarin and y (g) of fructose glucose syrup. One-hundred grams of this item contains 12.4 g of carbohydrate and 21 mg of potassium. The same weight of Satsuma mandarin has 9.8 g of carbohydrate and 150 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 14.0 g, y = 14.7 g.

## 07035 Satsuma mandarins, canned in light syrup, solids

The main raw materials of this item are Satsuma mandarin, juice sacs, normal ripening type and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Satsuma mandarin and y (g) of white sugar. One-hundred grams of this item contains 0.5 g of protein and 15.3 g of carbohydrate. The same weight of Satsuma mandarin has 0.7 g of protein and 11.5 g of carbohydrate, while that of sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 71.4 g, y = 7.1 g.

## 07042 Oranges, Valencia, straight fruit juice

The main raw material of this item is Valencia orange. One-hundred grams of this item contains 9.0 g of available carbohydrate, while the same weight of Valencia orange has 7.1 g of available carbohydrate. Therefore, the required weight of Valencia orange to make 100 g of this item is:

## 07043 Oranges, Valencia, reconstituted fruit juice

The main raw material of this item is Valencia orange. One-hundred grams of this item contains 7.9 g available carbohydrate, while the same weight of Valencia orange has 7.1 g of available carbohydrate. Therefore, the required weight of Valencia orange to make 100 g of this item is:

## 07044 Oranges, Valencia, 50 % fruit juice beverage

The main raw materials of this item are Valencia orange and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of Valencia orange and y (g) of fructose glucose syrup. One-hundred grams of this item contains 10.8 g of carbohydrate and 99 mg of potassium. The same weight of Valencia orange has 7.1 g of carbohydrate and 140 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 70.7 g, y = 7.7 g.

## 07045 Oranges, Valencia, 30 % fruit juice beverage

The main raw materials of this item are Valencia orange and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of Valencia orange and y (g) of fructose glucose syrup. One-hundred grams of this item contains 10.0 g of carbohydrate and 57 mg of potassium. The same weight of Valencia orange has 7.1 g of carbohydrate and 140 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 40.7 g, y = 9.4 g.

## 07046 Oranges, Valencia, marmalade, heavily sweetened

The main raw materials of this item are Valencia orange and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Valencia orange and y (g) of white sugar. One-hundred grams of this item contains 0.2 g of protein and 63.2 g of carbohydrate. The same weight of navel orange has 0.9 g of protein and 11.8 g of carbohydrate, while that of white sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 22.2 g, y = 61.0 g.

## 07047 Oranges, Valencia, marmalade, lightly sweetened

The main raw materials of this item are Valencia orange and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Valencia orange and y (g) of white sugar. One-hundred grams of this item contains 0.3 g of protein and 47.7 g of carbohydrate. The same weight of navel orange has 0.9 g of protein and 11.8 g of carbohydrate, while that of white sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 33.3 g, y = 44.1 g.

## 07063 Grapefruit, straight fruit juice

The main raw material of this item is grapefruit. One-hundred grams of this item contains 8.8 g of available carbohydrate, while the same weight of grapefruit has 7.5 g of available carbohydrate. Therefore, the required weight of grapefruit to make 100 g of this item is:

## 07064 Grapefruit, reconstituted fruit juice

The main raw material of this item is grapefruit. One-hundred grams of this item contains 7.8 g of available carbohydrate, while the same weight of grapefruit has 7.5 g of available carbohydrate. Therefore, the required weight of grapefruit to make 100 g of this item is:

## 07065 Grapefruit, 50 % fruit juice beverage

The main raw materials of this item are grapefruit and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of grapefruit and y (g) of fructose glucose syrup. One-hundred grams of this item contains 11.1g of carbohydrate and 90 mg of potassium. The same weight of grapefruit has 7.5 g of carbohydrate and 140 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 64.3 g, y = 8.3 g.

## 07066 Grapefruit, 20 % fruit juice beverage

The main raw materials of this item are grapefruit and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of grapefruit and y (g) of fructose glucose syrup. One-hundred grams of this item contains 9.7g of carbohydrate and 34 mg of potassium. The same weight of grapefruit has 7.5 g of carbohydrate and 140 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 24.3 g, y = 10.4 g.

## 07067 Grapefruit, canned in light syrup

The main raw materials of this item are grapefruit and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of grapefruit and y (g) of white sugar. One-hundred grams of this item contains 0.5 g of protein and 17.1 g of carbohydrate. The same weight of grapefruit has 0.9 g of protein and 9.6 g of carbohydrate, while that of sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 55.6 g, y = 11.8 g.

## 07076 Citrus, "Shiikuwasha", 10 % fruit juice beverage

The main raw materials of this item are "Shiikuwasha" citrus and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of "Shiikuwasha" citrus and y (g) of fructose glucose syrup. One-hundred grams of this item contains 11.8 g of carbohydrate and 13 mg of potassium. The same weight of "Shiikuwasha" citrus has 7.9 g of carbohydrate and 180 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 7.2 g, y = 14.9 g.

## 07094 Citrus, "Natsudaidai", canned in heavy syrup

The main raw materials of this item are "Natsudaidai" citrus and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of "Natsudaidai" citrus and y (g) of white sugar. One-hundred grams of this item contains 0.5 g of protein and 19.4 g of carbohydrate. The same weight of "Natsudaidai" citrus has 0.9 g of protein and 10.0 g of carbohydrate, while that of sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 55.6 g, y = 13.9 g.

## 07082 Plums, European plums, dried

This item has the water content of 33.3%, while raw European plum has the water content of 86.2%. Therefore, the required weight of raw European plum to make 100 g of this item is 483.3 g.

## 07092 Pears, European pears, canned in heavy syrup

The main raw materials of this item are European pear and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of European pear and y (g) of white sugar. One-hundred grams of this item contains 0.2 g of protein and 20.7 g of carbohydrate. The same weight of European pear has 0.3 g of protein and 14.4 g of carbohydrate, while that of sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 66.7 g, y = 11.2 g.

## 07098 Pineapple, straight fruit juice

The main raw material of this item is pineapple. One-hundred grams of this item contains 10.2 g of available carbohydrate, while the same weight of pineapple has 12.6 g of available carbohydrate. Therefore, the required weight of pineapple to make 100 g of this item is:

## 07099 Pineapple, reconstituted fruit juice

The main raw material of this item is pineapple. One-hundred grams of this item contains 10.1 g of available carbohydrate, while the same weight of pineapple has 12.6 g of available carbohydrate. Therefore, the required weight of pineapple to make 100 g of this item is:

## 07100 Pineapple, 50 % fruit juice beverage

The main raw materials of this item are pineapple and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of pineapple and y (g) of fructose glucose syrup. One-hundred grams of this item contains 12.1 g of carbohydrate and 95 mg of potassium. The same weight of pineapple has 12.6 g of carbohydrate and 150 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 63.3 g, y = 5.5 g.

## 07101 Pineapple, 10 % fruit juice beverage

The main raw materials of this item are pineapple and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of pineapple and y (g) of fructose glucose syrup. One-hundred grams of this item contains 12.4 g of carbohydrate and 18 mg of potassium. The same weight of pineapple has 12.6 g of available carbohydrate and 150 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 12.0 g, y = 14.4 g.

## 07102 Pineapple, canned in heavy syrup

The main raw materials of this item are pineapple and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of pineapple and y (g) of white sugar. One-hundred grams of this item contains 0.4 g of protein and 20.3 g of carbohydrate. The same weight of pineapple has 0.6 g of protein and 13.7 g of carbohydrate, while that of sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 66.7 g, y = 11.2 g.

## 07103 Pineapple, candied

The main raw materials of this item are pineapple and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of pineapple and y (g) of white sugar. One-hundred grams of this item contains 0.5 g of protein and 86.8 g of carbohydrate. The same weight of pineapple has 0.6 g of protein and 13.7 g of carbohydrate, while that of sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 83.3 g, y = 75.9 g.

## 07108 Bananas, dried

This item has the water content of 14.3%, while raw banana has the water content of 75.4%. Therefore, the required weight of banana to make 100 g of this item is 348.4 g.

## 07117 Grapes, raisins

This item has the water content of 14.5%, while grape with skin has the water content of 81.7%. Therefore, the required weight of grape with skin to make 100 g of this item is 467.2 g

## 07118 Grapes, straight fruit juice

The main raw material of this item is grape with skin. One-hundred grams of this item contains 13.9 g of available carbohydrate, while the same weight of grape with skin has 17.0 g of available carbohydrate. Therefore, the required weight of grape with skin to make 100 g of this item is:

## 07119 Grapes, reconstituted fruit juice

The main raw material of this item is grape with skin. One-hundred grams of this item contains 11.7 g of available carbohydrate, while the same weight of grape with skin has 17.0 g of available carbohydrate. Therefore, the required weight of grape with skin to make 100 g of this item is:

## 07120 Grapes, 70 % fruit juice beverage

The main raw materials of this item are grape with skin and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of grape with skin and y (g) of fructose glucose syrup. One-hundred grams of this item contains 12.9 g of carbohydrate and 17 mg of potassium. The same weight of grape with skin has 17.0 g of carbohydrate and 220 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 7.7 g, y = 15.3 g.

## 07121 Grapes, 10 % fruit juice beverage

The main raw materials of this item are grape with skin and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of grape with skin and y (g) of fructose glucose syrup. One-hundred grams of this item contains 13.1 g of carbohydrate and 3 mg of potassium. The same weight of grape with skin has 17.0 g of carbohydrate and 220 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 1.4 g, y = 17.0 g.

## 07122 Grapes, canned in heavy syrup

The main raw materials of this item are grape without skin and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of grape without skin and y (g) of white sugar. One-hundred grams of this item contains 0.4 g of protein and 20.4 g of carbohydrate. The same weight of grape without skin has 0.4 g of protein and 15.7 g of carbohydrate, while that of sugar contains no protein, but has 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 100.0 g, y = 4.7 g.

## 07123 Grapes, jam

The main raw materials of this item are grape without skin and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of grape without skin and y (g) of white sugar. One-hundred grams of this item contains 0.5 g of protein and 47.5 g of carbohydrate. The same weight of grape without skin has 0.6 g of protein and 16.9 g of carbohydrate, while that of sugar contains no protein, but has 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 83.3 g, y = 33.7 g.

## 07125 Blueberries, jam

The main raw materials of this item are blueberry and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of blueberry and y (g) of white sugar. One-hundred grams of this item contains 0.7 g of protein and 43.8 g of carbohydrate. The same weight of blueberry has 0.5 g of protein and 12.9 g of carbohydrate, while that of sugar contains no protein, but has 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 140.0 g, y = 20.3 g.

## 07172 Blueberries, dried

This item has the water content of 21.9%, while raw blueberry has the water content of 86.4%. Therefore, the required weight of blueberry to make 100 g of this item is 574.3 g.

## 07179 Mangoes, green flesh type, dried

This item has the water content of 9.3%, while raw mango has the water content of 82.0%. Therefore, the required weight of mango to make 100 g of this item is 503.9 g.

## 07137 Peaches, 30 % fruit juice beverage (nectar)

The main raw materials of this item are peach and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of peach and y (g) of fructose glucose syrup. One-hundred grams of this item contains 11.6 g of carbohydrate and 35 mg of potassium. The same weight of peach has 8.4 g of carbohydrate and 180 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 19.4 g, y = 13.2 g.

## 07149 Apples, straight fruit juice

The main raw material of this item is apple without skin. One-hundred grams of this item contains 10.8 g of available carbohydrate, while the same weight of apple without skin has 12.4 g of available carbohydrate. Therefore, the required weight of apple without skin to make 100 g of this item is:

## 07150 Apples, reconstituted fruit juice

The main raw material of this item is apple without skin. One-hundred grams of this item contains 10.4 g of available carbohydrate, while the same weight of apple without skin has 12.4 g of available carbohydrate. Therefore, the required weight of apple without skin to make 100 g of this item is:

## 07151 Apples, 50 % fruit juice beverage

The main raw materials of this item are apple without skin and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of apple without skin and y (g) of fructose glucose syrup. One-hundred grams of this item contains 11.5 g of carbohydrate and 55 mg of potassium. The same weight of apple without skin has 12.4 g of available carbohydrate and 120 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 45.8 g, y = 7.7 g.

## 07152 Apples, 30 % fruit juice beverage

The main raw materials of this item are apple without skin and fructose glucose syrup. First assume that 100 g of this item mainly consists of x (g) of apple without skin and y (g) of fructose glucose syrup. One-hundred grams of this item contains 11.4 g of carbohydrate and 24 mg of potassium. The same weight of apple without skin has 12.4 g of available carbohydrate and 120 mg of potassium, while that of fructose glucose syrup has 75.5 g of available carbohydrate but no potassium. Therefore, the following equation is established:

From the above, x = 20.0 g, y = 11.8 g.

## 07153 Apples, canned in heavy syrup

The main raw materials of this item are apple without skin and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of apple without skin and y (g) of white sugar. One-hundred grams of this item contains 0.1 g of fat and 20.1 g of carbohydrate. The same weight of apple without skin has 0.2 g of fat and 15.5 g of carbohydrate, while that of sugar has no fat but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 50.0 g, y = 12.4 g.

## 07154 Apples, jam

The main raw materials of this item are apple without skin and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of apple without skin and y (g) of white sugar. One-hundred grams of this item contains 0.2 g of protein and 52.7 g of carbohydrate. The same weight of apple without skin has 0.1 g of protein and 15.5 g of carbohydrate, while that of sugar contains no protein, but has 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 200.0 g, y = 21.9 g.

# MUSHROOMS

## 08003 Mushrooms, winter mushrooms\*, bottled in seasoning [\*Syn. Enokitake, Enoki]

The main raw materials of this item are: winter mushroom; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of winter mushroom, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 3.6 g of protein, 16.9 g of carbohydrate, and 4.3 g of sodium content, while the same weight of winter mushroom has 2.7 g of protein,7.6 g of carbohydrate, but no sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 48.8 g, y = 29.7 g, z = 10.9 g.

## 08022 Mushrooms, “Nameko”, canned in brine

The main raw material of this item is "Nameko" mushroom. One-hundred grams of this item contains 32 g of carbohydrate, while the same weight of "Nameko" mushroom has 5.4 g of carbohydrate. Therefore, the required weight of "Nameko" mushroom to make 100 g of this item is:

# ALGAE

## 09004 Algae, purple laver, dried, toasted

The main raw material of this item is dried purple laver. One-hundred grams of this item contains 44.3 g of carbohydrate, while the same weight of dried purple laver has 38.7 g of carbohydrate. Therefore, the required weight of dried purple layer to make 100 g of this item is:

## 09005 Algae, purple laver, dried, seasoned and toasted

The main raw materials of this item are: dried purple laver; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of dried purple laver, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 40.0 g of protein, 41.8 g of carbohydrate, and 4.3 g of sodium content, while the same weight of dried purple laver contains 39.4 g of protein, 38.7 g of carbohydrate, and 1.5 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 97.7 g, y = 19.5 g, z = 2.5 g.

## 09009 Algae, “Ego-nori”, “Okyuto” (algae jelly)

The main raw material of this item is dried "Ego-nori" algae. One-hundred grams of this item contains 2.5 g of carbohydrate, while the same weight of dried "Ego-nori" algae has 62.2 g of carbohydrate. Therefore, the required weight of "Ego-nori" algae to make 100 g of this item is:

## 09020 Algae, kombu, “Kizami-kombu” (dried and cut into thin strips)

The main raw material of this item is "Makombu" or sweet kelp. One-hundred grams of this item contains 46.0 g of carbohydrate, while the same weight of "Makombu" has 64.3 g of carbohydrate. Therefore, the required weight of "Makombu" to make 100 g of this item is:

## 09021 Algae, kombu, “Kezuri-kombu” (dried and thinly shaved)

The main raw material of this item is "Makombu" or sweet kelp. One-hundred grams of this item contains 50.2 g of carbohydrate, while the same weight of "Makombu" has 64.3 g of carbohydrate. Therefore, the required weight of "Makombu" to make 100 g of this item is:

## 09022 Algae, kombu, “Shio-kombu” (seasoned and dried)

The main raw materials of this item are: "Makombu," dark soy sauce; common salt, and; sugar (white sugar), based on a product made by Fujicco. First assume that 100 g of this item mainly consists of x (g) of "Makombu," y (g) of dark soy sauce, z (g) of common salt, and w (g) of white sugar. One-hundred grams of this item has 110 kcal, containing 37.0 g of carbohydrate, 13.1 g of dietary fiber and 18.0 g of sodium content. The same weight of "Makombu" has 146 kcal, containing 64.3 g of carbohydrate, 32.1 g of dietary fiber and 14.5 g of sodium content, while that of dark soy sauce 77 kcal, containing 7.9 g of carbohydrate, no dietary fiber, and 14.5 g of sodium content. That of common salt has 0 kcal, containing no carbohydrate or dietary fiber, but having 99.5 g of sodium content, while that of sugar has 384 kcal, containing 99.3 g of carbohydrate, but no dietary fiber or sodium content. Therefore, the following equation is established:

From the above, x = 40.8 g, y = 19.0 g, z = 12.6 g, w =9.3 g.

## 09023 Algae, kombu, “Tsukudani” (simmered in soy sauce and sugar)

The main raw materials of this item are: "Makombu;" dark soy sauce; dried and roasted whole sesame seed, and; sugar (white sugar), based on a product made by Fujicco. First assume that 100 g of this item mainly consists of x (g) of "Makombu," y (g) of dark soy sauce, z (g) of roasted sesame seed, and w (g) of white sugar. One-hundred grams of this item contains 1.0 g of fat, 33.3 g of carbohydrate, 6.8 g of dietary fiber and 7.4 g of sodium content. The same weight of "Makombu" has 1.3 g of fat, 64.3 g of carbohydrate, 32.1 g of dietary fiber and 6.6 g of sodium content, while that of dark soy sauce contains no fat or dietary fiber, but has 7.9 g of carbohydrate and 14.5 g of sodium content. That of roasted sesame seed has 54.2 g of fat, 18.5 g of carbohydrate, 12.6 g of dietary fiber, but no sodium content, while that of sugar has 99.3 g of carbohydrate, but no fat, dietary fiber or sodium content. Therefore, the following equation is established:

From the above, x = 20.7 g, y = 41.6 g, z = 1.3 g, w =16.6 g.

## 09026 Algae, "Tengusa", "Tokoroten" (Gelidium jelly)

The main raw material of this item is dried "Tengusa" algae. One-hundred grams of this item contains 0.6 g of carbohydrate, while the same weight of "Tengusa" algae has 53.8 g of carbohydrate. Therefore, the required weight of "Tengusa" algae to make 100 g of this item is:

## 09027 Algae, "Tengusa", agar-agar

The main raw material of this item is dried "Tengusa" algae. One-hundred grams of this item contains 74.1 g of carbohydrate, while the same weight of "Tengusa" algae has 53.8 g of carbohydrate. Therefore, the required weight of "Tengusa" algae to make 100 g of this item is:

## 09028 Algae, "Tengusa", agar jelly

The main raw material of this item is dried "Tengusa" algae. One-hundred grams of this item contains 1.5 g of carbohydrate, while the same weight of "Tengusa" algae has 53.8 g of carbohydrate. Therefore, the required weight of "Tengusa" algae to make 100 g of this item is:

## 09049 Algae, "Tengusa", agar-agar powder

The main raw material of this item is dried "Tengusa" algae. One-hundred grams of this item contains 81.7 g of carbohydrate, while the same weight of "Tengusa" algae has 53.8 g of carbohydrate. Therefore, the required weight of "Tengusa" algae to make 100 g of this item is:

## 09033 Algae, “Hitoegusa”, “Tsukudani” (simmered in soy sauce and sugar)

The main raw materials of this item are: dried "Hitoegusa" algae; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of "Hitoegusa" algae, y (g) of dark soy sauce, z (g) of white sugar. One-hundred grams of this item contains 21.1 g of carbohydrate, 4.1 g of dietary fiber, and 5.8 g of sodium content, while the same weight of "Hitoegusa" algae has 46.3 g of carbohydrate, 44.2 g of dietary fiber, and 11.4 g of sodium content. That of dark soy sauce has 7.9 g of carbohydrate and 14.5 g of sodium content but no dietary fiber, while that of sugar has no dietary fiber or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 9.3 g, y = 32.7 g, z = 14.3 g.

# FISH, MOLLUSKS AND CRUSTACEANS

## 10013 Fish, horse mackerel, brownstriped mackerel scad, “Hirakiboshi” (salted and semi-dried split)

The main raw materials of this item are brownstriped mackerel scad and common salt. This item has the water content of 67.9%, while raw brownstriped mackerel scad has the water content of 67.7%. Therefore, the required weight of raw brownstriped mackerel scad to make 100 g of this item is 99.3 g. Moreover, 100 g of this item contains 2.1 g of sodium content, while the same weight of raw brownstriped mackerel scad and common salt have 0.1 g and 99.5 g of sodium content, respectively. Therefore, the required weight of common salt to make 100 g of this item is:

## 10014 Fish, horse mackerel, brownstriped mackerel scad, “Kusaya” (brine-soaked and dried scad)

The main raw materials of this item are brownstriped mackerel scad and common salt. This item has the water content of 38.6%, while raw brownstriped mackerel scad has the water content of 67.7%. Therefore, the required weight of raw brownstriped mackerel scad to make 100 g of this item is 190.1 g. Moreover, 100 g of this item contains 4.1 g of sodium content, while the same weight of raw brownstriped mackerel scad and common salt have 0.1 g and 99.5 g of sodium content, respectively. Therefore, the required weight of common salt to make 100 g of this item is:

## 10034 Fish, Japanese sand lance, “Niboshi” (boiled and dried whole)

This item has the water content of 38.0%, while raw Japanese sand lance has the water content of 74.2%. Therefore, the required weight of Japanese sand lance to make 100 g of this item is 240.3 g.

## 10035 Fish, Japanese sand lance, “Tsukudani” (simmered whole in soy sauce and sugar)

The main raw materials of this item are: Japanese sand lance; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Japanese sand lance, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 29.4 g of protein, 30.7 g of carbohydrate, and 5.6 g of sodium content, while the same weight of Japanese sand lance has 17.2 g of protein, 0.1 g of carbohydrate, and 0.5 g of sodium content. That of soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 156.0 g, y = 33.2 g, z = 28.1 g.

## 10036 Fish, Japanese sand lance, “Ameni” (simmered whole in glucose syrup and soy sauce)

The main raw materials of this item are: Japanese sand lance; dark soy sauce, and; sugar (white sugar). The weight of starch syrup is minor, thus ignored. First assume that 100 g of this item mainly consists of x (g) of Japanese sand lance, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 25.6 g of protein, 35.8 g of carbohydrate, and 4.3 g of sodium content, while the same weight of Japanese sand lance has 17.2 g of protein, 0.1 g of carbohydrate, and 0.5 g of sodium content. That of soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 137.7 g, y = 24.9 g, z = 33.9 g.

## 10043 Fish, sardine, Pacific round herring\*, “Maruboshi” (salted and dried whole), raw [\*Syn. red-eye round herring]

The main raw materials of this item are Pacific round herring and common salt. This item has the water content of 40.1%, while raw Pacific round herring has the water content of 71.7%. Therefore, the required weight of Pacific round herring to make 100 g of this item is 211.7 g. Moreover, 100 g of this item contains 5.8 g of sodium content, while the same weight of raw Pacific round herring and common salt have 0.2 g and 99.5 g of sodium content, respectively. Therefore, the required weight of common salt to make 100 g of this item is:

## 10045 Fish, sardine, Japanese anchovy, “Niboshi” (boiled and dried whole)

This item has the water content of 15.7%, while raw Japanese anchovy has the water content of 68.2%. Therefore, the required weight of Japanese anchovy to make 100 g of this item is 260.1 g.

## 10046 Fish, sardine, Japanese anchovy, “Tazukuri” (dried young anchovy)

This item has the water content of 14.9%, while raw Japanese anchovy has the water content of 68.2%. Therefore, the required weight of Japanese anchovy to make 100 g of this item is 267.6 g.

## 10050 Fish, sardine, Japanese pilchard, “Shioiwashi” (salted pilchard), raw

The main raw materials of this item are Japanese pilchard and common salt. This item has the water content of 66.3%, while raw Japanese pilchard has the water content of 68.9%. Therefore, the required weight of Japanese pilchard to make 100 g of this item is 106.4 g. Moreover, 100 g of this item contains 6.1 g of sodium content, while the same weight of raw Japanese pilchard and common salt have 0.2 g and 99.5 g of sodium content, respectively. Therefore, the required weight of common salt to make 100 g of this item is:

## 10051 Fish, sardine, Japanese pilchard, “Namaboshi” (mild salted and semi-dried whole), raw

The main raw materials of this item are Japanese pilchard and common salt. This item has the water content of 59.6%, while raw Japanese pilchard has the water content of 68.9%. Therefore, the required weight of Japanese pilchard to make 100 g of this item is 129.9 g. Moreover, 100 g of this item contains 1.8 g of sodium content, while the same weight of raw Japanese pilchard and common salt have 0.2 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10052 Fish, sardine, Japanese pilchard, “Maruboshi” (salted and dried whole), raw

The main raw materials of this item are Japanese pilchard and common salt. This item has the water content of 54.6%, while raw Japanese pilchard has the water content of 68.9%. Therefore, the required weight of Japanese pilchard to make 100 g of this item is 146.0 g. Moreover, 100 g of this item contains 3.8 g of sodium content, while the same weight of raw Japanese pilchard and common salt have 0.2 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10055 Fish, sardine, “Shirasuboshi” (boiled and dried whitebait), mild dried

The main raw materials of this item are whitebait and common salt. This item has the water content of 69.9%, while raw whitebait has the water content of 81.8%. Therefore, the required weight of whitebait to make 100 g of this item is 165.4 g. Moreover, 100 g of this item contains 4.1 g of sodium content, while the same weight of raw whitebait and common salt have 1.0 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10056 Fish, sardine, “Shirasuboshi” (boiled and dried whitebait), semi-dried

The main raw materials of this item are whitebait and common salt. This item has the water content of 46.6%, while raw whitebait has the water content of 81.8%. Therefore, the required weight of whitebait to make 100 g of this item is 296.7 g. Moreover, 100 g of this item contains 6.6 g of sodium content, while the same weight of raw whitebait and common salt have 1.0 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10057 Fish, sardine, “Tatamiiwashi” (sheet of dried whitebait)

This item has the water content of 10.7%, while raw whitebait has the water content of 81.8%. Therefore, the required weight of whitebait to make 100 g of this item is 490.7 g.

## 10058 Fish, sardine, Japanese anchovy, “Mirinboshi” (split seasoned with Mirin and dried)

The main raw materials of this item are: Japanese anchovy; dark soy sauce, and; regular "mirin." First assume that 100 g of this item mainly consists of x (g) of Japanese anchovy, y (g) of dark soy sauce, and z (g) of "mirin." One-hundred grams of this item contains 44.3 g of protein, 25.0 g of carbohydrate, and 2.8 g of sodium content, while the same weight of Japanese anchovy contains 18.2 g of protein, 0.3 g of carbohydrate, and 0.2 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of "mirin" contains 0.3 g of protein, 43.2 g of carbohydrate but no sodium content. Therefore, the following equation is established:

From the above, x = 235.7 g, y = 16.1 g, z = 52.3 g.

## 10059 Fish, sardine, Japanese pilchard, “Mirinboshi” (split seasoned with Mirin and dried)

The main raw materials of this item are: Japanese pilchard; dark soy sauce; regular "mirin", and; dried and roasted sesame seed. First assume that 100 g of this item mainly consists of x (g) of Japanese pilchard, y (g) of dark soy sauce, z (g) of "mirin" and w (g) of dried and roasted sesame seed. One-hundred grams of this item contains 31.4 g of protein, 15.7 g of fat, 16.3 g of carbohydrate, and 1.7 g of sodium content, while the same weight of Japanese pilchard contains 19.2 g of protein, 9.2 g of fat, 0.2 g of carbohydrate, and 0.2 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content but no fat, while that of "mirin" contains 0.3 g of protein, 43.2 g of carbohydrate but no fat or sodium content, and that of dried and roasted sesame seed has 20.3 g of protein, 54.2 g of fat, 18.5 g of carbohydrate but no sodium content. Therefore, the following equation is established:

From the above, x = 156.7 g, y = 9.6 g, z = 34.2 g, w =2.4 g.

## 10060 Fish, sardine, Japanese pilchard, canned products, in brine

The main raw materials of this item are Japanese pilchard and common salt. This item has the water content of 66.3%, while raw Japanese pilchard has the water content of 68.9%. Therefore, the required weight of Japanese pilchard to make 100 g of this item is 108.4 g. Moreover, 100 g of this item has 0.8 g of sodium content, while the same weight of raw Japanese pilchard and common salt have 0.2 g and 99.5 g of sodium content, respectively. When assuming that the increase in sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10061 Fish, sardine, Japanese pilchard, canned products, with seasoning

The main raw materials of this item are: Japanese pilchard; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Japanese pilchard, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 20.4 g of protein, 5.7 g of carbohydrate, and 1.4 g of sodium content, while the same weight of Japanese pilchard contains 19.2 g of protein, 0.2 g of carbohydrate, and 0.2 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 102.9 g, y = 8.2 g, z = 4.9 g.

## 10062 Fish, sardine, Japanese pilchard, canned products, in tomato sauce

The main raw materials of this item are Japanese pilchard and tomato. First assume that 100 g of this item mainly consists of x (g) of Japanese pilchard and y (g) of tomato. One-hundred grams of this item contains 17.5 g of protein and 1.3 g of carbohydrate. The same weight of Japanese pilchard contains 19.2 g of protein and 0.2 g of carbohydrate, while that of tomato has 0.7 g of protein and 4.7 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 90.3 g, y = 23.8 g.

## 10063 Fish, sardine, Japanese pilchard, canned products, in oil

The main raw materials of this item are: Japanese pilchard; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of Japanese pilchard, y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item contains 20.3 g of protein, 30.7 g of fat, and 0.8 g of sodium content, while the same weight of Japanese pilchard has 19.2 g of protein, 9.2 g of fat, and 0.2 g of sodium content. That of rapeseed oil has no protein or sodium content but contains 100.0 g of fat, while that of common salt has no protein or fat, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 105.8 g, y = 21.0 g, z = 0.6 g.

## 10064 Fish, sardine, Japanese pilchard, “Kabayaki” (baked and seasoned fillet), canned products,

The main raw materials of this item are: Japanese pilchard; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Japanese pilchard, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 16.2 g of protein, 9.3 g of carbohydrate, and 1.5 g of sodium content, while the same weight of Japanese pilchard contains 19.2 g of protein, 0.2 g of carbohydrate, and 0.2 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 80.4 g, y = 9.2 g, z = 19.5 g.

## 10397 Fish, sardine, anchovy, canned products, in oil

The main raw materials of this item are Japanese anchovy and common salt. First assume that 100 g of this item mainly consists of x (g) of Japanese anchovy and y (g) of common salt. One-hundred grams of this item contains 24.2 g of protein and 13.1 g of sodium content. The same weight of Japanese anchovy has 18.2 g of protein and 0.2 g of sodium content, while that of common salt contains no protein, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 133.0 g, y = 12.9 g

## 10070 Fish, eel, “Kabayaki” (seasoned and baked fillet)

The main raw materials of this item are: eel; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of eel, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 23.0 g of protein, 3.1 g of carbohydrate, and 1.3 g of sodium content, while the same weight of eel contains 17.1 g of protein, 0.3 g of carbohydrate, and 0.2 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 131.2 g, y = 7.2 g, z = 2.2 g.

## 10072 Fish, black scraper\*, “Ajitsuke-hirakiboshi” (seasoned and dried fillet) [\*Syn. filefish]

The main raw materials of this item are: black scraper; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of black scraper, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 58.9 g of protein, 10.4 g of carbohydrate, and 6.1 g of sodium content, while the same weight of black scraper contains 18.2 g of protein, 0.0 g of carbohydrate, and 0.5 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 310.4 g, y = 31.4 g, z = 8.0 g.

## 10082 Fish, Japanese sculpin\*, “Tsukudani” (simmered whole fish in soy sauce and sugar) [\*Syn. Japanese fluvial sculpin]

The main raw materials of this item are: Japanese sculpin; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Japanese sculpin, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 29.4 g of protein, 33.8 g of carbohydrate, and 4.3 g of sodium content, while the same weight of Japanese sculpin contains 15.0 g of protein, 0.2 g of carbohydrate, and 0.3 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 182.7 g, y = 25.9 g, z = 31.6 g.

## 10089 Fish, skipjack tuna, processed products, “Namari” (boiled meat)

This item has the water content of 66.9%, while raw skipjack tuna caught in spring has the water content of 72.2%. Therefore, the required weight of raw skipjack tuna caught in spring to make 100 g of this item is 119.1 g.

## 10090 Fish, skipjack tuna, processed products, “Namari-bushi” (boiled and semi-dried fillet)

This item has the water content of 58.8%, while raw skipjack tuna caught in spring has the water content of 72.2%. Therefore, the required weight of raw skipjack tuna caught in spring to make 100 g of this item is 148.2 g.

## 10091 Fish, skipjack tuna, processed products, “Katsuo-bushi” (boiled, smoke-dried and fermented skipjack tuna fillet)

This item has the water content of 15.2%, while raw skipjack tuna caught in spring has the water content of 72.2%. Therefore, the required weight of raw skipjack tuna caught in spring to make 100 g of this item is 305.0 g.

## 10092 Fish, skipjack tuna and frigate mackerel, processed products, “Kezuri-bushi” (shaved “Katsuo-bushi”), uncooked (cf. 10091” Katsuo-bushi”)

This item has the water content of 17.2%, while raw skipjack tuna caught in spring has the water content of 72.2%. Therefore, the required weight of raw skipjack tuna caught in spring to make 100 g of this item is 297.8 g.

## 10093 Fish, skipjack tuna and frigate mackerel, processed products, “Kezuri-bushi” (shaved “Katsuo-bushi”), simmered in soy sauce and sugar (cf. 10091” Katsuo-bushi”)

The main raw materials of this item are: skipjack tuna caught in spring; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of skipjack tuna caught in spring, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 19.5 g of protein, 32.3 g of carbohydrate, and 7.9 g of sodium content, while the same weight of skipjack tuna caught in spring contains 25.8 g of protein, 0.1 g of carbohydrate, and 0.1 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 59.4 g, y = 54.1 g, z = 28.2 g.

## 10094 Fish, skipjack tuna and frigate mackerel, processed products, “Kakuni” (meat cube boiled in soy sauce and sugar)

The main raw materials of this item are: skipjack tuna caught in spring; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of skipjack tuna caught in spring, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 31.0 g of protein, 21.4 g of carbohydrate, and 3.8 g of sodium content, while the same weight of skipjack tuna caught in spring contains 25.8 g of protein, 0.1 g of carbohydrate, and 0.1 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 112.6 g, y = 25.4 g, z = 19.4 g.

## 10096 Fish, skipjack tuna and frigate mackerel, canned products, flaked meat with seasoning

The main raw materials of this item are: skipjack tuna caught in spring; sugar (white sugar); dark soy sauce, and; rapeseed oil. First assume that 100 g of this item mainly consists of x (g) of skipjack tuna caught in spring, y (g) of white sugar, z (g) of dark soy sauce, and w (g) of rapeseed oil. One-hundred grams of this item contains 18.4 g of protein, 2.7 g of fat, 10.7 g of carbohydrate, and 1.7 g of sodium content, while the same weight of skipjack tuna caught in spring contains 25.8 g of protein, 0.5 g of fat, 0.1 g of carbohydrate, and 0.1 g of sodium content. That of sugar has no protein, fat or sodium content, but contains 99.3 g of carbohydrate, while that of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content but no fat, and that of rapeseed oil has no protein, carbohydrate, or sodium content, but contains 100.0 g of fat. Therefore, the following equation is established:

From the above, x = 68.0 g, y = 9.8 g, z = 11.3 g, w =2.4 g.

## 10097 Fish, skipjack tuna and frigate mackerel, canned products, flaked meat in oil

The main raw materials of this item are: skipjack tuna caught in spring; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of skipjack tuna caught in spring, y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item contains 18.8 g of protein, 24.2 g of fat, and 0.9 g of sodium content, while the same weight of skipjack tuna caught in spring contains 25.8 g of protein, 0.5 g of fat, and 0.1 g of sodium content. That of rapeseed oil has no protein or sodium content, but contains 100.0 g of fat, while that of common salt has no protein or fat, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 72.9 g, y = 23.8 g, z = 0.8 g.

## 10106 Fish, righteye flounder, dried

The main raw materials of this item are righteye flounder and common salt. This item has the water content of 74.6%, while raw righteye flounder has the water content of 77.8%. Therefore, the required weight of raw righteye flounder to make 100 g of this item is 114.4 g. Moreover, 100 g of this item contains 1.1 g of sodium content, while the same weight of raw righteye flounder and common salt have 0.3 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10112 Fish, blue sprat, seasoned and dried

The main raw materials of this item are: blue sprat; dark soy sauce, and; common salt. First assume that 100 g of this item mainly consists of x (g) of blue sprat, y (g) of dark soy sauce, and z (g) of common salt. One-hundred grams of this item contains 47.9 g of protein, 0.5 g of carbohydrate, and 6.6 g of sodium content, while the same weight of blue sprat has of 18.8 g of protein, 0.1 g of carbohydrate, and 0.4 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 253.5 g, y = 3.1 g, z = 5.2 g.

## 10125 Fish, dotted gizzard shad\*, “Amazu-zuke” (marinated in vinegar and sugar) [\*Syn. gizzard shad]

The main raw materials of this item are: dotted gizzard shad; grain vinegar; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of dotted gizzard shad, y (g) of grain vinegar, z (g) of white sugar, and w (g) of common salt. One-hundred grams of this item has 193 kcal, containing 19.1 g of protein, 6.4 of carbohydrate, and 2.3 g of sodium content, while the same weight of dotted gizzard shad has 160 kcal, containing 19.0 g of protein, 0.4 g of carbohydrate, and 0.4 g of sodium content. That of grain vinegar has 25 kcal, containing 0.1 g of protein, 2.4 g of carbohydrate, but no sodium content, while that of sugar has 384 kcal, containing no protein or sodium content, but 99.3 g of carbohydrate, and that of common salt has 0 kcal, containing no protein or carbohydrate, but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 100.2 g, y = 60.2 g, z = 4.6 g, w =1.9 g.

## 10128 Fish, salmon and trout, pink salmon, salted

The main raw materials of this item are pink salmon and common salt. This item has the water content of 64.6%, while raw pink salmon has the water content of 70.1%. Therefore, the required weight of pink salmon to make 100 g of this item is 118.4 g. Moreover, 100 g of this item contains 5.8 g of sodium content, while the same weight of raw pink salmon and common salt have 0.2 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10129 Fish, salmon and trout, pink salmon, canned in brine

The main raw materials of this item are pink salmon and common salt. This item has the water content of 69.7%, while raw pink salmon has the water content of 70.1%. Therefore, the required weight of pink salmon to make 100 g of this item is 101.3 g. Moreover, 100 g of this item contains 0.9 g of sodium content, while the same weight of raw pink salmon and common salt have 0.2 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10137 Fish, salmon and trout, chum salmon, “Aramaki” (salted whole body), raw

The main raw materials of this item are chum salmon and common salt. This item has the water content of 67.0%, while raw chum salmon has the water content of 72.3%. Therefore, the required weight of chum salmon to make 100 g of this item is 119.1 g. Moreover, 100 g of this item contains 3.0 g of sodium content, while the same weight of raw chum salmon and common salt have 0.2 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10139 Fish, salmon and trout, chum salmon, “Shiozake” (salted salmon), raw

The main raw materials of this item are chum salmon and common salt. This item has the water content of 63.6%, while raw chum salmon has the water content of 72.3%. Therefore, the required weight of chum salmon to make 100 g of this item is 131.4 g. Moreover, 100 g of this item contains 1.8 g of sodium content, while the same weight of raw chum salmon and common salt have 0.2 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10143 Fish, salmon and trout, chum salmon, canned in brine

The main raw materials of this item are chum salmon and common salt. This item has the water content of 68.2%, while raw chum salmon has the water content of 72.3%. Therefore, the required weight of chum salmon to make 100 g of this item is 114.8 g. Moreover, 100 g of this item contains 0.6 g of sodium content, while the same weight of raw chum salmon and common salt have 0.2 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10151 Fish, salmon and trout, sockeye salmon, smoked

The main raw materials of this item are sockeye salmon and common salt. This item has the water content of 64.0%, while raw sockeye salmon has the water content of 71.4%. Therefore, the required weight of sockeye salmon to make 100 g of this item is 125.9 g. Moreover, 100 g of this item contains 3.8 g of sodium content, while the same weight of raw sockeye salmon and common salt have 0.1 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10165 Fish, mackerel, canned products, boiled with miso

The main raw materials of this item are: mackerel; light yellow-type miso, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of mackerel, y (g) of light yellow-type miso, and z (g) of sugar. One-hundred grams of this item contains 16.3 g of protein, 6.6 g of carbohydrate, and 1.1 g of sodium content, while the same weight of raw mackerel has 20.6 g of protein, 0.3 g of carbohydrate, and 0.3 g of sodium content. That of light yellow-type miso contains 12.5 g of protein, 21.9 g of carbohydrate, and 12.4 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 74.8 g, y = 7.1 g, z = 4.9 g.

## 10157 Fish, mackerel, chub mackerel\*, “Saba-bushi” (boiled, smoke-dried and fermented mackerel fillet) [\*Syn. mackerel]

The main raw material of this item is sesame seed mackerel. This item has the water content of 14.6%, while raw sesame seed mackerel has the water content of 70.7%. Therefore, the required weight of sesame seed mackerel to make 100 g of this item is 291.5 g.

## 10161 Fish, mackerel, processed products, “Shiosaba” (plain salted fillet)

The main raw materials of this item are chub mackerel and common salt. This item has the water content of 52.1%, while raw chub mackerel has the water content of 62.1%. Therefore, the required weight of chub mackerel to make 100 g of this item is 126.4 g. Moreover, 100 g of this item contains 1.8 g of sodium content, while the same weight of raw chub mackerel and common salt have 0.3 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10162 Fish, mackerel, processed products, “Hirakiboshi” (mild salted and semi-dried split)

The main raw materials of this item are chub mackerel and common salt. This item has the water content of 50.1%, while raw chub mackerel has the water content of 62.1%. Therefore, the required weight of chub mackerel to make 100 g of this item is 131.7 g. Moreover, 100 g of this item contains 1.7 g of sodium content, while the same weight of raw chub mackerel and common salt have 0.3 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10163 Fish, mackerels, processed products, “Shimesaba” (vinegar marinated fillet)

The main raw materials of this item are: chub mackerel; grain vinegar, and; common salt. First assume that 100 g of this item mainly consists of x (g) of chub mackerel, y (g) of grain vinegar, and z (g) of common salt. One-hundred grams of this item contains 18.6 g of protein, 1.7 of carbohydrate, and 1.6 g of sodium content, while the same weight of chub mackerel has 20.6 g of protein, 0.3 of carbohydrate, and 0.3 g of sodium content. That of grain vinegar contains 0.1 g of protein, 2.4 of carbohydrate, but no sodium content, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 90.0 g, y = 59.6 g, z = 1.3 g.

## 10164 Fish, mackerel, canned products, boiled in brine

The main raw materials of this item are chub mackerel and common salt. One-hundred grams of this item contains 20.9 g of protein, while raw chub mackerel has 20.6 g of protein. Therefore, the required weight of chub mackerel to make 100 g of this item is 101.5 g. Moreover, 100 g of this item contains 0.9 g of sodium content, while the same weight of raw chub mackerel and common salt have 0.3 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10166 Fish, mackerel, canned products, boiled with seasoning

The main raw materials of this item are: mackerel; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of mackerel, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 21.4 g of protein, 4.0 g of carbohydrate, and 1.3 g of sodium content, while the same weight of mackerel contains 20.6 g of protein, 0.3 g of carbohydrate, and 0.3 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 101.3 g, y = 6.9 g, z = 3.2 g.

## 10175 Fish, Pacific saury, “Hirakiboshi” (mild salted and semi-dried split)

The main raw materials of this item are Pacific saury and common salt. One-hundred grams of this item contains 19.3 g of protein, while the same weight of raw Pacific saury has 18.1 g of protein. Therefore, the required weight of Pacific saury to make 100 g of this item is 106.6 g. Moreover, 100 g of this item contains 1.3 g of sodium content, while the same weight of Pacific saury and common salt have 0.4 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10176 Fish, Pacific saury, “Mirinboshi” (seasoned with Mirin and dried fillet)

The main raw materials of this item are: Pacific saury; dark soy sauce, and; regular "mirin." First assume that 100 g of this item mainly consists of x (g) of Pacific saury, y (g) of dark soy sauce, and z (g) of "mirin." One-hundred grams of this item contains 23.9 g of protein, 20.4 g of carbohydrate, and 3.6 g of sodium content, while the same weight of Pacific saury contains 18.1 g of protein, 0.1 g of carbohydrate, and 0.4 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of "mirin" contains 0.3 g of protein, 43.2 g of carbohydrate but no sodium content. Therefore, the following equation is established:

From the above, x = 122.2 g, y = 21.5 g, z = 43.0 g.

## 10177 Fish, Pacific saury, canned products, boiled with seasoning

The main raw materials of this item are: Pacific saury; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Pacific saury, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 18.9 g of protein, 5.6 g of carbohydrate, and 1.4 g of sodium content, while the same weight of Pacific saury contains 18.1 g of protein, 0.1 g of carbohydrate, and 0.4 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 101.5 g, y = 6.9 g, z = 5.0 g.

## 10178 Fish, Pacific saury, canned products, “Kabayaki” (baked and seasoned fillet)

The main raw materials of this item are: Pacific saury; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Pacific saury, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 17.4 g of protein, 9.7 g of carbohydrate, and 1.5 g of sodium content, while the same weight of Pacific saury contains 18.1 g of protein, 0.1 g of carbohydrate, and 0.4 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 92.8 g, y = 7.8 g, z = 9.1 g.

## 10201 Fish, cod, walleye pollock\*, “Sukimidara” (skinned, salted and dried fillet)　[\*Syn. Alaska pollock]

The main raw materials of this item are walleye pollock and common salt. This item has the water content of 38.2%, while raw walleye pollock has the water content of 81.6%. Therefore, the required weight of raw walleye pollock to make 100 g of this item is 335.9 g. Moreover, 100 g of this item contains 18.8 g of sodium content, while the same weight of raw walleye pollock and common salt have 0.3 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10204 Fish, cod, walleye pollock\*, “Karashi-mentaiko” (salted roe with red hot pepper powder) [\*Syn. Alaska pollock]

The main raw materials of this item are: salted walleye pollock roe; common salt, and; ground red hot pepper. First assume that 100 g of this item mainly consists of x (g) of salted walleye pollock roe, y (g) of common salt, and z (g) of ground red hot pepper. One-hundred grams of this item contains 21.0 g of protein, 3.0 g of carbohydrate, and 5.6 g of sodium content, while the same weight of salted walleye pollock roe has 24.0 g of protein, 0.4 g of carbohydrate, and 4.6 g of sodium content. That of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content, while that of red hot pepper contains 16.2 g of protein, 66.8 g of carbohydrate, but no sodium content. Therefore, the following equation is established:

From the above, x = 84.8 g, y = 1.7 g, z = 4.0 g.

## 10208 Fish, cod, Pacific cod, salted fillet

The main raw materials of this item are Pacific cod and common salt. One-hundred grams of this item contains 15.2 g of protein, while the same weight of raw Pacific cod has 17.6 g of protein. Therefore, the required weight of Pacific cod to make 100 g of this item is 86.4 g. Moreover, 100 g of this item contains 2.0 g of sodium content, while the same weight of Pacific cod and common salt have 0.3 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10209 Fish, cod, Pacific cod, dried split

The main raw materials of this item are Pacific cod and common salt. This item has the water content of 18.5%, while raw Pacific cod has the water content of 80.9%. Therefore, the required weight of raw Pacific cod to make 100 g of this item is 426.7 g. Moreover, 100 g of this item contains 3.8 g of sodium content, while the same weight of raw Pacific cod and common salt have 0.3 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10210 Fish, cod, Pacific cod, “Denbu” (mashed and seasoned meat)

The main raw materials of this item are: Pacific cod; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Pacific cod, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 25.5 g of protein, 41.5 g of carbohydrate, and 4.2 g of sodium content, while the same weight of Pacific cod contains 17.6 g of protein, 0.1 g of carbohydrate, and 0.3 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 131.9 g, y = 26.2 g, z = 39.6 g.

## 10219 Fish, Pacific herring, “Migaki-nishin” (dried fillet)

The main raw material of this item is Pacific herring. This item has the water content of 60.6%, while raw Pacific herring has the water content of 66.1%. Therefore, the required weight of raw Pacific herring to make 100 g of this item is 116.3 g.

## 10220 Fish, Pacific herring, “Hirakiboshi” (dried split)

The main raw materials of this item are Pacific herring and common salt. This item has the water content of 59.8%, while raw Pacific herring has the water content of 66.1%. Therefore, the required weight of raw Pacific herring to make 100 g of this item is 118.6 g. Moreover, 100 g of this item contains 0.9 g of sodium content, while the same weight of raw Pacific herring and common salt have 0.3 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10221 Fish, Pacific herring, smoked

The main raw materials of this item are Pacific herring and common salt. This item has the water content of 43.9%, while raw Pacific herring has the water content of 66.1%. Therefore, the required weight of raw Pacific herring to make 100 g of this item is 165.5 g. Moreover, 100 g of this item contains 9.9 g of sodium content, while the same weight of raw Pacific herring and common salt have 0.3 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10226 Fish, yellowfin goby, “Tsukudani” (boiled whole in soy sauce)

The main raw materials of this item are: yellowfin goby; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of yellowfin goby, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 24.3 g of protein, 39.9 g of carbohydrate, and 5.6 g of sodium content, while the same weight of yellowfin goby contains 19.1 g of protein, 0.1 g of carbohydrate, and 0.2 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 112.3 g, y = 37.1 g, z = 37.1 g.

## 10227 Fish, yellowfin goby, “Kanroni” (simmered whole in soy sauce and sugar)

The main raw materials of this item are: yellowfin goby; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of yellowfin goby, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 21.1 g of protein, 40.3 g of carbohydrate, and 3.8 g of sodium content, while the same weight of yellowfin goby contains 19.1 g of protein, 0.1 g of carbohydrate, and 0.2 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 100.5 g, y = 24.8 g, z = 38.5 g.

## 10260 Fish, tuna, canned products, flaked light meat in brine

The main raw materials of this item are yellowfin tuna and common salt. First assume that 100 g of this item mainly consists of x (g) of yellowfin tuna and y (g) of common salt. One-hundred grams of this item contains 16.0 g of protein and 0.5 g of sodium content. The same weight of yellowfin tuna has 24.3 g of protein and 0.1 g of sodium content, while that of common salt has no protein, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 65.8 g, y = 0.4 g.

## 10261 Fish, tuna, canned products, flaked white meat in brine

The main raw materials of this item are albacore and common salt. First assume that 100 g of this item mainly consists of x (g) of albacore and y (g) of common salt. One-hundred grams of this item contains 18.3 g of protein and 0.7 g of sodium content. The same weight of albacore has 26.0 g of protein and 0.1 g of sodium content, while that of common salt has no protein, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 70.4 g, y = 0.6 g.

## 10262 Fish, tuna, canned products, flaked meat with seasoning

The main raw materials of this item are: yellowfin tuna; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of yellowfin tuna, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 19.0 g of protein, 9.9 g of carbohydrate, and 1.9 g of sodium content, while the same weight of yellowfin tuna contains 24.3 g of protein, 0.1 g of sodium content but no carbohydrate, and. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 74.2 g, y = 12.6 g, z = 9.0 g.

## 10263 Fish, tuna, canned products, flaked light meat in oil

The main raw materials of this item are: yellowfin tuna; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of yellowfin tuna, y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item contains 17.7 g of protein, 21.7 g of fat, and 0.9 g of sodium content, while the same weight of yellowfin tuna contains 24.3 g of protein, 1.0 g of fat, and 0.1 g of sodium content. That of rapeseed oil sauce has no protein or sodium content, but contains 100.0 g of fat, while that of common salt has no protein or fat, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 72.8 g, y = 21.0 g, z = 0.8 g.

## 10264 Fish, tuna, canned products, flaked white meat in oil

The main raw materials of this item are: albacore; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of albacore, y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item contains 18.8 g of protein, 23.6 g of fat, and 0.9 g of sodium content, while the same weight of albacore contains 26.0 g of protein, 0.7 g of fat, and 0.1 g of sodium content. That of rapeseed oil sauce has no protein or sodium content, but contains 100.0 g of fat, while that of common salt has no protein or fat, but contains 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 72.3 g, y = 23.1 g, z = 0.8 g.

## 10274 Fish, lamprey, dried

The main raw material of this item is lamprey. This item has the water content of 14.3%, while raw lamprey has the water content of 61.5%. Therefore, the required weight of lamprey with skin to make 100 g of this item is 222.6 g.

## 10277 Fish, Japanese smelt\*, “Tsukudani” (simmered whole in soy sauce and sugar) [\*Syn. Pond smelt]

The main raw materials of this item are: Japanese smelt; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Japanese smelt, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 28.7 g of protein, 38.2 g of carbohydrate, and 4.8 g of sodium content, while the same weight of Japanese smelt contains 14.4 g of protein, 0.1 g of carbohydrate, and 0.5 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 185.0 g, y = 26.7 g, z = 36.2 g.

## 10278 Fish, Japanese smelt\*, “Ameni” (simmered whole in glucose syrup and soy sauce) [\*Syn. Pond smelt]

The main raw materials of this item are: Japanese smelt; dark soy sauce, and; starch syrup (acid saccharified). First assume that 100 g of this item mainly consists of x (g) of Japanese smelt, y (g) of dark soy sauce, and z (g) of starch syrup. One-hundred grams of this item contains 26.3 g of protein, 40.4 g of carbohydrate, and 4.1 g of sodium content, while the same weight of Japanese smelt contains 14.4 g of protein, 0.1 g of carbohydrate, and 0.5 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of starch syrup has no protein or sodium content, but contains 85.0 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 170.7 g, y = 22.4 g, z = 38.7 g.

## 10282 Mollusks, short-necked clam\*, “Tsukudani” (simmered meat in soy sauce and sugar) [\*Syn. baby-neck clam, Manila clam, Japanese littleneck]

The main raw materials of this item are: short-necked clam; dark soy sauce, and; regular "mirin," the required weights of which to make 100 g of this item are 300 g, 6 g, and 65 g, respectively. Note that these values were determined using approximate values for calculation of protein, carbohydrate and sodium content, rather than using equation and component values in the Food Component Database, as the component values resulted in the negative weight for soy sauce. We used these values: 18.7/100 g for protein instead of 20.8 g/100 g, 29.9 g/100 g for carbohydrate instead of 30.1 g/100 g, and 7.5 g/100 g for sodium content instead of 7.4 g/100 g.

## 10283 Mollusks, short-necked clam\*, canned products, boiled in brine [\*Syn. baby-neck clam, Manila clam, Japanese littleneck]

The main raw material of this item is short-necked clam. One-hundred grams of this item contains 20.3 g of protein, while the same weight of raw short-necked clam has 6.0 g of protein. Therefore, the required weight of short-necked clam to make 100 g of this item is:

## 10284 Mollusks, short-necked clam\*, canned products, boiled with seasoning [\*Syn. baby-neck clam, Manila clam, Japanese littleneck]

The main raw materials of this item are: short-necked clam; dark soy sauce, and; sugar (white sugar)", the required weights of which to make 100 g of this item are 70 g, 1 g, and 11 g, respectively. Note that these values were determined using approximate values for calculation of protein, carbohydrate and sodium content, rather than using equation and component values in the Food Component Database, as the component values resulted in the negative weight for soy sauce. We used these values: 4.2/100 g for protein instead of 16.6 g/100 g, 11.3 g/100 g for carbohydrate instead of 11.5 g/100 g, and 1.7 g/100 g for sodium content instead of 1.6 g/100 g.

## 10286 Mollusks, abalone, steamed and dried

The main raw material of this item is disk abalone. One-hundred grams of this item has the water content of 27.9%, while the same weight of raw disk abalone has the water content of 79.5%. Therefore, the required weight of disk abalone to make 100 g of this item is 351.7 g.

## 10288 Mollusks, abalone, canned in brine

The main raw material of this item is disk abalone. One-hundred grams of this item contains 19.4 g of protein, while the same weight of raw disk abalone has 14.3 g of protein. Therefore, the required weight of disk abalone to make 100 g of this item is:

## 10294 Mollusks, Pacific oyster, canned in oil, smoked

The main raw materials of this item are oyster and rapeseed oil. First assume that 100 g of this item mainly consists of x (g) of oyster and y (g) of rapeseed oil. One-hundred grams of this item contains 12.5 g of protein and 22.6 g of fat. The same weight of oyster has 6.9 g of protein and 2.2 g of fat, while that of rapeseed oil has no protein, but contains 100.0 g of fat. Therefore, the following equation is established:

From the above, x = 181.2 g, y = 18.6 g.

## 10309 Mollusks, hard clam, “Tsukudani” (simmered meat in soy sauce and sugar)

The main raw materials of this item are: hard clam; dark soy sauce, and; sugar (white sugar), the required weights of which to make 100 g of this item are 210 g, 20 g, and 16 g, respectively. Note that these values were determined using approximate values for calculation of protein, carbohydrate and sodium content, rather than using equation and component values in the Food Component Database, as the component values resulted in the negative weight for soy sauce. We used these values: 14.4/100 g for protein instead of 27.0 g/100 g, 21.7 g/100 g for carbohydrate instead of 21.4 g/100 g, and 7.1 g/100 g for sodium content, which is the same as the component value.

## 10314 Mollusks, giant ezo-scallop\*, adductor muscle, “Niboshi” (boiled and dried) [\*Syn. common scallop, Japanese scallop]

The main raw materials of this item are giant ezo-scallop adductor muscle and common salt. One-hundred grams of this item has the water content of 17.1%, while the same weight of raw giant ezo-scallop adductor muscle has the water content of 78.4%. Therefore, the required weight of disk abalone to make 100 g of this item is 383.8 g. Moreover, 100 g of this item contains 6.4 g of sodium content, while the same weight of giant ezo-scallop adductor muscle and common salt have 0.3 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10315 Mollusks, giant ezo-scallop\*, adductor muscle, canned products, boiled in brine [\*Syn. common scallop, Japanese scallop]

The main raw materials of this item are giant ezo-scallop adductor muscle and common salt. First assume that 100 g of this item mainly consists of x (g) of giant ezo-scallop adductor muscle and y (g) of common salt. One-hundred grams of this item contains 19.5 g of protein and 1.0 g of sodium content. The same weight of giant ezo-scallop adductor muscle has 16.9 g of protein and 0.3 g of sodium content, while that of common salt contains no protein, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 115.4 g, y = 0.7 g.

## 10325 Crustacean, Sakura shrimp, dried

This item has the water content of 19.4%, while sakura shrimp has the water content of 78.9%. Therefore, the required weight of sakura shrimp to make 100 g of this item is 382.0 g.

## 10326 Crustacean, Sakura shrimp, “Niboshi” (boiled and dried)

The main raw materials of this item are sakura shrimp and common salt. One-hundred grams of this item has the water content of 23.2%, while the same weight of sakura shrimp has the water content of 78.9%. Therefore, the required weight of Sakura shrimp to make 100 g of this item is 364.0 g. Moreover, 100 g of this item contains 8.6 g of sodium content, while the same weight of sakura shrimp and common salt have 0.7 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10331 Crustacean, processed shrimp, “Tsukudani” (simmered whole in soy sauce and sugar)

The main raw materials of this item are: dried shrimp; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of dried shrimp, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 25.9 g of protein, 30.1 g of carbohydrate, and 4.8 g of sodium content, while the same weight of dried shrimp contains 48.6 g of protein, 0.3 g of carbohydrate, and 3.8 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 50.1 g, y = 20.0 g, z = 28.6 g.

## 10337 Crustacean, snow crab\*, canned products, boiled in brine [\*Syn. tanner crab]

The main raw materials of this item are snow crab and common salt. First assume that 100 g of this item mainly consists of x (g) of snow crab and y (g) of common salt. One-hundred grams of this item contains 16.3 g of protein and 1.7 g of sodium content. The same weight of snow crab has 13.9 g of protein and 0.8 g of sodium content, while that of common salt contains no protein, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 117.3 g, y = 0.8 g.

## 10340 Crustacean, red king crab\*, canned products, boiled in brine [\*Syn. king crab]

The main raw materials of this item are red king crab and common salt. First assume that 100 g of this item mainly consists of x (g) of red king crab and y (g) of common salt. One-hundred grams of this item contains 20.6 g of protein and 1.5 g of sodium content. The same weight of red king crab has 13.0 g of protein and 0.9 g of sodium content, while that of common salt contains no protein, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 158.5 g, y = 0.1 g.

## 10350 Mollusks, firefly squid, seasoned and smoked

The main raw materials of this item are firefly squid and common salt. This item has the water content of 26.4%, while firefly squid has the water content of 83.0%. Therefore, the required weight of firefly squid to make 100 g of this item is 432.9 g. Moreover, 100 g of this item contains 3.8 g of sodium content, while the same weight of firefly squid and common salt have 0.7 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10351 Mollusks, firefly squid, “Tsukudani” (simmered whole in soy sauce and sugar)

The main raw materials of this item are: firefly squid; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of firefly squid, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 27.0 g of protein, 22.9 g of carbohydrate, and 3.0 g of sodium content, while the same weight of firefly squid has 11.8 g of protein, 0.2 g of carbohydrate, and 0.7 g of sodium content. That of soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 222.3 g, y = 10.0 g, z = 21.8 g.

## 10353 Mollusks, processed squid, “Surume” (dried squid)

This item has the water content of 20.2%, while Japanese common squid has the water content of 80.2%. Therefore, the required weight of Japanese common squid to make 100 g of this item is 403.0 g.

## 10354 Mollusks, processed squid, “Saki-ika” (dried, seasoned and shredded squid)

The main raw materials of this item are: Japanese common squid; sugar (white sugar); common salt, and; grain vinegar. First assume that 100 g of this item mainly consists of x (g) of Japanese common squid, y (g) of white sugar, z (g) of common salt, and w (g) of grain vinegar. One-hundred grams of this item has 279 kcal, containing 45.5 g of protein, 17.3 of carbohydrate, and 6.9 g of sodium content, while the same weight of Japanese common squid has 83 kcal, containing 17.9 g of protein, 0.1 g of carbohydrate, and 0.5 g of sodium content. That of sugar has 384 kcal, containing no protein or sodium content, but 99.3 g of carbohydrate, while that of common salt has 0 kcal, containing no protein or carbohydrate, but 99.5 g of sodium content, and that of grain vinegar has 25 kcal, containing 0.1 g of protein, 2.4 g of carbohydrate, but no sodium content. Therefore, the following equation is established:

From the above, x = 254.1 g, y = 16.8 g, z = 5.7 g, w =13.8 g.

## 10355 Mollusks, processed squid, seasoned and smoked

The main raw materials of this item are Japanese common squid and common salt. This item has the water content of Japanese common squid 43.5%, while Japanese common squid has the water content of 80.2%. Therefore, the required weight of Japanese common squid to make 100 g of this item is 285.4 g. Moreover, 100 g of this item contains 6.1 g of sodium content, while the same weight of Japanese common squid and common salt have 0.5 g and 99.5 g of sodium content, respectively. When assuming that the increase in the sodium content is from common salt, the required weight of common salt to make 100 g of this item is:

## 10356 Mollusks, processed squid, “Kiriika-ameni” (dried shredded squid, simmered in glucose syrup and soy sauce)

The main raw materials of this item are: Japanese common squid; dark soy sauce; sugar (white sugar), and; regular "mirin." First assume that 100 g of this item mainly consists of x (g) of Japanese common squid, y (g) of dark soy sauce, z (g) of white sugar, and w (g) of regular "mirin." One-hundred grams of this item has 318 kcal, containing 22.7 g of protein, 46.1 g of carbohydrate, and 2.8 g of sodium content, while the same weight of Japanese common squid has 83 kcal, containing 17.9 g of protein, 0.1 g of carbohydrate, and 0.5 g of sodium content. That of soy sauce has 71 kcal, containing 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has 384 kcal, containing no protein or sodium content, but 99.3 g of carbohydrate, and that of regular "mirin" has 241 kcal, containing 0.3 g of protein, 43.2 g of carbohydrate, but no sodium content. Therefore, the following equation is established:

From the above, x = 119.5 g, y = 15.2 g, z = 24.6 g, w =47.2 g.

## 10357 Mollusks, processed squid, “Ika-arare” (dried squid flakes, simmered in glucose syrup and soy sauce)

The main raw materials of this item are: Japanese common squid; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Japanese common squid, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 20.0 g of protein, 49.1 g of carbohydrate, and 1.8 g of sodium content, while the same weight of Japanese common squid has 17.9 g of protein, 0.1 g of carbohydrate, and 0.5 g of sodium content. That of soy sauce contains 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but has 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 108.0 g, y = 48.6 g, z = 8.7 g.

## 10359 Mollusks, processed squid, canned with seasoning

The main raw materials of this item are: Japanese common squid; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of Japanese common squid, y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 21.4 g of protein, 7.7 g of carbohydrate, and 1.8 g of sodium content, while the same weight of Japanese common squid has 17.9 g of protein, 0.1 g of carbohydrate, and 0.5 g of sodium content. That of soy sauce contains 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 115.9 g, y = 8.4 g, z = 7.0 g.

## 10366 Sea urchin, “Tsubu-uni” (salted whole gonads)

The main raw materials of this item are raw gonads and common salt. First assume that 100 g of this item mainly consists of x (g) of raw gonads and y (g) of common salt. One-hundred grams of this item contains 17.2 g of protein and 8.4 g of sodium content. The same weight of raw gonads has 16.0 g of protein and 0.6 g of sodium content, while that of common salt contains no protein but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 107.5 g, y = 7.8 g.

## 10367 Sea urchin, “Neri-uni” (salted whole gonad paste)

The main raw materials of this item are raw gonads and common salt. First assume that 100 g of this item mainly consists of x (g) of raw gonads and y (g) of common salt. One-hundred grams of this item contains 13.5 g of protein and 7.1 g of sodium content. The same weight of raw gonads has 16.0 g of protein and 0.6 g of sodium content, while that of common salt contains no protein but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 84.4 g, y = 6.6 g.

## 10376 Surimi products, “Kanifumi-kamaboko” (imitation crab meat made from surimi)

The main raw materials of this item are: walleye pollock; wheat starch; hen egg white, and; common salt. First assume that 100 g of this item mainly consists of x (g) of walleye pollock, y (g) of wheat starch, z (g) of hen egg white, and w (g) of common salt. One-hundred grams of this item contains 12.1 g of protein, 0.5 g of fat, 9.2 g of carbohydrate, and 2.2 g of sodium content, while the same weight of walleye pollock has 17.4 g of protein, 1.0 g of fat, 0.1 g of carbohydrate, and 0.3 g of sodium content. That of wheat starch contains 0.2 g of protein, 0.5 g of fat, 86.0 g of carbohydrate, but no sodium content, while that of hen egg white has 10.5 g of protein, 0.4 g of carbohydrate, and 0.5 g of sodium content but no fat, and that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 44.8 g, y = 10.5 g, z = 40.8 g, w =1.9 g.

## 10377 Surimi products, “Kobumaki-kamaboko” (surimi rolled by kombu, steamed)

The main raw materials of this item are: walleye pollock; wheat starch; hen egg white; common salt, and; "Makombu." First assume that 100 g of this item mainly consists of x (g) of walleye pollock, y (g) of wheat starch, z (g) of hen egg white, w (g) of common salt, and u (g) of "Makombu." One-hundred grams of this item has 83 kcal, containing 8.9 g of protein 0.5 g of fat, 11.0 g of carbohydrate, and 2.4 g of sodium content, while the same weight of walleye pollock has 83 kcal, containing 17.4 g of protein, 1.0 g of fat, 0.1 g of carbohydrate, and 0.3 g of sodium content. That of wheat starch has 351 kcal, containing 0.2 g of protein, 0.5 g of fat, 86.0 g of carbohydrate, but no sodium content, while that of hen egg white has 47 kcal, containing 10.5 g of protein, 0.4 g of carbohydrate, and 0.5 g of sodium content, but no fat. That of common salt has 0 kcal, containing no protein, fat or carbohydrate, but has 99.5 g of sodium content, and that of "Makombu" has 145 kcal, containing 8.2 g of protein, 1.2 g of fat, 61.5 g of carbohydrate, and 7.1 g of sodium content. Therefore, the following equation is established:

From the above, x = 42.2 g, y = 11.5 g, z = 13.2 g, w =2.1, u = 1.7 g.

## 10378 Surimi products, “Sumaki-kamaboko” (steamed kamaboko covered with straw)

The main raw materials of this item are: walleye pollock; potato starch; hen egg white, and; common salt. First assume that 100 g of this item mainly consists of x (g) of walleye pollock, y (g) of potato starch, z (g) of hen egg white, and w (g) of common salt. One-hundred grams of this item contains 12.0 g of protein, 0.8 g of fat, 8.7 g of carbohydrate, and 2.2 g of sodium content, while the same weight of walleye pollock has 17.4 g of protein, 1.0 g of fat, 0.1 g of carbohydrate, and 0.3 g of sodium content. That of potato starch contains 0.1 g of protein, 0.1 g of fat, 81.6 g of carbohydrate, but no sodium content, while that of hen egg white has 10.5 g of protein, 0.4 g of carbohydrate, and 0.5 g of sodium content but no fat, and that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 68.3 g, y = 10.0 g, z = 0.9 g, w =2.0 g.

## 10379 Surimi products, “Mushi-kamaboko” (steamed kamaboko)

The main raw materials of this item are: croaker; potato starch; hen egg white, and; common salt. First assume that 100 g of this item mainly consists of x (g) of croaker, y (g) of potato starch, z (g) of hen egg white, and w (g) of common salt. One-hundred grams of this item contains 12.0 g of protein, 0.9 g of fat, 9.7 g of carbohydrate, and 2.5 g of sodium content, while the same weight of croaker has 18.0 g of protein, 0.8 g of fat, and 0.2 g of sodium content but no carbohydrate. That of potato starch contains 0.1 g of protein, 0.1 g of fat, 81.6 g of carbohydrate, but no sodium content, while that of hen egg white has 10.5 g of protein, 0.4 g of carbohydrate, and 0.5 g of sodium content but no fat, and that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 68.3 g, y = 11.3 g, z = 0.4 g, w =2.4 g.

## 10380 Surimi products, “Yakinuki-kamaboko” (baked kamaboko)

The main raw materials of this item are: croaker; potato starch; hen egg white, and; common salt. First assume that 100 g of this item mainly consists of x (g) of croaker, y (g) of potato starch, z (g) of hen egg white, and w (g) of common salt. One-hundred grams of this item contains 16.2 g of protein, 1.0 g of fat, 7.4 g of carbohydrate, and 2.4 g of sodium content, while the same weight of croaker has 18.0 g of protein, 0.8 g of fat, and 0.2 g of sodium content, but no carbohydrate. That of potato starch contains 0.1 g of protein, 0.1 g of fat, 81.6 g of carbohydrate, but no sodium content, while that of hen egg white has 10.5 g of protein, 0.4 g of carbohydrate, and 0.5 g of sodium content, but no fat, and that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 89.7 g, y = 8.6 g, z = 0.3 g, w =2.2 g.

## 10381 Surimi products, “Yaki-chikuwa” (baked tubular kamaboko)

The main raw materials of this item are: croaker; potato starch; hen egg white, and; common salt. First assume that 100 g of this item mainly consists of x (g) of croaker, y (g) of potato starch, z (g) of hen egg white, and w (g) of common salt. One-hundred grams of this item contains 12.2 g of protein, 2.0 g of fat, 13.5 g of carbohydrate, and 2.1 g of sodium content, while the same weight of croaker has 18.0 g of protein, 0.8 g of fat, and 0.2 g of sodium content, but no carbohydrate. That of potato starch contains 0.1 g of protein, 0.1 g of fat, 81.6 g of carbohydrate, but no sodium content, while that of hen egg white has 10.5 g of protein, 0.4 g of carbohydrate, and 0.5 g of sodium content, but no fat, and that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 66.6 g, y = 15.7 g, z = 1.8 g, w =2.0 g.

## 10382 Surimi products, “Datemaki” (sweet rolled omelet made of egg and surimi)

The main raw materials of this item are: croaker; whole hen egg; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of croaker, y (g) of whole hen egg, z (g) of white sugar, and w (g) of common salt. One-hundred grams of this item contains 14.6 g of protein, 7.5 g of fat, 17.6 g of carbohydrate, and 0.9 g of sodium content, while the same weight of croaker has 18.0 g of protein, 0.8 g of fat, and 0.2 g of sodium content, but no carbohydrate. That of hen egg has 12.3 g of protein, 10.3 g of fat, 0.3 g of carbohydrate, and 0.4 g of sodium content, while that of sugar has no protein, fat or sodium content, but contains 99.3 g of carbohydrate, and that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 33.1 g, y = 70.2 g, z = 17.5 g, w =0.6 g.

## 10383 Surimi products, “Tsumire” (boiled red meat fish paste)

The main raw materials of this item are: Japanese pilchard; hen egg white; common wheat, soft flour, first grade, and; common salt. First assume that 100 g of this item mainly consists of x (g) of Japanese pilchard, y (g) of hen egg white, z (g) of common wheat (soft flour), and w (g) of common salt. One-hundred grams of this item contains 12.0 g of protein, 4.3 g of fat, 6.5 g of carbohydrate, and 1.4 g of sodium content, while the same weight of Japanese pilchard has 19.2 g of protein, 9.2 g of fat, 0.2 g of carbohydrate, and 0.2 g of sodium content. That of hen egg white has 10.5 g of protein, 0.4 g of carbohydrate, and 0.5 g of sodium content, but no fat, while that of common wheat (soft flour) contains 8.3 g of protein, 1.5 g of fat, 75.8 g of carbohydrate, but no sodium content, and that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 45.4 g, y = 24.7 g, z = 8.3 g, w =1.2 g.

## 10384 Surimi products, “Naruto” (boiled stick kamaboko with cross section of red swirl)

The main raw materials of this item are: walleye pollock; common wheat, soft flour, first grade; hen egg white, and; common salt. First assume that 100 g of this item mainly consists of x (g) of walleye pollock, y (g) of common wheat (soft flour), z (g) of hen egg white, and w (g) of common salt. One-hundred grams of this item contains 7.6 g of protein, 0.4 g of fat, 11.6 g of carbohydrate, and 2.0 g of sodium content, while the same weight of walleye pollock has 17.4 g of protein, 1.0 g of fat, 0.1 g of carbohydrate, and 0.3 g of sodium content. That of common wheat (soft flour) contains 8.3 g of protein, 1.5 g of fat, 75.8 g of carbohydrate, but no sodium content, while that of hen egg white has 10.5 g of protein, 0.4 g of carbohydrate, and 0.5 g of sodium content, but no fat, and that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 17.3 g, y = 15.1 g, z = 31.7 g, w =1.8 g.

## 10385 Surimi products, “Hanpen” (boiled fishcake made of surimi, yam paste and starch)

The main raw materials of this item are: blue shark; hen egg white; Chinese yam ("Nagaimo"); sugar (white sugar), and; common salt. One-hundred grams of this item is made from 48 g of blue shark, 5 g of hen egg white, 10 g of Chinese yam ("Nagaimo"), 10 g of white sugar, and 1.2 g of common salt. Note that these values were calculated using approximate nutrition values for this item, namely 9.8 g/100 g for protein, 11.3 g/100 g for carbohydrate, and 1.5 g/100 g for sodium content, rather than using equation and component values in the Food Component Database, as the component values resulted in the negative weight.

## 10423 Surimi products, “Kuro-hanpen” (boiled fishcake made of surimi, yam paste and starch)

The raw material mix ratios are: Japanese pilchard at 200, sesame seed mackerel at 200; common salt at 8, sugar (white sugar) at 40, and potato starch at 60. Therefore, the required weights of Japanese pilchard, sesame seed mackerel, common salt, sugar and starch to make 100 g of this item are 25 g, 25 g, 1 g, 5 g, and 7.5 g, respectively.

## 10386 Surimi products, “Satsuma-age” (fried surimi)

The main raw materials of this item are: walleye pollock; common salt, and; rapeseed oil. First assume that 100 g of this item mainly consists of x (g) of walleye pollock, y (g) of common salt, and z (g) of rapeseed oil. One-hundred grams of this item contains 12.5 g of protein, 3.7 g of fat, and 1.9 g of sodium content, while the same weight of walleye pollock has 17.4 g of protein, 1.0 g of fat, and 0.3 g of sodium content. That of common salt contains no protein or fat, but has 99.5 g of sodium content, while that of rapeseed oil has no carbohydrate or sodium content, but contains 100.0 g of fat. Therefore, the following equation is established:

From the above, x = 71.8 g, y = 1.7 g, z = 3.0 g.

## 10387 Surimi products, fish ham

The main raw materials of this item are: walleye pollock; pork, large type breed, inside ham, lean and fat; corn starch, and; common salt. First assume that 100 g of this item mainly consists of x (g) of walleye pollock, y (g) of pork, z (g) of corn starch, and w (g) of common salt. One-hundred grams of this item contains 13.4 g of protein, 6.7 g of fat, 11.1 g of carbohydrate, and 2.3 g of sodium content, while the same weight of walleye pollock has 17.4 g of protein, 1.0 g of fat, 0.1 g of carbohydrate, and 0.3 g of sodium content. That of pork contains 20.5 g of protein, 10.2 g of fat, 0.2 g of carbohydrate, and 0.1 g of sodium content, while that of corn starch has 0.1 g of protein, 0.7 g of fat, 86.3 g of carbohydrate, but no sodium content, and that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 0.7 g, y = 84.7 g, z = 12.7 g, w =2.2 g.

10388 Surimi products, fish sausageThe main raw materials of this item are: walleye pollock; corn starch; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of walleye pollock, y (g) of corn starch, z (g) of rapeseed oil, and w (g) of common salt. One-hundred grams of this item contains 11.5 g of protein, 7.2 g of fat, 12.6 g of carbohydrate, and 2.1 g of sodium content, while the same weight of walleye pollock has 17.4 g of protein, 1.0 g of fat, 0.1 g of carbohydrate, and 0.3 g of sodium content. That of corn starch has 0.1 g of protein, 0.7 g of fat, 86.3 g of carbohydrate, but no sodium content, while that of rapeseed oil has no protein, carbohydrate or sodium content, but contains 100.0 g of fat, and that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 66.0 g, y = 14.5 g, z = 6.4 g, w =1.9 g.

## MEAT

## 11104 Beef products, roast beef

The main raw materials of this item are beef, dairy fattened steer, inside round, lean and fat, and common salt. First assume that 100 g of this item mainly consists of x (g) of beef (inside round, lean and fat) and y (g) of common salt. One-hundred grams of this item contains 21.7 g of protein and 0.8 g of sodium content. The same weight of beef has 19.5 g of protein and 0.1 g of sodium content, while that of common salt contains no protein, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 111.3 g, y = 0.7 g.

## 11105 Beef products, corned beef, canned

The main raw materials of this item are beef, dairy fattened steer, inside round, lean and fat, and common salt. First assume that 100 g of this item mainly consists of x (g) of beef (inside round, lean and fat) and y (g) of common salt. One-hundred grams of this item contains 19.8 g of protein and 1.8 g of sodium content. The same weight of beef has 19.5 g of protein and 0.1 g of sodium content, while that of common salt contains no protein, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 101.5 g, y = 1.7 g.

## 11106 Beef products, canned with seasoning

The main raw materials of this item are: beef, dairy fattened steer, chunk, lean and fat; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of beef (chunk, lean and fat), y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 19.2 g of protein 9.9 g of carbohydrate, and 1.8 g of sodium content, while the same weight of beef has 16.8 g of protein 0.4 g of carbohydrate, and 0.1 g of sodium content. That of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 108.9 g, y = 11.7 g, z = 8.6 g.

## 11107 Beef products, beef jerky

The main raw materials of this item are beef, dairy fattened steer, inside round, lean and fat, and common salt. First assume that 100 g of this item mainly consists of x (g) of beef (inside round, lean and fat) and y (g) of common salt. One-hundred grams of this item contains 54.8 g of protein and 4.8 g of sodium content. The same weight of beef has 19.5 g of protein and 0.1 g of sodium content, while that of common salt contains no protein, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 281.0 g, y = 4.5 g.

## 11108 Beef products, smoked tongue

The main raw materials of this item are beef tongue and common salt. First assume that 100 g of this item mainly consists of x (g) of beef tongue and y (g) of common salt. One-hundred grams of this item contains 18.1 g of protein and 1.6 g of sodium content. The same weight of beef tongue has 13.3 g of protein and 0.2 g of sodium content, while that of common salt contains no protein, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 136.1 g, y = 1.3 g.

## 11174 Pork, ham, bone-in

The main raw materials of this item are: pork, large type breed, inside ham, lean and fat; starch syrup (acid saccharified), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (inside ham, lean and fat), y (g) of starch syrup, and z (g) of common salt. One-hundred grams of this item contains 16.7 g of protein, 0.8 g of carbohydrate, and 2.5 g of sodium content, while the same weight of pork has 20.5 g of protein, 0.2 g of carbohydrate, and 0.1 g of sodium content. That of starch syrup contains no protein or sodium content, but has 85.0 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 81.5 g, y = 0.7 g, z = 2.4 g.

## 11175 Pork, ham, boneless

The main raw materials of this item are: pork, large type breed, inside ham, lean and fat; starch syrup (acid saccharified), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (inside ham, lean and fat), y (g) of starch syrup, and z (g) of common salt. One-hundred grams of this item contains 18.7 g of protein, 1.8 g of carbohydrate, and 2.8 g of sodium content, while the same weight of pork has 20.5 g of protein, 0.2 g of carbohydrate, and 0.1 g of sodium content. That of starch syrup contains no protein or sodium content, but has 85.0 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 91.2 g, y = 1.9 g, z = 2.7 g.

## 11176 Pork, ham, loin

The main raw materials of this item are: pork, large type breed, loin, lean and fat; starch syrup (acid saccharified), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (loin, lean and fat), y (g) of starch syrup, and z (g) of common salt. One-hundred grams of this item contains 18.6 g of protein, 2.0 g of carbohydrate, and 2.3 g of sodium content, while the same weight of pork has 19.3 g of protein, 0.2 g of carbohydrate, and 0.1 g of sodium content. That of starch syrup contains no protein or sodium content, but has 85.0 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 96.4 g, y = 2.1 g, z = 2.2 g.

## 11177 Pork, ham, shoulder

The main raw materials of this item are: pork, large type breed, picnic shoulder, lean and fat; starch syrup (acid saccharified), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (picnic shoulder, lean and fat), y (g) of starch syrup, and z (g) of common salt. One-hundred grams of this item contains 16.1 g of protein, 0.6 g of carbohydrate, and 1.6 g of sodium content, while the same weight of pork has 18.5 g of protein, 0.2 g of carbohydrate, and 0.1 g of sodium content. That of starch syrup contains no protein or sodium content, but has 85.0 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 87.0 g, y = 0.5 g, z = 1.5 g.

## 11181 Pork, ham, uncooked ham, fresh

The main raw materials of this item are: pork, large type breed, loin, lean and fat, and common salt. First assume that 100 g of this item mainly consists of x (g) of pork (loin, lean and fat) and y (g) of common salt. One-hundred grams of this item contains 24.0 g of protein and 2.8 g of sodium content. The same weight of pork has 19.3 g of protein and 0.1 g of sodium content, while that of common salt contains no protein, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 124.4 g, y = 2.7 g.

## 11182 Pork, ham, uncooked ham, ripened

The main raw materials of this item are: pork, large type breed, loin, lean and fat, and common salt. First assume that 100 g of this item mainly consists of x (g) of pork (loin, lean and fat) and y (g) of common salt. One-hundred grams of this item contains 25.7 g of protein and 5.6 g of sodium content. The same weight of pork has 19.3 g of protein and 0.1 g of sodium content, while that of common salt contains no protein, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 133.2 g, y = 5.5 g.

## 11178 Pork, ham, pressed

The main raw materials of this item are: pork, large type breed, inside ham, lean and fat; sugar, and; common salt, based on products by Myogata Ham. First assume that 100 g of this item mainly consists of x (g) of pork (inside ham, lean and fat), y (g) of sugar, and z (g) of common salt. One-hundred grams of this item contains 15.4 g of protein, 3.9 g of carbohydrate, and 2.4 g of sodium content, while the same weight of pork has 20.5 g of protein, 0.2 g of carbohydrate, and 0.1 g of sodium content. That of sugar contains no protein or sodium content, but has 99.3 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 75.1 g, y = 3.8 g, z = 2.3 g.

## 11180 Pork, ham, chopped

The main raw materials of this item are: pork, large type breed, inside ham, lean and fat; corn starch, and; common salt, based on products by Ito Ham. First assume that 100 g of this item mainly consists of x (g) of pork (inside ham, lean and fat), y (g) of corn starch, and z (g) of common salt. One-hundred grams of this item contains 11.7 g of protein, 12.7 g of carbohydrate, and 2.5 g of sodium content, while the same weight of pork has 20.5 g of protein, 0.2 g of carbohydrate, and 0.1 g of sodium content. That of corn starch contains 0.1 g of protein, 86.3 g of carbohydrate, but no sodium content, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 57.0 g, y = 14.6 g, z = 2.5 g.

## 11183 Pork, bacon

The main raw materials of this item are: pork, large type breed, belly, lean and fat; starch syrup (acid saccharified), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (belly, lean and fat), y (g) of starch syrup, and z (g) of common salt. One-hundred grams of this item contains 12.9 g of protein, 0.3 g of carbohydrate, and 2.0 g of sodium content, while the same weight of pork has 14.4 g of protein, 0.1 g of carbohydrate, and 0.1 g of sodium content. That of starch syrup contains no protein or sodium content, but has 85.0 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 89.6 g, y = 0.2 g, z = 1.9 g.

## 11184 Pork, bacon loin

The main raw materials of this item are: pork, large type breed, loin, lean and fat; starch syrup (acid saccharified), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (loin, lean and fat), y (g) of starch syrup, and z (g) of common salt. One-hundred grams of this item contains 16.8 g of protein, 3.2 g of carbohydrate, and 2.2 g of sodium content, while the same weight of pork has 19.3 g of protein, 0.2 g of carbohydrate, and 0.1 g of sodium content. That of starch syrup contains no protein or sodium content, but has 85.0 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 87.0 g, y = 3.6 g, z = 2.1 g.

## 11185 Pork, shoulder bacon

The main raw materials of this item are: pork, large type breed, picnic shoulder, lean and fat; starch syrup (acid saccharified), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (picnic shoulder, lean and fat), y (g) of starch syrup, and z (g) of common salt. One-hundred grams of this item contains 17.2 g of protein, 2.5 g of carbohydrate, and 2.4 g of sodium content, while the same weight of pork has 18.5 g of protein, 0.2 g of carbohydrate, and 0.1 g of sodium content. That of starch syrup contains no protein or sodium content, but has 85.0 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 93.0 g, y = 2.7 g, z = 2.3 g.

## 11186 Pork, sausage, Vienna

The main raw materials of this item are: pork, ground meet; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (ground meet), y (g) of white sugar, and z (g) of common salt. One-hundred grams of this item contains 11.5 g of protein, 2.3 g of carbohydrate, and 1.9 g of sodium content, while the same weight of pork has 17.7 g of protein, 0.1 g of carbohydrate, and 0.1 g of sodium content. That of sugar contains no protein or sodium content, but has 99.3 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 65.0 g, y = 2.6 g, z = 1.8 g.

## 11187 Pork, sausage, semi-dry

The main raw materials of this item are: pork, ground meet; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (ground meet), y (g) of white sugar, and z (g) of common salt. One-hundred grams of this item contains 16.9 g of protein, 2.9 g of carbohydrate, and 2.9 g of sodium content, while the same weight of pork has 17.7 g of protein, 0.1 g of carbohydrate, and 0.1 g of sodium content. That of sugar contains no protein or sodium content, but has 99.3 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 95.5 g, y = 2.8 g, z = 2.8 g.

## 11188 Pork, sausage, dry

The main raw materials of this item are: pork, ground meet; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (ground meet), y (g) of white sugar, and z (g) of common salt. One-hundred grams of this item contains 26.7 g of protein, 2.6 g of carbohydrate, and 4.4 g of sodium content, while the same weight of pork has 17.7 g of protein, 0.1 g of carbohydrate, and 0.1 g of sodium content. That of sugar contains no protein or sodium content, but has 99.3 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 150.8 g, y = 2.9 g, z = 4.3 g.

## 11189 Pork, sausage, Frankfurter

The main raw materials of this item are: pork, ground meet; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (ground meet), y (g) of white sugar, and z (g) of common salt. One-hundred grams of this item contains 12.7 g of protein, 6.2 g of carbohydrate, and 1.9 g of sodium content, while the same weight of pork has 17.7 g of protein, 0.1 g of carbohydrate, and 0.1 g of sodium content. That of sugar contains no protein or sodium content, but has 99.3 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 71.8 g, y = 6.7 g, z = 1.8 g.

## 11190 Pork, sausage, Bologna

The main raw materials of this item are: pork, ground meet; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (ground meet), y (g) of white sugar, and z (g) of common salt. One-hundred grams of this item contains 12.5 g of protein, 2.9 g of carbohydrate, and 2.1 g of sodium content, while the same weight of pork has 17.7 g of protein, 0.1 g of carbohydrate, and 0.1 g of sodium content. That of sugar contains no protein or sodium content, but has 99.3 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 70.6 g, y = 6.2 g, z = 2.0 g.

## 11191 Pork, sausage, Lyoner

The main raw materials of this item are: pork, ground meet; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (ground meet), y (g) of white sugar, and z (g) of common salt. One-hundred grams of this item contains 14.9 g of protein, 3.7 g of carbohydrate, and 2.3 g of sodium content, while the same weight of pork has 17.7 g of protein, 0.1 g of carbohydrate, and 0.1 g of sodium content. That of sugar contains no protein or sodium content, but has 99.3 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 84.2 g, y = 3.6 g, z = 2.2 g.

## 11192 Pork, sausage, liver

The main raw materials of this item are: pork, large type breed, inside ham, lean and fat; pork lever; lard, and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (inside ham, lean and fat), y (g) of pork lever, z (g) of lard, and w (g) of common salt. One-hundred grams of this item contains 14.7 g of protein, 33.5 g of fat, 2800 μg of retinol activity equivalent, and 1.7 g of sodium content, while the same weight of pork has 20.5 g of protein, 10.2 g of fat, 4 μg of retinol activity equivalent, and 0.1 g of sodium content, and that of pork lever contains 20.4 g of protein, 3.4 g of fat,13,000 μg of retinol activity equivalent, and 0.2 g of sodium content. That of lard contains no protein, retinol activity equivalent or sodium content, but has 100.0 g of fat, while that of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 50.3 g, y = 21.5 g, z = 27.6 g, w =1.6 g.

## 11193 Pork, sausage, mixed with fish meat

The main raw materials of this item are: pork, large type breed, inside ham, lean and fat; walleye pollock; lard; common salt, and; corn starch, the required weights of which to make 100 g of this item are 40 g, 20 g, 18 g, 2 g, and 5 g, respectively. Note that these values were determined using approximate values for calculation of protein, fat, carbohydrate and sodium content, rather than using equation and component values in the Food Component Database, as the component values resulted in the negative weights. With this raw material mix ratios, protein, fat, carbohydrate, and common salt per 100 g are 11.7 g, 22.3 g, 4.4 g, and 2.1 g, respectively.

## 11194 Pork, sausage, fresh sausage

The main raw materials of this item are: pork, ground meet; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (ground meet), y (g) of white sugar, and z (g) of common salt. One-hundred grams of this item contains 14.0 g of protein, 0.8 g of carbohydrate, and 1.7 g of sodium content, while the same weight of pork has 17.7 g of protein, 0.1 g of carbohydrate, and 0.1 g of sodium content. That of sugar contains no protein or sodium content, but has 99.3 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 79.1 g, y = 0.8 g, z = 1.6 g.

## 11195 Pork, roast pork

The main raw materials of this item are: pork, large type breed, Boston butt, lean and fat； dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of pork (Boston butt, lean and fat), y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 19.4 g of protein, 5.1 g of carbohydrate, and 2.4 g of sodium content, while the same weight of pork has 17.1 g of protein, 0.1 g of carbohydrate, and 0.1 g of sodium content. That of soy sauce contains 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 106.3 g, y = 15.8 g, z = 3.8 g.

## 11196 Pork, liver paste

The main raw materials of this item are: pork, large type breed, inside ham, lean and fat; pork lever; onion, and; common salt. First assume that 100 g of this item mainly consists of x (g) of pork (inside ham, lean and fat), y (g) of pork lever, z (g) of onion, and w (g) of common salt. One-hundred grams of this item contains 12.9 g of protein, 3.6 g of carbohydrate, 4300 μg of retinol activity equivalent, and 2.2 g of sodium content, while the same weight of pork has 20.5 g of protein, 0.2 g of carbohydrate, 4 μg of retinol activity equivalent, and 0.1 g of sodium content, and that of pork lever contains 20.4 g of protein, 2.5 g of carbohydrate,13,000 μg of retinol activity equivalent, and 0.1 g of sodium content. That of onion contains 1.0 g of protein, 8.8 g of carbohydrate, but has no retinol activity equivalent or sodium content, while that of common salt contains no protein, carbohydrate or retinol activity equivalent, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 28.5 g, y = 33.1 g, z = 30.9 g, w =2.1 g.

## 11197 Pork, smoked liver

The main raw materials of this item are pork lever and common salt. First assume that 100 g of this item mainly consists of x (g) of pork lever and y (g) of common salt. One-hundred grams of this item contains 29.6 g of protein and 1.8 g of sodium content. The same weight of pork lever has 20.4 g of protein and 0.1 g of sodium content, while that of common salt contains no protein but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 145.1 g, y = 1.7 g.

## 11198 Pork, gelatin

The main raw material of this item is pig hide. One-hundred grams of this item contains 87.6 g of protein, while the same weight of pig hide has 25.0 g of protein, according to Keiji Suzuki, "Raw Materials, Production, and the Properties of Gelatin," *The Journal of the Society of Scientific Photography of Japan*, 67.4, 2004, pp.379-385. Therefore, the required weight of pig hide to make 100 g of this item is:

## 11179 Mutton, ham, pressed, mixed with fish meat

The main raw materials of this item are: mutton, leg, lean and fat; walleye pollock, and; common salt. First assume that 100 g of this item mainly consists of x (g) of mutton (leg, lean and fat), y (g) of walleye pollock, and z (g) of common salt. One-hundred grams of this item contains 14.4 g of protein, 4.1 g of fat, and 2.2 g of sodium content, while the same weight of mutton has 18.8 g of protein, 15.3 g of fat, and 0.1 g of sodium content. That of walleye pollock contains 17.4 g of protein, 1.0 g of fat and 0.3 g of sodium content, while that of common salt contains no protein but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 23.0 g, y = 57.9. g, z = 2.0 g.

## 11237 Chicken, canned products, roast meat with seasoning

The main raw materials of this item are: chicken, broiler, thigh, meat with skin; dark soy sauce, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of chicken (thigh, meat with skin), y (g) of dark soy sauce, and z (g) of white sugar. One-hundred grams of this item contains 18.4 g of protein, 8.2 g of carbohydrate, and 2.2 g of sodium content, while the same weight of chicken has 16.6 g of protein and 0.2 g of sodium content, but no carbohydrate. That of dak soy sauce contains 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, while that of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 104.5 g, y = 13.7 g, z = 7.2 g

## 11292 Chicken, nuggets

The raw material mix ratios are: chicken, breast, meat without chicken at 65.8, common salt at 0.4, dry bread crumbs at 8.2, common wheat, soft flour at 2.5, hen egg at 16.5, rapeseed oil at 9. Thus, the RF values are:

chicken, breast (meat without chicken) = 65.8/(65.8+0.4+8.2+2.5+16.5+9) = 0.658,

common salt = 0.4/(65.8+0.4+8.2+2.5+16.5+9),

dry bread crumb = 8.2/(65.8+0.4+8.2+2.5+16.5+9) = 0.082,

soft flour = 2.5/(65.8+0.4+8.2+2.5+16.5+9) = 0.025,

hen egg = 16.5/(65.8+0.4+8.2+2.5+16.5+9) = 0.165,

rapeseed oil = 9/(65.8+0.4+8.2+2.5+16.5+9) = 0.090.

## 11293 Chicken, “Tsukune” (Japanese chicken meatball)

The raw material mix ratios are: ground chicken meat at 59, onion at 18.1, sugar (white sugar) at 3, common salt at 0.2, dark soy sauce at 6, and regular "mirin" at 5. Thus, the RF values are: ground chicken meat = 59/(59+18.1+3+0.2+6+5) = 0.590, onion = 18.1/(59+18.1+3+0.2+6+5) = 0.181, sugar (white sugar) = 3/(59+18.1+3+0.2+6+5) = 0.030, common salt = 0.2/(59+18.1+3+0.2+6+5) = 0.002, dark soy sauce = 6/(59+18.1+3+0.2+6+5) = 0.060, regular "mirin" = 5/(59+18.1+3+0.2+6+5) = 0.050.

# EGGS

## 12017 Eggs, hen, Tamago-dofu (cold savory egg custard)

The raw material mix ratios are: hen egg at 50, stock of "Katsuo-bushi" and dried kombu at 50, common salt at 0.7, light color soy sauce at 0.5, and regular "mirin" at 4. Thus, the RF values are: hen egg = 50/(50+50+0.7+0.5+4), stock of "Katsuo-bushi" and dried kombu = 50/(50+50+0.7+0.5+4), common salt = 0.7/(50+50+0.7+0.5+4), light color soy sauce = 0.5/(50+50+0.7+0.5+4), regular "mirin" = 4/(50+50+0.7+0.5+4).

## 12018 Eggs, hen, Tamago-yaki (Rolled omelet), Atsuyaki-tamago (sweet rolled omelet with Katsuo-bushi and kombu dashi)

The raw material mix ratios are: hen egg at 65, stock of "Katsuo-bushi" and dried kombu at 27.3, sugar (white sugar) at 4.8, light color soy sauce at 1, common salt at 0.5, and rapeseed oil at 0.5. Thus, the RF values are: hen egg = 65/(65+27.3+4.8+1+0.5+0.5), stock of "Katsuo-bushi" and dried kombu = 27.3/(65+27.3+4.8+1+0.5+0.5), sugar (white sugar) = 4.8/(65+27.3+4.8+1+0.5+0.5), light color soy sauce = 1/(65+27.3+4.8+1+0.5+0.5), common salt = 0.5/(65+27.3+4.8+1+0.5+0.5), rapeseed oil = 0.5/(65+27.3+4.8+1+0.5+0.5).

## 12019 Eggs, hen, Tamago-yaki (Rolled omelet), Dashimaki-tamago (rolled omelet with Katsuo-bushi and kombu dashi) (or omelet with dashi)

The raw material mix ratios are: hen egg at 73.4, stock of "Katsuo-bushi" and dried kombu at 24.5, light color soy sauce at 1.5, common salt at 0.5, and rapeseed oil at 0.2. Thus, the RF values are: hen egg = 73.4/(73.4+24.5+1.5+0.5+0.2), stock of "Katsuo-bushi" and dried kombu = 24.5/(73.4+24.5+1.5+0.5+0.2), light color soy sauce = 1.5/(73.4+24.5+1.5+0.5+0.2), common salt = 0.5/(73.4+24.5+1.5+0.5+0.2), rapeseed oil = 0.2/(73.4+24.5+1.5+0.5+0.2).

# MILK AND MILK PRODUCTS

## 13007 Milk beverages, coffee flavored

The main raw materials of this item are: whole milk; instant coffee, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole milk, y (g) of instant coffee, and z (g) of white sugar. One-hundred grams of this item contains 2.2 g of protein, 2.0 g of fat, and 7.2g of carbohydrate, while the same weight of whole milk has 3.3 g of protein, 3.8 g of fat, and 4.8 g of carbohydrate. That of instant coffee contains 14.7 g of protein, 0.3 g of fat, and 56.5 g of carbohydrate, while that of sugar has no protein or fat, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 52.4 g, y = 3.2 g, z = 2.9 g.

## 13008 Milk beverages, fruit flavored

The main raw materials of this item are whole milk and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of white sugar. One-hundred grams of this item contains 1.2 g of protein, 9.9 g of carbohydrate. The same weight of whole milk has 3.3 g of protein and 4.8 g of carbohydrate, while that of sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 36.4 g, y = 8.2 g.

## 13009 Milk powder, whole milk powder

The main raw material of this item is whole milk. One-hundred grams of this item contains 25.5 g of protein, while the same weight of whole milk has 3.3 g of protein. Therefore, the required weight of whole milk to make 100 g of this item is:

## 13010 Milk powder, skimmed milk powder

The main raw material of this item is whole milk. One-hundred grams of this item contains 34.0 g of protein, while the same weight of whole milk has 3.3 g of protein. Therefore, the required weight of whole milk to make 100 g of this item is:

## 13011 Milk powder, infant formula

The main raw material of this item is whole milk. One-hundred grams of this item contains 12.4 g of protein, while the same weight of whole milk has 3.3 g of protein. Therefore, the required weight of whole milk to make 100 g of this item is:

## 13012 Evaporated whole milk

The main raw material of this item is whole milk. One-hundred grams of this item contains 6.8 g of protein, while the same weight of whole milk has 3.3 g of protein. Therefore, the required weight of whole milk to make 100 g of this item is:

## 13013 Condensed whole milk, sweetened

The main raw materials of this item are whole milk and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of white sugar. One-hundred grams of this item contains 7.7 g of protein, 56.0 g of carbohydrate. The same weight of whole milk has 3.3 g of protein and 4.8 g of carbohydrate, while that of sugar has no protein, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 233.3 g, y = 45.1 g.

## 13014 Cream, milk fat

The main raw material of this item is whole milk. One-hundred grams of this item contains 1.9 g of protein, while the same weight of whole milk has 3.3 g of protein. Therefore, the required weight of whole milk to make 100 g of this item is:

## 13015 Cream substitute, milk and vegetable fats

The raw materials of 100 g of this item are 50 g of cream (milk fat) and 50 g of cream substitute (vegetable fat).

## 13016 Cream substitute, vegetable fat

The main raw materials of this item are palm oil and skimmed milk powder. First assume that 100 g of this item mainly consists of x (g) of palm oil and y (g) of skimmed milk powder. One-hundred grams of this item contains 6.8 g of protein and 39.2 g of fat. The same weight of palm oil has no protein but 100.0 g of fat, while that of skimmed milk powder contains 34.0 g of protein and 1.0 of fat. Therefore, the following equation is established:

From the above, x = 39.0 g, y = 20.0 g.

## 13017 Whipping cream, milk fat, with added sugar

The main raw materials of this item are whole milk and granulated sugar. First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of granulated sugar. One-hundred grams of this item contains 1.8 g of protein, 12.9 g of carbohydrate. The same weight of whole milk has 3.3 g of protein and 4.8 g of carbohydrate, while that of sugar has no protein, but contains 100.0 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 54.5 g, y = 10.3 g.

## 13018 Whipping cream substitute, milk and vegetable fats, with added sugar

The main raw materials of 100 g of this item are 50 g of cream (milk fat) and 50 g of cream substitute (vegetable fat).

## 13019 Whipping cream substitute, vegetable fat, with added sugar

The main raw materials of this item are: palm oil; skimmed milk powder, and; sugar (granulated sugar). First assume that 100 g of this item mainly consists of x (g) of palm oil, y (g) of skimmed milk powder and z (g) of granulated sugar. One-hundred grams of this item contains 6.3 g of protein, 36.1 g of fat, and 12.9 g of carbohydrate, while the same weight of palm oil has no of protein or carbohydrate, but 100.0 g of fat. That of skimmed milk powder contains 34.0 g of protein, 1.0 g of fat, and 53.3 g of carbohydrate, while that of sugar has no protein or fat, but contains 100.0 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 35.9 g, y = 18.5 g, z = 3.0 g.

## 13020 Coffee whitener, liquid, milk fat

The main raw material of this item is whole milk. One-hundred grams of this item contains 5.2 g of protein, while the same weight of whole milk has 3.3 g of protein. Therefore, the required weight of whole milk to make 100 g of this item is:

## 13021 Coffee whitener, liquid, milk and vegetable fats

The main raw materials of 100 g of this item are 50 g of coffee whitener (milk fat) and 50 g of coffee whitener (vegetable fat).

## 13022 Coffee whitener, liquid, vegetable fat

The main raw materials of this item are palm oil and skimmed milk powder. First assume that 100 g of this item mainly consists of x (g) of palm oil and y (g) of skimmed milk powder. One-hundred grams of this item contains 4.3 g of protein and 24.8 g of fat. The same weight of palm oil has no protein, but 100.0 g of fat, while that of skimmed milk powder contains 34.0 g of protein and 1.0 g of fat. Therefore, the following equation is established:

From the above, x = 24.7 g, y = 12.6 g.

## 13023 Coffee whitener, powder, milk fat

The main raw material of this item is whole milk. One-hundred grams of this item contains 7.6 g of protein, while the same weight of whole milk has 3.3 g of protein. Therefore, the required weight of whole milk to make 100 g of this item is:

## 13024 Coffee whitener, powder, vegetable fat

The main raw materials of this item are palm oil and skimmed milk powder. First assume that 100 g of this item mainly consists of x (g) of palm oil and y (g) of skimmed milk powder. One-hundred grams of this item contains 2.1 g of protein and 36.2 g of fat. The same weight of palm oil has no protein, but 100.0 g of fat, while that of skimmed milk powder contains 34.0 g of protein and 1.0 g of fat. Therefore, the following equation is established:

From the above, x = 36.1 g, y = 6.2 g.

## 13025 Yogurt, whole milk, unsweetened

The main raw material of this item is whole milk. One-hundred grams of this item contains 120 mg of calcium, while the same weight of whole milk has 110 mg of calcium. Therefore, the required weight of whole milk to make 100 g of this item is:

## 13053 Yogurt, low fat, unsweetened

The main raw material of this item is whole milk. One-hundred grams of this item contains 130 mg of calcium, while the same weight of whole milk has 110 mg of calcium. Therefore, the required weight of whole milk to make 100 g of this item is:

## 13054 Yogurt, fat free, unsweetened

The main raw material of this item is whole milk. One-hundred grams of this item contains 140 mg of calcium, while the same weight of whole milk has 110 mg of calcium. Therefore, the required weight of whole milk to make 100 g of this item is:

## 13026 Yogurt, skimmed, sweetened

The main raw materials of this item are whole milk and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of white sugar. One-hundred grams of this item contains 11.9 g of carbohydrate and 120 mg of calcium. The same weight of whole milk has 4.8 g of carbohydrate and 110 mg of calcium, while that of sugar has no calcium but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 109.1 g, y = 6.7 g.

## 13027 Yogurt, liquid, sweetened

The main raw materials of this item are whole milk and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of white sugar. One-hundred grams of this item contains 12.2 g of carbohydrate and 110 mg of calcium. The same weight of whole milk has 4.8 g of carbohydrate and 110 mg of calcium, while that of sugar has no calcium but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 100.0 g, y = 7.5.

## 13028 Lactic acid bacteria beverages, not pasteurized after fermentation, milk solids-nonfat ≥ 3.0%

The main raw materials of this item are whole milk and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of white sugar. One-hundred grams of this item contains 16.4 g of carbohydrate and 43 mg of calcium. The same weight of whole milk has 4.8 g of carbohydrate and 110 mg of calcium, while that of sugar has no calcium but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 39.1 g, y = 14.6 g.

## 13029 Lactic acid bacteria beverages, pasteurized after fermentation, milk solids-nonfat ≥ 3.0%

The main raw materials of this item are whole milk and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of white sugar. One-hundred grams of this item contains 52.6 g of carbohydrate and 55 mg of calcium. The same weight of whole milk has 4.8 g of carbohydrate and 110 mg of calcium, while that of sugar has no calcium but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 50.0 g, y = 50.6 g.

## 13030 Lactic acid bacteria beverages, milk solids-nonfat < 3.0%

The main raw materials of this item are whole milk and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of white sugar. One-hundred grams of this item contains 10.0 g of carbohydrate and 44 mg of calcium. The same weight of whole milk has 4.8 g of carbohydrate and 110 mg of calcium, while that of sugar has no calcium but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 40.0 g, y = 8.1 g.

## 13031 Cheese, Edam

The main raw materials of this item are whole milk and common salt. First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of common salt. One-hundred grams of this item contains 660 mg of calcium and 2.0 g of sodium content. The same weight of whole milk has 110 mg of calcium and 0.1 g of sodium content, while that of common salt contains 22 mg of calcium and 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 599.7 g, y = 1.4.

## 13032 Cheese, Emmental

The main raw materials of this item are whole milk and common salt. First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of common salt. One-hundred grams of this item contains 1,200 mg of calcium and 1.3 g of sodium content. The same weight of whole milk has 110 mg of calcium and 0.1 g of sodium content, while that of common salt contains 22 mg of calcium and 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 1090.9 g, y = 0.2 g.

## 13033 Cheese, cottage

The main raw materials of this item are whole milk and common salt. First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of common salt. One-hundred grams of this item contains 55 mg of calcium and 1.0 g of sodium content. The same weight of whole milk has 110 mg of calcium and 0.1 g of sodium content, while that of common salt contains 22 mg of calcium and 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 49.8 g, y = 1.0 g.

## 13034 Cheese, Camembert

The main raw materials of this item are whole milk and common salt. First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of common salt. One-hundred grams of this item contains 460 mg of calcium and 2.0 g of sodium content. The same weight of whole milk has 110 mg of calcium and 0.1 g of sodium content, while that of common salt contains 22 mg of calcium and 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 417.9 g, y = 1.6 g.

## 13035 Cheese, cream

The main raw materials of this item are whole milk and common salt. First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of common salt. One-hundred grams of this item contains 70 mg of calcium and 0.7 g of sodium content. The same weight of whole milk has 110 mg of calcium and 0.1 g of sodium content, while that of common salt contains 22 mg of calcium and 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 63.5 g, y = 0.6 g.

## 13036 Cheese, Gouda

The main raw materials of this item are whole milk and common salt. First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of common salt. One-hundred grams of this item contains 680 mg of calcium and 2.0 g of sodium content. The same weight of whole milk has 110 mg of calcium and 0.1 g of sodium content, while that of common salt contains 22 mg of calcium and 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 617.9 g, y = 1.4 g.

## 13037 Cheese, Cheddar

The main raw materials of this item are whole milk and common salt. First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of common salt. One-hundred grams of this item contains 740 mg of calcium and 2.0 g of sodium content. The same weight of whole milk has 110 mg of calcium and 0.1 g of sodium content, while that of common salt contains 22 mg of calcium and 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 672.5 g, y = 1.3 g.

## 13038 Cheese, Parmesan

The main raw materials of this item are whole milk and common salt. First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of common salt. One-hundred grams of this item contains 1,300 mg of calcium and 3.8 g of sodium content. The same weight of whole milk has 110 mg of calcium and 0.1 g of sodium content, while that of common salt contains 22 mg of calcium and 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 1181.3 g, y = 2.6 g.

## 13039 Cheese, blue

The main raw materials of this item are whole milk and common salt. First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of common salt. One-hundred grams of this item contains 590 mg of calcium and 3.8 g of sodium content. The same weight of whole milk has 110 mg of calcium and 0.1 g of sodium content, while that of common salt contains 22 mg of calcium and 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 535.7 g, y = 3.3 g.

## 13055 Cheese, Mascarpone

The main raw material of this item is whole milk. One-hundred grams of this item contains 150 mg of calcium, while the same weight of whole milk has 110 mg of calcium. Therefore, the required weight of whole milk to make 100 g of this item is:

## 13056 Cheese, mozzarella

The main raw material of this item is whole milk. One-hundred grams of this item contains 330 mg of calcium, while the same weight of whole milk has 110 mg of calcium. Therefore, the required weight of whole milk to make 100 g of this item is:

## 13057 Cheese, goat milk

The main raw materials of this item are goat milk and common salt. First assume that 100 g of this item mainly consists of x (g) of goat milk and y (g) of common salt. One-hundred grams of this item contains 130 mg of calcium and 1.2 g of sodium content. The same weight of goat milk has 120 mg of calcium and 0.1 g of sodium content, while that of common salt contains 22 mg of calcium and 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 108.1 g, y = 1.1 g.

## 13058 Cheese, Ricotta

The main raw material of this item is whole milk. One-hundred grams of this item contains 340 mg of calcium, while the same weight of whole milk has 110 mg of calcium. Therefore, the required weight of whole milk to make 100 g of this item is:

## 13040 Cheeses, processed

The main raw materials of this item are whole milk and common salt. First assume that 100 g of this item mainly consists of x (g) of whole milk and y (g) of common salt. One-hundred grams of this item contains 630 mg of calcium and 2.8 g of sodium content. The same weight of whole milk has 110 mg of calcium and 0.1 g of sodium content, while that of common salt contains 22 mg of calcium and 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 524.6 g, y = 2.3 g.

## 13041 Cheeses, spreadable

The main raw materials of this item are: whole milk; common salt, and; unsalted butter. First assume that 100 g of this item mainly consists of x (g) of whole milk, y (g) of common salt, and z (g) of unsalted butter. One-hundred grams of this item contains 25.7 g of fat, 460 mg of calcium and 2.5 g of sodium content, while the same weight of whole milk has 3.8 g of fat,110 mg of calcium and 0.1 g of sodium content. That of common salt contains no fat, but has 22 mg of calcium and 99.5 g of sodium content, while that of unsalted butter has 83.0 g of fat and 14 mg of calcium but no sodium content. Therefore, the following equation is established:

From the above, x = 416.2 g, y = 2.1 g, z = 11.9 g.

## 13042 Ice cream, high fat (milk solids ≥ 15%, milk fat ≥12%)

The main raw materials of this item are: whole milk; cream (milk fat); hen egg yolk, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole milk, y (g) of cream (milk fat), z (g) of hen egg yolk, and w (g) of white sugar. One-hundred grams of this item has 212 kcal, containing 3.5 g of protein, 12.0 g of fat, and 22.4 g of carbohydrate, while the same weight of whole milk has 67 kcal, containing 3.3 g of protein, 3.8 g of fat, and 4.8 g of carbohydrate. That of cream (milk fat) has 433 kcal, containing 2.0 g of protein, 45.0 g of fat, and 3.1 g of carbohydrate, while that of hen egg yolk has 387 kcal, containing 16.5 g of protein, 33.5 g of fat, and 0.1 g of carbohydrate, and that of sugar has 384 kcal, containing no protein or fat, but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 57.0 g, y = 16.0 g, z = 7.9 g, w =19.3 g.

## 13043 Ice cream, regular (milk solids ≥ 15%, milk fat = 8%)

The main raw materials of this item are: whole milk; cream (milk fat); hen egg yolk, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole milk, y (g) of cream (milk fat), z (g) of hen egg yolk, and w (g) of white sugar. One-hundred grams of this item has 180 kcal, containing 3.9 g of protein, 8.0 g of fat, and 23.2 g of carbohydrate, while the same weight of whole milk has 67 kcal, containing 3.3 g of protein, 3.8 g of fat, and 4.8 g of carbohydrate. That of cream (milk fat) has 433 kcal, containing 2.0 g of protein, 45.0 g of fat, and 3.1 g of carbohydrate, while that of hen egg yolk has 387 kcal, containing 16.5 g of protein, 33.5 g of fat, and 0.1 g of carbohydrate, and that of sugar has 384 kcal, containing no protein or fat, but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 77.5 g, y = 5.7 g, z = 7.4 g, w =19.4 g.

## 13044 Ice cream, ice milk (milk solids ≥ 10%, milk fat≥ 3%, including vegetable fat)

The main raw materials of this item are: whole milk; cream (milk fat); hen egg yolk, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole milk, y (g) of cream (milk fat), z (g) of hen egg yolk, and w (g) of white sugar. One-hundred grams of this item has 167 kcal, containing 3.4 g of protein, 6.4 g of fat, and 23.9 g of carbohydrate, while the same weight of whole milk has 67 kcal, containing 3.3 g of protein, 3.8 g of fat, and 4.8 g of carbohydrate. That of cream (milk fat) has 433 kcal, containing 2.0 g of protein, 45.0 g of fat, and 3.1 g of carbohydrate, while that of hen egg yolk has 387 kcal, containing 16.5 g of protein, 33.5 g of fat, and 0.1 g of carbohydrate, and that of sugar has 384 kcal, containing no protein or fat, but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 20.6 g, y = 0.2 g, z = 16.4 g, w =23.0 g.

## 13045 Ice cream, lacto-ice, regular (milk solids ≥ 3%, main lipid: vegetable fat)

The main raw materials of this item are: cream (milk fat); cream substitute (vegetable fat); sugar (white sugar), and; hen egg yolk. First assume that 100 g of this item mainly consists of x (g) of cream (milk fat), y (g) of cream substitute (vegetable fat), z (g) of white sugar, and w (g) of hen egg yolk. One-hundred grams of this item has 224 kcal, containing 3.1 g of protein, 13.6 g of fat, and 22.2 g of carbohydrate, while the same weight of cream (milk fat) has 433 kcal, containing 2.0 g of protein, 45.0 g of fat, and 3.1 g of carbohydrate. That of cream substitute (vegetable fat) has 392 kcal, containing 6.8 g of protein, 39.2 g of fat, and 2.9 g of carbohydrate, while that of sugar has 384 kcal, containing no protein or fat, but 99.3 g of carbohydrate, and that of hen egg yolk has 387 kcal, containing 16.5 g of protein, 33.5 g of fat, and 0.1 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 10.5 g, y = 11.8 g, z = 21.7 g, w =12.6 g.

## 13046 Ice cream, lacto-ice, low fat (milk solids ≥ 3% main lipid: vegetable fat)

The main raw materials of this item are: whole milk; cream substitute (vegetable fat), and; sugar (white sugar), the required weights of which to make 100 g of this item are 30 g, 12 g, and 19 g, respectively. Note that these values were determined using approximate values for calculation of protein, carbohydrate and sodium content, rather than using equation and component values in the Food Component Database, as the component values resulted in the negative weight. We used these values: 1.8 g/100 g for protein and 0.1 g/100 g for sodium content, same as the values in the database, and 20.7 g/100 g for carbohydrate instead of 20.6 g /100 g.

## 13047 Ice cream, soft-serve

The main raw materials of this item are: whole milk; cream (milk fat), and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole milk, y (g) of cream (milk fat), and z (g) of white sugar. One-hundred grams of this item contains 3.8 g of protein, 5.6 g of fat, and 20.1 g of carbohydrate, while the same weight of whole milk has 3.3 g of protein, 3.8 g of fat, and 4.8 g of carbohydrate. That of cream (milk fat) contains 2.0 g of protein, 45.0 g of fat, and 3.1 g of carbohydrate, while that of sugar has no protein or fat, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 113.4 g, y = 2.9 g, z = 14.7 g.

## 13049 Sherbet [\*Syn. Sorbet]

The main raw material of this item is sugar (white sugar). One-hundred grams of this item contains 28.7 g of carbohydrate, while the same weight of sugar contains 99.3 g of carbohydrate. Therefore, the required weight of sugar to make 100 g of this item is:

# FATS AND OILS

## 14023 Linseed oil [\*Syn. Flaxseed oil]

The main raw material of this item is linseed. One-hundred grams of this item contains 100.0 g of fat, while the same weight of linseed has 43.3 g of fat. Therefore, the required weight of linseed to make 100 g of this item is:

## 14024 Perilla oil

The main raw material of this item is perilla seed. One-hundred grams of this item contains 100.0 g of fat, while the same weight of perilla seed has 43.4 g of fat. Therefore, the required weight of perilla seed to make 100 g of this item is:

## 14001 Olive oil

The main raw material of this item is ripe olive. One-hundred grams of this item contains 100.0 g of fat, while the same weight of ripe olive has 12.3 g of fat. Therefore, the required weight of ripe olive to make 100 g of this item is:

## 14002 Sesame oil

The main raw material of this item is dried whole sesame seed. One-hundred grams of this item contains 100.0 g of fat, while the same weight of dried whole sesame seed has 53.8 g of fat. Therefore, the required weight of dried whole sesame seed to make 100 g of this item is:

## 14003 Rice bran oil

The main raw material of this item is rice bran. One-hundred grams of this item contains 100.0 g of fat, while the same weight of rice bran has 19.6 g of fat. Therefore, the required weight of rice bran to make 100 g of this item is:

## 14004 Safflower oil, high oleic

The main raw material of this item is safflower seed. One-hundred grams of this item contains 100.0 g of fat, while the same weight of safflower seed has 38.5 g of fat, according to USDA Food Data Central. Therefore, the required weight of safflower seed to make 100 g of this item is:

## 14025 Safflower oil, high linoleic

The main raw material of this item is safflower seed. One-hundred grams of this item contains 100.0 g of fat, while the same weight of safflower seed has 38.5 g of fat, according to USDA Food Data Central. Therefore, the required weight of safflower seed to make 100 g of this item is:

## 14005 Soybean oil

The main raw material of this item is soybeans. One-hundred grams of this item contains 100.0 g of fat, while the same weight of soybeans have 19.7 g of fat. Therefore, the required weight of soybeans to make 100 g of this item is:

## 14006 Vegetable oil, blend

The raw material mix ratios are: rapeseed oil at 1, soybean oil at 1. Therefore, the required weights of rapeseed and soybean oils to make 100 g of this item are 50 g each.

## 14007 Corn oil

The main raw material of this item is corn, whole grain, yellow kernel, raw. One-hundred grams of this item contains 100.0 g of fat, while the same weight of corn has 5.0 g of fat. Therefore, the required weight of corn to make 100 g of this item is:

## 14008 Rapeseed oil

The main raw material of this item is rapeseed. One-hundred grams of this item contains 100.0 g of fat, while the same weight of rapeseed has 37.2 g of fat, according to Goro Kajimoto and Akiko Hasebe, "Compositions of Fatty Acids and Tocopherols in Various Parts of Some Vegetable Oilseed," *Journal of Japanese Society of Food and Nutrition*, (35.4), 1982, pp. 291-296. Therefore, the required weight of rapeseed to make 100 g of this item is:

## 14011 Sunflower oil, high linoleic

The main raw material of this item is sunflower. One-hundred grams of this item contains 100.0 g of fat, while the same weight of sunflower has 49.8 g of fat. Therefore, the required weight of sunflower to make 100 g of this item is:

## 14026 Sunflower oil, mid-oleic

The main raw material of this item is sunflower. One-hundred grams of this item contains 100.0 g of fat, while the same weight of sunflower has 49.8 g of fat. Therefore, the required weight of sunflower to make 100 g of this item is:

## 14027 Sunflower oil, high oleic

The main raw material of this item is sunflower. One-hundred grams of this item contains 100.0 g of fat, while the same weight of sunflower has 49.8 g of fat. Therefore, the required weight of sunflower to make 100 g of this item is:

## 14028 Grape seed oil

The main raw material of this item is grape seed. One-hundred grams of this item contains 100.0 g of fat, while the same weight of grape seed has 14.1 g of fat, according to Yuko Hirose and Fumio Iwama, "Composition of Seed Oils in Five Varieties of Japanese Grape," *Journal of Japan Oil Chemist's Society*, (35.9), 1986, pp. 768-770. Therefore, the required weight of grape seed to make 100 g of this item is:

## 14012 Cottonseed oil

The main raw material of this item is cottonseed. One-hundred grams of this item contains 100.0 g of fat, while the same weight of cottonseed has 20.3 g of fat, according to Goro Kajimoto and Akiko Hasebe, "Compositions of Fatty Acids and Tocopherols in Various Parts of Some Vegetable Oilseed," *Journal of Japanese Society of Food and Nutrition*, (35.4), 1982, pp. 291-296. Therefore, the required weight of cottonseed to make 100 g of this item is:

## 14013 Coconut oil

The main raw material of this item is coconut. One-hundred grams of this item contains 100.0 g of fat, while the same weight of coconut has 33.5 g of fat, according to USDA Food Data Central. Therefore, the required weight of coconut to make 100 g of this item is:

## 14014 Peanut oil

The main raw material of this item is peanut of Virginia type. One-hundred grams of this item contains 100.0 g of fat, while the same weight of peanut of Virginia type has 47.0 g of fat. Therefore, the required weight of peanut to make 100 g of this item is:

## 14017 Butter, salted butter

The main raw materials of this item are: raw milk, Holstein, and common salt. First assume that 100 g of this item mainly consists of x (g) of raw milk (Holstein) and y (g) of common salt. One-hundred grams of this item contains 81.0 g of fat and 1.9 g of sodium content. The same weight of raw milk (Holstein) has 3.7 g of fat and 0.1 g of sodium content, while that of common salt contains no fat, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 2531.3 g, y = 0.3 g.

## 14018 Butter, unsalted butter

The main raw material of this item is raw milk, Holstein. One-hundred grams of this item contains 83.0 g of fat, while the same weight of raw milk (Holstein) has 3.7 g of fat. Therefore, the required weight of raw milk to make 100 g of this item is:

## 14019 Butter, cultured butter

The main raw material of this item is raw milk, Holstein. One-hundred grams of this item contains 80.0 g of fat, while the same weight of raw milk (Holstein) has 3.7 g of fat. Therefore, the required weight of raw milk to make 100 g of this item is:

## 14020 Margarine, soft type, home use

The main raw materials of this item are soybean oil and common salt. First assume that 100 g of this item mainly consists of x (g) of soybean oil and y (g) of common salt. One-hundred grams of this item contains 83.1 g of fat and 1.3 g of sodium content. The same weight of soybean oil has 100.0 g of fat but no sodium content, while that of common salt contains no fat, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 83.1 g, y = 1.3 g.

## 14029 Margarine, soft type, commercial use

The main raw materials of this item are soybean oil and common salt. First assume that 100 g of this item mainly consists of x (g) of soybean oil and y (g) of common salt. One-hundred grams of this item contains 84.3 g of fat and 1.3 g of sodium content. The same weight of soybean oil has 100.0 g of fat but no sodium content, while that of common salt contains no fat, but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 84.3 g, y = 1.3 g.

## 14021 Fat spread

The main raw materials of this item are soybean oil and common salt. First assume that 100 g of this item mainly consists of x (g) of soybean oil and y (g) of common salt. One-hundred grams of this item contains 69.1 g of fat and 1.1 g of sodium content. The same weight of soybean oil has 100.0 g of fat but no sodium content, while that of common salt contains no fat, but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 69.1 g, y = 1.3 g.

## 14022 Shortening, home use

The main raw material of this item is soybean oil. One-hundred grams of this item contains 99.9 g of fat, while the same weight of soybean oil has 100.0 g of fat. Therefore, the required weight of soybean oil to make 100 g of this item is:

## 14030 Shortening, commercial use for confectionery

The main raw material of this item is soybean oil. One-hundred grams of this item contains 99.9 g of fat, while the same weight of soybean oil has 100.0 g of fat. Therefore, the required weight of soybean oil to make 100 g of this item is:

## 14031 Shortening, commercial use for frying

The main raw material of this item is soybean oil. One-hundred grams of this item contains 99.9 g of fat, while the same weight of soybean oil has 100.0 g of fat. Therefore, the required weight of soybean oil to make 100 g of this item is:

# CONFECTIONARIES

|  |
| --- |
| (Basic Materials for Confectionaries)  \* Mushed sweet adzuki bean pastes   1. Namineri adzuki bean paste: non-sweetened adzuki bean paste at 100, sugar (white sugar) at 70, starch syrup at 7 2. Nakawari adzuki bean paste: non-sweetened adzuki bean paste at 100, sugar (white sugar) at 85, starch syrup at 7 3. Mushed adzuki bean paste (Ogura adzuki bean paste): non-sweetened mushed adzuki bean paste at 100, sugar (white sugar) at 75 4. Monaka bean paste: non-sweetened adzuki bean paste at 100, sugar (white sugar) at 100, starch syrup at 7   \* Creams   1. Custard cream: raw milk at 62.8, granulated sugar at 16.5, hen egg yolk at 14.4, wheat (soft flour, first grade) at 6.3 2. Chocolate cream: starch at 8.4, margarine at 7.4, evaporated whole milk, sweetened at 4.9, milk chocolate at 4.3, whole milk powder at 2.2   \*Whipping creams   1. Milk fat whipping cream (also called "animal whipping cream"): cream (milk fat) at 90, sugar (white sugar) at 10 2. Whipping cream substitute (milk and vegetable fats) (also called "mixed fat whipping cream"): whipping cream substitute (milk and vegetable fats) at 90, sugar (white sugar) at 10 3. Whipping cream substitute (vegetable fat) (also called "vegetable whipping cream"): whipping cream substitute (vegetable fat) at 90, sugar (white sugar) at 10   \* Brown sugar syrup: brown sugar at 50, water at 50  \* "Kinako" (roasted and ground beans) with sugar   1. Yellow "Kinako": "Kinako" (made from yellow soybean) at 1, sugar (white sugar) at 1 2. Uguisu "Kinako": "Kinako"(made from green soybeans) at 1, sugar (white sugar) at 1 |

## 15001 Traditional confectionery, “Amanatto, adzuki beans” (candied adzuki beans)

The main raw materials of this item are adzuki beans and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of adzuki beans and y (g) of white sugar. One-hundred grams of this item contains 5.6 g of protein and 67.1 g of carbohydrate. The same weight of adzuki beans contains 20.3 g of protein and 58.7 g of carbohydrate, while that of sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 27.6 g, y = 51.3 g.

## 15002 Traditional confectionery, “Amanatto, kidney beans” (candied kidney beans)

The main raw materials of this item are kidney beans and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of kidney beans and y (g) of white sugar. One-hundred grams of this item contains 5.5 g of protein and 67.6 g of carbohydrate. The same weight of kidney beans contains 19.9 g of protein and 57.8 g of carbohydrate, while that of sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 27.6 g, y = 52.0 g.

## 15003 Traditional confectionery, “Amanatto, peas” (candied green peas)

The main raw materials of this item are green peas and sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of green peas and y (g) of white sugar. One-hundred grams of this item contains 5.2 g of protein and 70.1 g of carbohydrate. The same weight of green peas contains 21.7 g of protein and 60.4 g of carbohydrate, while that of sugar has no protein but 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 24.0 g, y = 56.0 g.

## 15005 Traditional confectionery, “Imagawayaki” (Japanese waffle stuffed with sweet adzuki bean paste)

This item constitutes of a bun and filling with the weight ratio of 2:1. The raw material mix ratios are: 1) bun (wheat (soft flour, first grade) at 100 and sugar (white sugar) at 50, whole hen egg at 25, inflating agent at 1.5); 2) filling (Namineri adzuki bean paste at 100, common salt at 0.2). Thus, the RF values are: wheat (soft flour, first grade) = 2/(2+1)\*100/(100+50+25+1.5), sugar (white sugar) = 2/(2+1)\*50/(100+50+25+1.5), whole hen egg = 2/(2+1)\*25/(100+50+25+1.5), inflating agent = 2/(2+1)\*1.5/(100+50+25+1.5), Namineri adzuki bean paste = 1/(2+1)\*100/(100+0.2), and common salt = 1/(2+1)\*0.2/(100+0.2).

## 15006 Traditional confectionery, “Uiro” (steamed sweet rice dough)

The raw material mix ratios are: non-glutinous rice flour at 100, potato starch at 30, and sugar (white sugar) at 163. Thus, the RF values are: non-glutinous rice flour = 100/(100+30+163), potato starch = 30/(100+30+163), sugar (white sugar) = 163/(100+30+163).

## 15007 Traditional confectionery, “Uguisu-mochi” (sweet rice cake, filled with sweet adzuki bean paste, coated by roasted green soy flour)

This item constitutes of a rice cake, filling and Uguisu Kinako with the weight ratio of 10:8:0.05. The raw material mix ratios are: 1) rice cake (glutinous rice flour at 100, sugar (white sugar) at 100, starch syrup at 10); 2) filling (Namineri adzuki bean paste at 100, common salt at 0.2). Thus, the RF values are: glutinous rice flour = 10/(10+8+0.05)\*100/(100+100+10), sugar (white sugar) = 10/(10+8+0.05)\*100, starch syrup = 10/(10+8+0.05)\*10, Namineri adzuki bean paste = 8/(10+8+0.05)\*100/(100+0.2), common salt = 8/(10+8+0.05)\*0.2/(100+0.2), Uguisu Kinako = 0.05/(10+8+0.2).

## 15008 Traditional confectionery, “Kashiwa-mochi” (Leaf-wrapped rice cake with sweet adzuki bean paste filling)

This item constitutes of a rice cake and filling with the weight ratio of 3:2. The raw material mix ratios are: 1) rice cake (non-glutinous rice flour at 100, potato starch at 4, common salt at 0.2); 2) filling (Namineri adzuki bean paste at 100, common salt at 0.2). Thus, the RF values are: non-glutinous rice flour = 3/(3+2)\*100/(100+4+0.2), potato starch = 3/(3+2)\*4/(100+4+0.2), common salt = 3/(3+2)\*0.2/(100+4+0.2)〕, Namineri adzuki bean paste = 2/(3+2)\*100/(100+0.2), common salt = 2/(3+2)\*0.2/(100+0.2).

## 15009 Traditional confectionery, “Kasutera” (rectangle sponge cake)

The main raw materials of this item are: whole hen egg; common wheat, soft flour, first grade, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole hen egg, y (g) of common wheat (soft flour), and z (g) of white sugar. One-hundred grams of this item contains 6.2 g of protein, 4.6 g of fat, and 63.2 g of carbohydrate, while the same weight of whole egg has 12.3 g of protein, 10.3 g of fat, and 0.3 g of carbohydrate. That of common wheat (soft flour) contains 8.3 g of protein, 1.5 g of fat, and 75.8 g of carbohydrate, while that of sugar has no protein or fat, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 43.1 g, y = 10.9 g, z = 55.2 g.

## 15010 Traditional confectionery, “Kanoko” (sweet adzuki bean jelly wrapped with sweet adzuki bean paste, sweet adzuki bean compote and agar)

The raw material mix ratios are: adzuki bean compote at 50, Namineri adzuki bean paste at 30, "Neri-yokan" (hardened red bean agar bar) at 20, and bar-type "Tengusa" agar at a negligible level. Thus, the RF values are: adzuki bean compote = 50/(50+30+20) = 0.500, Namineri adzuki bean paste = 30/(50+30+20) = 0.300, and "Neri-yokan" = 20/(50+30+20) = 0.200.

## 15011 Traditional confectionery, “Karukan” (white steamed cake made from rice flour, grated yam and sugar)

The raw material mix ratios are: non-glutinous rice flour at 100, sugar (white sugar) at 160, and Chinese yam at 80. Thus, the RF values are: non-glutinous rice flour = 100/(100+160+80), sugar = (white sugar) 160/(100+160+80), Chinese yam = 80/(100+160+80).

## 15012 Traditional confectionery, “Kibi-dango” (sweet dumpling made from “Gyuhi” (kneaded glutinous rice flour with sugar, steamed)

The raw material mix ratios are: glutinous rice flour at 100, sugar (white sugar) at 200, and starch syrup at 20. Thus, the RF values are: glutinous rice flour = 100/(100+200+20), sugar (white sugar) = 200/(100+200+20), starch syrup = 20/(100+200+20).

## 15013 Traditional confectionery, “Gyuhi” (kneaded glutinous rice flour with sugar, steamed)

The raw material mix ratios are: "Shiratamako" glutinous rice flour milled in water at 100, sugar (white sugar) at 200, and starch syrup at 20. Thus, the RF values are: " Shiratamako" glutinous rice flour = 100/(100+200+20), sugar (white sugar) = 200/(100+200+20), starch syrup = 20/(100+200+20).

## 15014 Traditional confectionery, “Kirizansho” (Sweet rice cake flavored by Japanese pepper “Sansho”)

The raw material mix ratios are: non-glutinous rice flour at 100, sugar (white sugar) at 100, common salt 0.5, and Japanese pepper oil at a negligible level. Thus, the RF values are: non-glutinous rice flour = 100/(100+100+0.5), sugar (white sugar) = 100/(100+100+0.5), common salt = 0.5/(100+100+0.5).

## 15015 Traditional confectionery, “Kingyokuto” (Sweet agar jelly)

The raw material mix ratios are: sugar (white sugar) at 100, starch syrup at 7, and bar-type "Tengusa" agar at 1.5. Thus, the RF values are: sugar (white sugar) = 100/(100+7+1.5), starch syrup = 7/(100+7+1.5), bar-type "Tengusa" agar = 1.5/(100+7+1.5).

## 15016 Traditional confectionery, “Kintsuba” (sweet adzuki bean paste covered with dough, baked)

This item constitutes of baked dough and filling with the weight ratio of 1:9. The raw material mix ratios are: 1) baked dough (wheat (soft flour, first grade) at 100, sugar (white sugar) at 109; 2) filling (mushed adzuki bean paste at 100, common salt at 0.2). Thus, the RF values are: wheat (soft flour, first grade) = 1/(1+9)\*100/(100+10), sugar (white sugar) = 1/(1+9)\*10/(100+10), mushed adzuki bean paste = 9/(1+9)\*100/(100+0.2), common salt = 9/(1+9)\*0.2/(100+0.2).

## 15017 Traditional confectionery, “Kusa-mochi” (green rice cake, stuffed with sweet adzuki bean paste, flavored by Japanese wormwood “Yomogi”)

This item constitutes of a rice cake and filling with the weight ratio of 6:4. The raw material mix ratios are: 1) rice cake (non-glutinous rice flour at 100, sugar (white sugar) at 20, boiled Japanese wormwood leaves at 10); 2) filling (Namineri adzuki bean paste at 100, common salt at 0.1). Thus, the RF values are: non-glutinous rice flour = 6/(6+4)\*100/(100+20+10), sugar (white sugar) = 6/(6+4)\*20/(100+20+10), boiled Japanese wormwood leaves = 6/(6+4)\*10/(100+20+10), Namineri adzuki bean paste = 6/(6+4)\*100/(100+0.1), common salt = 6/(6+4)\*0.1/(100+0.1).

## 15018 Traditional confectionery, “Kushi-dango, An” (skewered rice dumplings, steamed, coated by sweet adzuki bean paste)

This item constitutes of rice dumplings and bean paste with the weight ratio of 8:3. The raw material mix ratios are: 1) rice dumplings (non-glutinous rice flour at 100); 2) bean paste (Namineri adzuki bean paste at 100, common salt at 0.2). Thus, the RF values are: non-glutinous rice flour = 8/(8+3), Namineri adzuki bean paste = 3/(8+3)\*100/(100+0.2), common salt = 3/(8+3)\*0.2/(100+0.2).

## 15019 Traditional confectionery, “Kushi-dango, soy sauce” (skewered rice dumplings, steamed, seasoned with sugar and soy sauce)

This item constitutes of rice dumplings and source with the weight ratio of 9:2. The raw material mix ratios are: 1) rice dumplings (non-glutinous rice flour at 100); 2) source (sugar (white sugar) at 95, dark soy sauce at 54, potato starch at 14). Thus, the RF values are: non-glutinous rice flour = 9/(9+2), sugar (white sugar) = 2/(9+2)\*95/(95+54+14), dark soy sauce = 2/(9+2)\*54/(95+54+14), potato starch = 2/(9+2)\*14/(95+54+14).

## 15121 Traditional confectionery, “Kudzu-mochi” (sweetened gel made from kudzu starch, with roasted soybean flour and brown sugar syrup)

The raw material mix ratios are: kudzu starch at 55 and water at 225. Thus, the RF values are: kudzu starch = 55/(55+225).

## 15122 Traditional confectionery, “Kudzu-mochi” (gel made from wheat starch, with roasted soybean flour and brown sugar syrup)

The raw material mix ratios are: wheat starch at 55 and water at 225. Thus, the RF values are: wheat starch = 55/(55+225).

## 15020 Traditional confectionery, Moon cake (Yue bing), stuffed with sweet adzuki bean paste

This item constitutes of a cake and filling with the weight ratio of 5:4. The raw material mix ratios are: 1) cake (wheat (soft flour, first grade) at 100, sugar (white sugar) at 54, shortening at 17.5, starch syrup at 5, and alkali salt powder at 1); 2) filling (non-sweetened adzuki bean paste at 100, sugar (white sugar) at 85, walnuts at 15, starch syrup at 10, and sesame seed at 7.5; 3) alkali salt powder (potassium carbonate at 6.0, sodium carbonate at 3.9, and phosphate at 0.1). Thus, the RF values are: wheat (soft flour, first grade) = 5/(5+4)\*100/(100+54+17.5+5+1), sugar (white sugar) = 5/(5+4)\*54/(100+54+17.5+5+1), shortening = 5/(5+4)\*17.5/(100+54+17.5+5+1), starch syrup = 5/(5+4)\*5/(100+54+17.5+5+1), alkali salt powder = 5/(5+4)\*1/(100+54+17.5+5+1), non-sweetened adzuki bean paste = 4/(5+4)\*100/(100+85+15+10+7.5), sugar (white sugar) = 4/(5+4)\*85/(100+85+15+10+7.5), walnuts = 4/(5+4)\*15/(100+85+15+10+7.5), starch syrup = 4/(5+4)\*10/(100+85+15+10+7.5), sesame seed = 4/(5+4)\*7.5/(100+85+15+10+7.5), potassium carbonate = 4/(5+4)\*1/(100+54+17.5+5+1)\*6.0, sodium carbonate = 5/(5+4)\* 1/(100+54+17.5+5+1)\*3.9, phosphate = 5/(5+4)\* 1/(100+54+17.5+5+1)\*0.1).

## 15123 “Gohei-mochi” (rice cake, grilled with soy sauce, miso, sugar and sesame paste)

This item constitutes of a rice cake and paste of soy sauce or miso mixed with sugar, and sesame or walnut with the weight ratio of 10:6. Thus, the RF values are: rice cake = 50/(50+10.6), paste = 10.6/(50+10.6).

## 15021 Traditional confectionery, “Sakura-mochi, Kanto style” (pink small pancake roll with sweet adzuki bean paste filling, wrapped by a salted cherry leaf. Dough is made from wheat and rice flour.)

This item constitutes of a pancake roll and filling with the weight ratio of 4:5. The raw material mix ratios are: 1) pancake roll (wheat (soft flour, first grade) at 100, "Shiratamako" glutinous rice flour milled in water at 11, sugar (white sugar) at 56); 2) filling (Namineri adzuki bean paste at 100, common salt at 0.2). Thus, the RF values are: wheat (soft flour, first grade) = 4/(4+5)\*100/(100+11+56), "Shiratamako" glutinous rice flour = 4/(4+5)\*11/(100+11+56), sugar (white sugar) = 4/(4+5)\*56/(100+11+56), Namineri adzuki bean paste = 5/(4+5)\*100/(100+0.2), common salt = 5/(4+5)\*0.2.

## 15022 Traditional confectionery, “Sakura-mochi, Kansai style” (pink rice cake stuffed with sweet adzuki bean paste, wrapped with a salted cherry leaf. Dough is made from glutinous rice flour.)

This item constitutes of a rice cake and filling with the weight ratio of 3:2. The raw material mix ratios are: 1) rice cake ("Domyojiko" steamed glutinous rice flour at 100, sugar (white sugar) at 50); 2) filling (Namineri adzuki bean paste at 100, common salt at 0.2). Thus, the RF values are: "Domyojiko" steamed glutinous rice flour = 3/(3+2)\*100/(100+50), sugar (white sugar) = 3/(3+2)\*50/(100+50), Namineri adzuki bean paste = 2/(3+2)\*100/(100+0.2), common salt = 2/(3+2)\*0.2/(100+0.2).

## 15124 Traditional confectionery, “Sasa-dango” (sweet rice cake stuffed with sweet adzuki bean paste, wrapped in sasa-bamboo leaves)

This item constitutes of a rice cake and filling with the weight ratio of 34:20. The raw material mix ratios are: 1) rice cake (glutinous rice flour at 300, non-glutinous rice flour at 200, sugar (white sugar) at 50, wheat (soft flour, first grade) at 50, hot water at 350, "Shiratamako" glutinous rice flour milled in water at 50, water at 40, boiled Japanese wormwood leaves at 89, potato starch at 1); 2) filling (adzuki beans at 200, sugar (white sugar) at 280, common salt at 1). Thus, the RF values are:

glutinous rice flour = 34/(34+20)\*300/(300+200+50+50+350+50+40+89+1),

non-glutinous rice flour = 34/(34+20)\*200/(300+200+50+50+350+50+40+89+1),

sugar (white sugar) = 34/(34+20)\*50/(300+200+50+50+350+50+40+89+1),

wheat (soft flour, first grade) = 34/(34+20)\*50/(300+200+50+50+350+50+40+89+1),

hot water = 34/(34+20)\*350/(300+200+50+50+350+50+40+89+1),

"Shiratamako" glutinous rice flour = 34/(34+20)\*50/(300+200+50+50+350+50+40+89+1), water = 34/(34+20)\*40/(300+200+50+50+350+50+40+89+1),

boiled Japanese wormwood leaves = 34/(34+20)\*89/(300+200+50+50+350+50+40+89+1), potato starch = 34/(34+20)\*1/(300+200+50+50+350+50+40+89+1),

adzuki beans = 20/(34+20)\*200/(200+280+1), sugar (white sugar) 20/(34+20)\*280/(200+280+1),

common salt = 20/(34+20)\*1/(200+280+1).

## 15023 Traditional confectionery, “Daifuku-mochi” (sweet rice cake stuffed with sweet adzuki bean paste)

This item constitutes of a rice cake and filling with the weight ratio of 10:7. The raw material mix ratios are: 1) rice cake (rice cake at 100); 2) filling (Namineri adzuki bean paste at 100, common salt at 0.2). Thus, the RF values are: rice cake = 10/(10+7), Namineri adzuki bean paste = 7/(10+7)\*100/(100+0.2), common salt = 7/(10+7)\*0.2/(100+0.2).

## 15024 Traditional confectionery, “Taruto” (Swiss roll with sweet adzuki bean paste filling)

This item constitutes of a swill roll and paste filling with the weight ratio of 2:1. The raw material mix ratios are: swill roll cake (sugar (white sugar) at 200, whole hen egg at 200, wheat (soft flour, first grade) at 100, starch syrup at 50); 2) paste filling (Nakawari adzuki bean paste at 100, "Yuzu" citrus juice at 7.8). Thus, the RF values are: sugar (white sugar) = 2/(2+1)\*200/(200+200+100+50), whole hen egg = 2/(2+1)\*200/(200+200+100+50), wheat (soft flour, first grade) = 2/(2+1)\*100/(200+200+100+50), starch syrup = 2/(2+1)\*50/(200+200+100+50), Nakawari adzuki bean paste = 1/(2+1)\*100/(100+7.8), "Yuzu" citrus juice = 1/(2+1)\*7.8/(100+7.8).

## 15025 Traditional confectionery, “Chimaki” (bamboo-leaf-wrapped sweet rice dough, steamed)

The raw material mix ratios are: sugar (white sugar) at 100, non-glutinous rice flour at 88, and glutinous rice flour at 12. Thus, the RF values are: sugar (white sugar) = 100/(100+88+12) = 0.500, non-glutinous rice flour = 88/(100+88+12) = 0.440, glutinous rice flour = 12/(100+88+12) = 0.060.

## 15026 Traditional confectionery, “Chatsu” (sweet adzuki bean paste covered with green tea flavored dough, baked)

This item constitutes of a baked dough and paste with the weight ratio of 1:9. The raw material mix ratios are: 1) baked dough (wheat (soft flour, first grade) at 100, sugar (white sugar) at 100, hen egg white at 38, potato starch at 10, finely ground tea at a negligible level); 2) paste (Nakawari adzuki bean paste at 100, black sesame seed at 9). Thus, the RF values are: wheat (soft flour, first grade) = 1/(1+9)\*100/(100+100+38+10), sugar (white sugar) = 1/(1+9)\*100/(100+100+38+10), hen egg white = 1/(1+9)\*38/(100+100+38+10), potato starch = 1/(1+9)\*10/(100+100+38+10), Nakawari adzuki bean paste = 9/(1+9)\*100/(100+9), black sesame seed = 9/(1+9)\*9/(100+9).

## 15027 Traditional confectionery, “Dorayaki” (Japanese pancake sandwich with sweet adzuki bean paste filling)

This item constitutes of a pancake and paste filling with the weight ratio of 5:4. The raw material mix ratios are: 1) pancake (wheat (soft flour, first grade) at 100, sugar (white sugar) at 100, whole hen egg at 100, common salt at 1.2); paste filling (mushed adzuki bean paste at 100). Thus, the RF values are: wheat (soft flour, first grade) = 5/(5+4)\*100/(100+100+100+1.2), sugar (white sugar) = 5/(5+4)\*100/(100+100+100+1.2), whole hen egg = 5/(5+4)\*100/(100+100+100+1.2), common salt = 5/(5+4)\*1.2/(100+100+100+1.2), mushed adzuki bean paste = 4/(5+4)\*100/100 = 0.444.

## 15004 Traditional confectionery, “Aniri-nama-yatsuhashi” (Cinnamon-flavored sweet rice dough, steamed, with sweet adzuki bean paste filling)

This item constitutes of a rice dough and paste filling with the weight ratio of 4:6. The raw material mix ratios are: 1) rice dough (non-glutinous rice flour at 100, sugar (white sugar) at 100); 2) filling (mushed adzuki bean paste at 50, Namineri adzuki bean paste at 50). Thus, the RF values are: non-glutinous rice flour = 4/(4+6)\*100/(100+100), sugar (white sugar) = 4/(4+6)\*100/(100+100), mushed adzuki bean paste = 6/(4+6)\*50/(50+50), Namineri adzuki bean paste = 6/(4+6)\*50/(50+50).

## 15028 Traditional confectionery, “Nerikiri” (“Gyuhi “ kneaded with colored bean paste, molded) (cf. 15013”Gyuhi”)

The raw material mix ratios are: Namineri adzuki bean paste at 100, and kneaded "Gyuhi" at 10. Thus, the RF values are: Namineri adzuki bean paste = 100/(100+10), kneaded "Gyuhi" = 10/(100+10).

## 15029 Traditional confectionery, “Kasutera-manju” (sponge cake stuffed with sweet adzuki bean paste)

This item constitutes of a sponge cake and paste filling with the weight ratio of 5:7. The raw material mix ratios are: 1) sponge cake (wheat (soft flour, first grade) at 100, sugar (white sugar) at 50, whole hen egg at 50, inflating agent at 2): 2) paste filling (Namineri adzuki bean paste at 100). Thus, the RF values are: wheat (soft flour, first grade) = 5/(5+7)\*100/(100+50+50+2), sugar (white sugar) = 5/(5+7)\*50/(100+50+50+2), whole hen egg = 5/(5+7)\*50/(100+50+50+2), inflating agent = 5/(5+7)\*2/(100+50+50+2), Namineri adzuki bean paste = 7/(5+7)\*100/100.

## 15030 Traditional confectionery, “Kudzu-manju” (sweetened gelatin made from kudzu starch, stuffed with sweet adzuki bean paste)

This item constitutes of a sweetened gelatin and filling with the weight ratio of 2:3. The raw material mix ratios are: 1) sweetened gelatin (sugar (white sugar) at 200, potato starch at 100); 2) filling (Namineri adzuki bean paste at 100, common salt at 0.2). Thus, the RF values are: sugar (white sugar) = 2/(2+3)\*200/(200+100), potato starch = 2/(2+3)\*100/(200+100), Namineri adzuki bean paste = 3/(2+3)\*100/(100+0.2), common salt = 3/(2+3)\*0.2/(100+0.2).

## 15031 Traditional confectionery, “Kuri-manju” (baked sweet dough stuffed with sweet adzuki bean paste and candied chestnuts)

This item constitutes of a baked dough and filling with the weight ratio of 1:2. The raw material mix ratios are: 1) baked dough (wheat (soft flour, first grade) at 100, sugar (white sugar) at 60, whole hen egg at 45, inflating agent at 1); 2) filling (Nakawari adzuki bean paste at 95, boiled and sweetened Japanese chestnuts at 5). Thus, the RF values are: wheat (soft flour, first grade) = 1/(1+2)\*100/(100+60+45+1), sugar (white sugar) = 1/(1+2)\*60/(100+60+45+1), whole hen egg = 1/(1+2)\*45/(100+60+45+1), inflating agent = 1/(1+2)\*1/(100+60+45+1), Nakawari adzuki bean paste = 1/(1+2)\*95/(95+5), boiled and sweetened Japanese chestnuts = 1/(1+2)\*5/(95+5).

## 15032 Traditional confectionery, “To-manju” (baked sweet dough stuffed with sweet adzuki bean paste)

This item constitutes of a baked dough and filling with the weight ratio of 4:5. The raw material mix ratios are: baked dough (whole hen egg at 110, wheat (soft flour, first grade) at 100, sugar (white sugar) at 100, honey at 10, "mirin" at 5); filling (Nakawari adzuki bean paste at 100). Thus, the RF values are: whole hen egg = 4/(4+5)\*110/(100+100+10+5), wheat (soft flour, first grade) = 4/(4+5)\*100/(100+100+10+5), sugar (white sugar) = 4/(4+5)\*100/(100+100+10+5), honey = 4/(4+5)\*10/(100+100+10+5), "mirin" = 4/(4+5)\*5/(100+100+10+5), Nakawari adzuki bean paste = 5/(4+5)\*100/100.

## 15033 Traditional confectionery, “Mushi-manju” (steamed sweet dough stuffed with sweet adzuki bean paste)

This item constitutes of a steamed dough and filling with the weight ratio of 1:2. The raw material mix ratios are: 1) steamed dough (wheat (soft flour, first grade) at 100, sugar (white sugar) at 60, inflating agent at 1); 2) filling (Namineri adzuki bean paste at 100, common salt at 0.2). Thus, the RF values are: wheat (soft flour, first grade) = 1/(1+2)\*100/(100+60+1), sugar (white sugar) = 1/(1+2)\*60/(100+60+1), inflating agent = 1/(1+2)\*1/(100+60+1), filling (Namineri adzuki bean paste) = 2/(1+2)\*100/(100+0.2), common salt = 2/(1+2)\*0.2\*(100+0.2).

## 15034 Chinese style steamed bun, stuffed with sweet adzuki bean paste

This item constitutes of a steamed bun and filling with the weight ratio of 10:7. The raw material mix ratios are: 1) steamed bun (wheat (soft flour, first grade) at 200, wheat (hard flour, first grade) at 100, sugar (white sugar) at 25, natural yeast at 0.7, common salt at 0.2); 2) filling (Namineri adzuki bean paste at 250, lard at 25, sesame seed at 25). Thus, the RF values are:

wheat (soft flour, first grade) = 10/(10+7)\*200/(200+100+25+0.7+0.2),

wheat (hard flour, first grade) = 10/(10+7)\*100/(200+100+25+0.7+0.2),

sugar (white sugar) = 10/(10+7)\*25/(200+100+25+0.7+0.2),

natural yeast = 10/(10+7)\*0.7/(200+100+25+0.7+0.2),

common salt = 10/(10+7)\*0.2/(200+100+25+0.7+0.2),

Namineri adzuki bean paste = 10/(10+7)\*250/(250+25+25),

lard = 10/(10+7)\*25/(250+25+25),

sesame seed = 10/(10+7)\*25/(250+25+25).

## 15035 Chinese style steamed bun, stuffed with meat and vegetable

This item constitutes of a steamed bun and filling with the weight ratio of 10:4.5. The raw material mix ratios are: 1) steamed bun (wheat (soft flour, first grade) at 200, wheat (hard flour, first grade) at 100, sugar (white sugar) at 25, natural yeast at 0.7, common salt at 0.2); 2) filling (onion at 150, ground pork meat at 100, boiled "Takenoko-imo" corm at 100, Welsh onion at 70, cabbage at 40, "Shiitake" mushroom at 15, ginger at 6, sugar (white sugar) at 5, soy sauce at 4, common salt at 4, sesame oil at 3). Thus, the RF values are:

wheat (soft flour, first grade) = 10/(10+4.5)\*200/(200+100+25+0.7+0.2),

wheat (hard flour, first grade) = 10/(10+4.5)\*100/(200+100+25+0.7+0.2),

sugar (white sugar) = 10/(10+4.5)\*25/(200+100+25+0.7+0.2),

natural yeast = 10/(10+4.5)\*0.7/(200+100+25+0.7+0.2),

common salt = 10/(10+4.5)\*0.2/(200+100+25+0.7+0.2),

onion = 4.5/(10+4.5)\*150/(150+100+100+70+40+15+6+5+4+4+3),

ground pork meat = 4.5/(10+4.5)\*100/(150+100+100+70+40+15+6+5+4+4+3),

boiled "Takenoko-imo" corm = 4.5/(10+4.5)\*100/(150+100+100+70+40+15+6+5+4+4+3),

Welsh onion = 4.5/(10+4.5)\*70/(150+100+100+70+40+15+6+5+4+4+3),

cabbage = 4.5/(10+4.5)\*40/(150+100+100+70+40+15+6+5+4+4+3),

"Shiitake" mushroom = 4.5/(10+4.5)\*15/(150+100+100+70+40+15+6+5+4+4+3),

ginger = 4.5/(10+4.5)\*6/(150+100+100+70+40+15+6+5+4+4+3),

sugar (white sugar) = 4.5/(10+4.5)\*5/(150+100+100+70+40+15+6+5+4+4+3),

soy sauce = 4.5/(10+4.5)\*4/(150+100+100+70+40+15+6+5+4+4+3),

common salt = 4.5/(10+4.5)\*4/(150+100+100+70+40+15+6+5+4+4+3),

sesame oil = 4.5/(10+4.5)\*3/(150+100+100+70+40+15+6+5+4+4+3).

## 15036 Traditional confectionery, “Monaka” (glutinous rice wafers with sweet adzuki bean paste filling)

This item constitutes of rice wafers and filling with the weight ratio of 1:9. The raw material mix ratios are: 1) wafers (glutinous rice flour at 100); 2) filling ("Monaka-an" at 100). Thus, the RF values are: glutinous rice flour = 1/(1+9)\*100/100 = 0.100, “"Monaka-an" = 9/(1+9)\*100/100 = 0.900.

## 15037 Traditional confectionery, “Yubeshi” (steamed sweet dough made from rice flour, walnuts, soy sauce and citrus “Yuzu” juice)

The raw material mix ratios are: sugar (yellow coarse crystal hard sugar) at 140, sugar (white coarse crystal hard sugar) at 120, non-glutinous rice flour at 100, walnuts at 24, soy sauce at 20, fine roasted glutinous rice flour at 10, "Yuzu" citrus peel at 5. Thus, the RF values are: sugar (yellow coarse crystal hard sugar) = 140/(140+120+100+24+20+10+5), sugar (white coarse crystal hard sugar) = 120/(140+120+100+24+20+10+5), non-glutinous rice flour = 100/(140+120+100+24+20+10+5), walnuts = 24/(140+120+100+24+20+10+5), soy sauce = 20/(140+120+100+24+20+10+5), fine roasted glutinous rice flour = 10/(140+120+100+24+20+10+5), "Yuzu" citrus peel = 5/(140+120+100+24+20+10+5).

## 15038 Traditional confectionery, “Neri-yokan” (hardened sweet adzuki bean agar bar)

The raw material mix ratios are: sugar (white sugar) at 100, strained adzuki bean paste at 65, starch syrup at 6, and bar-type "Tengusa" agar at 1.5. Thus, the RF values are: sugar (white sugar) = 100/(100+65+6+1.5), strained adzuki bean paste = 65/(100+65+6+1.5), starch syrup = 6/(100+65+6+1.5), bar-type "Tengusa" agar = 1.5/(100+65+6+1.5).

## 15039 Traditional confectionery, “Mizu-yokan” (soft sweet adzuki bean jelly)

The raw material mix ratios are: Namineri adzuki bean paste at 400, sugar (white sugar) at 100, starch syrup at 6, bar-type "Tengusa" agar at 4, and common salt at 1.2. Thus, the RF values are: Namineri adzuki bean paste = 400/(400+100+6+4+1.2), sugar (white sugar) = 100/(400+100+6+4+1.2), starch syrup = 6/(400+100+6+4+1.2), bar-type "Tengusa" agar = 4/(400+100+6+4+1.2), common salt = 1.2/(400+100+6+4+1.2).

## 15040 Traditional confectionery, “Mushi-yokan” (steamed sweet adzuki bean paste bar)

The raw material mix ratios are: Namineri adzuki bean paste at 100, sugar (white sugar) at 15, wheat (soft flour, first grade) at 9.3, and common salt at 0.3. Thus, the RF values are: Namineri adzuki bean paste = 100/(100+15+9.3+0.3), sugar (white sugar) = 15/(100+15+9.3+0.3), wheat (soft flour, first grade) = 9.3/(100+15+9.3+0.3), common salt = 0.3/(100+15+9.3+0.3).

## 15041 Traditional confectionery, “Amedama” (sugar candy)

The raw material mix ratios are: sugar (white sugar) at 100, and starch syrup at 20. Thus, the RF values are: sugar (white sugar) = 100/(100+20), starch syrup = 20/(100+20).

## 15042 Traditional confectionery, “Imo-karinto” (deep fried sweet potato chips, coated with sugar syrup)

The raw material mix ratios are: sweet potato at 126, sugar (white sugar) at 38, and absorbed oil (vegetable oil) at 22. Thus, the RF values are: sweet potato = 126/(126+38+22), sugar (white sugar) = 38/(126+38+22), vegetable oil = 22/(126+38+22).

## 15043 Traditional confectionery, “Okoshi” (puffed sweet rice cake)

The raw material mix ratios are: "Okoshidane" (processed cereals) at 125, sugar (white sugar) at 100, starch syrup at 25, vegetable oil at 0.9, and common salt at 0.6. Thus, the RF values are: "Okoshidane" (processed cereals) = 125/(125+100+25+0.9+0.6), sugar (white sugar) = 100/(125+100+25+0.9+0.6), starch syrup = 25/(125+100+25+0.9+0.6), vegetable oil = 0.9/(125+100+25+0.9+0.6), common salt = 0.6/(125+100+25+0.9+0.6).

## 15044 Traditional confectionery, “Onoroke-mame” (roasted peanuts coated with rice dough, baked)

This item constitutes of baked rice dough and peanuts with the weight ratio of 100:35. The raw material mix ratios are: baked rice dough (non-glutinous rice flour at 100, sugar (white sugar) at 5, and common salt at 1.3). Thus, the RF values are: non-glutinous rice flour = 100/(100+35)\*100/(100+5+1.3), sugar (white sugar) = 100/(100+35)\*5/(100+5+1.3), common salt = 100/(100+35)\*1.3/(100+5+1.3), roasted peanuts = 35/(100+35).

## 15045 Traditional confectionery, “Karinto, black” (crunchy deep fried wheat flour dough coated with brown sugar”

The raw material mix ratios are: wheat (hard flour, second grade) at 100, brown sugar lump at 40, sugar (white sugar) at 30, absorbed oil (vegetable oil) at 19, ammonium carbonate at 1.6, and natural yeast at 1.2. Thus, the RF values are: wheat (hard flour, second grade) = 100/(100+40+30+19+1.6+1.2), brown sugar lump = 40/(100+40+30+19+1.6+1.2), sugar (white sugar) = 30/(100+40+30+19+1.6+1.2), vegetable oil = 19/(100+40+30+19+1.6+1.2), ammonium carbonate = 1.6/(100+40+30+19+1.6+1.2), natural yeast = 1.2/(100+40+30+19+1.6+1.2).

## 15046 Traditional confectionery, “Karinto, white” (crunchy deep fried wheat flour dough coated with white sugar)

The raw material mix ratios are: wheat (hard flour, second grade) at 100, sugar (white sugar) at 30, absorbed oil (vegetable oil) at 13, ammonium carbonate at 1.6, and natural yeast at 1.2. Thus, the RF values are: wheat (hard flour, second grade) = 100/(100+30+13+1.6+1.2), sugar (white sugar) = 30/(100+30+13+1.6+1.2), vegetable oil = 13/(100+30+13+1.6+1.2), ammonium carbonate = 1.6/(100+30+13+1.6+1.2), natural yeast = 1.2/(100+30+13+1.6+1.2).

## 15047 Traditional confectionery, “Gokabo” (roasted glutinous rice stick covered with roasted soy powder and sugar)

The raw material mix ratios are: "Okoshidane" (processed cereals) at 100, sugar (white sugar) at 100, starch syrup at 100, and "Kinako" at 100. Thus, the RF values are: "Okoshidane" (processed cereals) = 100/(100+100+100) = 0.333, sugar (white sugar) = 100/(100+100+100) = 0.333, starch syrup = 100/(100+100+100) = 0.333, "Kinako" = 100/(100+100+100) = 0.333.

## 15048 Traditional confectionery, “Isobe-senbei” (soft wheat flour cracker using soda water of Isobe hot spring)

The raw material mix ratios are: wheat (soft flour, first grade) at 100, sugar (white sugar) at 100, and common salt at 2.5. Thus, the RF values are: wheat (soft flour, first grade) = 100/(100+100+2.5), sugar (white sugar) = 100/(100+100+2.5), common salt = 2.5/(100+100+2.5).

## 15049 Traditional confectionery, “Kawara senbei” (hard wheat flour cracker shaped like a Japanese traditional roof tile)

The main raw materials of this item are: whole hen egg; common wheat, soft flour, first grade, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of whole hen egg, y (g) of common wheat (soft flour), and z (g) of sugar. One-hundred grams of this item contains 7.5 g of protein, 3.5 g of fat, and 84.0 g of carbohydrate, while the same weight of hen egg has 12.3 g of protein, 10.3 g of fat, and 0.3 g of carbohydrate. That of common wheat (soft flour) contains 8.3 g of protein, 1.5 g of fat, and 75.8 g of carbohydrate, while that of sugar has no protein or fat, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 26.6 g, y = 51.0 g, z = 45.6 g.

## 15050 Traditional confectionery, “Maki-senbei” (light wheat cracker roll with sugar confectionary filling)

The raw material mix ratios are: wheat (soft flour, first grade) at 100, sugar (white sugar) at 100, "Ariheito" hard candy at 50, whole hen egg at 20, and inflating agent at 1. Thus, the RF values are: wheat (soft flour, first grade) = 100/(100+100+50+20+1), sugar (white sugar) = 100/(100+100+50+20+1), "Ariheito" hard candy = 50/(100+100+50+20+1), whole hen egg = 20/(100+100+50+20+1), inflating agent = 1/(100+100+50+20+1).

## 15051 Traditional confectionery, “Nanbu-Senbei, Sesame” (round wheat flour cracker, with sesame seeds)

The raw material mix ratios are: wheat (soft flour, first grade) at 100, sesame seed at 20, and common salt at 1.2. Thus, the RF values are: wheat (soft flour, first grade) = 100/(100+20+1.2), sesame seed = 20/(100+20+1.2), common salt = 1.2/(100+20+1.2).

## 15052 Traditional confectionery, “Nanbu-Senbei, Peanut” (round wheat flour cracker, with peanuts)

The raw material mix ratios are: wheat (soft flour, first grade) at 100, peanuts at 20, sugar (white sugar) at 5, and common salt at 1. Thus, the RF values are: wheat (soft flour, first grade) = 100/(100+20+5+1), peanuts = 20/(100+20+5+1), sugar (white sugar) = 5/(100+20+5+1), common salt = 1/(100+20+5+1).

## 15053 Traditional confectionery, “Shiogama” (molded confectionary made from sugar, glutinous rice flour and perilla leaf powder)

The raw material mix ratios are: sugar (white sugar) at 100, fine roasted glutinous rice flour at 60, starch syrup at 3, common salt at 2.6, and salted perilla at 1.3. Thus, the RF values are: sugar (white sugar) = 100/(100+60+3+2.6+1.3), fine roasted glutinous rice flour = 60/(100+60+3+2.6+1.3), starch syrup = 3/(100+60+3+2.6+1.3), common salt = 2.6/(100+60+3+2.6+1.3), salted perilla = 1.3/(100+60+3+2.6+1.3).

## 15055 Traditional confectionery, “Hina-arare, Kanto style” (roasted and sugared rice dough with candied adzuki beans and roasted soybeans for Doll’s festival)

The raw material mix ratios are: roasted and sugared rice dough at 88, candied adzuki beans at 6, and roasted soybeans at 6. Thus, the RF values are: roasted and sugared rice dough = 88/(88+6+6) = 0.880, candied adzuki beans = 6/(88+6+6) = 0.060, roasted soybeans = 6/(88+6+6) = 0.060.

## 15056 Traditional confectionery, “Hina-arare, Kansai style”(roasted rice dough for Doll’s festival)

The raw material mix ratios are: roasted and sugared rice dough at 100. Thus, the RF values are: roasted and sugared rice dough = 1.000.

## 15057 Traditional confectionery, “Age-senbei” (fried and salted rice cracker)

The raw material mix ratios are: non-glutinous rice flour (with the water content at 6%) at 100, absorbed oil (vegetable oil) at 20, and common salt at 1.5. Thus, the RF values are: non-glutinous rice flour = 100/(100+20+1.5), absorbed oil = (vegetable oil)20/(100+20+1.5), common salt = 1.5/(100+20+1.5).

## 15058 Traditional confectionery, “Amakara-senbei” (rice cracker coated with soy sauce and grain sugar)

The raw material mix ratios are: non-glutinous rice flour (with the water content at 6%) at 100, sugar (white sugar) at 10, and soy sauce at 9. Thus, the RF values are: non-glutinous rice flour = 100/(100+10+9), sugar (white sugar) = 10/(100+10+9), soy sauce = 9/(100+10+9).

## 15059 Traditional confectionery, “Arare” (glutinous rice cracker)

The raw material mix ratios are: rice cake (with the water content at 6%) at 100, and soy sauce at 12. Thus, the RF values are: rice cake = 100/(100+12), soy sauce = 12/(100+12).

## 15060 Traditional confectionery, “Shoyu-senbei” (soy sauce flavored rice cracker)

The main raw materials of this item are: paddy rice, non-glutinous, well-milled, raw, and dark soy sauce. First assume that 100 g of this item mainly consists of x (g) of rice and y (g) of soy sauce. One-hundred grams of this item contains 7.8 g of protein and 83.1 of carbohydrate. The same weight of rice has 6.1 g of protein and 77.6 of carbohydrate, while that of soy sauce has 7.7 g of protein and 7.9 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 105.3, y = 17.9 g.

## 15061 Traditional confectionery, “Boro, small” (Small balls of baked starch dough)

The raw material mix ratios are: potato starch at 100, sugar (white sugar) at 100, and whole hen egg at 40. Thus, the RF values are: potato starch = 100/(100+100+40), sugar (white sugar) = 100/(100+100+40), whole hen egg = 40/(100+100+40).

## 15062 Traditional confectionery, “Soba-boro” (Baked sweet dough made from buckwheat and wheat flour)

The raw material mix ratios are: wheat (soft flour, first grade) at 70, sugar (white sugar) at 70, whole hen egg at 40, buckwheat flour (straight buckwheat flour) at 20, starch syrup at 7, honey at 5, and baking soda (sodium hydrogen carbonate) at 0.6. Thus, the RF values are: wheat (soft flour, first grade) = 70/(70+70+40+20+7+5+0.6), sugar (white sugar) = 70/(70+70+40+20+7+5+0.6), whole hen egg = 40/(70+70+40+20+7+5+0.6), buckwheat flour (straight buckwheat flour) = 20/(70+70+40+20+7+5+0.6), starch syrup = 7/(70+70+40+20+7+5+0.6), honey = 5/(70+70+40+20+7+5+0.6), baking soda (sodium hydrogen carbonate) = 0.6/(70+70+40+20+7+5+0.6).

## 15063 Traditional confectionery, “Matsukaze” (Baked sweet dough, topped with poppy seeds)

The raw material mix ratios are: wheat (soft flour, first grade) at 100, sugar (white sugar) at 100, starch syrup at 12, ammonium carbonate at 0.4, and baking soda (sodium hydrogen carbonate) at 0.2. Thus, the RF values are: wheat (soft flour, first grade) = 100/(100+100+12+0.4+0.2), sugar (white sugar) = 100/(100+100+12+0.4+0.2), starch syrup = 12/(100+100+12+0.4+0.2), ammonium carbonate = 0.4/(100+100+12+0.4+0.2), baking soda (sodium hydrogen carbonate) = 0.2/(100+100+12+0.4+0.2).

## 15064 Traditional confectionery, “Mishima-mame” (Sugar-coated roasted soybeans)

The raw material mix ratios are: sugar (white sugar) at 200 and roasted soybeans at 100. Thus, the RF values are: sugar (white sugar) = 200/(200+100) = 0.667, roasted soybeans = 100/(200+100) = 0.333.

## 15065 Traditional confectionery, “Yatsuhashi” (Cinnamon-flavored sweet rice dough, baked

The raw material mix ratios are: non-glutinous rice flour at 100 and sugar (white sugar) at 100. Thus, the RF values are: non-glutinous rice flour = 100/(100+100) = 0.500, sugar (white sugar) = 100/(100+100) = 0.500.

## 15066 Traditional confectionery, "Rakugan, regular" (molded dry confectionary made from fine roasted glutinous rice flour and sugar)

The raw material mix ratios are: sugar (white sugar) at 100, fine roasted glutinous rice flour at 54, potato starch at 13, and starch syrup at 3. Thus, the RF values are: sugar (white sugar) = 100/(100+54+13+3), fine roasted glutinous rice flour = 54/(100+54+13+3), potato starch = 13/(100+54+13+3), starch syrup = 3/(100+54+13+3).

## 15067 Traditional confectionery, "Mugi-rakugan" (molded dry confectionary made from roasted barley flour and sugar)

The raw material mix ratios are: sugar (white sugar) at 100, dried barley flour at 60, fine roasted glutinous rice flour at 10, and starch syrup at 3. Thus, the RF values are: sugar (white sugar) = 100/(100+60+10+3), dried barley flour = 60/(100+60+10+3), fine roasted glutinous rice flour = 10/(100+60+10+3), starch syrup = 3/(100+60+10+3).

## 15068 Traditional confectionery, "Morokoshi-rakugan" (molded dry confectionary made from powdered adzuki bean paste and sugar)

The raw material mix ratios are: sugar (white sugar) 100, "Sarashi-an" strained bean paste powder at 40, glutinous rice flour at 10, starch syrup at 3, and common salt at 0.5. Thus, the RF values are: sugar (white sugar) = 100/(100+40+10+3+0.5), "Sarashi-an" strained bean paste powder = 40/(100+40+10+3+0.5), glutinous rice flour = 10/(100+40+10+3+0.5), starch syrup = 3/(100+40+10+3+0.5), common salt = 0.5/(100+40+10+3+0.5).

## 15125 Bun with filling, fried bun

The main raw materials of this item are white long roll bread and rapeseed oil. First assume that 100 g of this item mainly consists of x (g) of white long roll bread and y (g) of rapeseed oil.

One-hundred grams of this item has 377 kcal, containing 43.5 g of carbohydrate. The same weight of white long roll bread has 265 kcal, containing carbohydrate 49.1 g, while that of rapeseed oil has 921 kcal, containing no carbohydrate. Therefore, the following equation is established:

From the above, x = 88.615 g, y = 15.4 g.

## 15069 Bun with filling, baked bun with sweet adzuki bean paste filling regular type

This item constitutes of a soft roll bread and Namineri adzuki bean paste with the weight ratio of 10:7. Thus, the RF values are: soft roll bread = 10/(10+7), Namineri adzuki bean paste = 7/(10+7).

## 15126 Bun with filling, baked bun with sweet adzuki bean paste filling thin dough type

This item constitutes of a soft roll bread and mushed adzuki bean paste (with sugar) with the weight ratio of 22:7. Thus, the RF values are: soft roll bread = 22/(22+7), mushed adzuki bean paste (with sugar) = 7/(22+7).

## 15127 Bun with filling, fried bun with curry filling

First assume that 100 g of this item mainly consists of (x) g of fried bun and y (g) of curry filling. One-hundred grams of this item has 321 kcal. The same weight of fried bun has 384 kcal, while that of curry filling has 180 kcal. Therefore, the following equation is established:

From the above, x = 69.1 g, y = 30.9 g.

## 15070 Bun with filling, baked bun with custard cream filling regular type

This item constitutes of a soft roll bread and custard cream filling with the weight ratio of 5:3. Thus, the RF values are: soft roll bread = 5/(5+3) = 0.625, custard cream = 3/(5+3) = 0.375.

## 15130 Bun with filling, baked bun with custard cream filling thin dough type

This item constitutes of a soft roll bread and custard cream filling with the weight ratio of 31:69. Thus, the RF values are: soft roll bread = 31/(31+69) = 0.310, custard cream = 69/(31+69) = 0.690.

## 15071 Bun with filling, baked bun with strawberry jam filling

This item constitutes of a soft roll bread and strawberry jam (heavily sweetened) with the weight ratio of 5:3. Thus, the RF values are: soft roll bread = 5/(5+3) = 0.625, strawberry jam (heavily sweetened) = 3/(5+3) = 0.375.

## 15072 Bun with filling, “Korone” (horn-shaped bread), with chocolate cream filling

This item constitutes of a soft roll bread and chocolate cream with the weight ratio of 5:4. Thus, the RF values are: soft roll bread = 5/(5+4) = 0.556, chocolate cream = 4/(5+4) = 0.444.

## 15131 Bun with filling, baked bun with chocolate cream filling thin dough type

This item constitutes of a soft roll bread and chocolate cream with the weight ratio of 31:69. Thus, the RF values are: soft roll bread = 31/(31+69) = 0.310, chocolate cream = 69/(31+69) = 0.690.

## 15132 Bun with filling, ”Melon-pan” (sweet bun covered in a thin layer of crisp cookie dough)

The raw material mix ratios are: common wheat, hard flour, first grade at 150, common wheat, soft flour, first grade at 50, common salt at 3, sugar at 12, hen egg at 30, dry yeast at 3, unsalted butter at 10, unsalted butter at 50, sugar at 70, hen egg at 40, common wheat, soft flour, first grade at 120, baking powder at 2, whole milk at 30, and common salt at 0.1. Thus, the RF values are:

common wheat, hard flour, first grade = 150/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1),

common wheat, soft flour, first grade = 50/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1),

common salt = 3/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1),

sugar = 12/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1),

hen egg = 30/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1),

dry yeast = 3/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1),

unsalted butter = 10/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1),

unsalted butter = 50/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1),

sugar = 70/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1),

hen egg = 40/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1),

common wheat, soft flour, first grade = 120/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1),

baking powder = 2/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1),

whole milk = 30/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1),

common salt = 0.1/(150+50+3+12+30+3+10+50+70+40+120+2+30+0.1).

## 15073 Cake and pastry, custard cream puff

This item constitutes of a shell and custard cream filling with the weight ratio of 1:5. The raw material mix ratios of shell are: whole hen egg at 162, wheat (soft flour, first grade) at 100, water at 100, salted butter at 80, sugar (white sugar) at 3.5, and common salt at 0.7. Thus, the RF values are:

whole hen egg = 1/(1+5)\*162/(162+100+100+80+3.5+0.7),

wheat (soft flour, first grade) = 1/(1+5)\*100/(162+100+100+80+3.5+0.7),

water = 1/(1+5)\*100/(162+100+100+80+3.5+0.7),

salted butter = 1/(1+5)\*80/(162+100+100+80+3.5+0.7),

sugar (white sugar) = 1/(1+5)\*3.5/(162+100+100+80+3.5+0.7),

common salt = 1/(1+5)\*0.7/(162+100+100+80+3.5+0.7),

custard cream = 5/(1+5).

## 15074 Cake and pastry, sponge cake

The raw material mix ratios are: wheat (soft flour, first grade) at 100, whole hen egg at 150, sugar (white sugar) at 100, unsalted butter at 10, and water at 10. Thus, the RF values are: wheat (soft flour, first grade) = 100/(100+150+100+10+10), whole hen egg = 150/(100+150+100+10+10), sugar (white sugar) = 100/(100+150+100+10+10), unsalted butter = 10/(100+150+100+10+10).

## 15075 Cake and pastry, cream cake without fruits

This item constitutes of sponge cake and whipping cream substitute (milk and vegetable fats) with the weight ratio of 3:1. Thus, the RF values are: sponge cake = 3/(3+1) = 0.750, whipping cream substitute, milk and vegetable fats = 1/(3+1) = 0.250.

## 15133 Cake and pastry, tart

This item constitutes of tart, sponge cake and others (including custard cream) with the weight ratio of 22.5:19.6:54.9. The raw material mix ratios are: 1) tart dough (hard biscuits at 17, unsalted butter at 8.5); 2) others (strawberry at 31.9, wine jelly at 2.4, whipping cream at 6.3, custard cream at 14.2). Thus, the RF values are:

hard biscuits = 22.5/(22.5+19.6+54.9)\*17/(17+8.5),

unsalted butter = 22.5/(22.5+19.6+54.9)\*8.5/(17+8.5),

strawberry = 54.9/(22.5+19.6+54.9)\*31.9/(31.9+2.4+6.3+14.2),

wine jelly = 54.9/(22.5+19.6+54.9)\*2.4/(31.9+2.4+6.3+14.2),

whipping cream = 54.9/(22.5+19.6+54.9)\*6.3/(31.9+2.4+6.3+14.2),

custard cream = 54.9/(22.5+19.6+54.9)\*14.2/(31.9+2.4+6.3+14.2),

sponge cake = 19.6/(22.5+19.6+54.9).

## 15134 Cake and pastry, cheesecake, baked

The raw material mix ratios are: cream cheese at 200, hen egg at 100, sugar (white sugar) at 60, wheat (soft flour, first grade) at 25, and lemon juice at 14. Thus, the RF values are: cream cheese = 200/(200+100+60+25+14), hen egg = 100/(200+100+60+25+14), sugar (white sugar) = 60/(200+100+60+25+14), wheat (soft flour, first grade) = 25/(200+100+60+25+14), lemon juice = 14/(200+100+60+25+14).

## 15135 Cake and pastry, cheesecake, unbaked

The raw material mix ratios are: cream cheese at 200, fresh cream at 130, plain yogurt (whole milk, unsweetened) at 100, hard biscuit at 85, sugar (white sugar) at 55, salted butter at 47.5, water at 47.5, lemon juice at 19.5, hen egg white at 12.5, gelatin powder at 6.5, and curacao at 2.5. Thus, the RF values are:

cream cheese = 200/(200+130+100+85+55+47.5+19.5+12.5+6.5+2.5),

fresh cream = 130/(200+130+100+85+55+47.5+19.5+12.5+6.5+2.5),

plain yogurt (whole milk, unsweetened) = 100/(200+130+100+85+55+47.5+19.5+12.5+6.5+2.5),

hard biscuit = 85/(200+130+100+85+55+47.5+19.5+12.5+6.5+2.5),

sugar (white sugar) = 55/(200+130+100+85+55+47.5+19.5+12.5+6.5+2.5),

salted butter = 47.5/(200+130+100+85+55+47.5+19.5+12.5+6.5+2.5),

lemon juice = 19.5/(200+130+100+85+55+47.5+19.5+12.5+6.5+2.5),

hen egg white = 12.5/(200+130+100+85+55+47.5+19.5+12.5+6.5+2.5),

gelatin powder = 6.5/(200+130+100+85+55+47.5+19.5+12.5+6.5+2.5),

curacao = 2.5/(200+130+100+85+55+47.5+19.5+12.5+6.5+2.5).

## 15076 Cake and pastry, Danish pastry

The raw material mix ratios are: wheat (hard flour, first grade) at 80, margarine at 40, wheat (soft flour, first grade) at 20, whole hen egg at 20, sugar (white sugar) at 15, shortening at 15, live natural yeast at 7, and common salt at 1.4. Thus, the RF values are:

wheat (hard flour, first grade) = 80/(80+40+20+20+15+15+7+1.4),

margarine = 40/(80+40+20+20+15+15+7+1.4),

wheat (soft flour, first grade) = 20/(80+40+20+20+15+15+7+1.4),

whole hen egg = 20/(80+40+20+20+15+15+7+1.4),

sugar (white sugar) = 15/(80+40+20+20+15+15+7+1.4),

shortening = 15/(80+40+20+20+15+15+7+1.4),

live natural yeast = 7/(80+40+20+20+15+15+7+1.4),

common salt = 1.4/(80+40+20+20+15+15+7+1.4).

## 15077 Cake and pastry, doughnuts, yeast-leavened

The raw material mix ratios are: wheat (hard flour, first grade) at 75, absorbed oil (vegetable oil) at 29, wheat (soft flour, first grade) at 25, sugar (white sugar) at 14, shortening at 10, whole hen egg at 10, skimmed milk powder at 6, natural yeast at 3, and common salt at 1.5. Thus, the RF values are:

wheat (hard flour, first grade) = 75/(75+29+25+14+10+10+6+3+1.5),

absorbed oil (vegetable oil) = 29/(75+29+25+14+10+10+6+3+1.5),

wheat (soft flour, first grade) = 25/(75+29+25+14+10+10+6+3+1.5),

sugar (white sugar) = 14/(75+29+25+14+10+10+6+3+1.5),

shortening = 10/(75+29+25+14+10+10+6+3+1.5),

whole hen egg = 10/(75+29+25+14+10+10+6+3+1.5),

skimmed milk powder = 6/(75+29+25+14+10+10+6+3+1.5),

natural yeast = 3/(75+29+25+14+10+10+6+3+1.5),

common salt = 1.5/(75+29+25+14+10+10+6+3+1.5).

## 15078 Cake and pastry, doughnuts, cake-type

The raw material mix ratios are: wheat (soft flour, first grade) at 100, whole hen egg at 50, sugar (white sugar) at 50, whole milk at 20, shortening at 10, absorbed oil (vegetable oil) at 7.3, inflating agent at 1, and common salt at 0.5. Thus, the RF values are:

wheat (soft flour, first grade) = 100/(100+50+50+20+10+7.3+1+0.5),

whole hen egg = 50/(100+50+50+20+10+7.3+1+0.5),

sugar (white sugar) = 50/(100+50+50+20+10+7.3+1+0.5),

whole milk = 20/(100+50+50+20+10+7.3+1+0.5),

shortening = 10/(100+50+50+20+10+7.3+1+0.5),

absorbed oil = (vegetable oil)7.3/(100+50+50+20+10+7.3+1+0.5),

inflating agent = 1/(100+50+50+20+10+7.3+1+0.5),

common salt = 0.5/(100+50+50+20+10+7.3+1+0.5).

## 15079 Cake and pastry, pie pastry

The raw material mix ratios are: water at 55, wheat (hard flour, first grade) at 50, wheat (soft flour, first grade) at 50, shortening at 50, and common salt at 2. Thus, the RF values are: wheat (hard flour, first grade) = 50/(55+50+50+50+2), wheat (soft flour, first grade) = 50/(55+50+50+50+2), shortening = 50/(55+50+50+50+2), common salt = 2/(55+50+50+50+2).

## 15080 Cake and pastry, apple pie

This item constitutes of a pie pastry and apple compote filling with the weight ratio of 1:1. The raw material mix ratios of apple compote are: apple at 100, and sugar (white sugar) at 80. Thus, the RF values are: pie pastry = 1/(1+1) = 0.500, apple = 1/(1+1)\*100/(100+80), sugar (white sugar) = 1/(1+1)\*80(100+80).

## 15081 Cake and pastry, meat pie

This item constitutes of a pie pastry and filling with the weight ratio of 8:2. The raw material mix ratios of filling are: ground meat at 20, onion at 10, carrot at 10, tomato sauce at 5, and common salt at 0.5. Thus, the RF values are: pie pastry = 8/(8+2) = 0.800, ground meat = 2/(8+2)\*20/(20+10+10+5+0.5), onion = 2/(8+2)\*10/(20+10+10+5+0.5), carrot = 2/(8+2)\*10/(20+10+10+5+0.5), tomato sauce = 2/(8+2)\*5/(20+10+10+5+0.5), common salt = 2/(8+2)\*0.5/(20+10+10+5+0.5).

## 15082 Cake and pastry, butter cake

The raw material mix ratios are: wheat (soft flour, first grade) at 25, whole hen egg at 25, sugar (white sugar) at 25, and salted butter at 25. Thus, the RF values are: wheat (soft flour, first grade) = 25/(25+25+25+25) = 0.25, whole hen egg = 25/(25+25+25+25) = 0.25, sugar (white sugar) = 25/(25+25+25+25) = 0.25, salted butter = 25/(25+25+25+25) = 0.25.

## 15083 Cake and pastry, thick pancake

The raw material mix ratios are: premixed flour for pancake at 200, whole milk at 145, and whole hen egg at 50. Thus, the RF values are: premixed flour for pancake = 200/(200+145+50), whole milk = 145/(200+145+50), whole hen egg = 50/(200+145+50).

## 15084 Cake and pastry, waffles, with custard cream filling

This item constitutes of waffles and custard cream filling with the weight ratio of 1:1. The raw material mix ratios of waffles are: wheat (soft flour, first grade) at 100, whole milk at 100, whole hen egg at 50, sugar (white sugar) at 15, shortening at 5, and inflating agent at 1. Thus, the RF values are:

wheat (soft flour, first grade) = 1/(1+1)\*100/(100+100+50+15+5+1),

whole milk = 1/(1+1)\*100/(100+100+50+15+5+1),

whole hen egg = 1/(1+1)\*50/(100+100+50+15+5+1),

sugar (white sugar) = 15/(100+100+50+15+5+1),

shortening = 1/(1+1)\*5/(100+100+50+15+5+1),

inflating agent = 1/(1+1)\*1/(100+100+50+15+5+1),

custard cream = 1/(1+1) = 0.500.

## 15085 Cake and pastry, waffles, with strawberry jam filling

This item constitutes of waffles and strawberry jam (heavily sweetened) filling with the weight ratio of 1:1. The raw material mix ratios of waffles are: wheat (soft flour, first grade) at 100, whole milk at 100, whole hen egg at 50, sugar (white sugar) at 15, shortening at 5, and inflating agent at 1. Thus, the RF values are:

wheat (soft flour, first grade) = 1/(1+1)\*100/(100+100+50+15+5+1),

whole milk = 1/(1+1)\*100/(100+100+50+15+5+1),

whole hen egg = 1/(1+1)\*50/(100+100+50+15+5+1),

sugar (white sugar) = 15/(100+100+50+15+5+1),

shortening = 1/(1+1)\*5/(100+100+50+15+5+1),

inflating agent = 1/(1+1)\*1/(100+100+50+15+5+1),

strawberry jam (heavily sweetened) = 1/(1+1) = 0.500.

## 15086 Pudding and chilled dessert, caramel custard

The raw material mix ratios are: whole milk at 250, whole hen egg at 125, and sugar (white sugar) at 45. Thus, the RF values are: whole milk = 250/(250+125+45), whole hen egg = 125/(250+125+45), sugar (white sugar) = 45/(250+125+45).

## 15136 Pudding and chilled dessert, Milk pudding

The raw material mix ratios are: water at 200, whole milk at 100, sugar (white sugar) at 30, "Tengusa" agar powder at 1.8. Thus, the RF values are: whole milk = 100/(200+100+30+1.8), sugar (white sugar) = 30/(200+100+30+1.8), "Tengusa" agar powder = 1.8/(200+100+30+1.8).

## 15087 Pudding and chilled dessert, orange jelly

The raw material mix ratios are: Valencia orange juice (reconstituted) at 300, sugar (white sugar) at 30, and gelatin powder at 5. Thus, the RF values are: Valencia orange juice (reconstituted) = 300/(300+30+5), sugar (white sugar) = 30/(300+30+5), gelatin powder = 5/(300+30+5).

## 15088 Pudding and chilled dessert, coffee jelly

The raw material mix ratios are: water at 300, sugar (white sugar) at 30, gelatin powder at 5, and instant coffee at 4. Thus, the RF values are: sugar (white sugar) = 30/(300+30+5+4), gelatin powder = 5/(300+30+5+4), instant coffee = 4/(300+30+5+4).

## 15089 Pudding and chilled dessert, milk jelly

The raw material mix ratios are: whole milk at 400, sugar (white sugar) at 40, and gelatin powder at 5. Thus, the RF values are: whole milk = 400/(400+40+5), sugar (white sugar) = 40/(400+40+5), gelatin powder = 5/(400+40+5).

## 15090 Pudding and chilled dessert, wine flavored jelly

The raw material mix ratios are: water at 115, sugar (granulated sugar) at 20, red wine at 15, and gelatin powder at 3. Thus, the RF values are: sugar (granulated sugar) = 20/(115+20+15+3), red wine = 15/(115+20+15+3), gelatin powder = 3/(115+20+15+3).

## 15091 Pudding and chilled dessert, Bavarian cream

The raw material mix ratios are: whole milk at 150, cream substitute (milk and vegetable fats) at 60, sugar (granulated sugar) at 60, hen egg yolk at 40, water 30, and gelatin powder at 6. Thus, the RF values are: whole milk = 150/(150+60+60+40+30+6), cream substitute (milk and vegetable fats) = 60/(150+60+60+40+30+6), sugar (granulated sugar) = 60/(150+60+60+40+30+6), hen egg yolk = 40/(150+60+60+40+30+6), water = 30/(150+60+60+40+30+6), gelatin powder = 6/(150+60+60+40+30+6).

## 15092 Biscuits, wafers

The raw material mix ratios are: common wheat, soft flour, first grade at 100, sugar (white sugar) at 2, rapeseed oil at 3, hen egg at 3, skimmed milk powder at 2, baking soda at 0.3, whole milk at 50, and water at 100 according to *Kashinojiten* (ISBN 978-4254430639) in Japanese. Thus, the RF values are: common wheat, soft flour, first grade = 100/(100+2+3+3+2+0.3+50+100), sugar (white sugar) = 2/(100+2+3+3+2+0.3+50+100), rapeseed oil = 3/(100+2+3+3+2+0.3+50+100), hen egg = 3/(100+2+3+3+2+0.3+50+100), skimmed milk powder = 2/(100+2+3+3+2+0.3+50+100), baking soda = 0.3/(100+2+3+3+2+0.3+50+100), whole milk = 50/(100+2+3+3+2+0.3+50+100).

## 15141 Biscuits, wafers with cream

The raw material mix ratios are: wafers at 100, sugar (white sugar) at 15, and shortening at 15. Thus, the RF values are: wafers = 100/(100+15+15), sugar (white sugar) = 15/(100+15+15), shortening= 15/(100+15+15).

## 15093 Biscuits, crackers, oil-sprayed

The main raw materials of this item are: wheat; shortening, and; common salt. First assume that 100 g of this item mainly consists of x (g) of wheat, y (g) of shortening, and z (g) of common salt. One-hundred grams of this item contains 22.5 g of fat, 63.9 g of carbohydrate, and 1.5 g of sodium content, while the same weight of wheat has 1.5 g of fat, 75.8 g of carbohydrate, but no sodium content. That of shortening contains no carbohydrate or sodium content, but has 99.9 g of fat, while that of common salt contains no fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 84.3 g, y = 21.3 g, z = 1.5 g.

## 15094 Biscuits, crackers, soda

The main raw materials of this item are: wheat; shortening, and; common salt. First assume that 100 g of this item mainly consists of x (g) of wheat, y (g) of shortening, and z (g) of common salt. One-hundred grams of this item contains 9.8 g of fat, 74.4 g of carbohydrate, and 1.9 g of sodium content, while the same weight of wheat has 1.5 g of fat, 75.8 g of carbohydrate, but no sodium content. That of shortening contains no carbohydrate or sodium content, but has 99.9 g of fat, while that of common salt contains no fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 98.2 g, y = 8.3 g, z = 1.9 g.

## 15095 Biscuits, Sablé shortbread

The raw material mix ratios are: wheat (soft flour, first grade) at 110, sugar (white sugar) at 70, shortening at 30, whole hen egg at 30, and inflating agent at 1.6. Thus, the RF values are: wheat (soft flour, first grade) = 110/(110+70+30+1.6), sugar (white sugar) = 70/(110+70+30+1.6), shortening30/(110+70+30+1.6), whole hen egg = 30/(110+70+30+1.6), inflating agent = 1.6/(110+70+30+1.6).

## 15054 Biscuits, Chinese cookies containing lard

The raw material mix ratios are: wheat (soft flour, first grade) at 100, sugar (white sugar) at 70, lard at 65, whole hen egg at 30, inflating agent at 1, and common salt at 0.3. Thus, the RF values are: wheat (soft flour, first grade) = 100/(100+70+65+30+1+0.3), sugar (white sugar) = 70/(100+70+65+30+1+0.3), lard = 65/(100+70+65+30+1+0.3), whole hen egg = 30/(100+70+65+30+1+0.3), inflating agent = 1/(100+70+65+30+1+0.3), common salt = 0.3/(100+70+65+30+1+0.3).

## 15097 Biscuits, hard biscuits

The main raw materials of this item are: wheat; sugar; oil; common salt, and; whole milk powder. First assume that 100 g of this item mainly consists of x (g) of wheat, y (g) of sugar, z (g) of oil, w (g) of common salt, and u (g) of whole milk powder. One-hundred grams of this item has 432 kcal, containing 7.6 g of protein, 10.0 g of fat, 77.8 g of carbohydrate, and 0.8 g of sodium content, while the same weight of wheat has 367 kcal, containing 8.3 g of protein, 1.5 g of fat, 75.8 g of carbohydrate, but no sodium content, and that of sugar has 384 kcal, containing no protein, fat, sodium content, but 99.3 g of carbohydrate. That of oil has 921 kcal, containing no protein, carbohydrate or sodium content, but 100.0 g of fat, while that of common salt has 0 kcal, containing no protein, fat or carbohydrate, but 99.5 g of sodium content, and that of whole milk powder has 500 kcal, containing 25.5 g of protein, 26.2 g of fat, 39.3 g of carbohydrate, and 1.1 g of sodium content. Therefore, the following equation is established:

From the above, x = 28.6 g, y = 48.4 g, z = 4.2 g, w =0.6, u = 20.5 g.

## 15098 Biscuits, soft biscuits

The main raw materials of this item are: wheat; sugar; oil; common salt, and; whole hen egg. First assume that 100 g of this item mainly consists of x (g) of wheat, y (g) of sugar, z (g) of oil, w (g) of common salt, and u (g) of whole hen egg. One-hundred grams of this item has 522 kcal, containing 5.7 g of protein, 27.6 g of fat, 62.6 g of carbohydrate, and 0.6 g of sodium content, while the same weight of wheat has 367 kcal, containing 8.3 g of protein, 1.5 g of fat, 75.8 g of carbohydrate, but no sodium content, and that of sugar has 384 kcal, containing no protein, fat, sodium content, but 99.3 g of carbohydrate. That of oil has 921 kcal, containing no protein, carbohydrate or sodium content, but 100.0 g of fat, while that of common salt has 0 kcal, containing no protein, fat or carbohydrate, but 99.5 g of sodium content, and that of hen egg has 151 kcal, containing 5.7 g of protein, 27.6 g of fat, 62.6 g of carbohydrate, and 0.6 g of sodium content. Therefore, the following equation is established:

From the above, x = 65.9, y = 10.2, z = 25.5, w = 0.6, u = 4.0 g.

## 15099 Biscuits, hard pretzel

The main raw materials of this item are: wheat, hard flour; common salt; sugar, and; unsalted butter. First assume that 100 g of this item mainly consists of x (g) of common wheat (hard flour), y (g) of common salt, z (g) of sugar, w (g) of unsalted butter. One-hundred grams of this item contains 5.7 g of protein, 27.6 g of fat, 62.6 g of carbohydrate, and 0.6 g of sodium content, while the same weight of common wheat (hard flour) has 11.8 g of protein, 1.5 g of fat, 71.7 g of carbohydrate, but no sodium content. That of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content, while that of sugar has no protein, fat or sodium content, but contains 99.3 g of carbohydrate, and that of butter contains 0.5 g of protein, 83.0 g of fat, 0.2 g of carbohydrate but no sodium content. Therefore, the following equation is established:

From the above, x = 46.9 g, y = 0.6 g, z = 29.1 g, w =32.4 g.

## 15096 Biscuits, puff pastry biscuits

The raw material mix ratios are: wheat (soft flour, first grade) at 100, shortening at 50, sugar (white sugar) at 5, and common salt at 0.2. Thus, the RF values are: wheat (soft flour, first grade) = 100/(100+50+5+0.2), shortening = 50/(100+50+5+0.2), sugar (white sugar) = 5/(100+50+5+0.2), common salt = 0.2/(100+50+5+0.2).

## 15100 Biscuits, biscuits with jam topping

This item constitutes of biscuit, macaron and cream with the weight ratio of 4:2:1. The raw material mix ratios are: 1) biscuit (wheat (soft flour, first grade) at 60, sugar (white sugar) at 20, shortening at 18.5, whole milk powder at 1.2, common salt at 0.7, inflating agent at 0.3; 2) macaron (sugar (powder sugar) at 90, hen egg white at 45, almond at 45); 3) cream (shortening at 100, sugar (white sugar) at 100). Thus, the RF values are:

wheat (soft flour, first grade) = 4/(4+2+1)\*60/(60+20+18.5+1.2+0.7+0.3),

sugar (white sugar) = 4/(4+2+1)\*20/(60+20+18.5+1.2+0.7+0.3),

shortening = 4/(4+2+1)\*18.5/(60+20+18.5+1.2+0.7+0.3),

whole milk powder = 4/(4+2+1)\*1.2/(60+20+18.5+1.2+0.7+0.3),

common salt = 4/(4+2+1)\*0.7/(60+20+18.5+1.2+0.7+0.3),

inflating agent = 4/(4+2+1)\*0.3/(60+20+18.5+1.2+0.7+0.3),

sugar (powder sugar) = 2/(4+2+1)\*90/(90+45+45),

hen egg white = 2/(4+2+1)\*45/(90+45+45),

almond = 2/(4+2+1)\*45/(90+45+45),

shortening = 1/(4+2+1)\*100/(100+100),

sugar (white sugar) = 1/(4+2+1)\*100/(100+100).

## 15101 Snacks, wheat flour snack, extruded

The raw material mix ratios are: wheat (soft flour, first grade) at 100, shortening at 20, common salt at 2. Thus, the RF values are: wheat (soft flour, first grade) = 100/(100+20+2), shortening = 20/(100+20+2), common salt = 2/(100+20+2).

## 15102 Snacks, corn snack, extruded

The main raw materials of this item are: corn grits, yellow kernel; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of corn grits, y (g) of rapeseed oil, z (g) of common salt. One-hundred grams of this item contains 27.1 g of fat, 65.3 g of carbohydrate, and 1.2 g of sodium content, while the same weight of corn grits has 1.0 g of fat, 76.4 g of carbohydrate, but no sodium content. That of rapeseed oil has no carbohydrate and sodium content, but contains 100.0 g of fat, while that of common salt contains no fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 85.5, y = 26.2, z = 1.2 g.

## 15103 Snacks, potato chips, regular

The main raw materials of this item are: potato without skin; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of potato without skin, y (g) of rapeseed oil, and z (g) of common salt. One-hundred grams of this item contains 35.2 g of fat, 54.7 g of carbohydrate, and 1.0 g of sodium content, while the same weight of potato has 0.1 g of fat, 17.6 g of carbohydrate, but no sodium content. That of rapeseed oil has no carbohydrate and sodium content, but contains 100.0 g of fat, while that of common salt contains no fat or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 310.8, y = 351.7, z = 1.0 g.

## 15104 Snacks, potato chips, fabricated

The main raw materials of this item are: dehydrated mashed potato; shortening, commercial use for frying; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of potato, y (g) of shortening, z (g) of rapeseed oil, and w (g) of common salt. One-hundred grams of this item contains 32.0 g of fat, 12.96 g of saturated fatty acid, 54.7 g of carbohydrate, and 1.0 g of sodium content, while the same weight of dehydrated mashed potato has 0.6 g of fat, 0.30 g of saturated fatty acid, 17.6 g of carbohydrate, but no sodium content. That of shortening contains no carbohydrate or sodium content, but has 99.9 g of fat, and 41.37 g of saturated fatty acid, while that of rapeseed oil has no carbohydrate and sodium content, but contains 100.0 g of fat, 10.97 g of saturated fatty acid, and that of common salt contains no fat, saturated fatty acid or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 66.1, y = 30.6 g, z = 1.1 g, w =0.8 g.

## 15109 Candy, color changing candy

The raw material mix ratios are: sugar (white sugar) at 100. Thus, the RF values are: sugar (white sugar) = 1.000.

## 15105 Candy, caramel soft candy

The main raw materials of this item are: sugar (white sugar); evaporated whole milk, sweetened; common wheat, soft flour, first grade; unsalted butter, and; common salt. First assume that 100 g of this item mainly consists of x (g) of sugar, y (g) of evaporated whole milk (sweetened), z (g) of common wheat (soft flour), w (g) of unsalted butter, and u (g) of common salt. One-hundred grams of this item contains 433 kcal, containing 4.0 g of protein, 11.7 g of fat, 77.9 g of carbohydrate, and 0.3 g of sodium content. The same weight of sugar has 384 kcal, containing no protein, fat or sodium content, but 99.3 g of carbohydrate, while that of evaporated whole milk has 332 kcal, containing 7.7 g of protein, 8.5 g of fat, 56.0 g of carbohydrate, and 0.2 g of sodium content. That of common wheat (soft flour) has 367 kcal, containing 8.3 g of protein, 1.5 g of fat, 75.8 g of carbohydrate, but no sodium content, while that of butter has 720 kcal, containing 0.5 g of protein, 83.0 g of fat, 0.2 g of carbohydrate, but no sodium content, and that of common salt has 0 kcal, containing no protein, fat, or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 45.5 g, y = 23.1 g, z = 26.1 g, w =11.3 g, u = 0.3 g.

## 15107 Candy, jelly candy

The raw material mix ratios are: starch syrup at 300, sugar (white sugar) at 100, and bar-type "Tengusa" agar at 5. Thus, the RF values are: starch syrup = 300/(300+100+5), sugar (white sugar) = 100/(300+100+5), bar-type "Tengusa" agar = 5/(300+100+5).

## 15108 Candy, jelly beans

This item constitutes of sugar coating and jelly with the weight ratio of 5:6. The raw material mix ratios are: 1) sugar coating (sugar (white sugar) at 100, gum Arabic at a negligible level); 2) jelly (starch syrup at 200, sugar (white sugar) at 100, potato starch at 90, bar-type "Tengusa" agar at 9). Thus, the RF values are: sugar (white sugar) = 5/(5+6)\*100/(200+100+90+9), starch syrup = 6/(5+6)\*200/(200+100+90+9), sugar (white sugar) = 6/(5+6)\*100/(200+100+90+9), potato starch = 6/(5+6)\*90/(200+100+90+9), bar-type "Tengusa" agar = 6/(5+6)\*9/(200+100+90+9).

## 15110 Candy, sugar candy

The raw material mix ratios are: sugar (white sugar) at 55 and starch syrup at 45. Thus, the RF values are: sugar (white sugar) = 55/(55+45) = 0.550, starch syrup = 45/(55+45) = 0.450.

## 15111 Candy, butterscotch hard candy

The raw material mix ratios are: sugar (white sugar) at 100, starch syrup at 20, butter at 10, and common salt at 0.5. Thus, the RF values are: sugar (white sugar) = 100/(100+20+10+0.5), starch syrup = 20/(100+20+10+0.5), butter = 10/(100+20+10+0.5), common salt = 0.5/(100+20+10+0.5).

## 15112 Candy, brittles

The raw material mix ratios are: roasted peanuts at 150, sugar (white sugar) at 100, starch syrup at 50, shortening at 5, common salt at 0.4, and baking soda (sodium hydrogen carbonate) at 0.2. Thus, the RF values are: roasted peanuts = 150/(150+100+50+5+0.4+0.2), sugar (white sugar) = 100/(150+100+50+5+0.4+0.2), starch syrup = 50/(150+100+50+5+0.4+0.2), shortening = 5/(150+100+50+5+0.4+0.2), common salt = 0.4/(150+100+50+5+0.4+0.2), baking soda (sodium hydrogen carbonate) = 0.2/(150+100+50+5+0.4+0.2).

## 15113 Candy, marshmallows

The raw material mix ratios are: sugar (white sugar) at 55, starch syrup at 50, water at 20, gelatin powder at 3. Thus, the RF values are: sugar (white sugar) = 55/(55+50+20+3), starch syrup = 50/(55+50+20+3), water = 20/(55+50+20+3), gelatin powder = 3/(55+50+20+3).

## 15106 Candy, compressed tablet candy

The main raw material of this item is sugar (white sugar). First assume that 100 g of this item consists of x (g) of sugar. One-hundred grams of this item has 373 kcal, while the same weight of sugar has 384 kcal. Therefore, the following equation is established:

From the above, x = 97.1 g

## 15137 Chocolate, chocolate with almonds

This item constitutes of milk chocolate and roasted almond with the weight ratio of 27:15. Thus, the RF values are: milk chocolate = 27/(27+15), roasted almond = 15/(27+15).

## 15114 Chocolate, chocolate-covered biscuit

This item constitutes of milk chocolate and biscuit with the weight ratio of 3:2. The raw material mix ratios of biscuit are: wheat (soft flour, first grade) at 69, sugar (powder sugar) at 16, shortening at 10, whole milk powder at 1.8, common salt at 0.5, and inflating agent at 0.4. Thus, the RF values are: milk chocolate = 3/(3+2), wheat (soft flour, first grade) = 2/(3+2)\*69/(69+16+10+1.8+0.5+0.4), sugar (powder sugar) = 2/(3+2)\*16/(69+16+10+1.8+0.5+0.4), shortening = 2/(3+2)\*10/(69+16+10+1.8+0.5+0.4), whole milk powder = 2/(3+2)\*1.8/(69+16+10+1.8+0.5+0.4), common salt = 2/(3+2)\*0.5/(69+16+10+1.8+0.5+0.4), inflating agent = 2/(3+2)\*0.4/(69+16+10+1.8+0.5+0.4).

## 15115 Chocolate, white chocolate

The main raw materials of this item are: cocoa butter; sugar, and; whole milk powder. First assume that 100 g of this item mainly consists of x (g) of cocoa butter, y (g) of sugar, and z (g) of whole milk powder. One-hundred grams of this item contains 7.2 g of protein, 39.5 g of fat, 50.9 g of carbohydrate, while the same weight of cocoa butter has no protein or carbohydrate, but contains 100.0 of fat according to USDA Food Central. That of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate, while that of whole milk powder contains 25.5 g of protein, 26.2 g of fat, 39.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 32.1 g, y = 40.1 g, z = 28.2 g.

## 15116 Chocolate, milk chocolate

The main raw materials of this item are: cocoa mass; cocoa butter; sugar, and; whole milk powder. First assume that 100 g of this item mainly consists of x (g) of cocoa mass, y (g) of cocoa butter, z (g) of sugar, and w (g) of whole milk powder. One-hundred grams of this item contains 6.9 g of protein, 34.1 g of fat, 55.8 g of carbohydrate, 3.9 g of dietary fiber, while the same weight of cocoa mass, based on products made by Daito Cacao, has 14.2 g of protein, 54.6 g of fat, 27.2 g of carbohydrate, 20.3 g of dietary fiber according to Tatsuya Kamiwaki, Keisuke Tsuji, Yasue Nakagawa, "Effects of Dietary Fiber from Cacao Bean on Blood Pressure and Lipid Metabolism in Spontaneously Hypertensive Rat," *Journal of the Japanese Society for Food Science and Technology*, Vol. 46., No.9, 1999, pp. 581-586. The same weight of cocoa butter has no protein, carbohydrate or dietary fiber, but contains 100.0 g of fat according to USDA Food Central, while that of sugar has no protein, fat or dietary fiber, but contains 99.3 g of carbohydrate, and that of whole milk powder contains 25.5 g of protein, 26.2 g of fat, 39.3 g of carbohydrate, but no dietary fiber. Therefore, the following equation is established:

From the above, x = 19.2 g, y = 19.3 g, z = 44.5 g, w =16.4 g.

## 15117 Candied fruits, Marron glacé (candied chestnuts)

The main raw materials of this item are Japanese chestnuts and sugar. First assume that 100 g of this item mainly consists of x (g) of Japanese chestnuts and y (g) of sugar. One-hundred grams of this item has 317 kcal, containing 77.4 g of carbohydrate. The same weight of Japanese chestnut has 164 kcal, containing 36.9 g of carbohydrate, while that of sugar has 384 kcal, containing 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 83.0 g, y = 47.1 g.

## 15118 Chewing gum, stick

The raw material mix ratios are: gum base at 25, sugar at 60, glucose at 7.5, starch syrup at 7.5, glycerin at 1.5, and aroma chemical 0.75, according to *Kashinojiten* (ISBN 978-4254430639) in Japanese. Thus, the RF values are: gum base = 25/(25+60+7.5+7.5+1.5+0.75), sugar = 60/(25+60+7.5+7.5+1.5+0.75), glucose = 7.5/(25+60+7.5+7.5+1.5+0.75), starch syrup = 7.5/(25+60+7.5+7.5+1.5+0.75), glycerin = 1.5/(25+60+7.5+7.5+1.5+0.75), aroma chemical = 0.75/(25+60+7.5+7.5+1.5+0.75).

## 15119 Chewing gum, sugar-coated

The raw material mix ratios are: gum base at 25, sugar at 60, glucose at 7.5, starch syrup at 7.5, glycerin at 1.5, and aroma chemical 0.75, according to *Kashinojiten* (ISBN 978-4254430639) in Japanese. Thus, the RF values are: gum base = 25/(25+60+7.5+7.5+1.5+0.75), sugar = 60/(25+60+7.5+7.5+1.5+0.75), glucose = 7.5/(25+60+7.5+7.5+1.5+0.75), starch syrup = 7.5/(25+60+7.5+7.5+1.5+0.75), glycerin = 1.5/(25+60+7.5+7.5+1.5+0.75), aroma chemical = 0.75/(25+60+7.5+7.5+1.5+0.75).

## 15120 Chewing gum, bubble gum

The raw material mix ratios are: gum base at 25, sugar at 50, glucose at 20, starch syrup 7.5, glycerin at 4, and aroma chemical at 0.75, according to *Kashinojiten* (ISBN 978-4254430639) in Japanese. Thus, the RF values are: gum base = 25/(25+50+20+7.5+4+0.75), sugar = 50/(25+50+20+7.5+4+0.75), glucose = 20/(25+50+20+7.5+4+0.75), starch syrup = 7.5/(25+50+20+7.5+4+0.75), glycerin = 4/(25+50+20+7.5+4+0.75), aroma chemical = 0.75/(25+50+20+7.5+4+0.75).

## 15138 Pastry cream

The raw material mix ratios are: whole milk at 62.8, granulated sugar at 16.5, hen egg yolk at 14.4, and wheat (soft flour, first grade) at 6.3. Thus, the RF values are: whole milk = 62.8/(62.8+16.5+14.4+6.3), granulated sugar = 16.5/(62.8+16.5+14.4+6.3), hen egg yolk = 14.4/(62.8+16.5+14.4+6.3), wheat (soft flour, first grade) = 6.3/(62.8+16.5+14.4+6.3).

## 15139 Sweet adzuki bean soup made from strained bean paste

The raw material mix ratios are: strained adzuki bean paste at 30, sugar (white sugar) at 21, starch syrup at 21, and water at 10. Thus, the RF values are: strained adzuki bean paste = 30/(30+21+21+10), sugar (white sugar) = 21/(30+21+21+10), starch syrup = 21/(30+21+21+10).

## 15140 Sweet adzuki bean soup made from mushed bean paste

The raw material mix ratios are: mushed adzuki bean paste (with sugar) at 30, and water at 10. Thus, the RF values are: mushed adzuki bean paste (with sugar) = 30/(30+10).

# BEVERAGES

## 16001 Fermented alcoholic beverage, “Sake”, regular

The main raw material of this item is paddy rice, non-glutinous, well-milled, raw. The alcohol weight in 100 g of this item is 12.3 g. Therefore, the weight of carbohydrate derived from non-glutinous rice in 100 g of this item is:

As 100 g of non-glutinous rice has 83.1 g of available carbohydrate, the required weight of non-glutinous rice to make 100 g of this item is:

## 16002 Fermented alcoholic beverage, “Sake”, “Junmai” (made with only rice, water and koji)

The main raw material of this item is paddy rice, non-glutinous, well-milled, raw. The alcohol weight in 100 g of this item is 12.3 g. Therefore, the weight of carbohydrate derived from non-glutinous rice in 100 g of this item is:

As 100 g of non-glutinous rice has 83.1 g of available carbohydrate, the required weight of non-glutinous rice to make 100 g of this item is:

## 16003 Fermented alcoholic beverage, “Sake”, “Honjozo” (made with rice, water, koji and distilled alcohol. The rice used must be polished to at least 70%)

The main raw material of this item is paddy rice, non-glutinous, well-milled, raw. The alcohol weight in 100 g of this item is 12.3 g. Therefore, the weight of carbohydrate derived from non-glutinous rice in 100 g of this item is:

As 100 g of non-glutinous rice has 83.1 g of available carbohydrate, the required weight of non-glutinous rice to make 100 g of this item is:

## 16004 Fermented alcoholic beverage, “Sake”, “Ginjo” (brewed with labor-intensive steps, using highly polished rice)

The main raw material of this item is paddy rice, non-glutinous, well-milled, raw. The alcohol weight in 100 g of this item is 12.5 g. Therefore, the weight of carbohydrate derived from non-glutinous rice in 100 g of this item is:

As 100 g of non-glutinous rice has 83.1 g of available carbohydrate, the required weight of non-glutinous rice to make 100 g of this item is:

## 16005 Fermented alcoholic beverage, “Sake”, “Junmai-ginjo” (made with only rice, water and koji, brewed with labor-intensive steps, using highly polished rice)

The main raw material of this item is paddy rice, non-glutinous, well-milled, raw. The alcohol weight in 100 g of this item is 12.0 g. Therefore, the weight of carbohydrate derived from non-glutinous rice in 100 g of this item is:

As 100 g of non-glutinous rice has 83.1 g of available carbohydrate, the required weight of non-glutinous rice to make 100 g of this item is:

## 16006 Fermented alcoholic beverage, beer, pale

The main raw materials of this item are malt and hops. The alcohol weight in 100 g of this item is 3.7 g. Therefore, the weight of carbohydrate derived from malt in 100 g of this item is:

As 100 g of malt has 42.5 g of carbohydrate, the weight of malt to make 100 g of beer is:

(According to Jun'ichi Kumada, "Chapter 2: Carbohydrate," *Journal of the Brewing Society of Japan*, 71.8, 1976, pp.611-612; USDA Food Data Central.)

## 16007 Fermented alcoholic beverage, beer, black

The main raw materials of this item are malt and hops. The alcohol weight in 100 g of this item is 4.2 g. Therefore, the weight of carbohydrate derived from malt in 100 g of this item is:

As 100 g of malt has 42.5 g of carbohydrate, the weight of malt to make 100 g of this item is:

(According to Jun'ichi Kumada, "Chapter 2: Carbohydrate," *Journal of the Brewing Society of Japan*, 71.8, 1976, pp.611-612; USDA Food Data Central.)

## 16008 Fermented alcoholic beverage, beer, stout

The main raw materials of this item are malt and hops. The alcohol weight in 100 g of this item is 5.9 g. Therefore, the weight of carbohydrate derived from malt in 100 g of this item is:

As 100 g of malt has 42.5 g of carbohydrate, the weight of malt to make 100 g of this item is:

(According to Jun'ichi Kumada, "Chapter 2: Carbohydrate," *Journal of the Brewing Society of Japan*, 71.8, 1976, pp.611-612; USDA Food Data Central.)

## 16009 Fermented alcoholic beverage, “Happoshu” (beer-like beverage with less than 67% malt content)

The main raw materials of this item are malt and hops. The alcohol weight in 100 g of this item is 4.2 g. Therefore, the weight of carbohydrate derived from malt in 100 g of this item is:

Therefore, the weight of carbohydrate derived from malt in 100 g of this item is:

(According to Jun'ichi Kumada, "Chapter 2: Carbohydrate," *Journal of the Brewing Society of Japan*, 71.8, 1976, pp.611-612; USDA Food Data Central.)

## 16010 Fermented alcoholic beverage, wine, white

The main raw material of this item is grape with skin. The alcohol weight in 100g of this item is 9.1 g. Therefore, the weight of carbohydrate derived from grape in 100 g of this item is:

As 100 g of grape has 17.0 g of available carbohydrate, the required grape to make 100 g of this item is:

## 16011 Fermented alcoholic beverage, wine, red

The main raw material of this item is grape with skin. The alcohol weight in 100 g of this item is 9.3 g, Therefore, the weight of carbohydrate derived from grape in 100 g of this item is:

As 100 g of grape has 17.0 g of available carbohydrate, the required grape to make 100 g of this item is:

## 16012 Fermented alcoholic beverage, wine, rose

The main raw material of this item is grape with skin. The alcohol weight in 100 g of this item is 8.5 g. lTherefore, the weight of carbohydrate derived from grape in 100 g of this item is:

As 100 g of grape has 17.0 g of available carbohydrate, the required grape to make 100 g of this item is:

## 16013 Fermented alcoholic beverage, Shaoxing wine

The main raw materials of this item are paddy rice, glutinous rice, well-milled, raw. The alcohol weight in 100 g of this item is 14.1 g. Therefore, the weight of carbohydrate derived from glutinous rice in 100 g of this item is:

As 100 g of glutinous rice has 77.6 g of available carbohydrate, the required weight of glutinous rice to make 100 g of this item is:

## 16014 Distilled alcoholic beverage, “Shochu”, distilled through a continuous still

The main raw materials of this item are molasses. The alcohol weight in 100 g of this item is 29.0 g. Therefore, the weight of carbohydrate derived from molasses in 100 g of this item is:

## 16015 Distilled alcoholic beverage, “Shochu”, distilled through a pot still

Among many types of "Shochu", we selected sweet potato shochu as it has the largest shipment volume, according to Japanese Sake and Shochu Makers Association. The main raw material of this item is sweet potato without skin. The alcohol weight in 100 g of this item is 20.5 g. Therefore, the weight of carbohydrate derived from sweet potato in 100 g of this item is:

As 100 g of sweet potato contains 30.9 g of available carbohydrate, the required weight of sweet potato to make 100 g of this item is:

## 16016 Distilled alcoholic beverage, whisky

The main raw material of this item is malt. The alcohol weight in 100 g of this item is 33.4 g. Therefore, the weight of carbohydrate derived from malt in 100 g of this item is:

As 100 g of malt contains 42.5 g of carbohydrate, the required weight of malt to make 100 g of this item is:

## 16017 Distilled alcoholic beverage, brandy

The main raw material of this item is grape with skin. The alcohol weight in 100 g of this item is 33.4 g. Therefore, the weight of carbohydrate derived from grape in 100 g of this item is:

As 100 g of grape contains 17.0 g of carbohydrate, the required weight of grape to make 100 g of this item is:

## 16018 Distilled alcoholic beverage, vodka

The main raw material of this item is malt. The alcohol weight in 100 g of this item is 33.8 g. Therefore, the weight of carbohydrate derived from malt in 100 g of this item is:

As 100 g of malt contains 42.5 g of carbohydrate, the required weight of malt to make in 100 g of this item is:

## 16019 Distilled alcoholic beverage, gin

The main raw materials of this item are molasses. The alcohol weight in 100 g of this item is 40.0 g. Therefore, the weight of carbohydrate derived from molasses in 100 g of this item is:

## 16020 Distilled alcoholic beverage, rum

The main raw materials of this item are molasses. The alcohol weight in 100 g of this item is 33.8 g. Therefore, carbohydrate derived from molasses in 100 g of rum is:

## 16021 Distilled alcoholic beverage, Maotai

The main raw material of this item is great millet. The alcohol weight in 100 g of this item is 45.3 g. Therefore, the weight of carbohydrate derived from great millet in 100 g of this item is:

As 100 g of great millet has 74.6 g of carbohydrate according to USDA Food Data Central. Therefore, the required weight of great millet to make 100 g of this item is:

## 16022 Compound alcoholic beverage, “Umeshu” (plum liquor made from Japanese apricots)

The main raw materials of 500mL of this item are: 260 g of Japanese apricots; 260 g of crystal candy sugar, and; 350mL of white liquor (alcohol 35%). One-hundred milliliters of plum liquor (made according to a recipe at the Kurashiru website) has the weight of 103.9 g. Therefore, 100 g of this item is made from 50.0 g of Japanese apricot, 50.0 g of crystal candy sugar, and 67.4mL (=64.6 g) of white liquor.

## 16023 Compound alcoholic beverage, synthetic “Sake”

The main raw materials of this item are molasses. The alcohol weight in 100 g of this item is 12.3 g. Therefore, the weight of carbohydrate derived from molasses in 100 g of this item is:

## 16024 Compound alcoholic beverage, “Shiro-zake” (white Sake-like liquor made from steamed rice, rice koji and “Shochu”)

The main raw materials of this item are: paddy rice, glutinous rice, well-milled, raw, and; "Shochu" distilled through a continuous still. One-hundred grams of this item contains 48.1 g of carbohydrate, while the same weight of glutinous rice has 77.6 g of available carbohydrate. Therefore, the required weight of glutinous rice to make 100 g of this item is:

One-hundred grams of this item contains 4.9 g of alcohol, while the same weight of "Shochu" has 29.0 g of alcohol. Therefore, the required weight of "Shochu" to make 100 g of this item is:

## 16025 Compound alcoholic beverage, “Mirin” (sweet liquor made from rice, rice koji and Shochu or distilled alcohol), regular

The main raw materials of this item are: paddy rice, glutinous rice, well-milled, raw and; "Shochu", distilled through a continuous still. One-hundred grams of this item contains 26.1 g of available carbohydrate, while the same weight of glutinous rice has 77.6 g of available carbohydrate. Therefore, the required weight of glutinous rice to make 100 g of this item is:

One-hundred grams of this item contains 9.5 g of alcohol, while the same weight of "Shochu" has 29.0 g of alcohol. Therefore, the required weight of "Shochu" to make 100 g of this item is:

## 16026 Compound alcoholic beverage, “Honnaoshi” (sweet liquor made of “Shochu” and “Mirin”)

The main raw materials of this item are: paddy rice, glutinous rice, well-milled, raw and; "Shochu", distilled through a continuous still. One-hundred grams of this item contains 14.4 g of carbohydrate, while the same weight of rice has 77.6 g of available carbohydrate. Therefore, the required weight of glutinous rice to make 100 g of this item is:

One-hundred grams of this item contains 17.3 g of alcohol, while the same weight of "Shochu" has 29.0 g of alcohol. Therefore, the required weight of "Shochu" to make 100 g of this item is:

## 16027 Compound alcoholic beverage, medicinal liqueur

The main raw material of this item is white liquor. White liquor has 35% alcohol content, while this item has 14.6% alcohol content. Therefore, the required weight of white liquor to make 100 g of this item is:

## 16028 Compound alcoholic beverage, curacao

The main raw materials of this item are orange peel and white liquor. White liquor has 35% alcohol content, while this item has 40.4% alcohol content. Therefore, the required weight of white liquor to make 100 g of this item is:

As 100 g of orange peel has 25.0 g of carbohydrate according to USDA Food Data Central, the required weight of orange peel to make 100 g of this item is:

## 16029 Compound alcoholic beverage, fortified wine, sweet type

The main raw material of this item is grape with skin. The alcohol weight in 100 g of this item is 11.1 g. Therefore, the required carbohydrate derived from grape in 100 g of this item is:

As 100 g of grape contains 17.0 g of available carbohydrate, the required weight of grape to make 100 g of this item is:

## 16030 Compound alcoholic beverage, peppermint liqueur

The main raw materials of this item are peppermint and white liquor. White liquor has 35% alcohol content, while this item has 30.2% alcohol content. Therefore, the required weight of white liquor to make 100 g of this item is:

As 100 g of peppermint contains 14.9 g of available carbohydrate, according to USDA Food Data Central, the required weight of peppermint to make 100 g of this item is:

## 16031 Compound alcoholic beverage, vermouth, sweet type

The main raw material of this item is white wine. One-hundred grams of white wine contains 9.1 g of alcohol while the same weight of this item has 12.1 g of alcohol. Therefore, the required weight of white wine to make 100 g of this item is:

## 16032 Compound alcoholic beverage, vermouth, dry type

The main raw material of this item is white wine. One-hundred grams of white wine contains 9.1 g of alcohol while the same weight of this item has 14.4 g of alcohol. Therefore, the required weight of white wine to make 100 g of this item is:

## 16034 Green tea, “Gyokuro” (high grade tea made from shade-grown leaves), infusion

This item is brewed by steeping 10 g of tea leaves in 60 mL of hot water at 60 ºC for 2.5 minutes. Therefore, the required weight of tea leaves to make 100 g of brewed tea is 10/60\*100g.

## 16037 Green tea, “Sencha” (common grade tea), infusion

This item is brewed by steeping 10 g of tea leaves in 430 mL of hot water at 90 ºC for 1 minute. Therefore, the required weight of tea leaves to make 100 g of this item is 10/430\*100g.

## 16038 Green tea, “Kamairi-cha” (pan-fried tea), infusion

This item is brewed by steeping 15 g of tea leaves in 430 mL of hot water at 90 ºC for 1 minute. Therefore, the required weight of tea leaves to make 100 g of this item is 15/430\*100g.

## 16039 Green tea, “Ban-cha” (coarse grade tea), infusion

This item is brewed by steeping 15 g of tea leaves in 650 mL of hot water at 90 ºC for 0.5 minutes. Therefore, the required weight of tea leaves to make 100 g of this item is 15/430\*100g.

## 16040 Green tea, “Hoji-cha” (roasted tea), infusion

This item is brewed by steeping 15 g of tea leaves in 650 mL of hot water at 90 ºC for 0.5 minutes. Therefore, the required weight of tea leaves to make 100 g of this item is 15/650\*100g.

## 16041 Green tea, “Genmai-cha” (mixture of tea and roasted brown rice), infusion

This item is brewed by steeping 10 g of tea leaves in 650 mL of hot water at 90 ºC for 0.5 minutes. Therefore, the required weight of tea leaves to make 100 g of this item is 10/650\*100g.

## 16042 Fermented tea, Oolong tea, infusion

This item is brewed by steeping 15 g of tea leaves in 650 mL of hot water at 90 ºC for 0.5 minutes. Therefore, the required weight of tea leaves to make 100 g of this item is 15/650\*100g.

## 16044 Fermented tea, black tea, infusion

This item is brewed by steeping 5 g of tea leaves in 360 mL of hot water for 1.5 to 4 minutes. Therefore, the required weight of tea leaves to make 100 g of this item is 5/360\*100g.

## 16045 Coffee, infusion

This item is brewed by steeping 5 g of ground coffee in 150 mL of hot water for 1.5 to 4 minutes. Therefore, the required weight of ground coffee to make 100 g of this item is 10/150\*100g.

## 16047 Coffee, ready-to-drink coffee with milk and sugar, canned

The main raw materials of this item are: instant coffee; sugar (white sugar), and; whole milk powder. First assume that 100 g of this item mainly consists of x (g) instant coffee, y (g) of sugar, and z (g) of whole milk powder. One-hundred grams of this item contains 0.7 g of protein, 0.3 g of fat, and 8.2 g of carbohydrate, while the same weight of instant coffee has 14.7 g of protein, 0.3 g of fat, and 56.5 g of carbohydrate. That of sugar has no protein or fat, but contains 99.3 g of carbohydrate, while that of whole milk powder contains 25.5 of protein, 26.2 of fat, and 39.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 2.8 g, y = 6.2 g, z = 1.1 g.

## 16049 Cocoa, chocolate milk powder

The main raw materials of this item are: pure cocoa powder; sugar (white sugar); whole milk powder, and; common salt. One-hundred grams of this item is made by 20 g of pure cocoa powder, 66.5 g of sugar, 10 g of whole milk powder, and 0.5 g of common salt. (Note that these values were calculated using approximate values, rather than using equation and component values in the Food Component Database, as the component values resulted in the negative weight.)

## 16050 “Ama-zake” (sweet beverage made from rice koji)

The main raw materials of this item are paddy rice, non-glutinous, well-milled, raw, and rice koji. First assume that 100 g of this item mainly consists of x (g) of non-glutinous rice and y (g) of rice koji. One-hundred grams of this item contains 1.7 g of protein and 18.3 g of carbohydrate. The same weight of non-glutinous rice has 6.1 g of protein and 77.6 g of carbohydrate, while that of rice koji contains 5.8 g of protein and 59.2 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 6.2 g, y = 22.8 g.

## 16051 “Kobu-cha” (kombu powder for drink)

The main raw materials of this item are: common salt; sugar (white sugar), and; dried "Enaga-oni-kombu." First assume that 100 g of this item mainly consists of x (g) of common salt, y (g) of sugar, and z (g) of "Enaga-oni-kombu." One-hundred grams of this item contains 42.0 g of carbohydrate, 2.8 g of dietary fiber, and 51.3 g of sodium content, while the same weight of common salt contains no carbohydrate or dietary fiber, but has 99.5 g of sodium content. That of sugar has no dietary fiber or sodium content, but contains 99.3 g of carbohydrate, while that of "Enaga-oni-kombu" contains 55.7 g of carbohydrate, 24.9 g of dietary fiber, and 6.1 g of sodium content. Therefore, the following equation is established:

From the above, x = 50.9 g, y = 36.0 g, z = 11.2 g.

## 16057 Sports drink

The main raw materials of this item are sugar (white sugar) and common salt. First assume that 100 g of this item mainly consists of x (g) of sugar and y (g) of common salt. One-hundred grams of this item contains 5.1 g of carbohydrate and 0.1 g of sodium content. The same weight of sugar has no sodium content, but contains 99.3 g of carbohydrate, while that of common salt contains no carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 5.1 g, y = 0.1 g.

## 16052 Carbonated beverage, fruit flavored and colored drink

The main raw material of this item is sugar (white sugar). One-hundred grams of this item has 51 kcal, while the same weight of sugar has 384 kcal. When assuming 100 g of this item contains x (g) of sugar, the following equation is established:

From the above, x = 13.3 g.

## 16053 Carbonated beverage, cola

The main raw material of this item is sugar (white sugar). One-hundred grams of this item has 46 kcal, while the same weight of sugar has 384 kcal. When assuming 100 g of this item contains x (g) of sugar, the following equation is established:

From the above, x = 12.0 g.

## 16054 Carbonated beverage, clear soda

The main raw material of this item is sugar (white sugar). One-hundred grams of this item has 41 kcal, while the same weight of sugar has 384 kcal. When assuming 100 g of this item contains x (g) of sugar, the following equation is established:

From the above, x = 10.7 g.

## 16058 Carbonated beverage, beer-flavored drink, alcohol free

The main raw materials of this item are malt and hops. One-hundred grams of this item contains 1.2 g of carbohydrate, while 415 mg of malt has 267 mg of available carbohydrate. Therefore, the required weight of malt to make 100 g of this item is:

(According to Jun'ichi Kumada, "Chapter 2: Carbohydrate," *Journal of the Brewing Society of Japan*, 71.8, 1976, pp.611-612: Shigeo Kiribuchi and Michinori Nakamura,"An Analytical Study on Starch-degrading Enzymes and Composition of Carbohydrates in the Endosperm during Germination of Barley Seeds, " *Journal of Japan Society for Bioscience, Biotechnology, and Agrochemistry*, 47.5, 1973, pp. 333-340.)

## 16055 “Mugi-cha” (roasted barley tea), infusion

This item is brewed by steeping 50 g of roasted barleys in 1500 mL of boiled hot water for 5 minutes. Therefore, the required weight of roasted barleys to make 100 g of this item is

50/1500\*100g.

# SEASONINGS AND SPICES

## 17001 Japanese Worcester sauce, common type

The raw material mix ratios are: canned tomato at 400, onion at 200, carrot at 100, garlic at 20, ginger at 40, black pepper at 10, nutmeg at 10, Japanese pepper at 10, soy sauce at 236, sugar (white sugar) at 200, grain vinegar at 100, salt at 100, and apple at 250. Thus, the RF values are:

canned tomato = 400/(400+200+100+20+40+10+10+236+200+100+100+250),

onion = 200/(400+200+100+20+40+10+10+236+200+100+100+250),

carrot = 100/(400+200+100+20+40+10+10+236+200+100+100+250),

garlic = 20/(400+200+100+20+40+10+10+236+200+100+100+250),

ginger = 40/(400+200+100+20+40+10+10+236+200+100+100+250),

black pepper = 10/(400+200+100+20+40+10+10+236+200+100+100+250),

nutmeg = 10/(400+200+100+20+40+10+10+236+200+100+100+250),

Japanese pepper = 10/(400+200+100+20+40+10+10+236+200+100+100+250),

soy sauce = 236/(400+200+100+20+40+10+10+236+200+100+100+250),

sugar (white sugar) = 200/(400+200+100+20+40+10+10+236+200+100+100+250),

grain vinegar = 100/(400+200+100+20+40+10+10+236+200+100+100+250),

salt = 100/(400+200+100+20+40+10+10+236+200+100+100+250),

apple = 250/(400+200+100+20+40+10+10+236+200+100+100+250).

## 17002 Japanese Worcester sauce, semi-thick type

The raw material mix ratios are: canned tomato at 400, carrot at 135, onion at 140, celery at 100, apple without skin at 500, garlic at 10, ginger at 10, stock powder of "Katsuo-bushi" (boiled, smoke-dried and fermented skipjack tuna fillet) at 5, dark soy sauce at 118, sugar at 150, common salt at 50, grain vinegar at 100, cinnamon at 2, nutmeg at 2, ground red hot pepper at 2, clove at 2, allspice at 5, sage at 2, and thyme at 1. Thus, the RF values are:

canned tomato = 400/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

carrot = 135/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

onion = 140/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

celery = 100/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

apple without skin = 500/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

garlic = 10/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

ginger = 10/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

stock powder of "Katsuo-bushi" = 5/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

dark soy sauce = 118/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1), sugar = 150/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

common salt = 50/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

grain vinegar = 100/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

cinnamon = 2/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

nutmeg = 2/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

ground red hot pepper = 2/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

clove = 2/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

allspice = 5/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

sage = 2/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1),

thyme = 1/(400+135+140+100+500+10+10+5+118+150+50+100+2+2+2+5+2+1).

## 17003 Japanese Worcester sauce, thick type

The raw material mix ratios are: semi-thick Japanese Worcester sauce at 36, soy sauce based barbecue sauce at 15, tomato ketchup at 15, and sugar (white sugar) at 0.75. Thus, the RF values are: semi-thick Japanese Worcester sauce = 36/(36+15+15+0.75), soy sauce based barbecue sauce = 15/(36+15+15+0.75), tomato ketchup = 15/(36+15+15+0.75), sugar (white sugar) = 0.75/(36+15+15+0.75).

## 17085 Japanese Worcester sauce, sweet thick type for “Okonomiyaki” (Japanese-style savory pancake with various ingredients)

The raw material mix ratios are: tomato ketchup at 35, semi-thick Japanese Worcester sauce at 21, Worcester sauce at 19, sugar (white sugar) at 11.5, apple vinegar at 6, oyster sauce oil at 5, dark soy sauce at 2, and stock powder of "Katsuo-bushi" (boiled, smoke-dried and fermented skipjack tuna fillet) at 0.5. Thus, the RF values are: tomato ketchup = 35/(35+21+19+11.5+6+5+2+0.5), semi-thick Japanese Worcester sauce = 21/(35+21+19+11.5+6+5+2+0.5), Worcester sauce = 19/(35+21+19+11.5+6+5+2+0.5), sugar (white sugar) = 11.5/(35+21+19+11.5+6+5+2+0.5), apple vinegar = 6/(35+21+19+11.5+6+5+2+0.5), oyster sauce oil = 5/(35+21+19+11.5+6+5+2+0.5), dark soy sauce = 2/(35+21+19+11.5+6+5+2+0.5), stock powder of "Katsuo-bushi" = 0.5/(35+21+19+11.5+6+5+2+0.5).

## 17004 Hot seasoning, Doubanjiang

The main raw materials of this item are: broad beans (immature beans); common salt, and; ground red hot pepper. One-hundred grams of this item constitutes of 42.5 g of broad beans, 18 g of common salt, and 2 g of red hot pepper. (Note that these values were determined using approximate values for calculation of carbohydrate and sodium content, rather than using equation and component values in the Food Component Database, as the component values resulted in the negative weight.)

## 17005 Hot seasoning, hot pepper sauce

The main raw materials of this item are: grain vinegar; ground red hot pepper, and; common salt. First assume that 100 g of this item mainly consists of x (g) of vinegar, y (g) of red hot pepper, and z (g) of common salt. One-hundred grams of this item contains 0.7 g of protein, 5.2 g of carbohydrate, and 1.6 g of sodium content. The same weight of grain vinegar has 0.1 g of protein, 2.4 g of carbohydrate, but no sodium content. That of red hot pepper contains 16.2 g of protein, 66.8 g of carbohydrate, but no sodium content, while that of   
common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 116.4 g, y = 3.6 g, z = 1.6 g.

## 17006 Hot seasoning, Chinese chili oil

The main raw materials of this item are sesame oil and ground red hot pepper. First assume that 100 g of this item mainly consists of x (g) of sesame oil and y (g) of red hot pepper. One-hundred grams of this item contains 99.8 g of carbohydrate, and 59μ g of retinol activity equivalent. The same weight of sesame oil has 100.0 g of fat but no retinol activity equivalent, while that of red hot pepper contains no fat, but has 720μ g of retinol activity equivalent. Therefore, the following equation is established:

From the above, x = 99.8 g, y = 8.2 g.

## 17007 Soy sauce, “Koikuchi-shoyu” (common soy sauce)

The weight of protein in soy sauce changes little in the manufacturing process, and the weight ratio of soybeans and wheat (whole grain) is 1:1. First assume that 100 g of this item mainly consists of x (g) of soybeans and of wheat (whole grain). One-hundred grams of this item contains 7.7 g of protein. The same weight of soybeans contains 33.8 g of protein, while that of wheat (whole grain) has 10.6 g of protein. Therefore, the following equation is established:

From the above, x = 17.34 g. From the sodium content in 100 g of this item, the required weight of common salt to make 100 g of this item is 14.5 g.

## 17008 Soy sauce, “Usukuchi-shoyu” (light color soy sauce)

The weight of protein in soy sauce changes little in the manufacturing process, and the weight ratio of soybeans and wheat (whole grain) is 1:1. First assume that 100 g of this item mainly consists of x (g) of soybeans and of wheat (whole grain). One-hundred grams of this item contains 5.7 g of protein. The same weight of soybeans contains 33.8 g of protein, while that of wheat (whole grain) has 10.6 g of protein. Therefore, the following equation is established:

From the above, x = 12.84 g. From the sodium content in 100 g of this item, the required weight of common salt to make 100 g of this item is 16.0 g.

## 17086 Soy sauce, salt reduced

The weight of protein in soy sauce changes little in the manufacturing process, and the weight ratio of soybeans and wheat (whole grain) is 1:1. First assume that 100 g of this item mainly consists of x (g) of soybeans and of wheat (whole grain). One-hundred grams of this item contains 8.1 g of protein. The same weight of soybeans contains 33.8 g of protein, while that of wheat (whole grain) has 10.6 g of protein. Therefore, the following equation is established:

From the above, x = 18.2 g. From the sodium content in 100 g of this item, the required weight of common salt to make 100 g of this item is 8.3 g.

## 17139 Soy sauce, “Teien-Usukuchi-shoyu” (less sodium light color soy sauce)

The weight of protein in soy sauce changes little in the manufacturing process, and the weight ratio of soybeans and wheat (whole grain) is 1:1. First assume that 100 g of this item mainly consists of x (g) of soybeans and of wheat (whole grain). One-hundred grams of this item contains 6.4 g of protein. The same weight of soybeans contains 33.8 g of protein, while that of wheat (whole grain) has 10.6 g of protein. Therefore, the following equation is established:

From the above, x = 14.4 g. From the sodium content in 100 g of this item, the required weight of common salt to make 100 g of this item is 12.8 g.

## 17009 Soy sauce, “Tamari-shoyu” (full-bodied soy sauce)

The weight of protein in soy sauce changes little in the manufacturing process, and the weight ratio of soybeans and wheat (whole grain) is 9:1. First assume that 100 g of this item mainly consists of x (g) of wheat (whole grain). One-hundred grams of this item contains 11.8 g of protein. The same weight of soybeans contains 33.8 g of protein, while that of wheat (whole grain) has 10.6 g of protein. Therefore, the following equation is established:

From the above, x = 3.7 g. From the sodium content in 100 g of this item, the required weight of common salt to make 100 g of this item is 13.0 g.

## 17010 Soy sauce, “Saishikomi-shoyu” (refermented soy sauce)

The weight of protein in soy sauce changes little in the manufacturing process, and the weight ratio of soybeans and wheat (whole grain) is 1:1. First assume that 100 g of this item mainly consists of x (g) of soybeans and of wheat (whole grain). One-hundred grams of this item contains 9.6 g of protein. The same weight of soybeans contains 33.8 g of protein, while that of wheat (whole grain) has 10.6 g of protein. Therefore, the following equation is established:

From the above, x = 21.6 g. From the sodium content in 100 g of this item, the required weight of common salt to make 100 g of this item is 12.4 g.

## 17011 Soy sauce, “Shiro-shoyu” (extra light color soy sauce)

The weight of protein in soy sauce changes little in the manufacturing process, and the weight ratio of soybeans and wheat (whole grain) is 1:9. First assume that 100 g of this item mainly consists of x (g) of soybeans. One-hundred grams of this item contains 2.5 g of protein. The same weight of soybeans contains 33.8 g of protein, while that of wheat (whole grain) has 10.6 g of protein. Therefore, the following equation is established:

From the above, x = 1.9 g. From the sodium content in 100 g of this item, the required weight of common salt to make 100 g of this item is 14.2 g.

## 17087 Soy sauce, pre-seasoned with soup stock

The raw material mix ratios are: dark soy sauce at 10, stock of "Katsuo-bushi" and dried kombu at 10. Thus, the RF values are: dark soy sauce = 10/(10+10)=0.5, stock of "Katsuo-bushi"= 10/(10+10),= 0.5.

## 17088 Soy sauce, soy glazed

The raw material mix ratios are: regular "mirin" at 126, dark soy sauce at 45. Thus, the RF values are: regular "mirin" = 126/(126+45),= 0.737 dark soy sauce = 45/(126+45) = 0.263.

## 17090 Vinegar, black rice vinegar

The main raw material of this item is paddy rice (brown rice). The acetic acid in 100 g of this item is 4.0 g. Therefore, the weight of carbohydrate derived from brown rice in 100 g of this item is:

As 100 g of brown rice has 78.4 g of available carbohydrate, the required weight of brown rice to make 100 g of this item is:

## 17015 Vinegar, grain vinegar

The main raw material of this item is paddy rice, non-glutinous, well-milled, raw. The acetic acid in 100 g of this item is 4.4 g. Therefore, the weight of carbohydrate derived from non-glutinous rice in 100 g of this item is:

As 100 g of non-glutinous rice has 83.1 g of available carbohydrate, the required weight of non-glutinous rice to make 100 g of this item is:

## 17016 Vinegar, rice vinegar

The main raw material of this item is paddy rice, non-glutinous, well-milled, raw. The acetic acid in 100 g of this item is 4.4 g. Therefore, the weight of carbohydrate derived from non-glutinous rice in 100 g of this item is:

As 100 g of non-glutinous rice has 83.1 g of available carbohydrate, the required weight of non-glutinous rice to make 100 g of this item is:

## 17091 Vinegar, fruit vinegar, Balsamic vinegar

The main raw material of this item is grape with skin. The acetic acid in 100 g of this item is 5.6 g. Therefore, the weight of carbohydrate derived from grape in 100 g of this item is:

As 100 g of grape with skin has 17.0 g of available carbohydrate, the required weight of grape to make 100 g of this item is:

## 17017 Vinegar, fruit vinegar, wine vinegar

The main raw material of this item is grape with skin. The acetic acid in 100 g of this item is 4.8 g. Therefore, the weight of carbohydrate derived from grape in 100 g of this item is:

As 100 g of grape with skin has 17.0 g of available carbohydrate, the required weight of grape to make 100 g of this item is:

## 17018 Vinegar, fruit vinegar, cider vinegar

The main raw material of this item is apple with skin. The acetic acid in 100 g of this item is 4.7 g. Therefore, the weight of carbohydrate derived from apple in 100 g of this item is:

As 100 g of apple with skin has 12.9 g of available carbohydrate, the required weight of apple to make 100 g of this item is:

## 17130 Soup stock, “Ago-bushi dashi” (stock of dried Japanese flying fish)

The required weight of dried Japanese flying fish to make 100 g of this item is: 1×1/0.95 = 1.1 g, while the same weight of baked and dried Japanese flying fish is: 1×1/0.95 = 1.1 g.

## 17019 Soup stock, “Katsuo-bushi dashi” (stock of “Katsuo-bushi”)

The required weight of" Katsuo-bushi" (smoke-dried and fermented skipjack tuna fillet) to make 100 g of this item is: 3×1/0.86 = 3.5 g.

## 17131 Soup stock, “Katsuo-bushi dashi” (stock of “Hon-kare-bushi”)

The required weight of "Katsuo-bushi" (smoke-dried and fermented skipjack tuna fillet) to make 100 g of this item is: 3×1/0.86 = 3.5 g.

## 17020 Soup stock, “kombu dashi” (stock of dried kombu)

The required weight of dried kombu to make 100 g of this item is: 3×1/0.88 = 3.4 g.

## 17132 Soup stock, “Kombu-ni-dashi” (stock of dried kombu taken with boiling water)

The required weight of dried kombu to make 100 g of this item is: 3×1/0.35 = 8.6 g.

## 17021 Soup stock, “Katsuo-bushi and kombu dashi” (stock of “Katsuo-bushi” and dried kombu)

The required weights of "Katsuo-bushi" (smoke-dried and fermented skipjack tuna fillet) and dried kombu to make 100 g of this item is 2 g and 1 g, respectively.

## 17148 Soup stock, “Katsuo-bushi and kombu dashi” (stock of “Hon-kare-bushi” and dried kombu)

The required weights of "Katsuo-bushi" (smoke-dried and fermented skipjack tuna fillet) and dried kombu to make 100 g of this item is 2 g and 3 g, respectively.

## 17022 Soup stock, “Shiitake dashi” (stock of dried Shiitake mushroom)

The required weight of dried "Shiitake" mushroom to make 100 g of this item is: 100/16×1/0.7 = = 8.9 g.

## 17023 Soup stock, “Niboshi dashi” (stock of small dried sardine)

The required weight of dried "Niboshi" (boiled and dried Japanese anchovy) to make 100 g of this item is: 1/0.9 = 3.3 g.

## 17024 Soup stock, chicken bone stock

The required weight of chicken bones to make 100 g of this item is: 100/3×1/0.66 = = 5.1 g.

## 17025 Soup stock, chicken, pork and vegetable stock

The required weight of chicken with bone to make 100 g of this item is 10×1/0.66 = 15.2 g, while that of inside ham of pork is 10×1/0.66 = 15.2 g, and that of Welsh onion is 1.5×1/0.66 = 2.3 g. That of ginger is 0.3×1/0.66 = 0.5 g, and that of "sake" is 1×1/0.66 = 1.5 g.

## 17026 Soup stock, beef and vegetable stock

The required weight of inside round of beef to make 100 g of this item is 17.5×1/0.5 = 35 g, while that of carrot is 10×1/0.5 = 20 g. That of onion is 10×1/0.5 = 20 g, while that of celery is 10×1/0.5 = 20 g, and that of salt is 0.25×1/0.5 = 0.5 g.

## 17027 Stock cubes, meat and vegetable

The main raw materials of this item are: common salt; sugar (white sugar), oil, and; beef and vegetable stock. First assume that 100 g of this item mainly consists of x (g) of common salt, y (g) of white sugar, z (g) of oil, and w (g) of beef and vegetable stock One-hundred grams of this item contains 7.0 g of protein, 4.3 g of fat, 42.1 g of carbohydrate, and 43.2 g of sodium content, while the same weight of common salt contains no protein, fat or carbohydrate, but has 99.5 g of sodium content. That of sugar has no protein, fat or sodium content, but contains 99.3 g of carbohydrate, while that of oil has no protein, carbohydrate or sodium content, but has 100.0 g of fat, and that of beef and vegetable stock contains 1.3 g of protein, 0.3 g of carbohydrate, and 0.5 g of sodium content but no fat. Therefore, the following equation is established:

From the above, x = 40.7 g, y = 40.8 g, z = 4.3 g, w =538.5 g.

## 17092 Stock powder, for “Oden” (Japanese winter hodgepodge)

The raw material mix ratios are: common salt at 4, dark soy sauce at 3, stock powder of "Katsuo-bushi" (boiled, smoke-dried and fermented skipjack tuna fillet) at 3, and sugar (white sugar) at 2. Thus, the RF values are: common salt = 4/(4+3+3+2), dark soy sauce = 3/(4+3+3+2), stock powder of "Katsuo-bushi" = 3/(4+3+3+2), sugar (white sugar) = 2/(4+3+3+2).

## 17093 Stock powder, chicken, pork and vegetable

The raw material mix ratios are: common salt at 4, dark soy sauce at 3, stock powder of "Katsuo-bushi" (boiled, smoke-dried and fermented skipjack tuna fillet) at 3, sugar (white sugar) at 2. Thus, the RF values are: common salt = 4/(4+3+3+2), dark soy sauce = 3/(4+3+3+2), stock powder of "Katsuo-bushi" = 3/(4+3+3+2), sugar (white sugar) = 2/(4+3+3+2).

## 17028 Stock powder, “Katsuo-bushi”

The main raw materials of this item are: common salt; sugar (white sugar), and; "Katsuo-bushi" stock. First assume that 100 g of this item mainly consists of x (g) of common salt, y (g) of white sugar, and z (g) of "Katsuo-bushi" stock. One-hundred grams of this item contains 24.2 g of protein, 31.1 g of carbohydrate, and 40.6 g of sodium content, while the same weight of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. That of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate, while that of "Katsuo-bushi" stock has 0.4 g of protein and 0.1 g sodium content, but no carbohydrate. Therefore, the following equation is established:

From the above, x = 34.7 g, y = 31.3 g, z = 6050.0 g.

## 17140 Nabe stock, non-concentrated (soy sauce base)

The raw material mix ratios are: dark soy sauce at 44, "Katsuo-bushi" stock at 42, sugar (white sugar) at 9, and regular "mirin" at 5. Thus, the RF values are: dark soy sauce = 44/(44+42+9+5) = 0.440, "Katsuo-bushi" stock = 42/(44+42+9+5) = 0.420, sugar (white sugar) = 9/(44+42+9+5) = 0.090, regular "mirin" = 5/(44+42+9+5) = 0.050.

## 17029 Japanese noodle soup, non-concentrated (soy sauce base)

The main raw materials of this item are: dark soy sauce; regular "mirin", and "Katsuo-bushi" stock. First assume that 100 g of this item mainly consists of x (g) of dark soy sauce, y (g) of regular "mirin", and z (g) of "Katsuo-bushi" stock. One-hundred grams of this item contains 2.2 g of protein, 8.7 g of carbohydrate, and 3.3 g of sodium content, while the same weight of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content. That of regular "mirin" contains 0.3 g of protein, 43.2 g of carbohydrate but no sodium content, while that of "Katsuo-bushi" stock has 0.4 g of protein and 0.1 g sodium content but no carbohydrate. Therefore, the following equation is established:

From the above, x = 22.0 g, y = 16.1 g, z = 115.1 g.

## 17141 Japanese noodle soup, double-concentrated (soy sauce base)

The weight of this item is determined by doubling the weight of Japanese noodle soup, non-concentrated (soy sauce base).

## 17030 Japanese noodle soup, triple-concentrated (soy sauce base)

The weight of this item is determined by tripling the weight of Japanese noodle soup, non-concentrated (soy sauce base).

## 17142 Ramen soup, concentrated (soy sauce base)

The raw material mix ratios are: dark soy sauce at 9.5, common salt at 3.5, lard at 4, stock powder (chicken, pork and vegetables) at 2, stock cube at 0.4, sugar (white sugar) at 1, garlic (garlic powder, common salt added) at 0.5, onion powder at 0.5, and water at 13.6. Thus, the RF values are:

dark soy sauce = 9.5/(9.5+3.5+4+2+0.4+1+0.5+0.5+13.6),

common salt = 3.5/(9.5+3.5+4+2+0.4+1+0.5+0.5+13.6),

lard = 4/(9.5+3.5+4+2+0.4+1+0.5+0.5+13.6),

stock powder (chicken, pork and vegetables) = 2/(9.5+3.5+4+2+0.4+1+0.5+0.5+13.6),

stock cube = 0.4/(9.5+3.5+4+2+0.4+1+0.5+0.5+13.6),

sugar (white sugar) = 1/(9.5+3.5+4+2+0.4+1+0.5+0.5+13.6),

garlic (garlic powder, common salt added) = 0.5/(9.5+3.5+4+2+0.4+1+0.5+0.5+13.6),

onion powder = 0.5/(9.5+3.5+4+2+0.4+1+0.5+0.5+13.6).

## 17143 Ramen soup, concentrated (miso base)

The raw material mix ratios are: rice-koji miso (red rice-koji miso) at 15, dark soy sauce at 3, common salt at 3, lard at 3.5, sugar (white sugar) at 2, stock powder (chicken, pork and vegetables) at 2, stock cube at 0.8, garlic paste at 0.4, ginger paste at 0.2, red hot pepper powder at 0.1, and water at 10. Thus, the RF values are:

rice-koji miso (red rice-koji miso) = 15/(15+3+3+3.5+2+2+0.8+0.4+0.2+0.1+10),

dark soy sauce = 3/(15+3+3+3.5+2+2+0.8+0.4+0.2+0.1+10),

common salt = 3/(15+3+3+3.5+2+2+0.8+0.4+0.2+0.1+10),

lard = 3.5/(15+3+3+3.5+2+2+0.8+0.4+0.2+0.1+10),

sugar (white sugar) = 2/(15+3+3+3.5+2+2+0.8+0.4+0.2+0.1+10),

stock powder (chicken, pork and vegetables) = 2/(15+3+3+3.5+2+2+0.8+0.4+0.2+0.1+10),

stock cube = 0.8/(15+3+3+3.5+2+2+0.8+0.4+0.2+0.1+10),

garlic paste = 0.4/(15+3+3+3.5+2+2+0.8+0.4+0.2+0.1+10),

ginger paste = 0.2/(15+3+3+3.5+2+2+0.8+0.4+0.2+0.1+10),

red hot pepper powder = 0.1/(15+3+3+3.5+2+2+0.8+0.4+0.2+0.1+10).

## 17094 Seasoning sauce, sweet vinegar

The raw material mix ratios are: grain vinegar at 100, sugar (white sugar) at 36, and salt at 1.6. Thus, the RF values are: grain vinegar = 100/(100+36+1.6), sugar (white sugar) = 36/(100+36+1.6), salt = 1.6/(100+36+1.6).

## 17095 Seasoning sauce, sauce for “Ebichiri” (shrimp with chili sauce)

The raw material mix ratios are: chicken, pork and vegetable stock at 200, tomato ketchup at 30, Doubanjiang at 15, "sake" at 15, sugar (white sugar) at 9, ginger paste at 8, water at 5, garlic at 4, potato starch at 3, oil at 3, salt at 0.5, and pepper at 0.3. Thus, the RF values are:

chicken, pork and vegetable stock = 200/(200+30+15+15+9+8+5+4+3+3+0.5+0.3),

tomato ketchup = 30/(200+30+15+15+9+8+5+4+3+3+0.5+0.3),

Doubanjiang = 15/(200+30+15+15+9+8+5+4+3+3+0.5+0.3),

"sake" 15/(200+30+15+15+9+8+5+4+3+3+0.5+0.3),

sugar (white sugar) = 9/(200+30+15+15+9+8+5+4+3+3+0.5+0.3),

ginger paste = 8/(200+30+15+15+9+8+5+4+3+3+0.5+0.3),

garlic = 4/(200+30+15+15+9+8+5+4+3+3+0.5+0.3),

potato starch = 3/(200+30+15+15+9+8+5+4+3+3+0.5+0.3),

oil = 3/(200+30+15+15+9+8+5+4+3+3+0.5+0.3),

salt = 0.5/(200+30+15+15+9+8+5+4+3+3+0.5+0.3),

pepper = 0.3/(200+30+15+15+9+8+5+4+3+3+0.5+0.3).

## 17031 Seasoning sauce, oyster sauce

The main raw materials of this item are: cultured oyster; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of cultured oyster, y (g) of white sugar, and z (g) of common salt. One-hundred grams of this item contains 7.7 g of protein, 18.3 g of carbohydrate, and 11.4 g of sodium content, while the same weight of oyster has 6.9 g of protein, 4.9 g of carbohydrate, and 1.2 g of sodium content. That of sugar has no protein or sodium content, but contains 99.3 g of carbohydrate, while that of common salt contains no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 11.6 g, y = 12.9 g, z = 10.1 g.

## 17096 Seasoning sauce, “Kimizu” (seasoning containing vinegar and egg yolk)

The raw material mix ratios are: grain vinegar at 18, hen egg yolk at 18, sugar (white sugar) at 9, and salt at 2.7. Thus, the RF values are: grain vinegar = 18/(18+18+9+2.7), hen egg yolk = 18/(18+18+9+2.7), sugar (white sugar) = 9/(18+18+9+2.7), salt = 2.7/(18+18+9+2.7).

## 17097 Seasoning sauce, “Gomasu” (vinegar mixture containing sesame, soy sauce and sugar)

The raw material mix ratios are: grain vinegar at 30, sugar (white sugar) at 15, sesame seed at 10, dark soy sauce at 8, and regular "mirin" at 8. Thus, the RF values are: grain vinegar = 30/(30+15+10+8+8), sugar (white sugar) = 15/(30+15+10+8+8), sesame seed = 10/(30+15+10+8+8), dark soy sauce = 8/(30+15+10+8+8), regular "mirin" = 8/(30+15+10+8+8).

## 17098 Seasoning sauce, sesame sauce

The raw material mix ratios are: dark soy sauce at 4, sesame seed paste at 3.5, sesame seed at 2, sugar (white sugar) at 3, common salt at 0.1, apple vinegar at 3, grain vinegar at 1, regular "mirin" at 3, and stock powder of "Katsuo-bushi" (boiled, smoke-dried and fermented skipjack tuna fillet) at 0.4. Thus, the RF values are:

dark soy sauce = 4/(4+3.5+2+3+0.1+3+1+3+0.4),

sesame seed paste = 3.5/(4+3.5+2+3+0.1+3+1+3+0.4),

sesame seed = 2/(4+3.5+2+3+0.1+3+1+3+0.4),

sugar (white sugar) = 3/(4+3.5+2+3+0.1+3+1+3+0.4),

common salt = 0.1/(4+3.5+2+3+0.1+3+1+3+0.4),

apple vinegar = 3/(4+3.5+2+3+0.1+3+1+3+0.4),

grain vinegar = 1/(4+3.5+2+3+0.1+3+1+3+0.4),

regular "mirin" = 3/(4+3.5+2+3+0.1+3+1+3+0.4),

stock powder of "Katsuo-bushi" = 0.4/(4+3.5+2+3+0.1+3+1+3+0.4).

## 17099 Seasoning sauce, “Sanbaizu” (vinegar mixture containing sugar, soy sauce, and stock)

The raw material mix ratios are: rice vinegar at 100, sugar (white sugar) at 18, light color soy sauce at 18, stock of "Katsuo-bushi" and dried kombu at 15. Thus, the RF values are: rice vinegar = 100/(100+18+18+15), sugar (white sugar) = 18/(100+18+18+15), light color soy sauce = 18/(100+18+18+15), stock of "Katsuo-bushi" and dried kombu = 15/(100+18+18+15).

## 17100 Seasoning sauce “Nihaizu” (vinegar mixture containing soy sauce)

The raw material mix ratios are: grain vinegar at 10, dark soy sauce at 8. Thus, the RF values are: grain vinegar = 10/(10+8), dark soy sauce = 8/(10+8).

## 17101 Seasoning sauce, sweetened vinegar for “Inarizushi” (fried tofu pouch filled with sushi rice)

The raw material mix ratios are: rice vinegar at 15, sugar (white sugar) at 7, and common salt at 1.5. Thus, the RF values are: rice vinegar = 15/(15+7+1.5), sugar (white sugar) = 7/(15+7+1.5), common salt = 1.5/(15+7+1.5).

## 17102 Seasoning sauce, sweetened vinegar for “Nigirizushi” (hand-pressed sushi)

The raw material mix ratios are: rice vinegar at 10, sugar (white sugar) at 1, and common salt at 1.2. Thus, the RF values are: rice vinegar = 10/(10+1+1.2), sugar (white sugar) = 1/(10+1+1.2), common salt = 1.2/(10+1+1.2).

## 17103 Seasoning sauce, sweetened vinegar for “Makizushi” (rolled sushi) and “Hakozushi” (Pressed sushi)

The raw material mix ratios are: rice vinegar at 12, sugar (white sugar) at 3, and common salt at 1.4. Thus, the RF values are: rice vinegar = 12/(12+3+1.4), sugar (white sugar) = 3/(12+3+1.4), common salt = 1.4/(12+3+1.4).

## 17104 Seasoning sauce, Chinese style vinegar

The raw material mix ratios are: dark soy sauce at 45, rice vinegar at 45, sugar (white sugar) at 22.5, sesame oil at 4, and ginger at 2. Thus, the RF values are: dark soy sauce = 45/(45+45+22.5+4+2), rice vinegar = 45/(45+45+22.5+4+2), sugar (white sugar) = 22.5/(45+45+22.5+4+2), sesame oil = 4/(45+45+22.5+4+2), ginger = 2/(45+45+22.5+4+2).

## 17105 Seasoning sauce, demi-glace sauce

The raw material mix ratios are: red wine at 60, tomato ketchup at 30, semi-thick Japanese Worcester sauce at 36, dark soy sauce at 36, stock cube at 5, sugar (white sugar) at 1.5, and salted butter at 10. Thus, the RF values are:

red wine = 60/(60+30+36+36+5+1.5+10), tomato ketchup30/(60+30+36+36+5+1.5+10),

semi-thick Japanese Worcester sauce = 36/(60+30+36+36+5+1.5+10),

dark soy sauce = 36/(60+30+36+36+5+1.5+10),

stock cube = 5/(60+30+36+36+5+1.5+10),

sugar (white sugar) = 1.5/(60+30+36+36+5+1.5+10),

salted butter = 10/(60+30+36+36+5+1.5+10).

## 17106 Seasoning sauce, Tian Mian Jiang (sweet soybeans paste)

The main raw materials of this item are: soybean-koji miso; sugar (white sugar); rapeseed oil, and; dark soy sauce. First assume that 100 g of this item mainly consists of x (g) of soybean-koji miso, y (g) of white sugar, z (g) of rapeseed oil, and w (g) of dark soy sauce. One-hundred grams of this item contains 8.5 g of protein, 7.7 g of fat, 38.1 g of carbohydrate, and 7.3 g of sodium content, while the same weight of soybean-koji miso has 17.2 g of protein, 10.5 g of fat, 14.5 g of carbohydrate, and 10.9 g of sodium content. That of sugar has no protein, fat or sodium content, but contains 99.3 g of carbohydrate, while that of rapeseed oil has no protein, carbohydrate or sodium content, but contains 100.0 g of fat, and that of soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content, but no fat. Therefore, the following equation is established:

From the above, x = 40.5, y = 30.9, z =3.4, w = 19.9 g.

## 17107 Seasoning sauce, Nam pla (fish sauce)

The main raw materials of this item are Japanese anchovy and common salt. First assume that 100 g of this item mainly consists of x (g) of Japanese anchovy and y (g) of common salt. One-hundred grams of this item contains 9.1 g of protein and 22.9 g of sodium content. The same weight of Japanese anchovy has 18.2 g of protein and 0.2 g of sodium content, while that of common salt contains no protein but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 50.0 g, y = 22.9 g.

## 17108 Seasoning sauce, for “Hiyashi-chuka” (ramen noodles in a cold sweet soy sauce broth topped with meat and vegetables)

The main raw materials of this item are: rice vinegar； sugar (white sugar); dark soy sauce; sesame oil, and; common salt, based on "Hiyashi-chuka-no-Tsuyu-Shoyu" (soy sauce-based seasoning source for ramen noodles in a cold sweet soy sauce broth) made by Mizkan. First assume that 100 g of this item mainly consists of x (g) of rice vinegar, y (g) of white sugar, z (g) of dark soy sauce, w (g) of sesame oil, and u (g) of common salt. One-hundred grams of this item has 114 kcal, containing 2.1 g of protein, 1.2 g of fat, 23.1 g of carbohydrate, and 5.8 g of sodium content, while the same weight of rice vinegar has 46 kcal, containing no fat or sodium content, but 0.2 g of protein and 7.4 g of carbohydrate. That of sugar has 384 kcal, containing no protein, fat or sodium content, but having 99.3 g of carbohydrate, while that of dark soy sauce has 77 kcal, containing 7.7 g of protein, 7.9 g of carbohydrate, and 14.5 g of sodium content but no fat, and that of common salt has 0 kcal, containing no protein, fat or carbohydrate, but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 15.8 g, y = 19.9 g, z = 26.9 g, w =1.2 g, y=1.9 g.

## 17109 Seasoning sauce, white sauce

The main raw materials of this item are: unsalted butter; common wheat, soft flour, first grade; whole milk, and; common salt. First assume that 100 g of this item mainly consists of x (g) of unsalted butter, y (g) of common wheat (soft flour), z (g) of whole milk, and w (g) of common salt. One-hundred grams of this item contains 1.8 g of protein, 6.2 g of fat, 9.2 g of carbohydrate, and 1.0 g of sodium content, while the same weight of unsalted butter has 0.5 g of protein, 83.0 g of fat, 0.2 g of carbohydrate, but no sodium content. That of common wheat (soft flour) contains 8.3 g of protein, 1.5 g of fat, 75.8 g of carbohydrate, but no sodium content, while that of whole milk has 3.3 g of protein, 3.8 g of fat, 4.8 g of carbohydrate, and 0.1 g of sodium content, and that of common salt contains no protein, fat or carbohydrate, but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 6.0 g, y = 10.4 g, z = 27.5 g, w =1.0 g.

## 17110 Seasoning sauce, ponzu vinegar with soy sauce

The raw material mix ratios are: "Yuzu" citrus juice at 6, and dark soy sauce at 4. Thus, the RF values are: "Yuzu" citrus juice = 6/(6+4) = 0.600, dark soy sauce = 4/(6+4) = 0.400.

## 17137 Seasoning sauce, ponzu vinegar with soy sauce (commercially available)

The main raw materials of this item are: dark soy sauce; citrus juice, and; common salt. First assume that 100 g of this item mainly consists of x (g) of dark soy sauce, y (g) of citrus juice, and z (g) of common salt. One-hundred grams of this item has 3.7 g of protein, 10.8 g of carbohydrate, and 7.8 g of sodium content, while the same weight of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate and 14.5 g of sodium content. That of citrus juice contains 0.5 g of protein, 7.0 g of carbohydrate but no sodium content, while that of common salt has no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 41.0 g, y = 108.0 g, z = 1.9 g.

## 17032 Seasoning sauce, Mapo tofu sauce

The raw material mix ratios are: pork, ground meet at 30, common salt at 1.4, potato starch at 2, sugar (white sugar) at 1, red rice-koji miso at 3, regular "sake" at 3, dark soy sauce at 10, stock powder of "Katsuo-bushi" (boiled, smoke-dried and fermented skipjack tuna fillet) at 0.3, Doubanjiang at 3, and Chinese chili oil at 3. Thus, the RF values are:

pork, ground meet = 30/(30+1.4+2+1+3+3+10+0.3+3+3),

common salt = 1.4/(30+1.4+2+1+3+3+10+0.3+3+3),

potato starch = 2/(30+1.4+2+1+3+3+10+0.3+3+3),

sugar (white sugar) = 1/(30+1.4+2+1+3+3+10+0.3+3+3),

red rice-koji miso = 3/(30+1.4+2+1+3+3+10+0.3+3+3),

regular "sake" = 3/(30+1.4+2+1+3+3+10+0.3+3+3),

dark soy sauce = 10/(30+1.4+2+1+3+3+10+0.3+3+3),

stock powder of "Katsuo-bushi" = 0.3/(30+1.4+2+1+3+3+10+0.3+3+3),

Doubanjiang = 3/(30+1.4+2+1+3+3+10+0.3+3+3),

Chinese chili oil = 3/(30+1.4+2+1+3+3+10+0.3+3+3).

## 17111 Seasoning sauce, marinade

The raw material mix ratios are: white wine at 280, water at 280, wine vinegar at 240, sugar (white sugar) at 90, common salt at 8.5, and pepper at 0.6. Thus, the RF values are:

white wine = 280/(280+280+240+90+8.5+0.6),

wine vinegar = 240/(280+280+240+90+8.5+0.6),

sugar (white sugar) = 90/(280+280+240+90+8.5+0.6),

common salt = 8.5/(280+280+240+90+8.5+0.6),

pepper = 0.6/(280+280+240+90+8.5+0.6).

## 17033 Seasoning sauce, meat sauce

The raw material mix ratios are: beef, ground meat at 20, pork, ground meet at 20, onion at 45, carrot at 3, garlic at 2, common wheat, soft flour, first grade at 1, salted butter at 10, tomato ketchup at 25, semi-thick Japanese Worcester sauce at 15, common salt at 2, and stock cube at 0.5. Thus, the RF values are:

beef, ground meat = 20/(20+20+45+3+2+1+10+25+15+2+0.5),

pork, ground meet = 20/(20+20+45+3+2+1+10+25+15+2+0.5),

onion = 45/(20+20+45+3+2+1+10+25+15+2+0.5),

carrot = 3/(20+20+45+3+2+1+10+25+15+2+0.5),

garlic = 2/(20+20+45+3+2+1+10+25+15+2+0.5),

common wheat, soft flour, first grade = 1/(20+20+45+3+2+1+10+25+15+2+0.5),

salted butter = 10/(20+20+45+3+2+1+10+25+15+2+0.5),

tomato ketchup = 25/(20+20+45+3+2+1+10+25+15+2+0.5),

semi-thick Japanese Worcester sauce = 15/(20+20+45+3+2+1+10+25+15+2+0.5),

common salt = 2/(20+20+45+3+2+1+10+25+15+2+0.5),

stock cube = 0.5/(20+20+45+3+2+1+10+25+15+2+0.5).

## 17112 Seasoning sauce, for “Yakitori” (grilled chicken skewers )

The raw material mix ratios are: dark soy sauce at 12, regular "mirin" at 8, "sake" at 8, and sugar (white sugar) at 4. Thus, the RF values are: dark soy sauce = 12/(12+8+8+4), regular "mirin" = 8/(12+8+8+4), "sake" = 8/(12+8+8+4), sugar (white sugar) = 4/(12+8+8+4).

## 17113 Seasoning sauce, barbecue sauce, soy sauce based

The raw material mix ratios are: dark soy sauce at 40, sugar (white sugar) at 20, grated apple at 20, sesame oil at 1.5, stock powder of "Katsuo-bushi" (boiled, smoke-dried and fermented skipjack tuna fillet) at 1.5, sesame seed (roasted or ground) at 0.5, and common salt at 0.5. Thus, the RF values are:

dark soy sauce = 40/(40+20+20+1.5+1.5+0.5+0.5),

sugar (white sugar) = 20/(40+20+20+1.5+1.5+0.5+0.5),

grated apple = 20/(40+20+20+1.5+1.5+0.5+0.5),

sesame oil 1.5/(40+20+20+1.5+1.5+0.5+0.5),

stock powder of "Katsuo-bushi" = 1.5/(40+20+20+1.5+1.5+0.5+0.5),

sesame seed (roasted or ground) = 0.5/(40+20+20+1.5+1.5+0.5+0.5),

common salt = 0.5/(40+20+20+1.5+1.5+0.5+0.5).

## 17114 Seasoning sauce, for “Mitarashi” (skewed rice dumplings in a sweet soy glaze)

The raw material mix ratios are: "kombu dashi" (dried kombu stock) at 46, sugar (white sugar) at 23, dark soy sauce at 10, "sake" at 10, and potato starch at 4. Thus, the RF values are: "kombu dashi" (dried kombu stock) = 46/(46+23+10+10+4), sugar (white sugar) = 23/(46+23+10+10+4), dark soy sauce= 10/(46+23+10+10+4), "sake"= 10/(46+23+10+10+4), potato starch = 4/(46+23+10+10+4).

## 17115 Seasoning sauce, “Yuzu kosho” (spicy paste made from chili, yuzu zest and salt)

The main raw materials of this item are: ground red hot pepper; "Yuzu" citrus peel, and; common salt. First assume that 100 g of this item mainly consists of x (g) of ground red hot pepper, y (g) of "Yuzu" citrus peel, and z (g) of common salt. One-hundred grams of this item contains 1.3 g of protein, 9.3 g of carbohydrate, and 25.2 g of sodium content, while the same weight of ground red hot pepper has 16.2 g of protein, 66.8 g of carbohydrate, but no sodium content. That of "Yuzu" citrus peel contains 1.2 g of protein, 14.2 g of carbohydrate, but no sodium content, while that of common salt has no protein or carbohydrate, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 4.9 g, y = 42.6 g, z = 25.3 g.

## 17133 Fish sauce, “Ikanago-shoyu” (Fish sauce made from Japanese sand lance)

The main raw materials of this item are Japanese sand lance and common salt. First assume that 100 g of this item mainly consists of x (g) of Japanese sand lance and y (g) of common salt. One-hundred grams of this item contains 13.9 g of protein and 21.2 g of sodium content. The same weight of Japanese sand lance has 17.2 g of protein and 0.5 g of sodium content, while that of common salt contains no protein but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 80.8 g, y = 20.9 g.

## 17134 Fish sauce, “Ishiru” (Fish sauce)

The main raw materials of this item are squid and common salt. First assume that 100 g of this item mainly consists of x (g) of squid and y (g) of common salt. One-hundred grams of this item contains 12.8 g of protein and 21.9 g of sodium content. The same weight of squid has 17.9 g of protein and 0.5 g of sodium content, while that of common salt contains no protein but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 71.5 g, y = 21.5 g.

## 17135 Fish sauce, “Shottsuru” (Fish sauce)

The main raw materials of this item are sailfin sandfish and common salt. First assume that 100 g of this item mainly consists of x (g) of sailfin sandfish and y (g) of common salt. One-hundred grams of this item contains 6.1 g of protein and 24.3 g of sodium content. The same weight of sailfin sandfish has 14.1 g of protein and 0.5 g of sodium content, while that of common salt contains no protein but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 43.3 g, y = 24.1 g.

## 17107 Seasoning sauce, Nam pla (fish sauce)

The main raw materials of this item are Japanese anchovy and common salt. First assume that 100 g of this item mainly consists of x (g) of Japanese anchovy and y (g) of common salt. One-hundred grams of this item contains 9.1 g of protein and 22.9 g of sodium content. The same weight of Japanese anchovy has 18.2 g of protein and 0.2 g of sodium content, while that of common salt contains no protein but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 50.0 g, y = 22.9 g.

## 17034 Tomato products, puree

The main raw material of this item is tomato. This item has 41 kcal, while tomato has 19 kcal. Therefore, the required weight of tomato to make 100 g of this item is:

## 17035 Tomato products, paste

The main raw material of this item is tomato. This item has 89 kcal, while tomato has 19 kcal. Therefore, the required weight of tomato to make 100 g of this item is:

## 17036 Tomato products, ketchup

The main raw materials of this item are: tomato; sugar (white sugar); grain vinegar, and; common salt. First assume that 100 g of this item mainly consists of x (g) of tomato, y (g) of white sugar, z (g) of grain vinegar, w (g) of common salt. One-hundred grams of this item contains 1.6 g of protein, 27.6 g of carbohydrate, 3.1 g of sodium content, and 0.7 g acetic acid, while the same weight of tomato has 0.7 g of protein, 4.7 of carbohydrate, but no sodium content and acetic acid. That of sugar has no protein, sodium content or acetic acid, but 99.3 g of carbohydrate, while that of grain vinegar contains 0.1 g of protein, 2.4 g of carbohydrate, 4.2 g of acetic acid, but no sodium content, and that of common salt contains no protein, carbohydrate or acetic acid, but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 226.2 g, y = 16.7 g, z = 16.7 g, w =3.1 g.

## 17037 Tomato products, tomato sauce

The main raw materials of this item are: tomato and common salt. First assume that 100 g of this item mainly consists of x (g) of tomato and y (g) of common salt. One-hundred grams of this item contains 8.5 g of carbohydrate and 0.6 g of sodium content. The same weight of tomato has 4.7 g of carbohydrate but no sodium content, while that of common salt contains no carbohydrate, but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x180.9 g, y = 0.6 g.

## 17038 Tomato products, chili sauce

The main raw materials of this item are: tomato; sugar (white sugar); grain vinegar, and; common salt. First assume that 100 g of this item mainly consists of x (g) of tomato, y (g) of white sugar, z (g) of grain vinegar, w (g) of common salt. One-hundred grams of this item contains 1.8 g of protein, 26.3 g of carbohydrate, 3.0 g of sodium content, and 0.6 g of acetic acid, while the same weight of tomato has 0.7 g of protein, 4.7 of carbohydrate, but no sodium content and acetic acid. That of sugar has no protein, sodium content or acetic acid, but contains 99.3 g of carbohydrate, while that of grain vinegar contains 0.1 g of protein, 2.4 g of carbohydrate, and 4.2 g of acetic acid, but no sodium content, and that of common salt contains no protein, carbohydrate or acetic acid, but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 255.1 g, y = 14.1 g, z = 14.3 g, w =3.0 g.

## 17039 Dressing, soy sauce based, fat-free

The main raw materials of this item are: dark soy sauce; grain vinegar; sugar (white sugar), and; common salt. First assume that 100 g of this item mainly consists of x (g) of dark soy sauce, y (g) of grain vinegar, z (g) of white sugar, and w (g) of common salt. One-hundred grams of this item contains 3.1 g of protein, 16.1 g of carbohydrate, 7.4 g of sodium content, and 1.3 g of acetic acid, while the same weigh of dark soy sauce has 7.7 g of protein, 7.9 g of carbohydrate, 14.5 g of sodium content, but no acetic acid. That of grain vinegar contains 0.1 g of protein, 2.4 g of carbohydrate, and 4.2 g of acetic acid, but no sodium content, while that of sugar has no protein, sodium content, or acetic acid, but contains 99.3 g of carbohydrate, and that of common salt contains no protein, carbohydrate, or acetic acid, but has 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 39.9 g, y = 31.0 g, z = 11.4 g, w =1.6 g.

## 17040 Dressing, French dressing

The raw material mix ratios are: rapeseed oil at 42, grain vinegar at 30, sugar (white sugar) at 5, common salt at 3, lemon juice at 1, pepper at 0.2, and water at 18.8. Thus, the RF values are:

rapeseed oil = 42/(42+30+5+3+1+0.2+18.8), grain vinegar = 30/(42+30+5+3+1+0.2+18.8), sugar (white sugar) = 5/(42+30+5+3+1+0.2+18.8), common salt = 3/(42+30+5+3+1+0.2+18.8), lemon juice = 1/(42+30+5+3+1+0.2+18.8), pepper = 0.2/(42+30+5+3+1+0.2+18.8).

## 17116 Dressing, soy sauce based, with oil

The raw material mix ratios are: dark soy sauce at 18, rice vinegar at 15, stock of "Katsuo-bushi" and dried kombu at 15, rapeseed oil at 13, ginger paste at 10. Thus, the RF values are: dark soy sauce = 18/(18+15+15+13+10), rice vinegar = 15/(18+15+15+13+10), stock of "Katsuo-bushi" and dried kombu = 15/(18+15+15+13+10), rapeseed oil = 13/(18+15+15+13+10), ginger paste = 10/(18+15+15+13+10).

## 17117 Dressing, sesame dressing

The raw material mix ratios are: sesame seed paste at 36, rice vinegar at 30, dark soy sauce at 18, sugar (white sugar) at 12, and mayonnaise at 12. Thus, the RF values are: sesame seed paste = 36/(36+30+18+12+12), rice vinegar = 30/(36+30+18+12+12), dark soy sauce = 18/(36+30+18+12+12), sugar (white sugar) = 12/(36+30+18+12+12), mayonnaise = 12/(36+30+18+12+12).

## 17041 Dressing, thousand island dressing

The raw material mix ratios are: rapeseed oil at 40, grain vinegar at 12, tomato ketchup at 12, pickles at 5, hen egg yolk at 4, sugar (white sugar) at 4, common salt at 3, lemon juice at 3, onion at 2, pepper at 0.5, and water at 14.5. Thus, the RF values are:

rapeseed oil = 40/(40+12+5+4+4+3+3+2+0.5+14.5),

grain vinegar = 12/(40+12+5+4+4+3+3+2+0.5+14.5),

tomato ketchup = 12/(40+12+5+4+4+3+3+2+0.5+14.5),

pickles = 5/(40+12+5+4+4+3+3+2+0.5+14.5),

hen egg yolk = 4/(40+12+5+4+4+3+3+2+0.5+14.5),

sugar (white sugar) = 4/(40+12+5+4+4+3+3+2+0.5+14.5),

common salt = 3/(40+12+5+4+4+3+3+2+0.5+14.5),

lemon juice = 3/(40+12+5+4+4+3+3+2+0.5+14.5),

onion = 2/(40+12+5+4+4+3+3+2+0.5+14.5),

pepper = 0.5/(40+12+5+4+4+3+3+2+0.5+14.5).

## 17042 Dressing, mayonnaise, whole egg type

The main raw materials of this item are: rapeseed oil; whole hen egg; acid-converted starch syrup; grain vinegar, and; common salt. First assume that 100 g of this item mainly consists of x (g) of rapeseed oil, y (g) of whole hen egg, z (g) of starch syrup, w (g) of vinegar, and u (g) of common salt. One-hundred grams of this item has 706 kcal, containing 1.4 g of protein, 76.0 g of fat, 3.6 g of carbohydrate, and 1.9 g of sodium content, while the same weight of rapeseed oil has 921 kcal, containing no protein, carbohydrate or sodium content, but 100.0 g of fat. That of hen egg has 151 kcal, containing 12.3 g of protein, 10.3 g of fat, 0.3 g of carbohydrate, and 0.4 g of sodium content, while that of starch syrup has 328 kcal, containing no protein, fat or sodium content, but 85.0 g of carbohydrate. That of vinegar has 25 kcal, containing no fat or sodium content, but 0.1 g of protein and 2.4 g of carbohydrate, while that of common salt has 0 kcal, containing no protein, fat or carbohydrate, but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 74.8 g, y = 11.3 g, z = 3.9 g, w =11.9 g, u = 1.9 g.

## 17043 Dressing, mayonnaise, egg yolk type

The main raw materials of this item are: rapeseed oil; hen egg yolk; grain vinegar, and; common salt. First assume that 100 g of this item mainly consists of x (g) of rapeseed oil, y (g) of hen egg yolk, z (g) of vinegar, and w (g) of common salt. One-hundred grams of this item contains 2.5 g of protein, 74.7 g of fat, 0.6 g of carbohydrate, and 2.0 g of sodium content, while the same weight of rapeseed oil has no protein, carbohydrate or sodium content, but has 100.0 g of fat. That of hen egg yolk contains 16.5 g of protein, 33.5 g of fat, 0.1 g of carbohydrate, and 0.1 g of sodium content, while that of grain vinegar has no fat or sodium content, but 0.1 g of protein and 2.4 g of carbohydrate, and that of common salt contains no protein, fat or carbohydrate, but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 69.7 g, y = 15.0 g, z = 24.4 g, w =2.0 g.

## 17118 Dressing, mayonnaise, low calorie type

The main raw materials of this item are: rapeseed oil; hen egg yolk; grain vinegar, common salt, and; sugar (white sugar). First assume that 100 g of this item mainly consists of x (g) of rapeseed oil, y (g) of hen egg yolk, z (g) of grain vinegar, w (g) of common salt and u (g) of white sugar. One-hundred grams of this item contains 2.9 g of protein, 28.3 g of fat, 3.3 g of carbohydrate, 3.9 g of sodium content, and 0.6 g of acetic acid while the same weight of rapeseed oil has no protein, carbohydrate, sodium content or acetic acid, but has 100.0 g of fat. That of hen egg yolk contains 16.5 g of protein, 33.5 g of fat, 0.1 g of carbohydrate, 0.1 g of sodium content but no acetic acid, while that of grain vinegar has no fat or sodium content, but 0.1 g of protein, 2.4 g of carbohydrate and 4.2 g of acetic acid. That of common salt contains no protein, fat, carbohydrate or acetic acid, but 99.5 g of sodium content, while that of sugar has no protein, fat, sodium content or acetic acid, but contains 99.3 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 22.4 g, y = 17.5 g, z = 14.3 g, w =3.9, u = 3.0 g.

## 17044 Miso, rice-koji miso, sweet type

The main raw materials of this item are: soybeans (S), well-milled rice (R), and common salt (N). It is known that the relation of S = (R+10N)/5 is established for weights of these materials, according to Isao Matsumoto, "Miso Deviating from the Row Materials Combination Curve - A Proposal for the Development of New Miso Articles", *Journal of the Brewing Society of Japan*, 93, 1998, pp 167-175. One-hundred grams of soybeans and well-milled rice have no sodium content, while the same weight of this item has 6.1 g of sodium content. Therefore, the required weight of common salt to make 100 g of this item 6.1 g. First assume that the required weight of well-milled rice to make 100 g of this item as x (g). As the weight of protein changes little in the manufacturing process, and 100 g of this item contains 9.7 g of protein, while the same weight of soybeans contains 33.8 g of protein, and that of well-milled rice has 6.1 g of protein, the required weight of well-milled rice to make 100 g of this item can be calculated from the following equation:

From the above, x = 43.36 g. Thus, the required weight of soybeans to make 100g of this item is: g.

## 17045 Miso, rice-koji miso, light yellow type

The main raw materials of this item are: soybeans (S), well-milled rice (R), and common salt (N). It is known that the relation of S = (R+10N)/5 is established for weights of these materials, according to Isao Matsumoto, "Miso Deviating from the Row Materials Combination Curve - A Proposal for the Development of New Miso Articles", *Journal of the Brewing Society of Japan*, 93, 1998, pp 167-175. One-hundred grams of soybeans and well-milled rice have no sodium content, while the same weight of this item has 12.4 g of sodium content. Therefore, the required weight of common salt to make 100 g of this item is 12.4 g. First assume that the required weight of well-milled rice to make 100 g of this item as x (g). As the weight of protein changes little in the manufacturing process, and 100 g of this item contains 12.5 g of protein, while the same weight of soybeans contains 33.8 g of protein, and that of well-milled rice has 6.1 g of protein, the required weight of well-milled rice to make 100 g of this item can be calculated from the following equation:

From the above, x = 32.01 g. Thus, the required weight of soybeans to make 100g of this item is: g.

## 17046 Miso, rice-koji miso, red type

The main raw materials of this item are: soybeans (S), well-milled rice (R), and common salt (N). It is known that the relation of S = (R+10N)/5 is established for weights of these materials, according to Isao Matsumoto, "Miso Deviating from the Row Materials Combination Curve - A Proposal for the Development of New Miso Articles", *Journal of the Brewing Society of Japan*, 93, 1998, pp 167-175. One-hundred grams of soybeans and well-milled rice have no sodium content, while the same weight of this item has 13.0 g of sodium content. Therefore, the required weight of common salt to make 100 g of this item is 13.0 g. First assume that the required weight of well-milled rice to make 100 g of this item as x (g). As the weight of protein changes little in the manufacturing process, and 100 g of this item contains 13.1 g of protein, while the same weight of soybeans contains 33.8 g of protein, and that of well-milled rice has 6.1 g of protein, the required weight of well-milled rice to make 100 g of this item can be calculated from the following equation:

From the above, x = 33.53 g. Thus, the required weight of soybeans to make 100g of this item is: 32.7 g.

## 17120 Miso, pre-seasoned with soup stock

The raw material mix ratios are: rice-koji miso (light yellow-type miso) at 11, stock powder of "Katsuo-bushi" (boiled, smoke-dried and fermented skipjack tuna fillet) at 1. Thus, the RF values are: rice-koji miso = 11/(11+1)=0.917, stock powder of "Katsuo-bushi" = 1/(11+1)=0.833.

## 17145 Miso, pre-seasoned with soup stock and salt reduced

The main raw materials of this item are light yellow-type miso and "Katsuo-bushi", based on "Reduced Sodium Miso - Ryotei No Aji," miso with "Katsuo-bushi" stock made by Marukome. First assume that 100 g of this item mainly consists of x (g) of light yellow-type miso and y (g) of "Katsuo-bushi." One-hundred grams of this item contains 10.3 g of protein and 9.7 g of sodium content. The same weight of light yellow-type miso has 12.5 g of protein and 12.4 g of sodium content, while that of "Katsuo-bushi" contains 75.7 g of protein and 1.2 g of sodium content. Therefore, the following equation is established:

From the above, x = 78.2 g, y = 0.7 g.

## 17047 Miso, barley-koji miso

The main raw materials of this item are: soybeans (S), well-milled rice (R), and common salt (N). It is known that the relation of S = (R+10N)/5 is established for weights of these materials, according to Isao Matsumoto, "Miso Deviating from the Row Materials Combination Curve - A Proposal for the Development of New Miso Articles", *Journal of the Brewing Society of Japan*, 93, 1998, pp 167-175. One-hundred grams of soybeans and well-barley have no sodium content, while the same weight of this item has 10.7 g of sodium content. Therefore, the required weight of common salt to make 100 g of this item is 10.7 g. First assume that the required weight of well-milled rice to make 100 g of this item as x (g). As the weight of protein changes little in the manufacturing process, and 100 g of this item contains 9.7 g of protein, while the same weight of soybeans contains 33.8 g of protein, and that of barley has 6.7 g of protein, the required weight of barley to make 100 g of this item can be calculated from the following equation:

From the above, x = 18.33 g. Thus, the required weight of soybeans to make 100g of this item is: g.

## 17048 Miso, soybeans-koji miso

The main raw materials of this item are soybeans and common salt. The weight of protein does not change in the manufacturing process, and 100 g of this item has 17.2 g of protein, while the same weight of soybeans contains 33.8 g of protein. When assuming that the required weight of soybeans to make 100 g of this item as x (g), the required weight of soybeans to make 100 g of this item can be calculated from the following equation:

From the above, x = 50.9 g. One-hundred grams of this item contains 10.9 g of sodium content, while the same weight of soybeans has no sodium content. Therefore, the required weight of common salt to make 100 g of this item is 10.9 g.

## 17119 Miso, salt reduced

The main raw materials of this item are: soybeans (S), well-milled rice (R), and common salt (N). It is known that the relation of S = (R+10N)/5 is established for weights of these materials, according to Isao Matsumoto, "Miso Deviating from the Row Materials Combination Curve - A Proposal for the Development of New Miso Articles", *Journal of the Brewing Society of Japan*, 93, 1998, pp 167-175. One-hundred grams of soybeans and well-milled rice have no sodium content, while the same weight of this item has 10.3 g of sodium content. Therefore, the required weight of common salt to make 100 g of this item 10.3 g. First assume that the required weight of well-milled rice to make 100 g of this item as x (g). As the weight of protein changes little in the manufacturing process, and 100 g of this item contains 10.8 g of protein, while the same weight of soybeans contains 33.8 g of protein, and that of well-milled rice has 6.1 g of protein, the required weight of well-milled rice to make 100 g of this item can be calculated from the following equation:

From the above, x = 29.84 g. Therefore, the required weight of soybeans to make 100 g of this item is: g.

## 17049 Miso, instant miso soup, powdered type

The main raw materials of this item are light yellow-type miso and stock powder of "Katsuo-bushi" (boiled, smoke-dried and fermented skipjack tuna fillet). First assume that 100 g of this item mainly consists of x (g) of light yellow-type miso and y (g) of stock powder of "Katsuo-bushi". One-hundred grams of this item contains 21.9 g of protein and 9.3 g of fat. The same weight of light yellow-type miso has 12.5 g of protein and 6.0 g of fat, while that of "Katsuo-bushi" has 24.2 g of protein and 0.3 g of fat. Therefore, the following equation is established:

From the above, x = 154.5 g, y = 10.7 g.

## 17050 Miso, instant miso soup, Paste type

The main raw materials of this item are light yellow-type miso and stock powder of "Katsuo-bushi" (boiled, smoke-dried and fermented skipjack tuna fillet). First assume that 100 g of this item mainly consists of x (g) of light yellow-type miso and y (g) of stock powder of "Katsuo-bushi". One-hundred grams of this item contains 8.9 g of protein and 3.7 g of fat. The same weight of light yellow-type miso has 12.5 g of protein and 6.0 g of fat, while that of "Katsuo-bushi" has 24.2 g of protein and 0.3 g of fat. Therefore, the following equation is established:

From the above, x = 61.4 g, y = 5.1 g.

## 17121 Miso, “Karashi-sumiso” (miso sauce containing mustard, vinegar and sugar)

The raw material mix ratios are: rice-koji miso (sweet type) at 20, sugar (white sugar) at 10, grain vinegar at 10, mustard (paste) at 2. Thus, the RF values are: rice-koji miso (sweet type) = 20/(20+10+10+2), sugar (white sugar) = 10/(20+10+10+2), grain vinegar = 10/(20+10+10+2), mustard (paste) = 2/(20+10+10+2).

## 17122 Miso, “Goma-miso” (miso sauce containing sesame)

The raw material mix ratios are: rice-koji miso (sweet type) at 80, "sake" at 22, sesame seed (roasted or ground) at 18, and sugar (white sugar) at 6. Thus, the RF values are: rice-koji miso (sweet type) = 80/(80+22+18+6), "sake" = 22/(80+22+18+6), sesame seed (roasted or ground sesame seed ) = 18/(80+22+18+6), sugar (white sugar) = 6/(80+22+18+6).

## 17123 Miso, “Su-miso” (miso sauce containing vinegar and mustard)

The raw material mix ratios are: rice-koji miso (sweet type) at 20, sugar (white sugar) at 10, and grain vinegar at 10. Thus, the RF values are: rice-koji miso (sweet type) = 20/(20+10+10) = 0.500, sugar (white sugar) = 10/(20+10+10) = 0.250, grain vinegar = 10/(20+10+10) = 0.250.

## 17124 Miso, “Neri-miso” (miso sauce containing egg and mirin)

The raw material mix ratios are: rice-koji miso (sweet type) at 60, sugar (white sugar) at 40, and "sake" at 10. Thus, the RF values are: rice-koji miso (sweet type) = 60/(60+40+10), sugar (white sugar) = 40/(60+40+10), "sake" = 10/(60+40+10).

## 17051 Roux, Japanese curry roux, instant

The main raw materials of this item are: curry powder; common wheat, soft flour, first grade; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of curry powder, y (g) of common wheat (soft flour), z (g) of rapeseed oil, and w (g) of common salt. One-hundred grams of this item contains 6.5 g of protein, 34.1 g of fat, 44.7 g of carbohydrate, and 10.7 g of sodium content, while the same weight of curry powder has 13.0 g of protein, 12.2 g of fat, 63.3 g of carbohydrate, and 0.1 g of sodium content. That of common wheat (soft flour) contains 8.3 g of protein, 1.5 g of fat, 75.8 g of carbohydrate, but no sodium content, while that of rapeseed oil has no protein, carbohydrate or sodium content, but 100.0 g of fat, and that of common salt contains no protein, fat or carbohydrate, but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 26.5 g, y = 36.9 g, z = 30.3 g, w =10.7 g.

## 17052 Roux, hash and rice roux, instant

The main raw materials of this item are: tomato; common wheat, soft flour, first grade; rapeseed oil, and; common salt. First assume that 100 g of this item mainly consists of x (g) of tomato, y (g) of common wheat (soft flour), z (g) of rapeseed oil, and w (g) of common salt. One-hundred grams of this item contains 5.8 g of protein, 33.2 g of fat, 47.5 g of carbohydrate, and 10.7 g of sodium content, while the same weight of tomato has 0.7 g of protein, 0.1 g of fat, 4.7 g of carbohydrate, but no sodium content. That of common wheat (soft flour) contains 8.3 g of protein, 1.5 g of fat, 75.8 g of carbohydrate, but no sodium content, while that of rapeseed oil has no protein, carbohydrate or sodium content, but 100.0 g of fat, and that of common salt contains no protein, fat or carbohydrate, but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 323.1 g, y = 42.6 g, z = 32.2 g, w =10.8 g.

## 17125 Seasoning mix for “Ochazuke” (bowl of rice soaked in dashi broth)

The raw material mix ratios are: "Aramaki" salted chum salmon at 34, common salt at 29, Kawara senbei (hard wheat flour cracker shaped like a Japanese traditional roof tile) at 23, stock powder of "Katsuo-bushi" (boiled, smoke-dried and fermented skipjack tuna fillet) at 17, sugar (white sugar) at 11, dried and toasted purple laver at 5, "Katsuo-bushi" at 4, "Maccha" finely ground tea at 3, and "Makombu" (dried) at 2. Thus, the RF values are: "Aramaki" salted chum salmon = 34/(34+29+23+17+11+5+4+3+2), common salt = 29/(34+29+23+17+11+5+4+3+2), Kawara senbei = 23/(34+29+23+17+11+5+4+3+2), stock powder of "Katsuo-bushi" = 17/(34+29+23+17+11+5+4+3+2), sugar (white sugar) = 11/(34+29+23+17+11+5+4+3+2), dried and toasted purple laver = 5/(34+29+23+17+11+5+4+3+2), "Katsuo-bushi" = 4/(34+29+23+17+11+5+4+3+2), "Maccha" finely ground tea = 3/(34+29+23+17+11+5+4+3+2), "Makombu" (dried) = 2/(34+29+23+17+11+5+4+3+2).

## 17136 Mixed seasoning, “Kimchi no Moto” (made from red pepper, salt, garlic, ginger, and fruits (such as apples))

The main raw materials of this item are: red hot pepper; garlic, and; common salt. First assume that 100 g of this item mainly consists of x (g) of red hot pepper, y (g) of garlic, and z (g) of common salt. One-hundred grams of this item has 135 kcal, containing 26.0g of carbohydrate and 9.3 g of sodium content, while the same weight of red-hot pepper has 96 kcal, containing 6.4 g of carbohydrate but no sodium content. That of garlic has 136 kcal, containing 27.5 g of carbohydrate but no sodium content, while that of common salt has 0 kcal, containing no carbohydrate but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 10.0 g, y = 92.2 g, z = 9.3 g.

## 17053 “Sakekasu” (sake lees)

The main raw material of this item is paddy rice, non-glutinous, well-milled, raw. From C6H12O6 (molecular weight = 180.16)→2C2H5OH (molecular weight = 46.07)+2CO2, the required weight of glucose to make 46.07 g of ethanol is: 180.16 / 2 = 90.08 g. Therefore, the weight of carbohydrate derived from non-glutinous rice in 100 g of sake lees is:

As 100 g of non-glutinous rice has 83.1 g of available carbohydrate, the required weight of non-glutinous rice to make 100 g of this item is:

## 17126 Instant soup mix, “Sumashi-jiru” (Japanese traditional clear-soup)

The raw material mix ratios are: common salt at 34, dark soy sauce at 33, stock powder of "Katsuo-bushi" (boiled, smoke-dried and fermented skipjack tuna fillet) at 30, "Konegi" (small variety) leaves at 30, sugar (white sugar) at 11, baked wheat gluten cake at 11, dried and toasted purple laver at 7, and "Katsuo-bushi" at 5. Thus, the RF values are: common salt = 34/(34+33+30+30+11+7+5), dark soy sauce = 33/(34+33+30+30+11+7+5), stock powder of "Katsuo-bushi" = 30/(34+33+30+30+11+7+5), "Konegi" (small variety) leaves = 30/(34+33+30+30+11+7+5), sugar (white sugar) = 11/(34+33+30+30+11+7+5), baked wheat gluten cake = 11/(34+33+30+30+11+7+5), dried and toasted purple laver = 7/(34+33+30+30+11+7+5), "Katsuo-bushi" 5/(34+33+30+30+11+7+5).

## 17127 “Furikake” (Seasoning mix for rice, containing dried seaweed and egg)

The raw material mix ratios are: sugar (white sugar) at 23, sesame seed (roasted or ground) at 19.3, dried hen egg yolk at 16.5, stock powder of "Katsuo-bushi" (boiled, smoke-dried and fermented skipjack tuna fillet) at 12.4, boiled, smoke-dried and fermented mackerel fillet at 10.7, wheat (common wheat, hard flour, first grade) at 8.5, dried purple laver at 6.1, common salt at 4, and "Maccha" finely ground tea at 1.5. Thus, the RF values are:

sugar = (white sugar) 23/(23+19.3+16.5+12.4+10.7+8.5+6.1+4+1.5),

sesame seed (roasted or ground) = 19.3/(23+19.3+16.5+12.4+10.7+8.5+6.1+4+1.5),

dried hen egg yolk = 16.5/(23+19.3+16.5+12.4+10.7+8.5+6.1+4+1.5),

stock powder of "Katsuo-bushi" = 12.4/(23+19.3+16.5+12.4+10.7+8.5+6.1+4+1.5),

boiled, smoke-dried and fermented mackerel fillet = 10.7/(23+19.3+16.5+12.4+10.7+8.5+6.1+4+1.5),

wheat (common wheat, hard flour, first grade) = 8.5/(23+19.3+16.5+12.4+10.7+8.5+6.1+4+1.5),

dried purple laver = 6.1/(23+19.3+16.5+12.4+10.7+8.5+6.1+4+1.5),

common salt = 4/(23+19.3+16.5+12.4+10.7+8.5+6.1+4+1.5),

"Maccha" finely ground tea = 1.5/(23+19.3+16.5+12.4+10.7+8.5+6.1+4+1.5).

## 17054 Mirin-like sweet cooking seasoning

The main raw material of this item is acid-converted starch syrup. First assume that 100 g of this item mainly consists of x (g) of starch syrup. One-hundred grams of this item contains 55.7 g of carbohydrate, while the same weight of starch syrup has 85.0 g of carbohydrate. Therefore, the following equation is established:

From the above, x = 65.5 g.

## 17138 Seasonings, cooking sake (ryorishu)

The main raw materials of this item are regular "sake" and common salt. First assume that 100 g of this item mainly consists of x (g) of "sake" and y (g) of common salt. One-hundred grams of this item contains 4.7 g of carbohydrate, and 2.2 g of sodium content. The same weight of "sake" has 4.9 g of carbohydrate but no sodium content, while that of common salt has no carbohydrate but 99.5 g of sodium content. Therefore, the following equation is established:

From the above, x = 95.9 g, y = 2.2 g.