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In [38]: import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
from collections import OrderedDict
import operator
import random
train = pd.read_json('/content/drive/MyDrive/SEM3/CGAS/Assignment2/train.json')
test = pd.read_json('/content/drive/MyDrive/SEM3/CGAS/Assignment2/test.json')

# Number of recipes
print("Number of recipes : ",len(train))

# Number of cuisines
cuisines = train.cuisine.unique()

print("Number of cuisines : ", len(cuisines))

#Get total number of ingredients from dataset
total_ingre = []
for lst in train['ingredients']:
    total_ingre.extend(lst)
print(len(total_ingre))

#Initialising Nature Basket
nb=list(set(total_ingre))
print(len(nb))
print(type(nb))
nb = random.sample(nb,5000)
print(nb)
print(len(nb))

#Initialising Kitchen Basket
kb = random.sample(nb,50)
print(kb)
print("kb type ", type(kb))
print(len(kb))
recipe_prim = {}
# number of ingr per recipe - fixed.
recipe_size =10
# generations
epochs = 5
curr_epoch = 0

#initial recipes of the cuisine
number_of_recipes =500
#number of ingr to be mutated

#ratio between the sizes of pool of ingredients and the pool of recipes
m = 10

#Assigning fitness values to ingredients
fitness_values = {}
for ing in nb:
    # print(ing)
    fitness_values[ing] = random.randint(0,99)
i =0
while i < number_of_recipes:
    recipe_prim['recipe'+str(i+1)] = random.sample(kb, recipe_size)
    i = i+1
print(len(recipe_prim))
```

Number of recipes : 39774

Number of cuisines : 20

428275

6714

<class 'list'>

['brine-cured olives', 'coffee', 'gluten-free baking powder', 'hot dogs', 'cocktail pumpernickel bread', 'Jimmy Dean All Natural Regular Pork Sausage', 'baby corn', 'dried rigatoni', 'vodka', 'chocolate glaze', 'tofu', 'blood', 'slice d turkey', 'vanilla frosting', 'all potato purpos', 'biscuit baking mix', 'mackerel', 'pimento stuffed olives', 'crus hed pineapples in juice', 'strip steaks', 'meal', 'lamb rib chops', 'lemon rind', 'soft-shell clams', 'flowering chin ese chives', 'sauce', 't-bone steak', 'Good Seasons Italian Dressing Mix', 'cacao nibs', 'black lentil', 'cilantro pe sto', 'small red beans', 'coconut sugar', 'wild rice', 'basil', 'jam', 'garlic cloves', 'Sugar in the Raw', 'ricard', 'cheddar cheese', 'veal demi-glace', 'Mexican beer', 'corn muffin', 'basmati rice', 'powdered buttermilk', 'goose fa t', 'wasabi powder', 'grated romano cheese', 'Heinz Worcestershire Sauce', 'vinaigrette dressing', 'lumpia skins', 'mesclun', 'frozen popcorn chicken', 'veal rib chops', 'red pepper', 'fresh raspberries', 'Frangelico', 'gram dal', 'ta tsoi', 'McCormick Poppy Seed', 'yellow corn meal', 'light alfredo sauce', 'basil pesto sauce', 'steel-cut oatmeal', 'Italian seasoned panko bread crumbs', 'tahini', 'indian flat bread', 'knorr rice side cheddar broccoli', 'chopped fresh mint', 'boar', 'tri-tip steak', 'bourbon liqueur', 'reduced fat milk', 'organic low sodium chicken broth', 'bro wn rice', 'Knox unflavored gelatin', 'light corn syrup', 'nondairy whipped topping', 'cooking salt', 'bacon dripping s', 'fish fingers', 'lower sodium beef broth', 'swiss steak', 'chinese chives', 'shungiku', 'soya cheese', 'chinese w heat noodles', 'unsalted peanut butter', 'shells', 'cheese dip', 'stew', 'green tea leaves', 'ammonium bicarbonate', 'low sodium teriyaki sauce', 'sandwich rolls', 'arak', 'unsalted pecans', 'cheese slices', 'dry jack', 'soft-wheat fl our', 'pork leg', 'balsamic vinaigrette salad dressing', 'glace de viande', 'hot pepper rings', 'crab boil', 'radish sprouts', 'coffee granules', 'yellow cake mix', 'puff pastry sheets', 'tzatziki', 'poblano chiles', 'arrowroot powde r', 'Pure Wesson Canola Oil', 'konbu', 'sea salt', 'eggs', 'hot italian turkey sausage', 'jamaican rum', 'frozen pota toes', 'moose', 'chopped pecans', 'mung bean sprouts', 'drummettes', 'hoisin sauce', 'ginger syrup', 'brown butter', 'canned chopped tomatoes', 'shoulder lamb chops', 'smoked kielbasa', 'chaat masala', 'chopped celery', 'pickled garli c', 'mint syrup', 'dried Thai chili', 'saltine crumbs', 'smoked cheddar cheese', 'miso sesame grilling sauce', 'sirlo in tip steak', 'pasilla chiles', 'nashi', 'almond liqueur', 'spanish chorizo', 'stewed tomatoes', 'peeled diced tomat oes', 'organic buttermilk', 'asafetida', 'frozen raspberries', 'sea bass', 'other vegetables', 'xanthan gum', 'almond s', 'nori paper', 'gluten', 'orange', 'paccheri', 'dark rum', 'vegan bouillon cubes', 'chourico', 'vanilla bean ice c ream', 'rice crackers', 'breast of lamb', 'fish steaks', 'banana flower', 'Hidden Valley® Greek Yogurt Original Ranch ® Dip Mix', 'cream sherry', 'beef bouillon granules', 'lime zest', 'cointreau', 'eye of the round', 'frozen mini ravioli', 'unsweetened cocoa powder', 'ramen', 'cognac', 'butter pecan ice cream', 'straight bourbon whiskey', 'creole se asoning mix', 'lambrusco', 'wild mushrooms', 'stevia', 'italian sausage', 'green chilies', 'sugar cookie dough', 'yak i-nori', 'red swiss chard', 'safflower', "Old El Paso™ Thick 'n Chunky salsa", 'ice water', 'black fungus', 'gram flo ur', 'ramen noodles seasoning', 'dry bread crumbs', 'wine syrup', 'whole wheat english muffins', 'low fat chunky mush room pasta sauce', 'leaf parsley', 'dried arbol chile', 'masur dal', 'jumbo shells', 'green bell pepper', 'red snappe r', 'madeira wine', 'sweetened coconut flakes', 'chipotles in adobo', 'Progresso Diced Tomatoes', 'baked ham', 'fat s kimmered reduced sodium chicken broth', 'snails', 'turkey kielbasa', 'coarse-grain salt', 'toasted walnuts', 'leftover steak', 'poppadoms', 'blanco tequila', 'light tuna', 'winter squash', 'mango salsa', 'pastina', 'tamarind pod', 'salm on sashimi', 'unsalted butter', 'fresh yeast', 'lavender flowers', 'Flora pro.activ', 'KRAFT Shredded Low-Moisture Pa rt-Skim Mozzarella Cheese', 'long green pepper', 'marjoram', 'white wine', 'scallops', 'tuna packed in olive oil', 'rice flour', 'cooked meatballs', 'red bell pepper', 'red grapefruit', 'passion fruit', 'white pepper', 'dulce de lech e', 'black moss', 'frozen peas and carrots', 'French lentils', 'ground sirloin', 'cremini', 'jeera', 'chat masala', 'Pale Ale', 'lady apples', 'vegetarian refried beans', 'beef consomme', 'basil dried leaves', 'chile sauce', 'creamer potatoes', 'chocolate curls', 'crabmeat', 'jamaican pumpkin', 'petits pois', "hellmann' or best food real mayonnais", 'creole seasoning', 'veal loin', 'posole', 'pumpkin', 'hakusai', 'pork sausage links', 'dashi kombu', 'yellow mustard seeds', 'boneless magret duck breast halves', 'fish fillets', 'knorr homestyle stock beef', 'mandarin oranges', 'tab le cream', 'boneless chop pork', 'low-fat vanilla wafers', 'konnyaku', 'Manischewitz Potato Starch', 'sambal olek', 'galangal', 'pound cake mix', 'dried bonito flakes', 'center cut pork chops', 'meringue', 'collard leaves', 'long gra in brown rice', 'rotini', 'black grapes', 'vermouth', 'sandwich bread', 'lamb leg steaks', 'italian loaf', 'finely ch opped fresh parsley', 'coke', 'sauce tomato', 'Boursin', 'brown rice vinegar', 'anise', 'pickle relish', 'prepar salsa', 'demerara sugar', 'thai black glutinous rice', 'whole peeled tomatoes', 'chicken fingers', 'orange flower water', 'garland chrysanthemum', 'flour tortillas (not low fat)', 'rose hip tea bags', 'chili beans', 'longaniza', 'fresh ros emary', 'walnut pieces', 'raspberry liqueur', 'tenderloin steaks', '2% low fat cheddar cheese', 'sweet white miso past e', 'roasted chestnuts', 'anise seed', 'mango chutney', 'wheat flour', 'regular sugar', 'french baguette', 'pumpkinse ed kernels', 'white cheese', 'and carrot green pea', 'cubed meat', 'fresh parsley leaves', 'lamb loin chops', 'marshm allows', 'pork blood', 'beef shin', 'oil packed dried tomatoes', 'cookies', 'brown rice flour', 'ranch dip', 'vanilla extract', 'veal bones', 'Jameson Whiskey', 'dark miso', 'strawberry jam', 'hanger steak', 'dried guajillo chiles', 'kiwi', 'center cut pork roast', 'low-fat vanilla ice cream', 'shredded sharp cheddar cheese', 'lavash', 'frozen bluebe rries', 'all-purpose flour', 'unbaked pie shells', 'boudin', 'low-fat soft goat cheese', 'chili habanero pepper', 'strawberry syrup', 'salt peter', 'condensed cheddar cheese soup', 'fingerling potatoes', 'mint leaves', 'center-cut salm on fillet', 'chicken wingettes', 'Azteca Flour Tortillas', 'strawberry yogurt', 'pâte brisée', "I Can't Believe It's Not Butter!® All Purpose Sticks", 'salad dressing', 'short-grain rice', 'hollandaise sauce', 'pie dough', 'meat bone s', 'green tea bags', 'frozen limeade', 'top loin steaks', 'garlic flakes', 'red mullet', 'wheat bran', 'low sodium b lack beans', 'refined sugar', 'gouda', 'chicken carcass', 'garlic olive oil', 'filet mignon steaks', 'kha', 'nori she ets', 'deep dish pie crust', 'calimyrna figs', 'bamboo shoots', "JOHNSONVILLE® Hot 'N Spicy Brats", 'atlantic cod fil lets', 'poolish', 'low sodium chicken stock', 'yellow tomato', 'white bread crumbs', 'ground turkey breast', 'heavy c ream', 'chocolate drink', 'raspberry puree', 'mandarin orange segments', 'cold meatloaf', 'and fat free half half', 'perch fillets', 'adobo', 'vegetarian protein crumbles', 'rice wine', 'salmon fillets', 'balsamic vinaigrette', 'stra ined yogurt', 'sweet white miso', 'cornbread crumbs', 'espresso beans', 'grated Gruyère cheese', 'cumin seed', 'gnocchi', 'toast points', 'sweet corn', 'paneer', 'venison', 'shimeji mushrooms', 'broccoli slaw', 'mustard oil', 'brewed espresso', 'chilli bean sauce', 'annatto', 'seasoned croutons', 'split black lentils', 'egg bread', 'bread', 'milk ch ocolate pieces', 'fresh spinach', 'non-dairy margarine', 'nonfat plain greek yogurt', 'mild cheddar cheese', 'flour', 'fontina cheese', 'hot chili', 'reduced sodium beef broth', 'morcilla', 'octopuses', 'whole wheat linguine', 'minceme at pie filling', 'Chartreuse Liqueur', 'Gourmet Garden Parsley', 'green peppercorns', 'garam masala', 'fresh lima be ns', 'asti spumante', 'sorghum syrup', 'whole wheat pita bread', 'dry hard cider', 'hot pork sausage', 'young nettl e', 'wheat crackers', 'evaporated cane juice', 'country crock honey spread', 'garlic chili sauce', 'grassfed beef', 'franks', 'tart filling', 'polish sausage', 'steamer', 'stem ginger', 'mole sauce', 'prepared guacamole', 'smoked str eaky bacon', 'whole wheat spaghetti', 'cake mix or white yellow', 'cappuccino', 'Meyer lemon juice', 'brandy', 'par magiano reggiano', 'bread crumb fresh', 'duck drumsticks', 'white grape juice', 'old-fashioned oatmeal', 'strozzapret i', 'Madeira', 'schnapps', 'asparagus spears', 'bechamel', 'chopped green chilies', 'dry white wine', 'natto', 'queso fresca', 'chicken soup base', 'framboise eau-de-vie', '2% reduced-fat milk', 'cheese ravioli', "BREAKSTONE'S Sour Cre am", 'bear', 'persimmon', 'campari', 'spaghetti', 'cook and drain', 'barbecue sauce', 'white button mushrooms', 'baby p otatoes', 'apple juice concentrate', 'nonfat dried milk', 'pepperoncini', 'regular tofu', 'whole cranberry sauce', 'lemon dressing', 'queso panela', 'freshly ground pepper', 'grated parmesan cheese', 'kidney', 'Taco Bell Taco Seasoning Mix', 'baking chocolate', 'Alfredo sauce', 'Wish-Bone Light Italian Dressing', 'white cornmeal', 'M&M's Candy', 'dry vermouth', 'BACARDI® Mixers Margarita Mix', 'Grand Marnier', 'stilton cheese', 'Flora Buttery', 'berries', 'sliced

cucumber', 'chinkiang vinegar', 'roast breast of chicken', 'liquid sweetener', 'turkey breast deli meat', 'liquor', 'soy sauce', 'apricot nectar', 'cream of chicken soup', 'starch', 'sunchokes', 'lipton tea bags', 'Kroger Black Bean s', 'amchur', 'fresh curry', 'tartlet shells', 'dragon fruit', 'frozen blackberries', 'energy drink', 'curly-leaf par sley', 'ground oregano', 'soybean oil', 'dried oregano', 'asian barbecue sauce', 'pure olive oil', 'maui onion', 'yea st extract', 'hass avocado', 'plum sauce', 'sausage casings', 'sole', 'long buns', 'lemon extract', 'cherry peppers', 'buttermilk ranch dressing', 'balm leaves', 'string cheese', 'cube steaks', 'carrot juice', 'one third less sodium ch icken broth', 'Knudsen Sour Cream', 'cornish game hens', 'chioggia', 'black mission figs', 'dried prawns', 'jerk sauc e', 'new mexico chile pods', 'gluten-free spaghetti', 'red bean paste', 'toasted nuts', 'lemon pudding', 'sweet cream butter', 'apricot brandy', 'shredded reduced fat cheddar cheese', 'boneless beef chuck roast', 'cooked beetroot', 're d sockeye', 'bitter gourd', 'whole wheat bread dough', 'bottled lime juice', 'wheatberries', 'fresh lavender', 'Lipto n Lemon Iced Tea Mix', 'knorr italian side creami garlic shell', 'coarse sugar', 'low-fat salad dressing', 'Pillsbu ry Thin Pizza Crust', 'radicchio', 'diced green chilies', 'falafel', 'frosting', 'low moisture mozzarella', 'almond oil', 'garlic herb feta', 'water', 'onion slices', 'iodized salt', 'eggplant', 'chopped fresh sage', 'Mission Yellow C orn Tortillas', 'elbow pasta', 'reduced sodium cream of mushroom soup', 'ramen noodle soup', 'angel food cake mix', 'five-spice powder', 'soba noodles', 'bihon', 'ricotta', 'ruby red grapefruit', 'chocolate milk', 'gremolata', 'muffi n mix', 'salad dressing mix', 'Gochujang base', 'instant espresso granules', 'oxtails', 'abura age', 'smithfield ha m', 'flax seeds', 'stir fry beef meat', 'country white bread', 'low sodium low fat pasta sauce', 'cinnamon hot cand y', 'pastry', 'scotch', 'doritos', 'large free range egg', 'bai cai', 'plain yogurt', 'amaretti', 'top sirloin', 'red potato', 'sparkling sangria tradicional', 'Taiwanese bok choy', 'hominy', 'curry', 'cream of tartar', 'clam juice', 'vegetable soup', 'pork sausages', 'cooked brisket', 'cracker meal', 'white bread slices', 'vegan parmesan cheese', 'dry milk powder', 'lipton onion soup mix', 'chuck roast', 'vegetable bouillon', 'crushed pistachio', 'Guinness Bee r', 'cornflake cereal', 'skinless chicken pieces', 'apple juice', 'red rice', 'Bengali 5 Spice', 'mayonaise', 'red pe pper flakes', 'mexican chocolate', 'vin santo', 'dried salted codfish', 'unsalted pistachios', 'bouillon', 'pickled b eets', 'fresh orange juice', 'vegetable gumbo mixture', 'reduced sugar orange marmalade', 'preserved lemon', 'e-fu no odl', 'bitter melon', 'soup bones', 'snapper fillets', 'compote', 'pepperoni', 'less sodium chicken broth', 'collard greens', 'bacon grease', 'date sugar', 'extra large eggs', 'black sesame seeds', 'crumbled goat cheese', 'low sodium pinto beans', 'rib', 'orange zest', 'dri leav rose mari', 'honey', 'crème fraîche', 'rabbit', 'hot red pepper flakes', 'catsup', 'curry sauce mix', 'andouille chicken sausage', 'heirloom tomatoes', 'low sodium vegetable stock', 'Gebhard t Chili Powder', 'sun dried tomato dressing', 'drumstick', 'sesame seed paste', 'jerk seasoning mix', 'spaghetti squa sh', 'rioja', 'wakame', 'blue cheese', 'shrimp', 'full fat cream cheese', 'Rice Krispies Cereal', 'ancho chili ground pepper', 'cane syrup', 'quick-cooking hominy grits', 'maca powder', 'golden beets', 'pink salt', 'panch phoran', 'bou illon granules', 'codfish', 'sliced salami', 'besan (flour)', 'biscuit mix', 'meat sauce', 'rub', 'sprite', 'long gre en chilies', 'focaccia', 'torn romain lettuc leav', 'lamb shoulder', 'bean soup', 'creme de cacao', 'char siu sauce', 'mostarda', 'beef shoulder roast', 'double-dark soi sauc', 'long grain and wild rice mix', 'borlotti', 'reduced-fat s our cream', 'peperoncini', 'assam', 'Jimmy Dean Pork Sausage', 'chinese eggplants', 'white fleshed fish', 'english br eakfast tea leaves', 'hominy grits', '2 1/2 to 3 lb. chicken, cut into serving pieces', 'pickled carrots', 'Nielsen-M assey Vanilla Extract', 'cashew chop unsalt', 'louisiana hot sauce', 'sliced leeks', 'duxelles', 'ground peanut', 'em panada wrappers', 'smoked salmon', 'Thai eggplants', 'bloody mary mix', 'fresno chiles', 'chicken drumsticks', 'onion powder', 'game', 'soba', 'kingfish', 'spelt flour', 'bird chile', 'reduced sodium beef stock', 'low-fat cottage chee se', 'italian pork sausage', 'boneless, skinless chicken breast', 'ranch dip mix', 'cream sweeten whip', 'soft buns', 'green figs', 'cornflour', 'bananas', 'veal', 'cubed ham', 'whole wheat spaghetti', 'peaches', 'prepared horseradis h', 'lemon thyme', 'brown mustard seeds', 'cracker crumbs', "Uncle Ben's Ready Rice Whole Grain Brown Rice", 'whole w heat rigatoni', 'Pam Cooking Spray', 'fresh thyme', 'sesame oil', 'sheep's milk cheese', 'pure acai puree', 'rounds', 'boneless duck breast', 'reduced fat Mexican cheese', 'mini m&ms', 'mung bean vermicelli', 'whole wheat cereal', 're duced fat mozzarella', 'stew meat', 'braeburn apple', 'chinese black bean', 'Truvia® Baking Blend', 'soursop', 'vanill a essence', 'Oscar Mayer Deli Fresh Smoked Ham', 'chocolate sticks', 'chip plain tortilla', 'savoy cabbage', 'chicken cutlets', 'caramel ice cream', 'filo', 'redfish', 'peanut oil', 'heeng', 'hard shelled clams', 'Mazola Corn Oil', 'ta ngerine zest', 'miswa', 'risotto rice', 'comino', 'beef tendons', 'cole slaw mix', 'buttermilk cornbread', 'cardamom seeds', 'london broil', 'arctic char', 'bone-in short ribs', 'pizza sauce', 'strawberry extract', 'russet', 'marrons glacés', 'spot prawns', 'belacan', 'potato nuggets', 'lemon grass', 'açai', 'Castelvetrano olives', 'jack', 'pepperidge farm puff pastry', 'condensed cream of broccoli soup', 'stone flower', 'dried chickpeas', 'hoja santa', 'pickle we dges', 'brioche buns', 'anasazi beans', 'meringue powder', 'baby gem lettuce', 'pea eggplants', 'pickled onion', 'cor nflakes', 'whole wheat hamburger buns', 'yams', 'soft fresh goat cheese', 'reduced fat shredded cheese', 'chorizo sau sage', 'pansies', 'wide rice noodles', 'avocado oil', 'Nido Milk Powder', 'watermelon', 'paste tomato', 'Kitchen Bouq uet', 'ras el hanout', 'Scotch whisky', 'coconut milk powder', 'hot bean paste', 'kewra', 'ragu old world style pasta sauc', 'poultry', 'tea leaves', 'skinned boned duck breast halves', 'low-fat coconut milk', 'shoulder meat', 'low-fat caesar dressing', 'frozen artichoke hearts', 'peach sorbet', 'chapatti flour', 'frozen mixed vegetables', 'whole grai n thin spaghetti', 'mooli', 'chicken flavored rice', 'Smithfield Ham', 'hellmannâ€“ or best food canola cholesterol f ree mayonnais', 'ancho', 'white wine vinegar', 'instant butterscotch pudding mix', 'pepperocini', 'pineapple syrup', 'red grape', 'kale leaves', 'chicken wings', 'corn oil', 'samphire', 'glace cherries', 'ducklings', 'porterhouse stea ks', 'low sodium canned chicken stock', 'coarse semolina', 'quick-cooking oats', 'nonfat vanilla frozen yogurt', 'nuo c nam', 'chile colorado', 'dark leafy greens', 'canned jalapeno peppers', 'asiago', 'golden caster sugar', 'margarin e', 'brown mushroom', 'asafoetida powder', 'hot chili powder', 'KRAFT Shredded Colby & Monterey Jack Cheese', 'curry mix', 'sichuanese chili paste', 'dried pineapple', 'frozen edamame beans', 'Bertolli® Alfredo Sauce', 'boneless skinl ess chicken thigh fillets', 'plum jam', 'mango juice', 'Angostura bitters', 'chili flakes', 'knorr reduc sodium chick en flavor bouillon', 'squid tube', 'greek style seasoning', 'whole wheat tortillas', 'diet dr. pepper', 'sorbet', 'la mb breast', 'havarti cheese', 'flavored vinegar', 'dark chicken stock', 'Best Foods® Real Mayonnaise', 'raw tiger pra wn', 'marzipan', 'lemon juice', 'split peas', 'baby bok choy', 'do chua', 'asafoetida powder', 'caster', 'mascarpone', 'condensed cream', 'ground cayenne pepper', 'spicy pork sausage', 'raw honey', 'India Pale Ale', 'trout', 'channa da l', 'twists', 'celtic salt', 'pummelo', 'kiwifruit', 'jamaican jerk spice', 'red drum', 'black bass', 'habanero powde r', 'dry rub', 'umeboshi vinegar', 'tongue', 'black truffles', 'reposado', 'Knorr® Fiesta Sides™ - Mexican Rice', 'mo chi', 'Flora Original', 'pork loin rib chops', 'meat drippings', 'eggnog', 'gingersnap crumbs', 'dark chocolate', 'gr ound roasted sichuan peppers', 'garlic puree', 'country ham', 'açai powder', 'tamarind', 'vegan chicken flavored bou ilon', 'brewed coffee', 'chicken heart', 'reduced sugar ketchup', 'sambal ulek', 'lo mein noodles', 'lemon-lime sod a', 'satsumas', 'haricots verts', 'shaved chocolate', 'puffed rice', 'allspice', 'romaine lettuce', 'sirloin tip roas t', 'kimchi juice', 'crushed peppermint candy', 'pan drippings', 'low-fat chicken broth', 'instant pudding mix', 'mix ed nuts', 'Stonefire Italian Artisan Pizza Crust', 'achiote paste', 'raw sugar', 'crushed red pepper', 'peeled canned low sodium tomatoes', 'rutabaga', 'pink beans', 'shelled hemp seeds', 'semisweet baking chocolate', 'ground ginger', 'Hawaiian salt', 'milk & cream', 'prawns', 'garlic sauce', 'italian vinaigrette', 'Saigon cinnamon', 'boneless salmon fillets', 'cassava', 'chopped hazelnuts', 'boned duck breast halves', 'Japanese Mayonnaise', 'whole wheat pizza crus t', 'hibiscus', 'Asian chili sauce', 'crispy bacon', 'chocolate mousse', 'chocolate chip cookie mix', 'dashi powder', 'Fisher Pecan Halves', 'whole wheat pita', 'cracked wheat', 'pie crust', 'light cream', 'Jif Creamy Peanut Butter', 'chocolate frosting', 'banana blossom', 'great northern beans', 'low-fat plain greek yogurt', 'pinot grigio', 'porte r', 'condensed golden mushroom soup', 'Pillsbury Pie Crusts', 'nuoc cham', 'vegetable demi-glace', 'rib eye steaks', 'grapes', 'rock salt', 'roasted chili paste', 'edible flowers', 'chickpea flour', 'fry mix', 'pancetta slices', 'pie shell', 'vegetable stock', 'turkey breast tenderloins', 'hellmann' or best food light mayonnais", 'orange marmalade', 'fat-trimmed beef flank steak', 'boiled ham', 'cocktail sauce', 'gruyere cheese', 'bouquet garni', 'pisco', 'tap wate r', 'carnation', 'agave tequila', 'gluten-free flour', 'gluten-free tamari', 'chunky tomato salsa', 'bread mix', 'chi

nese red rice vinegar', 'Hurst Family Harvest Chipotle Lime Black Bean Soup mix', 'gala apples', 'powdered garlic', 'hamachi fillets', 'active dry yeast', 'muscovado sugar', 'sparkling mineral water', 'espresso powder', 'rice cakes', 'mexicorn', 'toffee sauce', 'sumac', 'apple cider', 'dri basil leaves, crush', 'Vietnamese coriander', 'turnip greens', 'V8 Juice', 'condensed cream of celery soup', 'japanese breadcrumbs', 'portobello caps', 'pork rub', 'Asian sweet chili sauce', 'roast', 'frozen sweet corn', 'kahlúa', 'ground sichuan pepper', 'cooked vegetables', 'fresh oregano', 'pork picnic roast', 'ajinomoto', 'yellow chives', 'italian seasoned dry bread crumbs', 'fryer chickens', 'capon', 'Crystal Farms® Shredded Cheddar Cheese', 'raw prawn', 'low sodium garbanzo beans', 'cooked pumpkin', 'chopmeat', 'tv p', 'lobster meat', 'non dairy milk', 'knoblauch', 'sorghum', 'red delicious apples', 'jujube', 'cod fillets', 'carbonated water', 'low fat mozzarella', 'coarse salt', 'applesauce', 'ox tongue', 'split yellow lentils', 'chees mozzarela stick', 'suet', 'mixed mushrooms', 'rosé wine', 'snail shells', 'onions', 'fully cooked ham', 'butter flavor shortening', 'grated kefalograviera', 'lemon wedge', 'branston pickle', 'ripe olives', 'brownie layer', 'crumbled cornbread', 'ratatouille', 'KRAFT Zesty Lime Vinaigrette Dressing', 'polenta prepar', 'salsa verde', 'tuna packed in water', 'non fat evaporated milk', 'black peppercorns', 'chopped nuts', 'scones', 'roti', 'peach preserves', 'saba', 'blackberry jam', 'parsnips', 'cajeta', 'iceberg lettuce', 'splenda', 'orange bitters', 'organic sugar', 'chicken parts', 'sliced chicken', 'chunky tomato sauce', 'hot chili oil', 'rye flour', 'California bay leaves', 'linguine', 'zest', 'chateaubriand', 'sushi rice', 'hot cherry pepper', 'teriyaki sauce', 'chicken wing drumettes', 'reduced sodium chicken broth', 'Mexican vanilla extract', 'condensed reduced fat reduced sodium tomato soup', 'chipotle paste', 'reduced sodium chicken flavor stuffing mix', 'kohlrabi', 'lamb leg', 'flat iron steaks', 'candy', 'salt and ground black pepper', 'cacao powder', 'lemon soda', 'genoa salami', 'pasta', 'white vinegar', 'fryers', 'kirby cucumbers', 'italian meatballs', 'green mango', 'poured fondant', 'Green Giant Whole Kernel Sweet Corn', 'oatmeal', 'english breakfast tea bags', 'firmly packed light brown sugar', 'fat free beef broth', 'sharp cheddar cheese', 'turkey breast steaks', 'tuaca', 'salmon roe', 'shaved parmesan cheese', '40% less sodium taco seasoning', 'salad oil', 'Ortega Tostada Shells', 'sirloin steak', 'duck liver', 'pastry cream', 'caramel syrup', 'vanilla wafer crumbs', 'chili oil', 'Kraft Sharp Cheddar Cheese', 'disco empanada frozen', 'stem ginger in syrup', 'sliced shallots', 'chocolate graham cracker crumbs', 'unsweetened vanilla almond milk', 'stone ground mustard', 'low-fat mayonnaise', 'beef demi-glace', 'barolo', 'minced pork', 'kewra water', 'green peas', 'red jalapeno peppers', 'rubbed sage', 'snip fresh dill', 'natural peanut butter', 'toga rashi', 'silver dragees', 'liver sausage', 'honey mustard', 'acorn squash', 'Quorn crumbles', '33% less sodium smoked fully cooked ham', 'mozzarella string cheese', 'sliced pears', 'sub buns', 'crushed garlic', 'blacan', 'BACARDI® Superior', 'hot salsa', 'long beans', 'center cut loin pork chop', 'pomegranate molasses', 'fresh mushrooms', 'dried split peas', 'hazelnut butter', 'medium cheddar cheese', 'sweet potato vermicelli', 'other', 'gochugaru', 'Old El Paso Flour Tortillas', 'pickle juice', 'sour milk', 'crumbled cheese', 'peanut butter chips', 'clementine sections', 'whole wheat fusilli', 'corn salsa', 'baobab fruit powder', 'vegan yogurt', 'ancho chile pepper', 'food colouring', 'nian gao', 'whole wheat peasant bread', 'shredded extra sharp cheddar cheese', 'low fat low sodium chicken broth', 'tawny port', 'shredded cheese', 'mixed seafood', 'soya flour', 'mortadella', 'chinese red vinegar', 'crushed red pepper flakes', 'chinese plum sauce', 'salmon caviar', 'frozen corn', 'pineapple juice concentrate', 'whole wheat crackers', 'Knorr Onion Minicubes', 'yellow bell pepper', 'shredded parmesan cheese', 'chicken fillets', 'sliced fresh fruit', 'spaghetti granular', 'shell pasta', 'back bacon', 'Turkish bay leaves', 'black bean and corn salsa', 'roasted rice powder', 'miso', 'coarse ground mustard', 'glazed pecans', 'Hidden Valley® Original Ranch Salad® Dressing & Seasoning Mix', 'jambalaya mix', 'candied peel', 'pancake mix', 'habanero chile', 'sweet pickle juice', 'raw peeled prawns', 'boysenberries', 'chili bean paste', 'chocolate syrup', 'barramundi fillets', 'chuck tender', 'McCormick Taco Seasoning', 'white corn', 'fresh onion', 'kim chee', 'canned chicken broth', 'creamed horseradish', 'jasmine', 'smoked eel', 'karo', 'sponge cake', 'powdered vanilla pudding mix', 'hachiya', 'fettuccine pasta', 'KRAFT Shredded Pepper Jack Cheese with a TOUCH OF PHILADELPHIA', 'levain bread', 'swanson beef broth', 'smooth natural peanut butter', 'Tamari Tamari', 'lemon slices', 'brown basmati rice', 'salted roasted pecans', 'pizza doughs', 'cannelloni shells', 'beef roast', 'pasta shells', 'chunky peanut butter', 'barbecued pork', 'fresh tomatoes', 'fudge brownie mix', 'comice pears', 'hops', 'Bragg Liquid Aminos', 'plum tomatoes', 'dried chives', 'and cook drain pasta ziti', 'organic vegetable stock', 'rouille', 'cabbage leaves', 'shrimp shells', 'prepared coleslaw', 'grated parmesan romano', 'Yoplait® Greek 100 blackberry pie yogurt', 'soy', 'cooked rice', 'Chianti', 'baby leaf lettuce', 'shiso leaves', 'glaze', 'sparkling wine', 'cook egg hard', 'dry gin', 'vegan mayonnaise', 'Zatarains Creole Seasoning', 'lager beer', 'swanson chicken broth', 'cashew butter', 'fat free less sodium chicken broth', 'Bertolli® Arrabbiata Sauce', 'toasted baguette', 'porridge oats', 'white tuna', 'tuna fillets', 'veggies', 'zinfandel', 'violets', 'popcorn chicken', 'masa', 'fermented bean curd', 'suacat', 'orange glaze', 'shoyu', 'vanilla yogurt', 'orange rind', 'refrigerated pizza dough', 'roast beef deli meat', 'Philadelphia Light Cream Cheese', 'palm sugar', 'smoked turkey drumstick', 'honey glazed ham', 'german mustard', 'root beer', 'creamy peanut butter', 'whole grain bread', 'coffee liqueur', 'broiler', 'farofa', 'beef sausage', 'basil mayonnaise', 'chocolate bars', 'sliced chorizo', 'kappa', 'ears', 'ciabatta loaf', 'caster sugar', 'ginger liqueur', 'fresh chile', 'Pernod Liqueur', 'Lipton® Recipe Secrets® Onion Soup Mix', 'wheat beer', 'strip loin', 'chilli paste', 'low fat graham cracker crumbs', 'chinese ham', 'crushed peppercorn', 'ground chicken', '2% milk shredded mozzarella cheese', 'chocolate', 'flower petals', 'liquid egg substitute', 'vanilla lowfat yogurt', 'Knorr parslei minicub', 'raisins', 'chicken egg', 'yu choy', 'flax seed meal', 'linguica', 'cranberry juice cocktail', 'lamb rib roast', 'dumpling wrappers', 'Kraft Grated Parmesan Cheese', 'lily flowers', 'Campbell's Condensed Cream of Mushroom Soup', 'beef ribs', 'reduced sodium chicken stock', 'Hellmann's® Real Mayonnaise', 'steamed white rice', 'Velveeta Cheese Spread', 'bouillon powder', 'wholemeal flour', 'vanilla glaze', 'tostadas', 'shank half', 'chocolate cake mix', 'chocolate ice cream mix', '(oz.) tomato paste', 'idaho potatoes', 'rapid rise yeast', 'Hidden Valley® Farmhouse Originals Italian with Herbs Dressing', 'palm vinegar', 'canola oil', 'sun-dried tomatoes', 'nutritional yeast', 'bosc pears', 'chocolate morsels', 'borlotti beans', 'frozen mango', 'coconut milk', 'frozen lemonade concentrate, thawed and undiluted', 'crisco', 'bottled low sodium salsa', 'semi pearled farro', 'Ciabatta rolls', 'tomatillos', 'whole wheat thin italian pizza crust', 'rich chicken stock', 'whole allspice', 'unsulphured molasses', 'Campbell's Condensed Cream of Chicken Soup', 'ground fennel', 'boneless chuck roast', 'hard-boiled egg', 'egg whites', 'alfalfa sprouts', 'rib roast', 'deep-fried tofu', 'Mexican oregano', 'currant', 'Progresso Artichoke Hearts', 'buckwheat flour', 'unsweetened dried coconut', 'imitation seafood', 'dark brown sugar', 'dinner rolls', 'low-fat monterey jack', 'buckwheat groats', 'chinese buns', 'Melba toast', 'low sodium diced tomatoes', 'low-fat sour cream', 'barley miso', 'erythritol', 'black pepper', 'bean curd', 'lettuce', 'pork sausage casing', 'chopped cooked meat', 'white rice flour', 'cuban peppers', 'pickled jalapenos', 'Himalayan salt', 'Crystal Farms Shredded Gouda Cheese', 'honeydew melon', 'dry yeast', 'garden peas', 'coke zero', 'cilantro sprigs', 'fresh tarragon', 'Jarlsberg', 'oat groats', 'vegan coffee creamer', 'dumpling dough', 'rigatoni', 'pimenton', 'reduced sodium italian style stewed tomatoes', 'cherries', 'nonfat milk', 'chicken strips', 'wing sauce', 'hierba santa', 'doenzang', 'lamb steaks', 'cake batter', 'mild curry paste', 'brownies', 'chicken thighs', 'medium egg noodles', 'low salt chicken broth', 'dried neem leaves', 'veal scallopini', 'challa', 'frozen tater tots', 'whole wheat sourdough bread', 'Pillsbury™ Refrigerated Crescent Dinner Rolls', 'seeds', 'unseasoned breadcrumbs', 'medium-grain rice', 'whole wheat pastry flour', 'grana padano', 'dipping sauces', 'prosecco', 'cactus pad', 'pumpkin pie spice', 'cipollini onions', 'spring rolls', 'flavored syrup', 'butter salt', 'au jus gravy', 'curly leaf spinach', 'devil's food cake mix', 'pickled jalapeno peppers', 'pollock', 'flour tortillas', 'broad beans', 'plantains', 'masa harina', 'v 8 juice', 'crimini mushrooms', 'Nestle Table Cream', 'snow pea pods', 'quince paste', 'hot dog bun', 'grated cauliflower', 'iced tea', 'instant tapioca', 'bertolli four cheeses', 'frozen cheese ravioli', 'clam sauce', 'lima beans', 'prosciutto fat', 'raw almond', 'chocolate chunks', 'low fat cream', 'bucatini', 'cajun seasoning', 'roquefort cheese', 'Yoplait® Greek 2% caramel yogurt', 'pane di casa', 'chuck', 'frozen lemonade concentrate', 'olive oil mayonnaise', 'Kim Crawford Sauvignon Blanc', 'pumpkin seeds', 'pork rib chops', 'ginger ale', 'asian', 'taco bell home originals', 'worcestershire sauce low sodium', 'reduced fat alfredo sauce', 'Ragu Traditional Sauce', 'ham hock', 'mild green chiles', 'chicken breast fillets', 'beef round', 'mustard powder', 'sweetened condensed

milk', 'toasted buns', 'hot chili paste', 'almond extract', 'reduced sodium kidney beans', 'yellow peas', 'tomato basil sauce', 'frozen green beans', 'smoked almonds', 'maple extract', 'sturgeon fillets', 'red anjou pears', 'gelatin', 'stevia powder', 'soy nuts', 'boneless skin on chicken thighs', 'low-fat balsamic vinaigrette', 'coconut flour', 'stolichnaya', 'chile de arbol', 'chicken breasts', 'regular soy sauce', 'canned corn', 'kaffir lime', 'granola', 'sushi vinegar', 'Italian turkey sausage links', 'sesame seeds buns', 'papad', 'bran flakes', 'unsalted shelled pistachio', 'gluten-free pie crust', 'chrysanthemum', 'grated lemon peel', 'gluten-free penne', 'plain chocolate', 'abbamele', 'mixed peel', 'fresh red chili', 'evaporated milk', 'golden zucchini', 'herb seasoned stuffing mix', 'mahi mahi fillets', 'frozen peach slices', 'mole paste', 'agave nectar', 'seafood glaze', 'tortellini', 'fresh orange', 'watercress', 'confit', 'dashi', 'medium whole wheat tortillas', 'fine granulated sugar', 'raw buckwheat groats', 'amontillado sherry', 'dried pappardelle', 'bottled clam juice', 'white quinoa', 'cut up cooked chicken', 'seedless watermelon', 'pepperoni turkei', 'shichimi togarashi', 'drippings', 'cavatelli', 'fuji apples', 'whole turkey', 'dry mustard', 'beef rump', 'ikura', 'ragu old world style sweet tomato basil pasta sauc', 'kokum', 'Gourmet Garden Oregano', 'shortening', 'Elmlea single', 'lavender', 'garlic', 'loose leaf black tea', 'tropical fruits', 'Fisher Pecans', 'lipton green tea bag', 'white beans', 'thin rice stick noodles', 'pasta shell small', 'coffee low-fat frozen yogurt', 'Progresso Black Beans', 'boneless beef roast', 'low-fat bottled italian dressing', 'fresh dill', 'mild curry powder', 'Daiya', 'green plantains', 'fava beans', 'Spice Islands Bay Leaves', 'dark crème de cacao', 'duck breasts', 'citron', 'pork sirloin chops', 'medium firm tofu', 'american cheese food', 'low-fat deli ham', 'artisan bread', 'whipped cream cheese', 'risotto', 'mashed cauliflower', 'orange slices', 'smoked pork', 'corn tortillas', 'cheese', 'whole wheat rotini', 'light beer', 'napa cabbage', 'icing mix', 'alphabet pasta', 'finely ground coffee', 'beef bones', 'shell steak', 'whole wheat berries', 'yellow curry paste', 'sea bass fillets', 'center cut bacon', 'relish', 'dried wood ear mushrooms', 'halibut fillets', 'monkfish fillets', 'spring greens', 'lobster stock', 'somen', 'raita', 'mild salsa', 'lo bok', 'Japanese turnips', 'tapioca flour', 'vanilla almondmilk', 'less sodium beef broth', 'fat free ground turkey breast', 'wild asparagus', 'molasses', 'shredded romano cheese', 'morsels', 'benne seed', 'dried basil', 'grated coconut', 'salsa', 'oven-ready lasagna noodles', 'mushroom caps', 'japanese style bread crumbs', 'frozen fruit', 'whole wheat bread flour', 'cucuzza', 'fresno pepper', 'fruitcake', 'pangasius', 'fatfre cream of chicken soup', 'Knorr® Beef Bouillon', 'matzo cake meal', 'dried fruit', 'shredded low-fat sharp cheddar', 'nacho chips', 'Velveeta Queso Blanco', 'boneless pork loin', 'whole baby okra', 'sweet italian sausag links, cut into', 'low fat coleslaw dressing', 'catfish fillets', 'Italian cheese', 'ground dried shrimp', 'sausages', 'bread flour', 'vegetable shortening', 'graham cracker crumbs', 'Cointreau Liqueur', 'flax egg', 'low-fat cheddar cheese', 'Foster Farms boneless skinless chicken breasts', 'dark turkey meat', 'low sodium store bought chicken stock', 'lemon cucumber', 'black tea leaves', 'bone-in chicken breast halves', 'rockfish', 'dried lentils', 'Nilla Wafers', 'chicken chorizo sausages', 'whipped dessert topping', 'salt free herb seasoning', 'sichuan peppercorn oil', 'cuttlefish balls', 'low sodium low fat vegetable broth', 'evaporated skim milk', 'pork baby back ribs', 'warm water', 'dark muscovado sugar', 'brown ale', 'frozen pastry puff sheets', 'greater yam', 'sugar substitute', 'lamb loin', 'cactus paddles', 'evapor low-fat milk', 'pineapple slices', 'blood sausag e', 'pork butt roast', 'file powder', 'mussels', 'tomato garlic pasta sauce', 'beef base', 'extra-lean ground beef', 'seafood', 'nappa cabbage', 'spaghetti sauce seasoning mix', 'fresh spinach leaves, rins and pat dry', 'turkey meat', 'chipotle peppers', 'keema', 'Philadelphia Cooking Creme', 'boneless ham', 'mixed dried fruit', 'Braeburn Apple', 'fresh ginger', 'winter savory', 'broth', 'double concentrate tomato paste', 'turmeric root', 'lapsang', 'Knorr® Past a Sides™ - Butter & Herb', 'black trumpet mushrooms', 'low sodium stock', 'chocolate ice cream', 'meatballs', 'whole grain dijon mustard', 'mora chiles', 'hog casings', 'soft corn tortillas', 'cooking sherry', 'caramels', 'cilantro stems', 'nutritional yeast flakes', 'strawberry ice cream', 'Budweiser', 'hibiscus tea', 'yellow split peas', 'mahlab', 'cream cheese frosting', 'ground white pepper', 'Colman's Mustard Powder', 'whiskey', 'roma tomatoes', 'process cheese spread', 'heirloom squash', 'skinless chicken thighs', 'mixed fruit', 'sunflower kernels', 'skin on bone in chicken legs', 'whole wheat seasoned breadcrumbs', 'spicy sausage', 'green chile sauce', 'triple sec', 'white hominy', 'pork stew meat', 'red vinegar', 'mild pork sausage', 'KRAFT Mexican Style Shredded Four Cheese with a TOUCH OF PHILADELPHIA', 'Ibarra Chocolate', 'miniature chocolate chips', 'San Marzano Diced Tomatoes', 'capellini', 'sourdough loaf', 'lean ground pork', 'gluten-free broth', 'truffle butter', 'parmesan cheese', 'asian basil', 'sesame chili oil', 'Campbell's Condensed Cheddar Cheese Soup', 'pure vanilla', 'Manischewitz Matzo Meal', 'whole cloves', 'wildflower honey', 'vindaloo paste', '2% lowfat greek yogurt', 'lady fingers', 'buns', 'olive oil flavored cooking spray', 'snow peas', 'katsuo bushi', 'osetra caviar', 'shellfish', 'fowl', 'irish oats', 'raisin bread', 'sweet sherry', 'roasted hazelnuts', 'winesap', 'San Marzano tomatoes', 'manicotti pasta', 'golden raisins', 'panang curry paste', 'lean minced beef', 'sloe gin', 'fried eggs', 'plum wine', 'jicama', 'bone-in ribeye steak', 'red cabbage', 'sliced black olives', 'poha', 'extra lean minced beef', 'groundnut', 'Cholula Hot Sauce', 'white asparagus', 'savoiardi', 'bone in skin on chicken thigh', 'italian style seasoning', 'chinese roast pork', 'goji berries', 'pepperoni slices', 'knorr tomato bouillon with chicken flavor', 'Johnsonville Andouille', 'sourdough baguette', 'dipping chocolate', 'chitterlings', 'grilled chicken strips', 'bermuda onion', 'gluten flour', 'dal', 'kirschwasser', 'sherbet', 'sour orange juice', 'granulated garlic', 'herb cheese', 'chopped fresh herbs', 'soy-based liquid seasoning', 'A Taste of Thai Rice Noodles', 'cream style cottage cheese', 'whole milk ricotta cheese', 'herbs', 'hot pepper', 'graham flour', 'cabbage head', 'granular no-calorie sucralose sweetener', 'shirataki', 'frangipane', 'cumineed', 'Crystal Hot Sauce', 'khoa', 'Heat h Candy Bars', 'black treacle', 'cooking spray', 'ground flaxseed', 'sweet biscuit crumbs', 'green split peas', 'onion salt', 'ajwain', 'baked corn tortilla chips', 'reduced sodium fat free chicken broth', 'garlic salt', 'bread and butter pickles', 'bhaji', 'nonfat dry milk', 'capicola', 'corn bread', 'pumpernickel', 'frozen chopped spinach', 'crema mexican', 'gran marnier', 'dried fish flakes', 'almond milk', 'chèvre', 'truffle salt', 'small white beans', 'leg of lamb', 'Cavenders Greek Seasoning', 'beef carpaccio', 'dark beer', 'cracked black pepper', 'plain seltzer', 'lecithin', 'custard powder', 'whole wheat sandwich bread', 'rock cornish game hens', 'ziti', 'water crackers', 'custard', 'mixed greens', 'chicken demi-glace', 'dill', 'dried scallops', 'chopped onion', 'poppy seed filling', 'Spice Islands Garlic Salt', 'Louisiana Cajun Seasoning', 'manchego cheese', 'grouper', 'shiro miso', 'amaranth', 'sweet relish', 'dried leav thyme', 'karashi', 'waxy potatoes', 'mint sprigs', 'komatsuna', 'Red Gold® diced tomatoes', 'reduced fat cream of mushroom soup', 'shiitake', 'pita bread', 'boiling water', 'creamy gravy', 'fresh basil leaves', 'snapper head', 'fresh tofu', 'ice', 'jerk paste', 'dried kelp', 'shahi jeera', 'orange flavored brandy', 'rye', 'pork stock', 'young leeks', 'olives', 'light cream or half and half', 'shelled pistachios', 'black mustard seeds', 'chili powder', 'unsweetened soymilk', 'macarons', 'king crab legs', 'unsweetened baking chocolate', 'Rotel Diced Tomatoes & Green Chilis', 'candied pineapple', 'high-fructose corn syrup', 'ground thyme', 'chile piquin', 'arrow root', 'peperoncino', 'reduced fat reduced sodium cream of mushroom soup', 'crumb crust', 'orange bell pepper', 'sandwiches', 'yukon gold', 'tiger prawn', 'wish bone red wine vinaigrett dress', 'regular sour cream', 'sambuca', 'gluten free chicken broth', 'nonfat italian dressing', 'candied fruit', 'boneless skinless chicken breasts', 'Kraft Mayonnaise', 'cooked turkey', 'ripe', 'steak fillets', 'veal medallions', 'whipped butter', 'stout', 'paella rice', 'fillet of beef', 'Vegeta Seasoning', 'melon', 'Royal Baking Powder', 'baby lima beans', 'free-range eggs', 'cereal flakes', 'herring fillets', 'halloumi cheese', 'green gram', 'roasted tomatoes', 'razor clams', 'Mexican lager beer', 'beef drippings', 'gravy master', 'azuki bean', 'low-fat feta', 'Splenda Brown Sugar Blend', 'tea cake', 'dried cornhusks', 'pepper', 'ear of corn', 'medium salsa', 'peanuts', 'smoked turkey breast', 'boneless pork tenderloin', 'tempura batter', 'root vegetable s', 'vine ripened tomatoes', 'crumbles', 'boneless chicken breast halves', 'dried chipotle pepper', 'extra', 'chilled prosecco', 'serrano chile', 'tortilla wraps', 'medium shrimp', 'huckleberries', 'mitsuba', 'beans', 'seasoned rice wine vinegar', 'candied chestnuts', 'gomashio', 'aged balsamic vinegar', 'endive', 'hyssop', 'yellow food coloring', 'anch-style seasoning', 'ground beef', 'quinces', 'cherry juice', 'fat-free shredded cheddar cheese', 'pumpkin purée', 'hot green chile', 'beluga lentil', 'crumbled ricotta salata cheese', 'Mazola® Chicken Flavor Bouillon Powder', 'extra firm silken tofu', 'thai chile', 'day old bread', 'tortilla shells', 'sweet pickle relish', 'mochiko', 'red bliss potato', 'riesling', 'licor 43', 'breasts halves', 'frozen garden peas', 'grana', 'cheese curds', 'scallions', 'pizza'

crust', 'roasted garlic oil', 'Spike Seasoning', 'baking sugar', 'Massaman curry paste', 'daikon sprouts', 'celery seed', 'cherry vanilla ice cream', 'sugar syrup', 'blade steak', 'shredded swiss cheese', 'queso crema', 'chipotle sauce', 'large egg whites', 'fusilli', 'table syrup', 'tri-tip roast', 'calamansi juice', 'italian style rolls', 'tarragon vinegar', 'kasuri methi', 'preserv raspberri seedless', 'low-sodium low-fat chicken broth', 'tortilla chips', 'cream peach', 'Crystal Farms Reduced Fat Shredded Marble Jack Cheese', 'nonfat ricotta cheese', 'sazon seasoning', 'broccoli florets', 'Crispy Rice Cereal', 'patis', 'sour cream', 'Tokyo negi', 'matcha', 'sweet turkey sausage', 'jello', 'dr. pepper', 'veal cutlets', 'canned tomatoes', 'chile pepper', 'TACO BELL® HOME ORIGINALS® Taco Seasoning Mix', 'broiler-fryer chicken', 'gyoza wrappers', 'canela', 'mesquite seasoning', 'small yellow onion', 'white corn tortillas', 'Johnsonville Andouille Fully Cooked Sausage', 'curly kale', 'graham crackers', 'Jameson Irish Whiskey', 'egg roll skins', 'friselle', 'calabaza', 'frozen crabmeat, thaw and drain', 'vanilla pods', 'bottom round roast', 'tangelo s', 'pork cutlets', 'croissant dough', 'sesame paste', 'butterflied leg of lamb', 'unsweetened almond milk', 'tamari soy sauce', 'sage leaves', 'boiled eggs', 'sardines', 'diced bacon', 'Amaretti Cookies', 'aloe juice', 'fontina', 'mace', 'frozen carrots', 'red wine', 'black tea', 'merguez sausage', 'mein', 'red chili peppers', 'crushed graham crackers', 'organic tomato', 'hot cocoa mix', 'shanghai noodles', 'boneless chicken breast', 'chicken tenderloin', 'unsalted beef stock', 'condensed french onion soup', 'chestnuts', 'serrano peppers', 'navel oranges', 'dried allspice berries', 'mustard seeds', 'onion rings', 'burro banana', 'shao hsing wine', 'thai noodles', 'rosemary', 'chicken-flavored soup powder', 'ginseng tea', 'hubbard squash', 'coconut aminos', 'sirloin tip', 'beef', 'french fri frozen', 'medium shrimp uncook', 'boneless skinless chicken breast halves', 'powdered turmeric', 'prepared mustard', 'monterey jack', 'dried cherry', 'nori furikake', 'black bean stir fry sauce', 'unsalted almonds', 'red curry paste', 'morel', 'country gravy', 'gumbo file', 'runny honey', 'beef jerky', 'yellow rock sugar', 'pink grapefruit juice', 'bread, cut into italian loaf', 'bulk italian sausag', 'seasoned panko bread crumbs', 'dried coconut flakes', 'chili paste with garlic', 'cinnamon sticks', 'honey mustard dressing', 'banana peppers', 'whole almonds', 'Spanish olives', 'vine tomatoes', 'peas', 'beef marrow', 'uncooked ziti', 'Chinese sesame paste', 'noodles', 'dark corn syrup', 'butter flavor vegetable shortening', 'borage', 'flageolet', 'beef stock cubes', 'fat free lemon curd', 'boneless beef rib eye steaks', 'butter', 'double-acting baking powder', 'gray salt', 'whole wheat lasagna noodles', 'ground poppy seed', 'small red potato', 'cookie crumbs', 'flank steak', 'kasseri', 'poppy seed dressing', 'melted butter', 'lemon twists', 'french toast', 'citric acid powder', 'coffee extract', 'ice cream salt', 'barley grits', 'soft sandwich rolls', 'adobo sauce', 'chicken broth', 'carnation condensed milk', 'TABASCO® Chipotle Pepper Sauce', 'red apples', 'Thai fish sauce', 'thickeners', 'wheat berries', 'chopped fresh thyme', 'ground pecans', 'butter pecan cake mix', 'candied bacon', 'rusk', 'italian salad dressing mix', 'flat anchovy', 'knorr chicken flavor bouillon', 'seville oranges', 'coconut extract', 'miniature semisweet chocolate chips', 'frozen mixed berries', 'champagne', 'rapeseed oil', 'montreal steak seasoning', 'unhulled sesame seeds', 'Classico Pasta Sauce', 'reduced fat ricotta cheese', 'Haas avocados', 'diced red onions', 'chicken breast strips', 'chicken', 'roasted bell peppers', 'bresaola', 'fat free less sodium beef broth', 'romana', 'forest mushroom', 'nori flakes', 'coconut syrup', 'cajun style stewed tomatoes', 'ginseng', 'round sourdough bread', 'ground peppercorn', 'turbot fillets', 'green apples', 'black bean sauce', 'sandwich wraps', 'verjuice', 'roasting chickens', 'sundried tomato pesto', 'syrup', 'chicken stock cubes', 'marinara sauce', 'fino sherry', 'reduced fat firm tofu', 'lean beef', 'gorgonzola', 'whole wheat bread slices', 'granulated tapioca', 'mozzarella balls', 'tart crust', 'coconut chips', 'curds', 'popped popcorn', 'beef rump steaks', 'honeydew', 'meat filling', 'bhindi', 'vanilla bean seeds', 'sobrasada', 'cornbread mix', 'corned beef', 'yam bean', 'demi-glace', 'puy lentils', 'beef shank', 'decorating sugars', 'spaghetti', 'tri tip', 'lipton pure leaf unsweetened iced tea', 'mild sausage', 'ginger paste', 'brill', 'Old El Paso™ taco seasoning mix', '(14.5 oz.) diced tomatoes', 'beef boneless meat stew', 'katakuriko', 'mantou', 'Biryani Masala', 'Velveeta', 'refrigerated piecrusts', 'Kewpie Mayonnaise', 'bisquick', 'coleslaw dressing', 'southwest seasoning', 'mint extract', 'glucose syrup', 'cannelloni', 'burgundy snails', 'whole snapper', 'reduced fat swiss cheese', 'oyster liquor', 'watermelon radishes', 'cayenne pepper', 'asian wheat noodles', 'processed cheese', 'white rum', 'basil leaves', 'canned chipotles', 'simple syrup', 'chambord', 'mineral water', 'blueberry preserv', 'shrimp powder', 'enokitake', 'harusame', 'couscous', 'prepared pizza crust', 'ravioli', 'chocolate spread', 'dried peach', 'ceylon cinnamon', 'japanese radish', 'pork lard', 'San Marzano Crushed Tomatoes', 'low sodium tomato', 'minced meat', 'pork roast', 'soy marinade', 'sorrel', '(15 oz.) refried beans', 'fat free reduced sodium chicken broth', 'cream cheese, soften', 'taco toppings', 'solid white tuna', 'beef for stew', 'Herdez Salsa Verde', 'baby spinach leaves', 'whole wheat pita bread rounds', 'pudding', 'chicken and rice soup', 'sweet chili sauce', 'frozen pie crust', 'reduced fat cream cheese', 'sweet mustard', 'tenderloin roast', 'creamed spinach', 'Conimex Woksaus Specials Vietnamese Gember Knoflook', 'Betty Crocker™ oatmeal cookie mix', 'grated cotija', 'green leaf lettuce', 'silken tofu', 'fish balls', 'reduced sodium soy sauce', 'prune juice', 'snow crab', 'whole wheat bread toasted', 'chocolate chip cookie dough ice cream', 'pink lady apple', 'mixed vegetables', 'quickcooking grits', 'mostaccioli', 'dijon style mustard', 'guinea hens', 'cassava root flour', 'sweet basil', 'fresh salmon', 'roast beef', 'lamb cutlet', 'irish bacon', 'barilla', 'top sirloin steak', 'ramen noodles', 'pasta rotel', 'giblet', 'anchovy paste', 'greens', 'spicy brown mustard', 'caramel ice cream topping', 'low fat tortilla chip', 'seltzer water', 'liver', 'soft taco size flour tortillas', 'manicotti shells', 'pot roast', 'tamarind concentrate', 'orzo', 'cassis liqueur', 'dried shiitake mushrooms', 'pork and beans', 'buttermilk biscuits', 'gold potatoes', 'ahi', 'cauliflowerets', 'dark ale', 'sliced green onions', 'herbsaint', 'gingerroot', 'bengal gram', 'red russian kale', 'frozen ravioli', 'Barilla Plus Pasta', 'low-fat yogurt', 'green tea powder', 'cubed bread', 'turkey sausage', 'spinach', 'fish', 'truffle puree', 'buckwheat soba noodles', 'pistachio nuts', 'panko breadcrumbs', 'diced tomatoes', 'frozen broccoli', 'frozen basil', 'whole wheat dough', 'cabrals', 'pork bouillon cube', 'tupelo honey', 'Mrs. Dash', 'penn pasta, cook and drain', 'hot italian pork sausage', 'cubed pumpkin', 'stilton', 'turkey thigh', 'roquefort', 'fines herbes', '33% less sodium cooked ham', 'boneless rib eye steaks', 'part-skim ricotta cheese', 'boneless sirloin', 'mirlitons', 'slab bacon', 'shredded carrots', 'sweet & sour stir fry sauce', 'umeboshi', 'turkey broth', 'arrowroot starch', 'smoked fully cooked ham', 'hazelnut meal', 'prosciutto di parma', 'horseradish', 'swede', 'homemade chicken broth', 'queso asadero', 'vinegar', 'venison steaks', 'taco meat', 'kinchay', 'black cardamom pods', 'ale', 'fresh white truffles', 'italian sauce', 'dr pepper', 'chana dal', 'lic pop', 'lox', 'long pasta', 'ground pepper', 'large garlic cloves', 'coars ground black pepper', 'sweet chocolate', 'fresh sage', 'black truffle oil', 'nonfat half-and-half', 'pasta shapes', 'pancit bihon', 'pitted Medjool dates', 'shanks', 'beef bouillon', 'reduced sodium refried beans', 'citrus peel', 'pistachios', 'Belgian endive', 'citrus fruit', 'Mizkan Rice Vinegar', 'knorr pasta side', 'lasagna sheets', 'chicken salad', 'textured soy protein', 'empanada', 'rice bran', 'Quorn Chik'n Tenders', 'Old El Paso™ chopped green chiles', 'light pancake syrup', 'black-eyed peas', 'cardamom', 'chicken in water', 'daal', 'beansprouts', 'tortillas', 'jambalaya rice mix', 'gluten-free breadcrumbs', 'whole milk greek yogurt', 'america', 'ravva', 'meat tenderizer', 'baked pita chips', 'low sodium fat free vegetable broth', 'beef brisket', 'vanilla bean paste', 'low-fat ricotta', 'rump roast', 'black vinegar', 'maple sugar', 'pastis', 'Lipton® Iced Tea Brew Family Size Tea Bags', 'psyllium husks', 'sweet rice wine', 'smoked whitefish', 'sea salt flakes', 'stir fry vegetable blend', 'whole wheat bread', 'spicy salami', 'roasted red peppers', 'low sodium worcestershire sauce', 'pearl barley', 'ramen soup mix', 'bonito flakes', 'nonfat yogurt plain', 'dried beef', 'Wish-Bone Italian Dressing', 'boneless skinless chicken', 'yucca root', 'sour salt', 'pork roll', 'boned skinned duck breast halves', 'orange blossom extract', 'bread rolls', 'garlic naan', 'sherry wine', 'fruit juice', 'extra firm tofu', 'manzanilla', 'gluten-free pasta', 'spiny lobsters', 'canola mayonnaise', 'brown beech mushrooms', 'cassava meal', 'turkey', 'masago', 'beef bouillon powder', 'chopped parsley', 'red lentils', 'mandarin pancakes', 'lasagna noodle s', 'white cannellini beans', 'bawang goreng', 'matsutake mushrooms', 'toasted shredded coconut', 'Bob Evans Italian Sausage', 'Domino Confectioners Sugar', 'dark soy', 'ahi tuna steaks', 'fish broth', 'chinese radish', 'shanghai bok choy', 'shrimp chips', 'tikka masala curry paste', 'frozen broad beans', 'spring onions', 'hot curry powder', 'leaf lettuce', 'turkey legs', 'yellowtail', 'medium eggs', 'burgers', 'vegetable oil spray', 'alcohol', 'chipotle chile', 'pike', 'mizuna', 'kumquats', 'aleppo pepper', 'grapeseed oil', 'framboise liqueur', 'chinese mustard', 'hungarian h

ot paprika', 'grated lemon zest', 'slider buns', 'sweet baking chocolate', 'rum', 'light whipping cream', 'fresh shiitake mushrooms', 'feta cheese crumbles', 'instant espresso', 'sweet and sour sauce', 'no-salt-added diced tomatoes', 'pears', 'beef liver', 'braggs liquid aminos', 'American cheese', 'organic cane sugar', 'KRAFT Mexican Style Finely Shredded Four Cheese', 'reduced sodium vegetable stock', 'bread yeast', 'chopped cilantro', 'limoncello', 'sweet potatoes or yams', 'chinese baby corn', 'black cod fillets', 'duck fat', 'pink lentil', 'Spice Islands Ground Cumin Seed', 'passover wine', 'Fuyu persimmons', 'white mushrooms', 'ground black pepper', 'applewood smoked bacon', 'almond paste', 'Everglades Seasoning', 'frozen banana leaf', 'brisket', 'Madras curry powder', 'ground allspice', 'soda bread', 'red velvet cake mix', 'chanterelle', 'double smoked bacon', 'Hatch Green Chiles', 'pickling liquid', 'stewing beef', 'unsalted roasted pistachios', 'rose petals', 'caper berries', 'KRAFT Zesty Italian Dressing', 'habanero', 'pak choi', 'jamaican jerk season', 'dukkah', 'pocket bread', 'crumpet', 'Tabasco Green Pepper Sauce', 'chicken bouillon', 'pearl rice', 'low-fat natural yogurt', 'shark', 'spring water', 'graham cracker crusts', 'red preserved bean curd', 'instant rice', 'hamburger buns', 'cola', 'gluten free cooking spray', 'vanilla flavoring', 'lumpia wrappers', 'moonshine', 'black', 'cuttlefish', 'Tyson Crispy Chicken Strips', 'saltines', 'meat extract', 'veal for stew', 'tamari extract', 'whole garam masala', 'small eggs', 'picholine', 'zucchini blossoms', 'glutinous rice', 'fresh mexican cheese', 'butter extract', 'cooked quinoa', 'date molasses', 'manicotti', 'tarragon', 'romano cheese', 'skinless chicken breasts', 'bbq sauce', 'dried raspberry', 'chili', 'shrimp and crab boil seasoning', 'dhal', 'reduced-sodium tamarind sauce', 'whole grain mustard', 'cornish hens', 'poundcake', 'chicken meat', 'farro', 'dried lavender blossoms', 'creme anglaise', 'ground sage', 'fleur de sel', 'potato flour', 'swanson chicken stock', 'cherry syrup', 'plain low-fat yogurt', 'beef rib roast', 'cornbread stuffing mix', 'sweetener', 'shrimp small uncook', 'hot italian turkey sausage links', 'butter beans', 'granita', 'golden brown sugar', 'brandy extract', 'instant chicken bouillon granules', '(10 oz.) frozen chopped spinach', 'brie cheese', 'pork liver', 'French mustard', 'boneless sirloin steak', 'culinary lavender', 'chicken legs', 'fudge cake mix', 'grated horseradish', 'fat free cream cheese', 'fish sauce', 'silver tequila', 'soy milk', 'french sandwich rolls', 'pimentos', 'knorr pasta side cheesi cheddar', 'cones', 'mandarin juice', 'pineapple rings', 'chopped garlic', 'hearts of romaine', 'olive tapenade', 'fresh turmeric', 'flaked coconut', 'sweet pickle', 'poblano', 'seasoning', 'oregano leaves', 'low fat part skim ricotta cheese', 'diced pimentos', 'light chicken stock', 'table salt', 'juice', 'hatcho miso', 'knorr cilantro minicub', 'puff paste', 'Goya Ground Cumin', 'tilapia', 'grenadine syrup', 'refrigerated biscuits', 'baking mix', 'karo syrup', 'bean curd stick', 'chicken consomme', 'yam noodles', 'frozen peas', 'olive oil', 'cocoa', 'garnish', 'chickpeas', 'Goya Hot Sauce', 'low-fat cheese', 'turnips', 'Herdez Salsa Casera', 'dried soba', 'buttermilk self-rising white cornmeal mix', 'organic coconut milk', 'seedless red grapes', 'whole wheat flour', 'prepar pesto', 'sole fillet', 'calabash', 'dried mushrooms', 'italian seasoning', 'hake fillets', 'Margherita Pepperoni', 'taco shells', 'thyme sprigs', 'chinese barbecue sauce', 'smoked chorizo', '(14 oz.) sweetened condensed milk', 'seedless green grape', 'raspberry juice', 'pineapple salsa', 'margarita salt', 'white almond bark', 'aged cheddar cheese', 'beef hot dogs', 'sago', 'dried apple rings', 'bean threads', 'pork hocks', 'nut oil', 'toasted slivered almonds', 'Alaskan king crab legs', 'cabbage lettuce', 'condensed tomato soup', 'smoked rashers', 'skinless cod fillets', 'fresh marjoram', 'Marshmallow Fluff', 'toasted pecans', 'fresh parsley', 'croutons', 'absinthe', 'winter melon', 'condiments', 'chive blossoms', 'clams', 'fennel seeds', 'candlenuts', 'broccoli romanesco', 'organic butter', 'toasted sunflower seeds', 'greek yogurt', 'leftover meat', 'dried navy beans', 'fengreek leaves', 'soup pasta', 'chives', 'sweet onion', 'soft margarine', 'lemon cake mix', 'yellow hominy', 'no-calorie sweetener', 'Pace Picante Sauce', 'burgundy wine', 'reduced fat creamy peanut butter', 'unsweetened iced tea', 'green tea', 'shrimp stock', 'espresso', 'safflower oil', 'fresh chorizo', 'condensed milk', 'poppy seeds', 'chicken breast halves', 'prime rib', 'blanched almond flour', 'crabmeat frozen', 'pandan essence', 'tree ears', 'jumbo shrimp', 'reduced sodium black beans', 'low-fat mozzarella cheese', 'ladys house seasoning', 'aquavit', 'achiote powder', 'sirloin', 'tuscan sausage', 'fajita seasoning mix', 'blueberries', 'arugula', 'low-fat milk', 'orange juice concentrate', 'yellowfin', 'apple butter', 'buttermilk', 'shiso', 'oyster mushrooms', 'gingersnap', 'shredded coconut', 'swiss', 'shredded low-fat cheddar', 'Old El Paso Green Chiles', 'iceberg', 'brown gravy', 'rosemary leaves', 'frozen chopped spinach, thawed and squeezed dry', 'nigari tofu', 'ganache', 'butter-margarine blend', 'egg roll wraps', 'clarified butter', 'Pompeian Canola Oil and Extra Virgin Olive Oil', 'kelp noodles', 'bulb', 'fresh leav spinach', 'homemade meatballs', 'pain au levain', 'yellow lentils', 'mincemeat', 'oat flour', 'true cinnamon', 'eye of round steak', 'beef heart', 'tandoori seasoning', 'dried beans', 'anisette', 'brown gravy mix', 'char', 'fresh masa', 'shoepeg corn', 'country bread', 'chocolate baking bar', 'lardons', 'Knorr Chicken Stock Cubes', 'shishito chile', 'pork spare ribs', 'blue cheese dressing', 'low-fat ricotta cheese', 'tofu puffs', 'gluten-free chicken stock', 'corn bread crumbs', 'coconut oil', 'banana bread', 'KRAFT Original Barbecue Sauce', 'hazelnut oil', 'diced tomatoes and green chilies', 'lime rind', 'edible gold leaf', 'hot smoked paprika', 'free-range chickens', 'pekin duck breast halves', 'pickles', 'papardelle', 'croissants', 'Knorr Beef Stock Cubes', 'bock beer', 'pasta sauce', 'fresh corn', 'rice mix', 'filling', 'mini pepperoni slices', 'jalapeno chilies', 'crab sticks', 'grappa', 'whole okra', 'deli rolls', 'Jonshonville® Cajun Style Chicken Sausage', 'pork shoulder', 'pepper jack', 'tomato sauce', 'KRAFT Reduced Fat Shredded Mozzarella Cheese', 'gravy granules', 'tricolor quinoa', 'coconut water', 'virgin olive oil', 'chinese black mushrooms', 'kippered herring fillets', 'alum', 'dried chile peppers', 'mini chocolate chips', 'cockles', 'squabs', 'all beef hot dogs', 'no salt added chicken broth', 'matzo meal', 'sweet rice flour', 'fresh green bean', 'Mae Ploy Sweet Chili Sauce', 'tart shells', 'ampalaya', 'mullet', 'fresh cranberries', 'breakfast sausage links', 'yogurt dressing', 'Wolf Brand Chili', 'light lager', 'tenderloin', 'baking apples', 'Cara Cara orange', 'nut meal', 'mini marshmallows', 'fresh green peas', 'frozen shelled edamame', 'frozen whip topping, thaw', 'orchid', 'Soy Vay® Veri Veri Teriyaki® Marinade & Sauce', 'coconut flakes', 'fine grain salt', 'mentsuyu', 'havarti', 'whey', 'arame', 'jamaican jerk rub', 'vegetarian oyster sauce', 'italian eggplant', 'dark lager', 'toasted coconut', 'paprika', 'fresh brussels sprouts', 'store bought low sodium vegetable stock', 'dark rye flour', 'shredded Monterey Jack cheese', 'hand', 'breadfruit', 'chillies', 'cake', 'semolina', 'century eggs', 'chicken thigh fillets', 'Ragu Sauce', 'sliced apples', 'biscuits', 'biga', 'chocolate wafer cookies', 'bagel chips', 'hot chili sauce', 'spearmint', 'queso anejo', 'large egg yolks', 'cooked chicken', 'reduced sodium garbanzos', 'smoked haddock', 'artichoke bottoms', 'edamame', 'sweet bean paste', 'frozen mashed potatoes', 'tuna in oil', 'Kung Pao sauce', 'andouille turkey sausages', 'kaffir lime leaves', 'Accent Seasoning', 'pandan extract', 'gelatin sheet', 'Kahlua Liqueur', 'toast', 'smoked hog jowl', 'king oyster mushroom', 'green curry paste', 'tony chachere's seasoning', 'brine', 'chinese spinach', 'masala', 'shredded nori', 'Italian cheese blend', 'young coconut meat', 'crème de framboise', 'tapioca starch', 'bone-in pork chops', 'duck drippings', 'pomegranate seeds', 'asadero', 'lime slices', 'liver pate', 'raspberry jam', 'low-fat coffee ice cream', 'Italian herbs', 'rolls', 'hot chocolate mix', 'turkey giblet stock', 'reduced fat monterey jack cheese', 'urad dal split', 'culantro', 'grape juice', 'toasted sesame oil', 'chutney', 'treviso radicchio', 'mrs. dash seasoning mix', 'pork fillet', 'vanilla frozen yogurt', 'diced tomatoes in juice', 'loin pork chops', 'hen of the woods', 'clams, well scrub', 'min', '(oz.) tomato sauce', 'prosciutto', 'hawaiian sweet rolls', 'Spanish smoked paprika', 'red kidney beans', 'ditalini pasta', 'bottled balsamic vinaigrette', 'homemade beef stock', 'almond meal', 'baked pizza crust', 'white zinfandel', 'Toulouse sausage', 'low-sodium fat-free chicken broth', 'cannellini beans', 'Knorr® Pasta Sides™ - Alfredo', 'spices', 'fresh chicken stock', 'natural low-fat yogurt', 'red currants', 'salmon steaks', 'pancit', 'pickling salt', 'king crab', 'flowering garlic chives', 'reduced sodium canned chicken broth', 'tuna, drain and flake', 'chinese wolfberries', 'frozen cod fillets', 'cucumber salad', 'star anise', 'apple pie spice', 'corn tortilla chips', 'swordfish steaks', 'lacinato kale', 'chocolate milk mix', 'rice stick noodles', 'hot sauce', 'pita wedges', 'scrod', 'capsicum', 'light margarine', 'cooking apples', 'japanese cucumber', 'apricots', 'sweet potato starch', 'wheat starch', 'cherry coke', 'mel low white miso', 'parsley', 'apple cider vinegar', 'tuna steaks', 'non fat chicken stock', 'muscadine grapes', 'yellow mustard', 'yellow onion', 'chocolate covered coffee beans', 'banh hoi', 'bows', 'lean ground turkey', 'sherry vinegar', 'skinless flounder fillets', 'kamaboko', 'cream of potato soup', 'peach purée', 'whole wheat thin spaghetti', 'sauterne', 'buffalo', 'bénédictine', 'aleppo', 'roe', 'turkey salami', 'fat free frozen top whip', 'dill tips', 'McCor

mick Ground Cumin', 'pork country-style ribs', 'shortbread cookies', 'sambal chile paste', 'brats', 'fresh lemon juice', 'figs', 'finger chili', 'red wine vinegar', 'rum raisin ice cream', 'black radish', 'string beans', 'squirt', 'linguini', 'ascorbic acid', 'swordfish', 'low-fat tartar sauce', 'pork chops', 'dried dill', 'milk chocolate chips', 'chile negro', 'multi-grain penne pasta', 'unsalted dry roast peanuts', 'soup', 'black gram', 'bertolli vodka sauc made with fresh cream', 'instant white rice', 'smoked trout', 'Mo Qua', 'pernod', 'stuffing mix', 'panettone', 'marrons', 'crispy rice cereal', 'tofu sour cream', 'English muffins', 'shredded cheddar cheese', 'katsuo dashi', 'chocolate sp rinkles', 'pistou', 'fat-free refried beans', 'skate wing', 'coconut milk yogurt', 'rooster', 'brown chicken stock', 'green garlic', 'vanilla vodka', 'canned beef broth', 'feet', 'sweet soy', 'low sodium jarred chicken soup base', 'radicchio leaves', 'microgreens', 'unsalted chicken stock', 'topping', 'roasted unsalted cashews', 'unsweetened shredded dried coconut', 'radish slices', 'prebaked pizza crusts', 'gluten free corn tortillas', 'Barilla Oven-Ready Lasagne', 'skim milk', 'bone-in chicken breasts', 'butter lettuce', 'soft shelled crabs', 'medium zucchini', 'prego fresh mushroom italian sauce', 'rigatoni or large tube pasta', 'chocolate sauce', 'Truvia® natural sweetener', 'dried cranberries', 'fresh lime juice', 'cold water', 'Spice Islands Oregano', 'bonito', 'pork tenderloin', 'glucose', 'raw cane sugar', 'dough', 'chrysanthemum leaves', 'jerk seasoning', 'huitlacoche', 'Texas toast bread', 'uni', 'chicken leg quarters', 'Kikkoman Oyster Sauce', 'caribbean jerk seasoning', 'tubetti', 'reduced fat reduced sodium tomato and herb pasta sauce', 'ground red pepper', 'corn flour', 'Elmea Single Light', 'lamb stock', 'mushroom soup', 'garlic powder', 'pork heart', 'shiromiso', 'distilled vinegar', 'loosely packed fresh basil leaves', 'unsmoked bacon', 'gin', 'bo ttled chili sauce', 'boneless steak', 'wasabe', 'reduced fat sharp cheddar cheese', 'shredded Italian cheese', 'muscles, well scrubbed', 'black cherries', 'tree ear mushrooms', 'quahog clams', 'italian salad dressing', 'summer squash', 'fatback', 'minced beef', 'Pillsbury™ Crescent Recipe Creations® refrigerated seamless dough sheet', 'caramel flavored syrup', 'ground chicken breast', 'splenda no calorie sweetener', 'yuca', 'links', 'liquid honey', 'steak', 'small pearl tapioca', 'white truffle oil', 'traditional italian sauce', 'low-fat goat cheese', 'Italian bread', 'citrus juice', 'red kidney beans, rins and drain', 'green tomato relish', 'seitan', 'pork back ribs', 'semi firm tofu', 'rice vinegar', 'large marshmallows', 'romaine lettuce leaves', 'McCormick Ground Ginger', 'hot water', 'boneless country pork ribs', 'quick oats', 'dried minced garlic', 'whole wheat potato buns', 'ragu pizza quick sauc', 'green cardamom pods', 'rosewater', 'Conimex Wok Olie', 'maifun', 'shrimp paste', 'minced chicken', 'Makers Mark Whisky', 'roast pork seasoning mix', 'trout fillet', 'grape tomatoes', 'black rice vinegar', 'liqueur', 'medium curry powder', 'lime juice', 'sack', 'brown mustard', 'sage', 'vine leaves', 'yukon gold potatoes', 'soda water', 'chicken feet', 'vinaigrette', 'soy yogurt', 'veal tongue', 'sliced carrots', 'chuck short ribs', 'marshmallow creme', 'lime', 'broccoli rabe', 'tortellini, cook and drain', 'baby arugula', 'cream of mushroom soup', 'nonfat milk powder', 'granny smith apples', 'pineapple chunks in natural juice', 'jalape', 'pizza toppings', 'chinese duck sauce', 'sweet italian pork sausage', 'duck egg', 'honey-flavored greek style yogurt', 'toasted sesame seeds', 'melted fat', 'celery ribs', 'powdered egg whites', 'gravy', 'chile verde', 'rotelle', 'sea bream', 'sashimi grade tuna', 'chopped almonds', 'Hidden Valley® Original Ranch® Dips Mix', 'chinese parsley', 'italian plum tomatoes', 'whole wheat penne rigate', 'lotus seed paste', 'nonfat sweetened condensed milk', 'coconut butter', 'anise oil', 'ground cinnamon', 'Success White Rice', 'annatto seeds', 'raspberry fruit spread', 'Morton Salt', 'red chard', 'Swanson Chicken Broth', 'tuna drained and flaked', 'buffalo sauce', 'oil-cured black olives', 'salted mixed nuts', 'Sriracha', 'roasted pumpkin seeds', 'black cod', 'queso fresco', 'light cream cheese', 'diced potatoes', 'dried apricot', 'vegetable stock powder', 'fennel bulb', 'apricot halves', 'ume plum vinegar', 'powdered sugar icing', 'beef sirloin', 'seafood base', 'fresh lemon', 'filé', 'tarama', 'extra virgin coconut oil', 'broccoli stems', 'chopped ham', 'Ragu® Robusto!® Pasta Sauce', 'large curd cottage cheese', 'kippers', 'chunky salsa', 'burger style crumbles', 'phyllo', 'golden syrup', 'food gel', 'baby turnips', 'rice noodles', 'sorghum molasses', 'hot sausage', 'cross rib roast', 'freshly grated parmesan', 'callaloo', 'manioc flour', 'champagne grapes', 'peanut sauce', 'unsalted vegetable stock', 'bolillo', 'ragu cheesi classic alfredo sauc', 'mini bananas', 'pitted black olives', 'cantal', 'eggroll wrappers', 'bean curd skins', 'portuguese rolls', 'sunflower seed butter', 'california avocado', 'legumes', 'bass', 'malt', 'natural sugar', 'dried strawberries', 'vidalia', 'seasoned black beans', 'fresh chervil', '1% low-fat chocolate milk', 'Barilla Linguine', 'cooked bone in ham', 'collard green leaves', 'chicory', 'angus', 'honeycomb tripe', 'chinese cinnamon', 'organic granulated sugar', 'ngo gai', 'chocolate graham crackers', 'gluten-free hoisin sauce', 'longan', 'low-fat spaghetti sauce', 'dates', 'Japanese mountain yam', 'lipton recip secret golden onion soup mix', 'tumeric', 'baby back ribs', 'no salt added canned tomatoes', 'ornamental kale', 'cooked deli ham', 'Neapolitan ice cream', 'cream cheese with chives and onion', 'whitefish fillets', 'tomatillo salsa', 'custard dessert mix', 'vietnamese rice paper', 'scape pesto', 'lime wedges', 'soy bean paste', 'cooked bacon', 'baby goat', 'pasta wagon wheel', 'red wine vinaigrette', 'nam prik', 'water chestnuts', 'irish cream liqueur', 'Yuzukoshio', 'jackfruit', 'sweet cherries', 'Kraft Shredded Pepper Jack Cheese', 'knorr reduc sodium chicken flavor bouillon cube', 'cream cheese', 'miso paste', 'spareribs', 'gluten free cornmeal', 'turkey ham', 'fresh chevre', 'sodium free chicken broth', 'chorizo', 'armagnac', 'beef stew seasoning mix', 'dark meat', 'sazon goya with coriander and annatto', 'chicken gravy', 'gai lan', 'canola', 'frozen peaches', 'basil olive oil', 'Old El Paso Taco Seasoning Mix', 'cubed mango', 'wild garlic', 'ground blanched almonds', 'Crystal Farms Butter', 'beet juice', 'malt powder', 'english cucumber', 'napa cabbage leaves', 'orecchiette', 'maraschino', 'low sodium beef bouillon granules', 'Jose Cuervo', 'shark steak', 'regular chicken broth', 'gaeta olives', 'veggie patties', 'hazelnut flour', 'curry leaves', 'ciabatta', 'long-grain rice', 'farina', 'ghee', 'tomato paste', 'Adobo All Purpose Seasoning', 'buckwheat noodle s', 'curry powder', 'beet greens', 'tartar sauce', 'spam', 'rendered bacon fat', 'grated orange', 'royal olives', 'chocolate covered english toffee', 'lamb neck', 'watercress leaves', 'baking potatoes', 'savoy spinach', 'recipe crumbles', 'Honeysuckle White® Hot Italian Turkey Sausage Links', 'swordfish fillets', 'cauliflower flowerets', 'whole kernel corn, drain', 'refried beans', 'salted roasted almonds', 'mission figs', 'dried pinto beans', 'potato gnocchi', 'D elallo Extra Virgin Olive Oil', 'crumbled corn bread', 'low sodium beef stock', 'steel-cut oats', 'fatfree lowsodium chicken broth', 'bone in chicken thighs', 'shredded low-fat cheddar cheese', 'frozen hash browns', 'brewed tea', 'Philadelphia Cream Cheese', 'dumplings', 'shortcakes', 'whole wheat rotini pasta', 'japanese rice', 'fronds', 'pork meat', 'brown hash potato', 'low-fat firm silken tofu', 'high-gluten flour', 'cooking cream', 'fine salt', 'dark molasses', 'pizza shells', 'blood orange juice', 'Lipton Sparkling Diet Green Tea with Strawberry Kiwi', 'dri oregano leaves, crush', 'cooking wine', 'cod cheeks', 'Meyer lemon peel', 'cilantro leaves', 'orgeat syrup', 'ground turkey', 'fresh lime', 'turkey bacon', 'brine-cured black olives', 'curing salt', 'dumpling skins', 'new york strip steaks', 'tonic water', 'cream sauce', 'wide egg noodles', 'watermelon seeds', 'apple schnapps', 'madagascar bourbon vanilla extract', 'shelled shrimp', 'soft-shelled crabs', 'dried lavender flowers', 'cod fish', 'dinosaur kale', 'natural pistachios', 'tamarind purée', 'pimenton de la vera', 'whole wheat fettuccine', 'fenugreek seeds', 'pizza seasoning', 'condensed cream of mushroom soup', 'instant banana cream pudding', 'rum extract', 'durum wheat flour', 'ocean perch', 'merlot', 'sumac powder', 'Jasmine brown rice', 'bacon pieces', 'stick butter', 'extra sharp cheddar cheese', 'palm oil', 'Kikkoman Less Sodium Soy Sauce', 'gluten free barbecue sauce', 'soybean sprouts', 'dried tagliatelle', 'low sodium 96% fat free ham', 'green papaya', 'cajun-creole seasoning mix', 'wheat', 'spinach tortilla', 'frozen cherries', 'celery leaves', 'rice sticks', 'pea shoots', 'white cabbage', 'orange peel', 'lambs liver', 'jasmine rice', 'caponata', 'extra wide egg noodles', 'phyllo dough', 'fromage blanc', 'Japanese soy sauce', 'Bertolli Tomato & Basil Sauce', 'large eggs', 'dried mission figs', 'juice concentrate', 'Hidden Valley® Original Ranch® Light Dressing', 'cress', 'lunc heon meat', 'bittersweet chocolate chips', 'dried mint flakes', 'cooked white rice', 'turkey burger', 'jack cheese', 'beurre manié', 'purple onion', 'sprouts', 'flavored rice mix', 'apple pie filling', 'baby radishes', 'light rum', 'ground rosemary', 'OREO® Cookies', 'sesame salt', 'duck breast halves', 'barbecue rub', 'chunky', 'horseradish sauce', 'adzuki beans', 'country crock calcium plus vitamin d', 'cane sugar', 'bird pepper', 'gyoza', 'salt free chili powder', 'unsalted margarine', 'Goya Extra Virgin Olive Oil', 'Oscar Mayer Cotto Salami', 'reduced fat italian dressing', 'vegan butter', 'chili seasoning mix', 'thick-cut bacon', 'spring roll skins', 'bread dough', 'caraway', 'Saffron Road Vegetable Broth', 'greek seasoning mix', 'snappers', 'whole wheat submarine loaves', 'bacon fat', 'praline toppi

ng', 'chai tea concentrate', 'refrigerated bread dough', 'chinese turnip', 'prepared lasagne', 'boneless chops', 'peach vodka', 'veal loin chops', 'low fat cream of celery soup', 'Tipo 00 flour', 'avocado leaves', 'minced ginger', 'ragu', 'condensed cream of chicken soup', 'rib-eye roast', 'sooji', 'canned low sodium chicken broth', 'globe eggplant', 'store bought low sodium chicken stock', 'extract', 'cherry pie filling', 'teas', 'cherry tomatoes', 'low-fat refried beans', 'whipped cream', 'tomato purée', 'toasted almonds', 'top round steak', 'korean buckwheat noodles', 'shuck corn', 'reduced fat provolone cheese', 'precooked meatballs', 'whole wheat tortilla wraps', 'black olives', 'ice cubes', 'grenadine', 'piri-piri sauce', 'swiss cheese', 'fettucine', 'garbanzo beans', 'mini cucumbers', 'bacon bits', 'Praline Liqueur', 'wensleydale', 'bread and butter pickle slices', 'carpaccio', 'xuxu', 'frozen stir fry vegetable blend', 'small tomatoes', 'any', 'green onion bottoms', 'light coconut milk', 'penne', 'fire roasted diced tomatoes', 'varnish clams', 'white sesame seeds', 'hemp seeds', 'rotisserie chicken', 'teleme', 'graviera', 'frozen petit pois', 'Ritz Crackers', 'tobiko', 'raw pistachios', 'chuck steaks', 'fresh asparagus', 'vegetable soup mix', 'knorr leek recipe mix', 'whole wheat penne', 'tomatoes on the vine', 'Breyers® Natural Vanilla Ice Cream', 'egg substitute', 'turkey stock', 'chili seasoning', 'unsweetened chocolate', 'wonton noodles', 'white radish', 'jerusalem artichokes', 'cold cut', 'seasoning salt', 'candy canes', 'yellow peppers', 'asian chile paste', 'instant couscous', 'baked tortilla chips', 'chipotle', 'canned tuna', 'dried porcini mushrooms', 'vegetarian chicken', 'orange roughy', 'Sangiovese', 'cannoli shells', 'ficelle', 'king salmon', 'mozzarella cheese', 'dry lasagna', 'sliced meat', 'veggie crumbles', 'pure maple syrup', 'sourdough rolls', 'serrano', 'beef smoked sausage', 'long pepper', 'dried plum', 'sea scallops', 'brown rice noodles', 'fresh ginger root', 'condensed reduced fat reduced sodium cream of chicken soup', 'Spring! Water', 'low-fat cheddar', 'pecorino cheese', 'green chard', '40% less sodium taco seasoning mix', 'nori', 'Kerrygold Pure Irish Butter', 'jamaica', 'pastry dough', 'Jell-O Gelatin Dessert', 'old fashioned stone ground grits', 'chunky tomatoes', 'rib pork chops', 'smoked sausage', 'roasted sesame seeds', 'mature cheddar', 'sweet potatoes & yams', 'citrus slices', 'sodium reduced chicken broth', 'bay leaves', 'whole chicken', 'starchy potatoes', 'ground nutmeg', 'red beans', 'Indian spice', 'dried orange peel', 'coffee ice cream', 'canning salt', 'Daisy Sour Cream', 'grass-fed butter', 'short pasta', 'low fat monterey jack cheese', 'braising steak', 'crostini', 'angel food cake', 'apricot jelly', 'fat-free cheddar cheese', 'caraway seeds', 'boneless moulard duck breast halves', 'frozen vegetables', 'radishes', 'Poi re Williams', 'baking yeast', 'Greek dressing', 'Kraft Miracle Whip Dressing', 'bouillon cube', 'Boston lettuce', 'lamb shanks', 'goose', 'cider vinegar', 'cavatappi', 'vegetable oil', 'tandoori spices', 'kecap manis', 'dried chile', 'fine grind white cornmeal', 'candied orange peel', 'saki', 'boneless chicken', 'cherry preserves', 'lamb bouillon cube', 'yardlong beans', 'chiles', 'mung beans', 'baked beans', 'opo squash', 'sugar', 'knorr tomato bouillon with chicken flavor cube', 'blood orange', 'mi', 'cooking liquid', 'hickory-flavored liquid smoke', 'low fat reduced sodium pasta sauce', 'converted rice', 'dill pickles', 'mezcal', 'pound cake', 'Hogue Cabernet Sauvignon', 'brioche', 'mahima hi', 'low-fat vegetarian chili with beans', 'wood mushrooms', 'tangzhong roux', 'slider rolls', 'Old El Paso™ refried beans', 'coconut cream', 'pear juice', 'red quinoa', 'vanilla powder', 'wagon wheels', 'steak sauce', 'yoghurt', 'hoja santa leaves', 'flavored wine', 'roasted pistachios', 'roasted garlic', 'Doubanjiang', 'canton noodles', 'truffles', 'baby tatsoi', 'seedless raspberry jam', 'small potatoes', 'walnuts', 'flanken short ribs', 'littleneck clams', 'cake mix', 'idli', 'crawfish', 'margarine spread', 'ground bison', 'rainbow trout', 'veal shoulder', 'tomato salsa', 'fried garlic', 'Dutch-processed cocoa powder', 'canned beans', 'Mazola Canola Oil', 'whipping heavy cream', 'turbinado', 'firm silken tofu', 'kumquats in syrup', 'grits', 'baby greens', 'ginger puree', 'cod roe', 'yuzu', 'redfish fillet', 'foie gras terrine', 'refried black beans', 'salad', 'urad dal', 'softened butter', 'vanilla pudding', 'self-rising cornmeal', 'gravy mix mushroom', 'fat-free mayonnaise', 'dried pasta', 'white peaches', 'cooked shrimp', 'yellow miso', 'chihuahua cheese', 'gari', 'green bellpepper', 'lemon olive oil', 'madeleine', 'unsweetened apple juice', 'parsley root', 'california chile', 'pickled radish', 'cream filled chocolate sandwich cookies', 'potato starch', 'sugar pearls', 'serrano ham', 'queso manchego', 'aonori', 'hash brown', 'granular sucrose sweetener', 'ceci bean', 'pear nectar', 'long green beans', 'arhar', 'red chili powder', 'fingerling', 'chocolate-hazelnut spread', 'sugar cubes', 'pearl onions', 'wish bone ranch dress', 'soft tofu', 'firmly packed brown sugar', 'wild salmon', 'kalamata', 'baby okra', 'pork shoulder boston butt', 'marrow bones', 'buckwheat', 'curaçao', 'robiola', 'flavored vodka', 'flat leaf spinach', 'Frank's® RedHot® Original Cayenne Pepper Sauce', 'boneless pork shoulder', 'tart', 'blue corn tortilla chips', 'tubettini', 'rye bread', 'pompano fillets', 'lingcod', 'hazelnuts', 'brown shrimp', 'chicken livers', 'bread, cut french into loaf', 'roasted almond oil', 'crusty sandwich rolls', 'light sour cream', 'wine', 'paratha', 'fruit puree', 'seedless cucumber', 'gnocchetti sardi', 'clove', 'nonstick spray', 'dandelion greens', 'creole seafood seasoning', 'frozen okra', 'Martha White Cornbread Mix', 'veal chops', 'lower sodium chicken broth', 'dry sherry', 'whipping cream', 'chile puree', 'ladyfingers', 'sweetened coconut', 'remoulade', 'fine egg noodles', 'pasilla pepper', 'port abello mushroom', 'gluten-free rolled oats', 'rice vermicelli', 'unagi', 'bread crumbs', 'oleo', 'meat marinade', 'Japanese rice vinegar', 'amaretto', 'thick curds', 'fried rice', 'cornstarch noodles', 'lamb seasoning', 'diced celery', 'whole wheat orzo', 'unsweetened pineapple juice', 'baby zucchini', 'rotel tomatoes', 'Johnsonville Andouille Dinner Sausage', 'stevia extract', 'semisweet vegan chocolate chips', 'English mustard', 'tomato juice', 'milk chocolate', 'sweet and sour mix', 'smoked ham hocks', 'apple puree', 'caramel sauce', 'roasted pepitas', 'egg yolks', 'tagliatelle', 'rosemary needles', 'single malt Scotch', 'acini di pepe', 'dried sage', 'pepper flakes', 'dried red chile peppers', 'chinese black vinegar', 'biscotti', 'pita chips', 'val', 'demi baguette', 'black chicken', 'peanut powder', 'mint sauce', 'boneless chicken thighs', 'red beets', 'shredded zucchini', 'tandoori paste', 'emerils original essence', 'salted butter', 'Mountain Dew Soda', 'i can't believ it' not butter! made with olive oil spread', 'vermicelli noodles', 'nonfat cottage cheese', 'drambuie', 'mahi mahi', 'seaweed', 'refrigerated four cheese ravioli', 'pointed peppers', 'skinless haddock', 'pork shanks', 'sundried tomato paste', 'spanish rice', 'chili con carne', 'chinese ginger', 'herb seasoned stuffing', 'calamari steak', 'shrimp meat', 'gooseberries', 'anchovy filets', 'hero rolls', 'chinese celery cabbage', 'flaxseed', 'beaujolais', 'fresh parmesan cheese', 'boneless veal shoulder', 'cabbage', 'red vinegar white wine', 'eau de vie', 'instant espresso powder', 'frozen pound cake', 'whole wheat pizza dough', 'sugar pumpkin', 'Greek black olives', 'fresh chives', 'pareve margarine', 'turkey gravy', 'vanilla', 'collards', 'red serrano peppers', 'white frostings', 'candy sprinkles', 'frozen whole kernel corn', 'marjoram leaves', 'boiling onion s', 'bicarbonate of soda', 'accent', 'asian chili red sauc', 'confectioners sugar', 'yellow rice', 'ranch dressing', 'ham', 'nonfat frozen yogurt', 'frozen pizza dough', 'chocolate shavings', 'vegetable seasoning', 'chinese leaf', 'fermented black beans', 'KRAFT Shredded Cheddar Cheese', 'malt vinegar', 'vegetable gumbo', 'crescent rolls', 'french dressing', 'Stonefire Italian Thin Pizza Crust', 'Gourmet Garden garlic paste', 'manouri', 'frozen mixed thawed vegetables', 'granulated sugar', 'food paste color', 'ground asafetida', 'ouzo', 'boneless center cut pork chops', 'jumbo shell pasta', 'cook and drain', 'meat-filled tortellini', 'hard salami', 'beaten eggs', 'vegetable slaw', 'gumbo', 'pizza crust mix', 'jerk rub seasoning', 'strip loin steak', 'lemon lime beverage', 'frisee', 'whole wheat bread cubes', 'green cauliflower', 'low-fat flour tortillas', 'umeboshi plum vinegar', 'fresh peas', 'banana extract', 'roasted salted cashews', 'crystallized ginger', 'dried dates', 'asian rice noodles', 'ground pork', 'ground paprika', 'store bought low sodium chicken broth', 'celery powder', 'veal shanks', 'shredded reduced fat reduced sodium swiss cheese', 'condensed reduced fat reduced sodium cream of mushroom soup', 'chunk light tuna in water', 'grilled chicken breasts', 'gold tequila', 'red leaf lettuce', 'meat loaf mix', 'kalonji', 'Doritos Tortilla Chips', '7 Up', 'savoy cabbage leaves', 'old bay seasoning', 'pitas', 'lemongrass', 'guanciale', 'bell pepper', 'lychees', 'white onion', 'peach nectar', 'medium tomatoes', 'anise powder', 'Thai chili paste', 'peeled tomatoes', 'drum', 'meat stock', 'pomegranate', 'green olives', 'chees fresco queso', 'chicken-apple sausage', 'Ro-Tel Diced Tomatoes & Green Chilies', 'herb seasoning', 'seltzer', 'Pace Chunky Salsa', 'lapsang souchong', 'dip mix', 'cava', 'bulb fennel', 'Irish Red ale', 'margarita mix', 'Earth Balance Natural Buttery Spread', 'thai basil', 'creole spice mix', 'low-fat sesame-ginger dressing', 'white cheddar cheese', 'farfalline', 'fennel', 'fat-free croutons', 'clove garlic, fine chop', 'peppermint', 'peppercorns', 'corn kernel whole', 'homemade stock', 'cream', 'muenster cheese', 'non dairy yogurt', 'bread ciabatta', 'marmite', 'greek-style vinaigrette', 'refrigerated dinner rolls', 'picante sauce', 'pig', 'buckwheat honey', 'dried

dillweed', 'tart cherries', 'pesto', 'refrigerated seamless crescent dough', 'celery salt', 'lemon peel', 'button mushrooms', 'picholine olives', 'almond syrup', 'veal stock', 'garlic bread', 'baby beets', 'methi', 'KRAFT Mexican Style 2% Milk Finely Shredded Four Cheese', 'head on shrimp', 'parmigiano', 'lowfat plain greekstyle yogurt', 'melissa', 'calamata olives', 'pie crust mix', 'won ton wrappers', 'banger', 'white distilled vinegar', 'korma paste', 'bean dip', 'au jus gravy mix', 'korean chile paste', 'carne seca', 'tomato soup', 'dried rosemary', 'orange juice', 'guajillo chile powder', 'dried kidney beans', 'self rising flour', 'camembert', 'smoked & dried fish', 'wish-bone light country italian dressing', 'chervil', 'shrimp heads', 'full-fat plain yogurt', 'chia seeds', 'amber', 'black bean sauce with garlic', 'fregola', 'cake pound prepar', 'chestnut spread', 'aged gouda', 'baby portobello mushrooms', 'asakusa nori', 'Neufchâtel', 'grilled chicken', 'salt', 'pudding powder', 'jumbo macaroni shells', 'arhar dal', 'achiote', 'white chocolate', 'table wine', 'cheese spread', 'cooki vanilla wafer', 'veal kidneys', 'lamb cubes', 'sweet corn kernels', 'bacon', 'chicken bouillon granules', 'carnitas', 'knockwurst', 'peaches in heavy syrup', 'dry pasta', 'smoked bacon', 'pork neck', 'sherry', 'prepared pie crusts', 'smoked chicken sausages', 'less sodium fat free chicken broth', 'pink food coloring', 'fish stock', 'filet', "Uncle Ben's Original Converted Brand rice", 'rock sugar', 'white arborio rice', 'loaves', 'carambola', 'tomato ketchup', 'saffron', 'oliv pit ripe', 'corn kernels', 'bok choy', 'white sugar', 'king prawns', 'goat cheese', 'balsamic vinegar', 'tortelloni', 'guacamole seasoning mix', 'low sodium parmesan cheese', 'mahimahi fillet', 'pure vanilla extract', 'deviled ham', 'pumpkin seed oil', 'shortbread', 'burger buns', 'taleggio', 'orange extract', 'crab', 'chicken breast tenderloins', 'white vermouth', 'cardamom pods', 'papaya', 'gingko nut', 'taco seasoning mix', 'baking powder', 'venison roast', 'cream of celery soup', 'chocolate flavored liqueur', 'strawberry compote', 'medjool date', 'canned chicken breast', 'Galliano', 'ackee', 'fresh basil', 'catfish', 'frozen brussels sprouts', 'nonfat dry milk powder', 'pinot blanc', 'Manzanilla olives', 'yolk', 'ricotta salata', 'coconut vinegar', 'rice paper', 'feta cheese', 'butter cake', 'double crust', 'gobo root', 'dried cloud ears', 'tamarind water', 'preserves', 'spaghettini', 'tangerine', 'corn niblets', 'beer', 'tuna', 'dry roasted peanuts', 'tahini paste', 'haddock', 'black pudding', 'Franks Hot Sauce', 'chicken stock', 'dried oysters', 'sourdough bread', 'nopalitos', 'egg pasta', 'chile bean paste', 'pâté', 'pickled vegetables', 'taco seasoning reduced sodium', 'sticky rice', 'hard cider', 'low-fat plain yogurt', 'plain low fat greek yogurt', 'refrigerated crescent rolls', 'lite coconut milk', 'fresh sea bass', 'gluten-free oyster sauce', 'pancake', 'green cabbage', 'pecans', 'artichoke hearts', 'ground mustard', 'mcintosh apples', 'okra pods', 'ancho powder', 'braising beef', 'malt syrup', 'green pumpkin seeds', 'fat free whipped topping', 'yellow heirloom tomatoes', 'ground sumac', 'hillshire farms low fat sausage', 'skinless snapper fillets', 'small new potatoes', 'low-fat sharp cheddar cheese', 'vegetable fats', 'caviar', 'self-rising cake flour', 'vanilla beans', 'Tapatio Hot Sauce', 'ragu old world style tradit pasta sauc', 'ground espresso', 'icing', 'Better Than Bouillon Chicken Base', 'banana leaves', 'cranberry sauce', 'prepared pasta sauce', 'baby spinach', 'kewra essence', 'kalamata olive halves', 'sesame', 'tomatoes with juice', 'nonhydrogenated margarine', 'bacon rind', 'lemon', 'bay leaf', 'roast duck meat', 'garden cress', 'Fuji Apple', 'dark chocolate chip', 'whole wheat pita pockets', 'fresh herbs', 'dhaniya powder', 'whole wheat angel hair pasta', 'leek tops', 'fresh ham', 'base', 'methi leaves', 'bean thread vermicelli', 'chapati flour', 'sparkling sugar', 'butternut', 'soy crumbles', 'baguette', 'breadstick', 'choy sum', 'leftover gravy', 'white creme de cacao', 'condensed chicken broth', 'grape vine leaves', 'chili pepper flakes', 'broccolini', 'Chambord Liqueur', 'raspberry vinegar', 'chile paste with garlic', 'boneless lamb', 'dry red wine', 'meat seasoning', 'low sodium tomato sauce', 'reduced fat mayonnaise', 'adobo seasoning', 'pork cubes', 'fast-rising active dry yeast', 'mashed potatoes', 'enriched white rice', 'hot pepper sauce', 'crema mexicana', 'Diamond Crystal® Kosher Salt', 'pullman loaf', 'bagels', 'potato starch flour', 'tarragon leaves', 'red pepper hot sauce', 'marmalade', 'empanada dough', 'lager', 'poblano peppers', 'McCormick Parsley Flakes', 'chestnut purée', 'sanding sugar', 'chocolate liqueur', 'shiraz', 'pork shoulder roast', 'cubed potatoes', 'chilean sea bass fillets', 'reduced-fat cheese', 'small shells', 'muscat', 'ponzu', 'dressing', 'abalone', 'ground turkey sausage', 'fresh prawn', 'vital wheat gluten', 'sake', 'andouille sausage links', 'edamame beans', 'smoked turkey', 'pinhead oatmeal', 'black forest ham', 'brown sauce', 'sauerkraut', 'Italian basil', 'boquerones', 'praline', 'whole nutmegs', 'clamato juice', '8 ounce ziti pasta, cook and drain', 'piecrust', 'white grapefruit', 'shoga', 'pecan pie', 'panela', 'onion tops', 'ham steak', 'thai jasmine rice', 'meat fats', 'habas', 'hot fudge topping', 'pork chops, 1 inch thick', 'skinless chicken fillets', 'fresh onion', 'pepper leaves', 'marsala wine', 'yellow squash', 'tiger lily buds', 'small pasta', 'chocolatecovered espresso beans', 'annatto powder', 'campanelle', 'cubed beef', 'Knorr® Vegetable recipe mix', 'homemade chicken stock', 'pepper cheese', 'pita loaves', 'natural yogurt', 'steak seasoning', 'cream powder', 'Johnsonville Hot & Spicy Breakfast Links', 'harissa sauce', 'enchilada sauce', 'ground meat', 'cipollini', 'sweet paprika', 'balsamic reduction', 'english breakfast tea', 'chopped leaves', 'green enchilada sauce', 'low fat plain yoghurt', 'low-fat canned coconut milk', 'key lime juice', 'white tuna in water', 'asian pear', 'skinless mahi mahi fillets', 'fedelini', 'angel hair', 'meyer lemon', 'corn syrup', 'organic milk', 'chili paste', 'Mexican cheese', 'skinless salmon fillets', 'small capers, rins and drain', 'fresh mozzarella', 'liquid', 'cheddar cheese soup', 'asian black bean sauce', 'knorr homestyle stock chicken', 'guacamole', 'whole grain rice', 'steak tips', 'jerk marinade', 'whole wheat couscous', 'lasagne', 'bertolli vineyard premium collect marinara with burgundi wine sauc', 'pasta water', 'tomatoes', 'Heinz Chili Sauce', 'soft-boiled egg', 'canned chicken', 'italian chicken sausage', 'powdered milk', 'tagliarini', 'old ginger', 'goose liver', 'turkey breakfast sausage', 'cornbread', 'jambon de bayonne', 'instant potato flakes', 'cachaca', 'escargot', 'butterscotch sauce', 'shredded American cheese', 'rice bran oil', 'barbecue seasoning', 'provolone cheese', 'lemon zest', 'sauage links', 'treviso', 'boneless beef sirloin steak', 'roast turkey', 'agar', 'yeast', 'george dickel', 'apple slice', 'kabocha squash', 'avocado', 'minced garlic', 'creole style seasoning', 'superfine sugar', 'bing cherries', 'hothouse cucumber', 'Gold Medal All Purpose Flour', 'fresh pineapple', 'fresh oregano leaves', 'Cinnamon Toast Crunch Cereal', 'pie pastry', 'kirschenliqueur', 'chinese pancakes', 'marinade', 'sugar cane juice', 'msg', 'cinnamon candy canes', 'cavolo nero', 'green tomatoes', 'wasabi paste', 'frozen whipped topping', 'low-fat white sauce', 'fresh cheese', 'green pepper', 'baking spray', 'tamarind paste', 'raspberries', 'fresh thyme leaves', 'maple flavored extract', 'cointreau liqueur', 'dasheen', 'skinless and boneless chicken breast fillet', 'dried minced onion', 'chicken sausag e', 'fiber one', 'flavored oil', 'maple syrup', 'soya bean', 'haddock fillets', "Potatoes O'Brien", 'cold coffee', 'Domino Light Brown Sugar', 'hard cheese', 'essence seasoning', 'fern', 'sazon', 'red chile sauce', 'Minute White Rice', 'fresh cilantro', 'Ragu Classic Alfredo Sauce', 'imitation vanilla flavoring', 'homemade vegetable stock', 'whole wheat french bread', 'kangkong', 'vanilla soy milk', 'leaves', 'pheasant', 'anjou pears', 'vegan Worcestershire sauce', 'toor dal', 'Piment d'Espelette', 'black onion seeds', 'tikka paste', 'plain breadcrumbs', 'haloumi', 'ginger juice', 'cortland apples', 'cabernet', 'dried shrimp', 'grated orange peel', 'spelt', 'onion flakes', 'low sodium canned chicken broth', 'clover honey', 'barilla piccolini mini', 'polenta', 'orzo pasta', 'creole mustard', 'Heinz Tomato Ketchup', 'granulated white sugar', 'peaches in syrup', 'pancake batter', 'bologna', 'rome apples', 'diced bell pepper', 'thin spaghetti', 'ground hazelnuts', 'butter crackers', 'beer batter', 'eating apple', 'pepperidge farm puff pastry sheets', 'chipped beef', 'usukuchi soy sauce', 'sweet rice', 'white italian tuna in olive oil', 'alaskan king salmon', 'powdered gelatin', 'shoulder roast', 'port wine', 'ground cloves', 'crayfish', 'cooking fat', 'coulis', 'ground coriander', 'peach pie filling', 'champagne vinegar', 'black garlic', 'yucca', 'polenta corn meal', 'gravlax', 'pit ted olives', 'back ribs', 'butternut squash', 'confit duck leg', 'colby cheese', 'mustard', 'lesser galangal', 'soup mix', 'forest fruit', 'hungarian sweet paprika', 'taco sauce', 'pork tenderloin medallions', 'rock shrimp', 'bigoli', 'white sandwich bread', 'verjus', 'beef kidney', 'low sodium beef broth', 'Smart Balance Cooking Spray', 'ground chile', 'dried mango', 'burrata', 'virginia ham', 'bertolli organic tradit sauc', 'low sodium vegetable broth', 'turkey carcass', 'pink grapefruit', 'chinese cabbage', 'dandelion', '33% less sodium ham', 'refrigerated chocolate chip cookie dough', 'unsweetened applesauce', 'Thai red curry paste', 'lotus roots', 'sodium free chicken stock', 'haricot beans', 'baby eggplants', 'plain soy yogurt', 'coco', 'water spinach', 'cream of coconut', 'whole grain spelt flour', 'steamed rice', 'black mushrooms', 'anise extract', 'bass fillets', 'hibiscus flowers', 'minute steaks', 'meat glaze', 'burger rolls', 'goat s milk cheese', 'spanish onion', 'full fat sour cream', 'chinese celery', 'tart apples',

'whole wheat uncooked lasagna noodles', 'ground walnuts', 'yellowtail snapper fillets', 'maldon sea salt', 'kielbasa', 'bone in', 'Progresso™ Chicken Broth', 'Corn Flakes Cereal', 'canned snails', 'soy glaze', 'sansho', 'peach schnapps', 'fresh chili', 'chipotle puree', 'Challenge Butter', 'black rice', 'shredded basil', 'citrus', 'uncooked rigatoni', 'pierogi', 'sliced tomatoes', 'pork', 'canned black beans', 'Skippy Creamy Peanut Butter', 'hamachi', 'trout caviar', 'chinese noodles', 'dried thyme leaves, crush', 'peanut brittle', 'beef cheek', 'raspberry sauce', 'cooked rigatoni', 'cola soft drink', 'skirt steak', 'aioli', 'ground veal', 'tangerine juice', 'wish-bone', 'chopped walnuts', 'masoor dal', 'low sodium cajun seasoning', 'asafoetida', 'prune puree', 'fresh cod', 'five spice', 'chocolate sandwich cookies', 'potatoes', 'bottom round', 'lean ground beef', 'browning', 'jamaican curry powder', 'Wish-Bone® Robusto Italian Dressing', "I Can't Believe It's Not Butter!® Spread", 'fresh tomato salsa', 'pork rind', 'whole grain baguette', 'knorr chicken flavor bouillon cube', 'veal escalopes', 'green lentil', 'ciabatta roll', 'Karo Corn Syrup', 'walnut halves', 'nuoc mam', 'cranberry juice', 'large tomato', 'dry coconut', 'purple potatoes', 'crab meat', 'garlic bulb', 'dried parsley', 'pink salmon', 'instant coffee', 'cho-cho', 'nutmeg', 'fat-free cottage cheese', 'crushed pineapple', 'Alexia Waffle Fries', 'crumbs', 'kochujang', 'cherry vinegar', 'frozen peppers and onions', 'arrowroot flour', 'branzino fillets', 'ground cumin', 'cooked brown rice', 'kefir', 'vanilla low-fat ice cream', 'frozen strawberries', 'golden delicious apples', 'fenugreek', 'vodka sauce', 'beef stew', 'granary bread', 'jaggery', 'riso', 'beef tongue', 'walnut oil', 'mild olive oil', 'stewing steak', 'cauliflower florets', 'pink peppercorns', 'lemon pepper seasoning', 'chinese jujubes', 'low-fat soy milk', 'wheat bread', 'shredded mild cheddar cheese', 'kiwi fruits', 'foccacia', 'croton italian season', 'beef stock', 'wish-bone light asian sesame ginger vinaigrette dressing', 'smoked paprika', 'tostada shells', 'smoked haddock fillet', 'frozen spring roll wrappers', 'dried hibiscus blossoms', 'new mexico red chile powder', 'dried fettuccine', 'quail eggs', 'southern comfort', 'raw cashews', 'self raising flour', 'long grain white rice', 'ground sausage', 'SYD Hot Rub', 'cinnamon graham crackers', 'dried rice noodles', 'sourdough', 'filo dough', 'oats', 'uncook medium shrimp, peel and devein', 'grated carrot', 'dried sardines', 'organic chicken broth', 'Johnsonville Mild Italian Sausage Links', 'less sodium soy sauce', 'carrots', 'part-skim mozzarella cheese', 'yellow crookneck squash', 'cinnamon rolls', 'broccoli', 'Tuttorosso Diced Tomatoes', 'glutinous rice flour', 'red vermouth', 'pesto sauce', 'sago pearls', 'fresh poblano pepper', 'pork butt', 'seville orange juice', 'ginger piece', 'Guinness Lager', 'carbonated beverages', 'chicken gravy mix', 'kimchi', 'galanga', 'La Victoria Red Chile Sauce', 'savory', 'kalamansi juice', 'salted peanuts', 'McCormick Ground White Pepper', 'Maggi', 'minute rice', 'fresh pasta', 'cayenne', 'truffle oil', 'candied cherries', 'chicken broth low fat', 'green pesto', 'semisweet chocolate', 'Quinoa Flour', 'duck stock', 'medium dry sherry', 'sliced mango', 'fat free milk', 'pappardelle pasta', 'guava paste', 'italian-style meatballs', 'pork sirloin', 'flaked', 'cheese sticks', 'whole wheat buns', 'oil packed anchovy fillets', 'chinese chili paste', 'taco seasoning', 'black bean garlic sauce', 'peppermint schnapps', 'kefalotyri', 'turkey breast cutlets', 'lotus seeds', 'garlic shoots', 'mulato chiles', 'pastry flour', 'unbaked pie crusts', 'beef tenderloin', 'caul fat', 'Pam No-Stick Cooking Spray', 'KRAFT Shredded Mozzarella Cheese', 'white rice', 'cream style corn', 'extra lean ground beef', 'rape', 'luke warm water', 'green beans', 'Thai chili garlic sauce', 'Hellmann's Light Mayonnaise', 'udon', 'hots', 'white miso', 'sweet white wine', 'gluten-free tamari sauce', 'canola oil cooking spray', 'ramps', 'chopped fresh chives', 'delicata squash', 'rice syrup', 'orange soda', 'peeled fresh ginger', 'balm', 'herb vinegar', 'french fried onions', 'extra light olive oil', 'fillets', 'taro leaf', 'toasted unsweetened coconut', 'myzithra', 'dried currants', 'liquid smoke', 'whole milk yoghurt', 'lap cheong', 'Sicilian olives', 'turkey meatballs', 'herbed goat cheese', 'dried bonito', 'fresh pork fat', 'jack daniels', 'habanero hot sauce']
5000

['adobo sauce', 'buttermilk', 'beef tenderloin', 'chopped cooked meat', 'Tabasco Green Pepper Sauce', 'red vinegar white wine', 'peeled fresh ginger', 'steak fillets', 'cod fish', 'cream of mushroom soup', 'rice bran oil', 'Old El Paso™ chopped green chiles', 'manouri', 'marrons', 'farfalline', 'Green Giant Whole Kernel Sweet Corn', 'fat free less sodium beef broth', 'baking yeast', 'dried apple rings', 'chopped fresh mint', 'flat anchovy', 'wheatberries', 'bone in', 'yellowtail snapper fillets', 'true cinnamon', 'TACO BELL® HOME ORIGINALS® Taco Seasoning Mix', 'sorghum syrup', 'gruyere cheese', 'plantains', 'sticky rice', 'cranberry sauce', 'vital wheat gluten', 'pineapple syrup', 'smoked sausage', 'gravy', 'reduced fat mayonnaise', 'Spice Islands Garlic Salt', 'ajinomoto', 'gingersnap crumbs', 'garlic salt', 'Budweiser', 'meat fats', 'small potatoes', 'mashed potatoes', 'ocean perch', 'light whipping cream', 'haddock', 'fresh chervil', 'vegetarian chicken', 'sponge cake']

kb type <class 'list'>

50

500

```
In [39]: n =501
choices_list =[]
while(curr_epoch != epochs):

    print("Epoch ",curr_epoch + 1 , " Started\n")
    print("Recipe Size :",recipe_size)
    print("Kitchen Basket : ",len(kb))
    print("Nature Basket : ",len(nb))
    print("Number of recipe in primordial cuisine epoch", curr_epoch + 1, "=" , len(recipe_prim))
    number_of_recipes = len(recipe_prim)
    Recipes_Per_Epochs = round((number_of_recipes)/epochs)
    number_of_recipes_new = number_of_recipes + Recipes_Per_Epochs
    kb_new_size = round(number_of_recipes_new/m)

    while(len(kb) != kb_new_size):
        random_i = random.randint(0, len(nb)-1)
        kb.append(nb.pop(random_i))

    while(len(recipe_prim) != number_of_recipes_new ):

        recipe_index = random.randint(1,len(recipe_prim)-1)
        random_recipe = recipe_prim['recipe'+str(recipe_index)]

        choices = random.randint(0, 2) # del, add, replace
        choices_list.append(choices)
        if choices == 2:
            while 1:
                ing_index = random.randint(0,recipe_size-1)
                random_ing = recipe_prim['recipe'+str(recipe_index)][ing_index]
                j = random.randint(0,kb_new_size-1)

                if(kb[j] not in random_ing ):
                    if(fitness_values[kb[j]] > fitness_values[random_ing]):
                        random_recipe.remove(random_ing)
                        random_recipe.append(kb[j])

                break

        elif choices == 1:

            # delete
            while (len(random_recipe)==1):
                recipe_index2 = random.randint(1,len(recipe_prim)-1)
                random_recipe = recipe_prim['recipe'+str(recipe_index2)]
                ing_index = random.randint(0,recipe_size-1)
                random_ing = recipe_prim['recipe'+str(recipe_index)][ing_index]
                # while 1:
                # if(random_ing in random_recipe):
                # p = random.randint(0,recipe_size-1)
                random_recipe.remove(random_ing)
                # recipe_prim['recipe'+str(n)] = random_recipe
                break

        elif choices == 0:
            random_recipe = set(random_recipe)
            # add
            while(1):

                ing_index = random.randint(0,recipe_size-1)
                random_ing = recipe_prim['recipe'+str(recipe_index)][ing_index]
                j = random.randint(0,kb_new_size-1)

                if(kb[j] not in random_recipe):
                    random_recipe.add(kb[j])
                    # recipe_prim['recipe'+str(n)] = random_recipe
                    break

            random_recipe = list(random_recipe)
            random_recipe.sort()
            recipe_prim['recipe'+str(n)] = random_recipe
            n = n+1

        if(len(recipe_prim)/len(kb) == 10):
            break

#####
# Plot for Recipe Size Distribution
count = []
for lst in recipe_prim.keys():
    count.append(len(recipe_prim[lst]))

recipe_size_data = {}
for p in count:
    # print(type(p))
    if p not in recipe_size_data:
        recipe_size_data[p] = 1
    else:
        recipe_size_data[p] += 1
```

```
for p in recipe_size_data.keys():
    recipe_size_data[p] = recipe_size_data[p]/len(count) * 100

plt.figure(figsize = (8,6))
plt.plot(list(sorted(recipe_size_data.keys())),list(sorted(recipe_size_data.values())), marker = 'o' , label = "All Recipes", c ='green')
plt.ylabel("Percentage of Number of recipes")
plt.xlabel("Recipe Size(Number of Ingredients)")
plt.title('Recipe Size Distribution for all Recipes '+ str(curr_epoch +1) )
plt.legend()
plt.grid()
plt.show()
print("\n")

#####
# Plot for Frequency Rank Distribution

total_ingre =[]
for lst in recipe_prim.keys():
    for lst_ingr in recipe_prim[lst]:
        # total_ingre.extend(lst)
        total_ingre.append(lst_ingr)

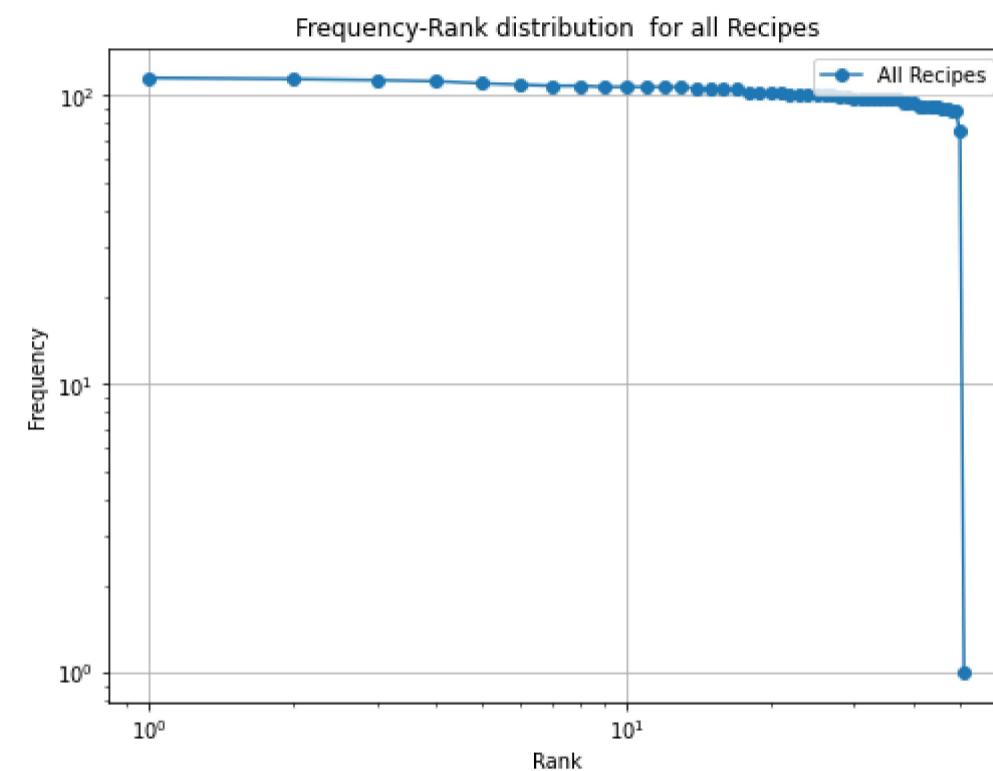
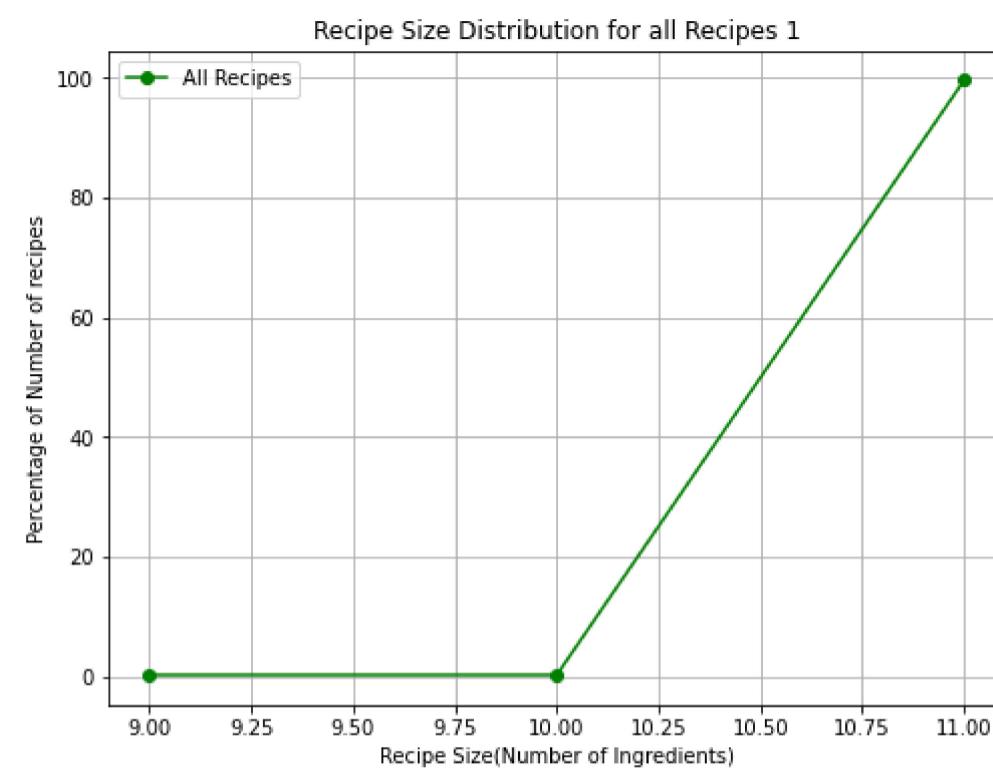
values, counts = np.unique(total_ingre, return_counts=True)
# print(type(counts))
# print(values, counts)
sorted_count = np.sort(counts)[::-1]
rank =1
rank_lst = []
for i in range(sorted_count.shape[0]):
    rank_lst.append(rank)
    rank = rank+1

plt.figure(figsize = (8,6))
plt.loglog(rank_lst,sorted_count, marker = 'o',label ="All Recipes" )
plt.ylabel("Frequency")
plt.xlabel("Rank")
plt.title('Frequency-Rank distribution for all Recipes')
plt.legend()
plt.grid()
plt.show()

print("Epoch ",curr_epoch + 1, " Ended\n")
print("Recipe Size :",len(recipe_prim))
print("Kitchen Basket :",len(kb))
print("Nature Basket : ",len(nb))
print("\n")
if ((kb_new_size) == 0):
    break
curr_epoch = curr_epoch + 1
```

Epoch 1 Started

Recipe Size : 10
Kitchen Basket : 50
Nature Basket : 5000
Number of recipe in primordial cuisine epoch 1 = 500

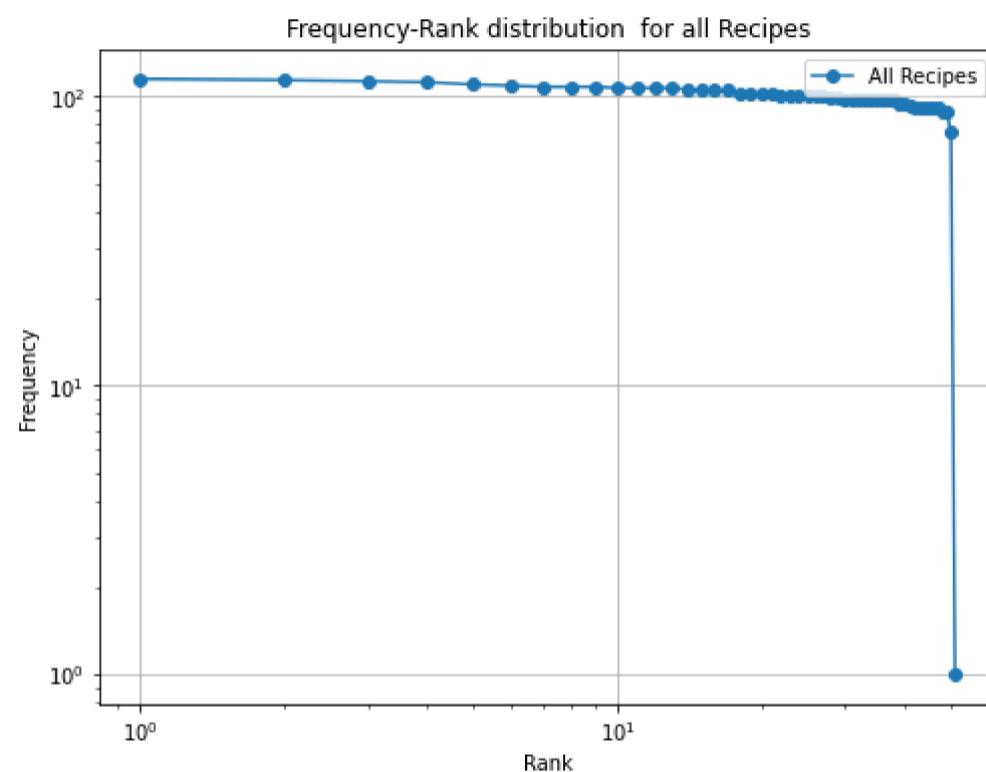
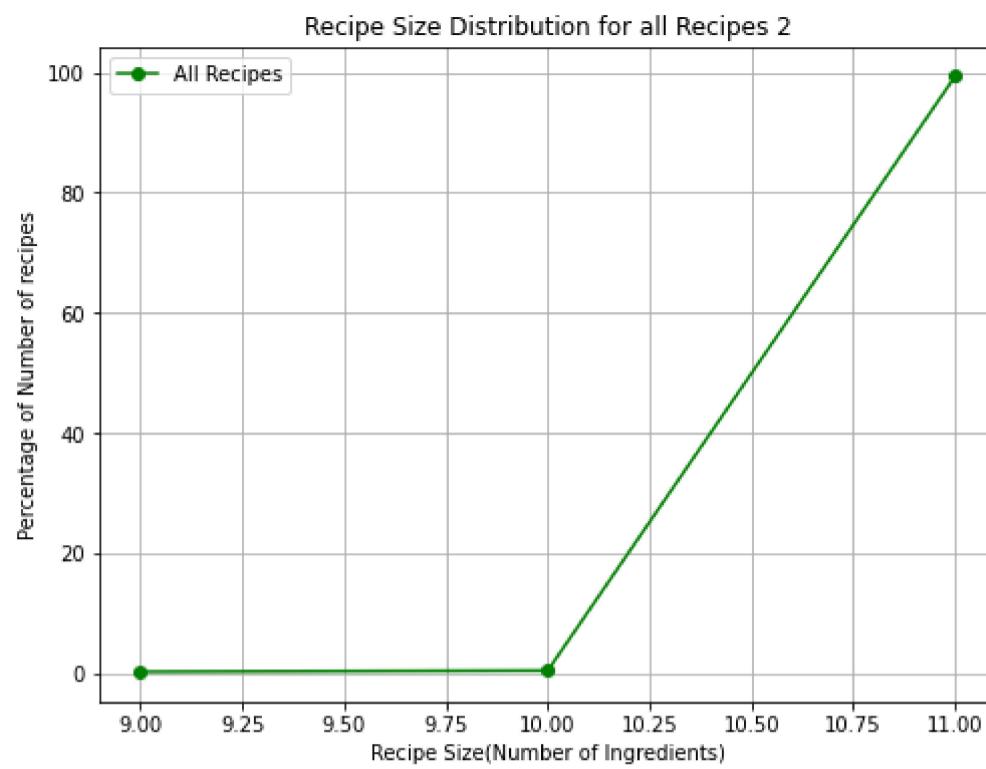


Epoch 1 Ended

Recipe Size : 501
Kitchen Basket : 60
Nature Basket : 4990

Epoch 2 Started

Recipe Size : 10
Kitchen Basket : 60
Nature Basket : 4990
Number of recipe in primordial cuisine epoch 2 = 501

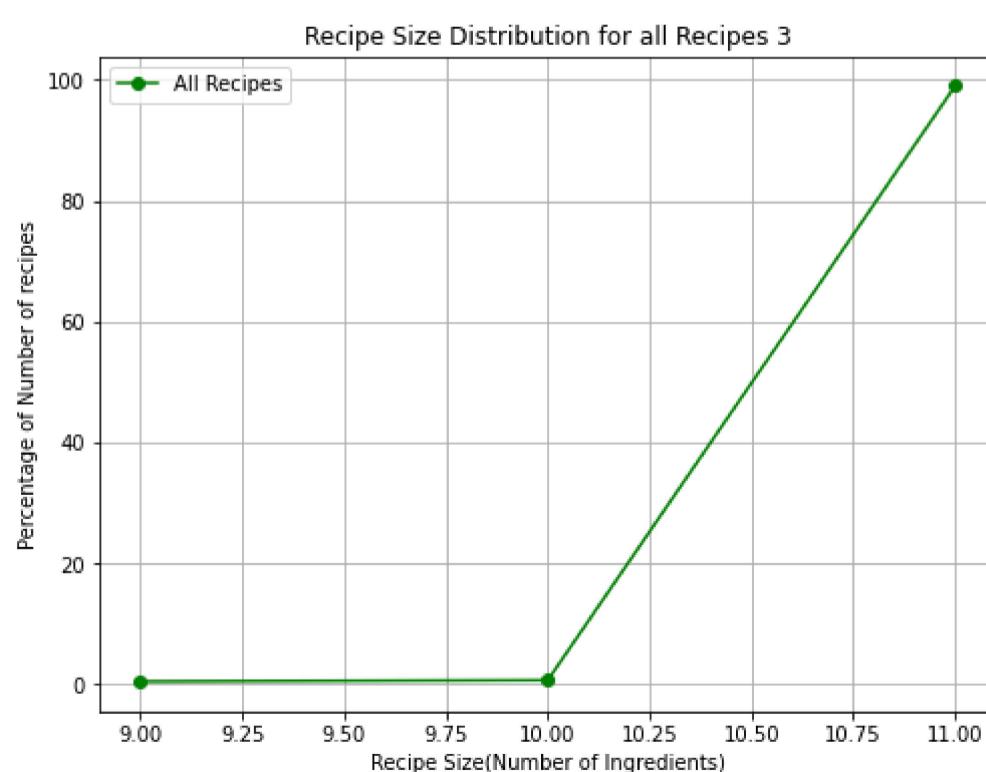


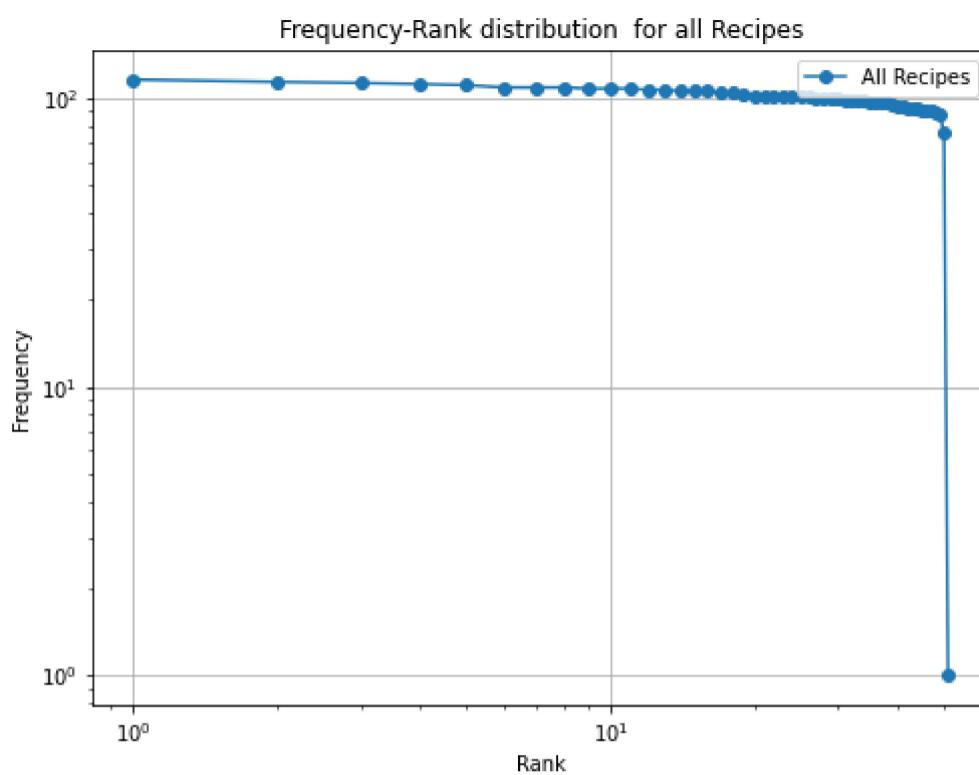
Epoch 2 Ended

Recipe Size : 502
Kitchen Basket : 60
Nature Basket : 4990

Epoch 3 Started

Recipe Size : 10
Kitchen Basket : 60
Nature Basket : 4990
Number of recipe in primordial cuisine epoch 3 = 502



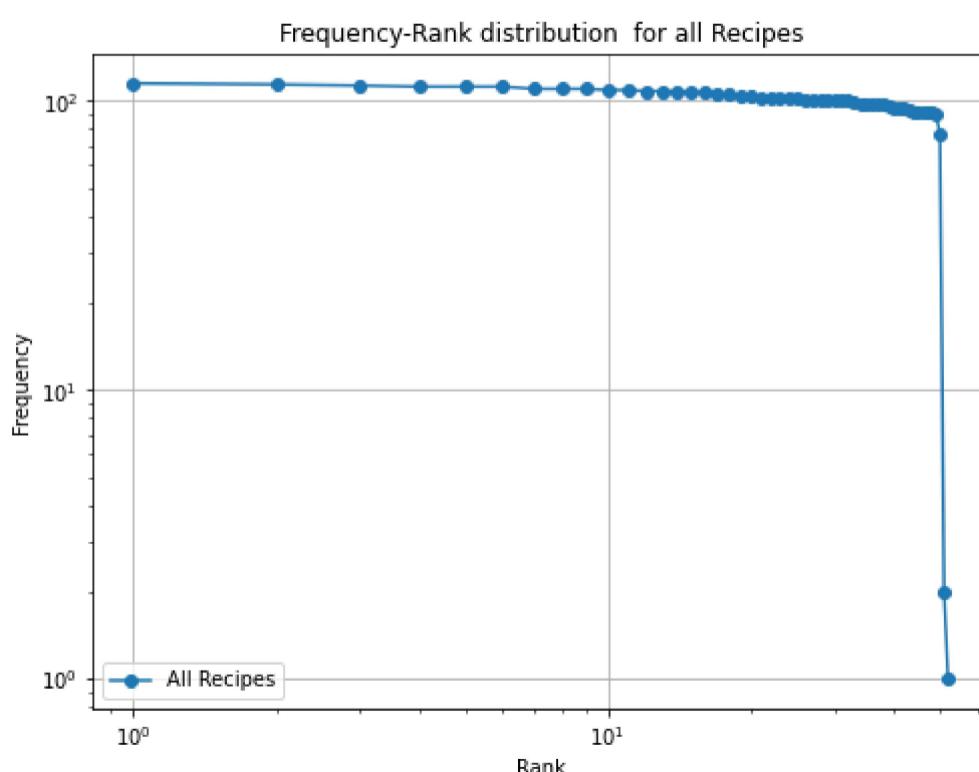
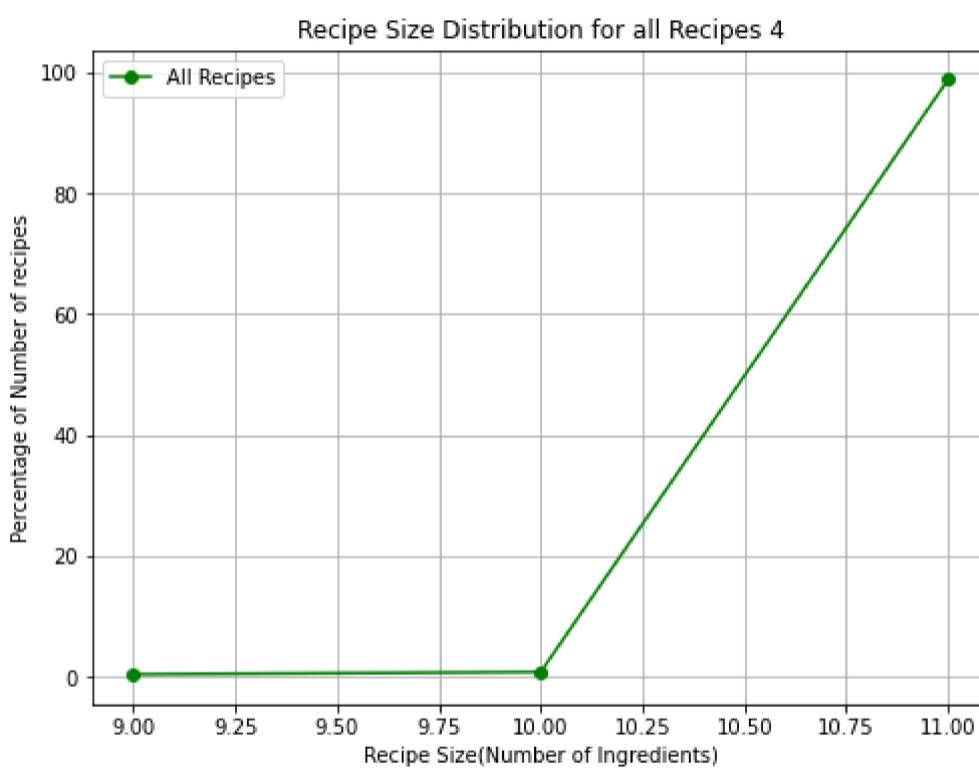


Epoch 3 Ended

Recipe Size : 504
Kitchen Basket : 60
Nature Basket : 4990

Epoch 4 Started

Recipe Size : 10
Kitchen Basket : 60
Nature Basket : 4990
Number of recipe in primordial cuisine epoch 4 = 504

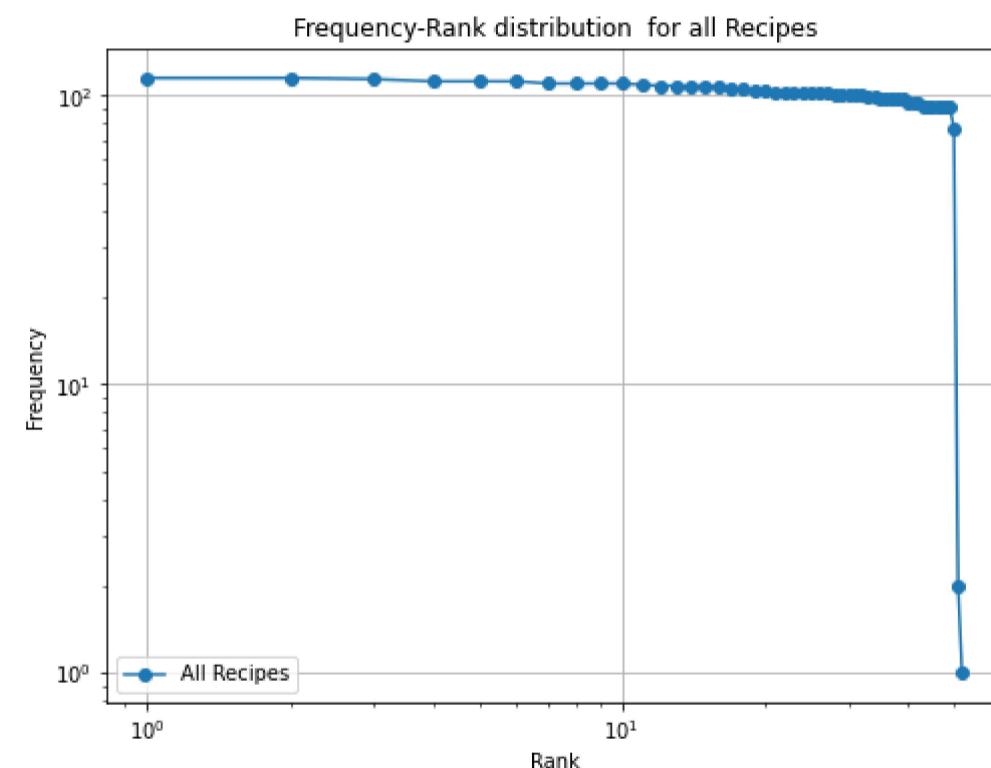
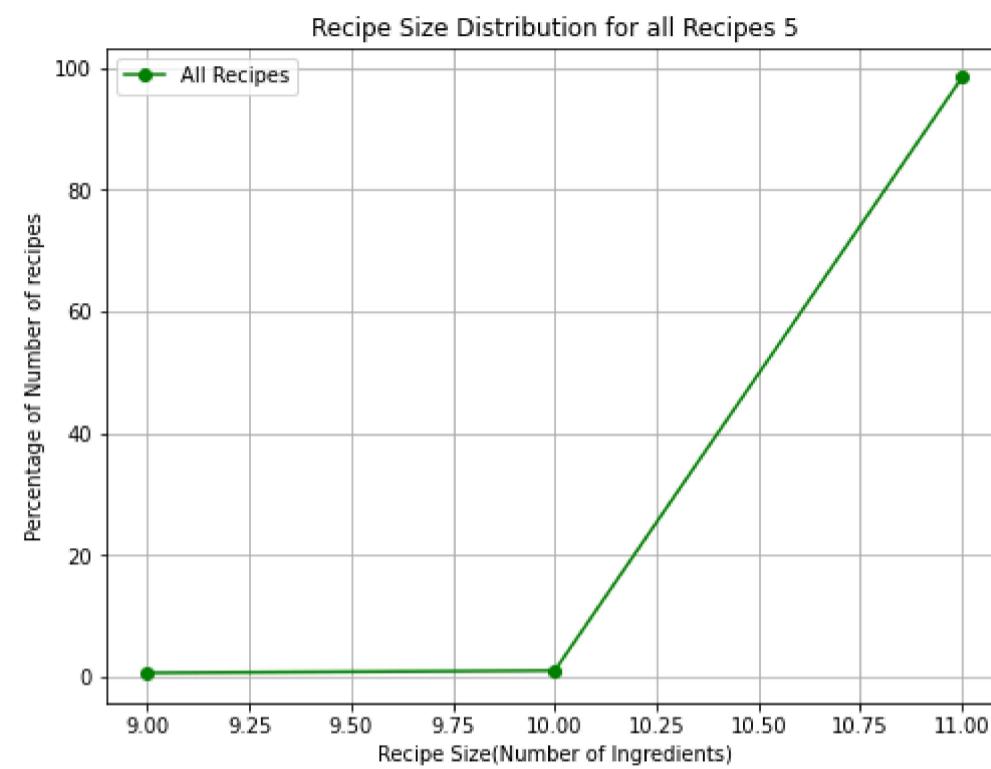


Epoch 4 Ended

Recipe Size : 509
 Kitchen Basket : 60
 Nature Basket : 4990

Epoch 5 Started

Recipe Size : 10
 Kitchen Basket : 60
 Nature Basket : 4990
 Number of recipe in primordial cuisine epoch 5 = 509



Epoch 5 Ended

Recipe Size : 510
 Kitchen Basket : 61
 Nature Basket : 4989

Time taken to run the code: $O(\text{size of kitchen basket})$ Mutate operation : $O(n)$, where n is the size of primordial cuisine. Time complexity of entire algorithm - $O(\text{number of epochs} * \text{tc(Mutate operation)})$

Analysis - The recipe size distribution varies due to addition and deletion operation. The frequency rank follows delta function.

```
In [41]: %%shell
jupyter nbconvert --to html /content/drive/MyDrive/SEM3/CGAS/Assignment2/CGAS_A2_Q2.ipynb
```

```
[NbConvertApp] Converting notebook /content/drive/MyDrive/SEM3/CGAS/Assignment2/CGAS_A2_Q2.ipynb to html
[NbConvertApp] Writing 651790 bytes to /content/drive/MyDrive/SEM3/CGAS/Assignment2/CGAS_A2_Q2.html
```

Out[41]: