



```
In [14]: 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

&lt;class 'list'&gt;

['wensleydale', 'ogura-an', 'smoked bratwurst', 'e-fu noodl', 'herbs', 'nashi', 'sorghum syrup', 'mousse', 'usukuchi soy sauce', 'duck breast halves', 'ground turmeric', 'smoked hog jowl', 'lemon', 'stock', 'soy-based liquid seasonin g', 'hungarian paprika', 'fresh peas', 'margarine spread', 'turkey stock', 'cake flour', 'nut meal', 'low-fat pasta s auce', 'canned peas and carrots', 'crumbles', 'green grape', 'chicken stock cubes', 'dried mission figs', 'tandoori masala mix', 'pork shoulder butt', 'white poppy seeds', 'tropical fruits', 'Mexican cheese blend', 'pancetta slices', 'red rice', 'paste tomato', 'darjeeling tea leaves', 'bouillon', 'garbanzo bean flour', 'chunky tomato salsa', 'Japanese mountain yam', 'lean bacon', 'diced red onions', 'luncheon meat', 'pork country-style ribs', 'aquavit', 'ground chipotle chile pepper', 'buckwheat groats', 'crushed peppermint candy', 'cream cheese', 'black cardamom pods', 'sour milk', 'skinless salmon fillets', 'reduced fat provolone cheese', 'roast duck meat', 'bacon', 'waffle', 'pickled beet s', 'sesame butter', 'spiced rum', 'mexicorn', 'dried dillweed', 'nonfat vanilla yogurt', 'SYD Hot Rub', 'Pace Chunky Salsa', 'asakusa nori', 'oat bran', 'pullman loaf', 'leftover steak', 'tripe', 'amaretto', 'California bay leaves', 'yellow mustard seeds', 'pink lady apple', 'nonfat block cream cheese', 'sazon goya', 'parmigiano-reggiano cheese', 'ramen noodles', 'Italian cheese', 'light red kidney beans', 'beef drippings', 'sugar pumpkin', 'marmite', 'bread flour', 'crostini', 'unsalted beef stock', 'bittersweet chocolate chips', 'white rice vinegar', 'amba', 'farofa', 'frozen pie crust', 'calamari', 'hickory-flavored liquid smoke', 'shredded cheese', 'portuguese rolls', 'country bread', 'raw tiger prawn', 'hoja santa', 'raspberry jam', 'buffalo mozzarella', 'almond extract', 'instant butterscotch pudding mix', 'sweetener', 'radicchio leaves', 'boneless chicken breast halves', 'ground almonds', 'short rib', 'whole cranberry sauce', 'flour tortillas (not low fat)', 'paella rice', 'medium potatoes', 'amberjack fillet', 'poussins', 'shiro miso', 'steamed white rice', 'pita rounds', 'potato rolls', 'raspberry vinegar', 'shredded swiss cheese', 'garlic oil', 'banana leaves', 'crepes', 'root beer', 'whole wheat pita rounds', 'cookies', 'unsalted pumpkinseed kernels', 'hot chocolate mix', 'light chicken stock', 'tomatillos', 'reduced sodium refried beans', 'chocolate wafer cookies', 'peanut brittle', 'pasilla chile pepper', 'sweet white miso', 'orange juice concentrate', 'chickpea flour', 'English toffee bits', 'italian sausage', 'cashew chop unsalt', 'coca-cola', 'compote', 'minced garlic', 'vanilla wafers', 'fresh lime juice', 'crumpet', 'tallow', 'sweet red bean paste', 'light cream or half and half', 'Mountain Dew Soda', 'pekin duck breast halves', 'ground thyme', 'steamed rice', 'cream style corn', 'rocket leaves', 'gomashio', 'whole wheat pastry flour', 'dates', 'dark lager', 'fully cooked ham', 'yolk', 'bread and butter pickles', 'tuna fillets', 'margarita mix', 'cream of coconut', 'shredded reduced fat cheddar cheese', 'sweet soy', 'French bread loaves', 'splenda', 'sun-dried tomatoes in oil', 'bacardi', 'refrigerated four cheese ravioli', 'coconut flour', 'mahi mahi fillets', 'dark rum', 'chile paste with garlic', 'horseradish sauce', 'barley flakes', 'green chile', 'red bell pepper', 'organic chicken', 'baking soda', 'green cabbage', 'burrata', 'soft goat's cheese', 'liquid honey', 'cooked pumpkin', 'pea eggplants', 'peppadews', 'prepar salsa', 'marmalade', 'coarse sea salt', 'peasant bread', 'vine ripened tomatoes', 'Gold Medal All Purpose Flour', 'Bertolli Garlic Alfredo Sauce', 'light tuna', 'KRAFT Original Barbecue Sauce', 'italian pizza crust', 'mustard powder', 'rice mix', 'table cream', 'caramels', 'cream of shrimp soup', 'bird chile', 'knorr chicken flavor bouillon cube', 'navy beans', 'crushed cheese crackers', 'shimeji mushrooms', 'ancho chile pepper', 'boneless beef round steak', 'irish cream liqueur', 'karashi', 'blackstrap molasses', 'cooked bacon', 'granulated garlic', 'homemade chicken stock', 'hog casings', 'gouda', 'baguette', 'abura age', 'mild salsa', 'arugula', 'crystallized ginger', 'shredded romano cheese', 'store bought low sodium chicken stock', 'poblano', 'sports drink', 'black bean garlic sauce', 'Knorr® Fiesta Sides Spanish Rice', 'nuts', 'Green Giant™ sliced mushrooms', 'chicken salad', 'cajun-creole seasoning mix', 'fresh basil leaves', 'gluten-free spaghetti', 'daikon', 'spareribs', 'beef roast', 'lemonade concentrate', 'ravioli', '(. oz.) tomato sauce', 'tomato chutney', 'braising beef', 'red jalapeno peppers', 'egg roll wrappers', 'yam noodles', 'vermicelli', 'elbow macaroni', 'chili paste', 'red kidney beans', 'rice milk', 'coconut flakes', 'plantains', 'Elmlea single', 'Hidden Valley® Original Ranch® Light Dressing', 'char', 'frozen fruit', 'toasted peanuts', 'wild salmon', 'pink grapefruit juice', 'pork rind', 'dried chile', 'refrigerated bread dough', 'crushed peppercorn', 'ground coriander', 'clover honey', 'light corn syrup', 'cauliflower florets', 'muscovado sugar', 'american', 'blueberry pie filling', 'pork picnic roast', 'mole paste', 'manouri', 'orange', 'pork sirloin roast', 'caramel ice cream topping', 'boneless country pork ribs', 'beef stock', 'pear juice', 'Madeira', 'whole wheat uncooked lasagna noodles', 'low sodium diced tomatoes', 'popcorn chicken', 'oil-cured black olives', 'sandwich buns', 'pickapeppa sauce', 'fingerling potatoes', 'ranch dressing', 'iodized salt', 'chunky style pasta sauce', 'black onion seeds', 'biscuit mix', 'chopped parsley', 'yucca', 'whole wheat buns', 'flavored rice mix', 'shark steak', 'wheat free soy sauce', 'Bordelaise sauce', 'rice noodles', 'crushed red pepper', 'sturgeon fillets', 'pork roll', 'Scotch whisky', 'lemon soda', 'chow mein noodles', 'chocolate ice cream mix', 'spicy sausage', 'Jamaican allspice', 'salmon fillets', 'Domino Confectioners Sugar', 'cashew milk', 'mixed nuts', 'roasted garlic oil', 'granita', 'pork belly', 'shucked oysters', 'white peaches', 'fennel', 'cereal', 'habas', 'butter oil', 'sweet potato vermicelli', 'Yakisoba noodles', 'white rum', 'whole wheat fusilli', 'white wine', 'low-fat soft goat cheese', 'balm leaves', 'center cut pork loin chops', 'boneless chuck roast', 'sour orange juice', 'chocolate bars', 'shallots', 'crackers', 'shredded mild cheddar cheese', 'Doubanjiang', 'center cut loin pork chop', 'Galliano', 'parma ham', 'chioggia', 'berries', 'whole wheat hamburger buns', 'redfish', 'blanco cheeques', 'parsley', 'rose petals', 'honey liqueur', 'bottom round roast', 'KRAFT Reduced Fat Shredded Mozzarella Cheese', 'turbot fillets', 'porter', 'spinach', 'fine grind white cornmeal', 'watermelon', 'brown butter', 'fresh dates', 'red potato', 'raspberry juice', 'snail shells', 'Boston lettuce', 'Italian herbs', 'fettuccine, cook and drain', 'Potatoes O'Brien', 'spaghetti', 'Mizkan Rice Vinegar', 'raw buckwheat groats', 'peach juice', 'sparkling lemonade', 'flat anchovy', 'peach salsa', 'beef shoulder roast', 'dried kidney beans', 'black bean and corn salsa', 'asian basil', 'medium-grain rice', 'custard dessert mix', 'graham cracker crusts', 'pecans', 'Chinese rose wine', 'corn starch', 'black rice', 'passion fruit juice', 'graham crackers', 'dukkah', 'biscuits', 'pitted olives', 'Pace Picante Sauce', 'granular sucrose sweetener', 'white beans', 'cooked chicken', 'lime peel', 'italian seasoning', 'hazelnut oil', 'beef', 'fresh oregano', 'jalape', 'black cod', 'bouquet', 'whole baby okra', 'fat-free parmesan cheese', 'grated kefalotiri', 'lo bok', 'black tea leaves', 'spanish onion', 'fat free frozen top whip', 'sugar pea', 'navel oranges', 'tart apples', 'flan', 'shiso', 'proscuitto', 'back bacon', 'shiitake', 'rice pilaf', 'ground ginger', 'cotija', 'chocolate sauce', 'peaches', 'Korean chile flakes', 'broccoli slaw', 'apricot nectar', 'chinese pepper', 'canned chicken broth', 'minced lean steak', 'unsweetened coconut milk', 'dry bread crumbs', 'radish slices', 'bottled clam juice', 'broccoli romanesco', 'traditional italian sauce', 'baked tortilla chips', 'coffee low-fat frozen yogurt', 'pitted green olives', 'lean ground beef', 'aleppo', 'black fungus', 'unsalted pecans', 'small pasta', 'Barilla Oven-Ready Lasagne', 'all beef hot dogs', 'avocado oil', 'biscotti', 'pastry cream', 'dressing', 'apricot halves', 'low-fat greek yogurt', 'tangzhong roux', 'banana liqueur', 'citrus slices', 'fructose', 'turkey thigh', 'green papaya', 'knorr leek recip mix', 'king prawns', 'pimento stuffed olives', 'hazelnut liqueur', 'sourdough loaf', 'chopped onion', 'chopped fresh sage', 'frozen basil', 'refrigerated biscuits', 'lady fingers', 'uncooked medium shrimp, peeled and deveined', 'ripe olives', 'nonfat powdered milk', 'dried tagliatelle', 'Old El Paso™ refried beans', 'louisiana hot sauce', 'kahlúa', 'anchovy filets', 'shoulder lamb chops', 'Vietnamese coriander', 'black sea bass', 'onion flakes', 'hachiya', 'flavored oil', 'dark chocolate cocoa powder', 'Royal Baking Powder', 'prepared mustard', 'malt', 'nonfat half-and-half', 'ground sichuan pepper', 'duck liver', 'chile sauce', 'onion gravy', 'tamale filling', 'fine grain salt', 'pisco brandy', 'unsulphured molasses', 'egg pasta', 'Foster Farms boneless skinless chicken breasts', 'unbleached flour', 'converted rice', 'sweetened coconut', 'fresh cod', 'sausage links', 'new mexico red chile powder', 'tar tar sauce', 'stew meat', 'baby kale', 'fillet medallions', 'granulated tapioca', 'rosewater', 'snow pea pods', 'canoli shells', 'Heinz Ketchup', 'turnips', 'leeks', 'ceylon cinnamon', 'giblet', 'whole wheat english muffins', 'ground

d chicken breast', 'Hidden Valley® Greek Yogurt Original Ranch® Dip Mix', 'frozen pastry puff sheets', 'shredded lettuce', 'shaved parmesan cheese', 'chilcostle chile', 'fregola', 'cream filled chocolate sandwich cookies', 'lamb loin chops', 'yellow split peas', 'chicken thigh fillets', 'topside steak', 'Velveeta Cheese Spread', 'chipotles in adobo', 'mesclun', 'date sugar', 'celery leaves', 'dried pear', 'cane vinegar', 'vegan mayonnaise', 'beef broth', 'filet mignon', 'soaking liquid', 'Honeysuckle White® Hot Italian Turkey Sausage Links', 'orgeat syrup', 'knorr parslei mini cub', 'mixed peel', 'hubbard squash', 'apricot preserves', 'reduced sodium reduced fat cream of mushroom soup', 'conc h', 'red lentils', 'steak', '(10 oz.) frozen chopped spinach', 'jumbo shrimp', 'atta', 'pancake mix', 'gorgonzola', 'Jose Cuervo Gold Tequila', 'natto', 'irish oats', 'grana', 'fillet steaks', 'Jack Daniels Whiskey', 'chicken strip s', 'Soy Vay® Hoisin Garlic Marinade & Sauce', 'chestnut mushrooms', 'tostada shells', 'ready-made pie crusts', 'pizz a toppings', 'yellow summer squash', 'smoked turkey sausage', 'nigari tofu', 'praline syrup', 'sesame oil', 'simple s yrup', 'cumberland sausage', 'Chartreuse Liqueur', 'cumin', 'nam pla', 'filet mignon steaks', 'chocolate curls', 'smoked rashers', 'frozen sweet corn', 'italian loaf', 'french bread', 'flatbread', 'frozen whipped topping', 'hot pepper oni', 'goose liver', 'vegan margarine', 'pinot noir', 'cholesterol free egg substitute', 'napa cabbage', 'steel-cut o atmeal', 'frozen carrots', 'crumbled gorgonzola', 'royal olives', 'steak fillets', 'egg noodles', 'mirin', 'patis', 'Madras curry powder', 'boneless pork loin', 'cantal', 'Challenge Butter', 'seafood seasoning', 'chicken breast fille ts', 'bean paste', 'low-fat tartar sauce', 'pineapple chunks', 'sliced chicken', 'bone in chicken thighs', 'yellow sq uash', 'gluten-free tamari sauce', 'rice bran', 'white frostings', 'white tuna in water', 'yoghurt natural low fat', 'buckwheat', 'preserves', 'graham cracker pie crust', 'TACO BELL® Thick & Chunky Mild Salsa', 'shredded low-fat chedd ar', 'roasted peanuts', 'meal', 'lesser galangal', 'loose leaf black tea', 'kosher wine', 'condensed cream of chicken soup', 'Knorr® Vegetable recipe mix', 'low-fat baked tortilla chips', 'Klondike Rose red skin potato', 'lamb bouillon cube', 'kirsch', 'fresh basil', 'thyme', 'chilli paste', 'orange glaze', 'garbonzo bean', 'poured fondant', 'cannello ni', 'fresh green peas', 'hand', 'extra large shrimp', 'knorr reduc sodium chicken flavor bouillon', 'shoulder stea k', 'crab claws', 'dark rye flour', 'rolls', 'deviled ham', 'fresh dill', 'peppermint extract', 'spam', 'rennet', 'wh ole wheat crackers', 'sparkling mineral water', 'turkey sausage', 'pork shanks', 'goma', 'saltine crumbs', 'tomato pu rée', 'mature cheddar', 'spaghettini', 'no-salt-added diced tomatoes', 'chinese ginger', 'chipotle sauce', 'frozen ve getables', 'rice sticks', 'refrigerated dinner rolls', 'cherry syrup', 'brewed tea', 'whole grain spelt flour', 'froz en bread dough', 'candied fruit', 'clam sauce', 'seafood base', 'fish balls', 'Louisiana Hot Sauce', 'dry jack', 'Ran ch Style Beans', 'red pepper', 'sweet mini bells', 'yellow heirloom tomatoes', 'citrus juice', 'garlic pepper blend', 'soft-shell clams', 'nuoc mam', 'duck egg', 'arrowroot powder', 'chinese spinach', 'Sargento® Traditional Cut Shredded Mozzarella Cheese', 'baby tatsoi', 'farina', 'pasta rotel', 'Tuttorosso Diced Tomatoes', 'lemon juice', 'bechamel', 'mini chocolate chips', 'ducklings', 'wine vinegar', 'shredded nori', 'beef shin', 'rubbed sage', 'muenstein cheese', 'kalamata', 'CURRY GUY Smoked Garam Masala', 'snapper fillets', 'pig', 'aged gouda', 'non stick spray', 'chipotle pur ee', 'garlic', 'chopped leaves', 'nori flakes', 'dijon style mustard', 'chopped bacon', 'low sodium beef stock', 'chi cken egg', "Hellmann's® Real Mayonnaise", 'boneless skin on chicken thighs', 'cooki vanilla wafer', 'low sodium teriy aki sauce', 'cinnamon ice cream', 'Gebhardt Chili Powder', 'blue curaçao', 'burro banana', 'aloe juice', 'reduced sod ium cream of mushroom soup', 'minced onion', 'rum', 'shrimp shells', 'Wish-Bone® Robusto Italian Dressing', 'cheese c ubes', 'condensed reduced fat reduced sodium cream of mushroom soup', 'red vinegar white white, wine, ', 'tomato jam', 'masa dough', 'broccoli florets', 'baby leaf lettuce', 'burdock', 'blacan', 'creamy gravy', 'sea bream', 'kim chee', 'ears', 'cod roe', 'limoncello', 'garland chrysanthemum', 'italian pork sausage', 'whole grain roll', 'sambal ulek', 'dried mushrooms', 'green leaf lettuce', 'herb seasoning', 'chopped walnuts', 'bouillon granules', 'long buns', 'fish broth', 'buttercream frosting', 'coriander seeds', 'cilantro leaves', 'Ragu® Robusto!® Pasta Sauce', 'caribbean jerk seasoning', 'pears', 'dry sherry', 'tri-tip roast', 'grappa', 'vanilla low-fat ic cream', 'chambord', 'new mexico chi le pods', 'raw cashews', 'evaporated low-fat 2% milk', 'jamaican jerk season', 'tahini', 'cut up chicken', 'laksa pas te', 'sliced beets', 'onion soup', 'wide rice noodles', 'pangasius', 'old-fashioned oats', 'powdered sugar', 'cream c heese frosting', 'yellow rice', 'black mustard seeds', 'corn flour', 'kappa', 'candied bacon', 'boneless duck breast halves', 'vinegar', 'full-fat plain yogurt', 'red grape', 'xuxu', 'crisps', 'frozen lima beans', 'fresh cilantro', 't omato soup', 'katakuriko', 'peanut powder', 'pearl couscous', 'annatto seeds', 'garlic salt', 'Tyson Crispy Chicken S trips', 'muscat', 'challa', 'sliced apples', 'shredded colby', 'arborio rice', 'bulb', 'chipotle', 'chicken gizzard s', 'pork sirloin chops', 'Chinese rice vinegar', 'country ham', 'sweet rice wine', 'fresh green bean', 'baked pizza crust', 'shortbread', 'leftover gravy', 'standing rib roast', 'pork', 'field lettuce', 'cumin seed', 'deep dish pie c rust', 'fresh red chili', 'Meyer lemon juice', 'white peppercorns', 'self-rising cake flour', 'black peppercorns', 'f resh marjoram', 'california avocado', 'marinade', 'hamachi fillets', 'bihon', 'Taco Bell Taco Seasoning Mix', 'fresh chili', 'avocado leaves', 'roast beef', 'mooli', 'flavoring', 'marrow', 'Azteca Flour Tortillas', 'gravy mix mushroo m', 'oil packed anchovies', 'Sargento® Artisan Blends® Shredded Parmesan Cheese', 'tiger lily buds', 'artisan bread', 'egg whites', 'unsalted cashews', 'spearmint', 'khoa', 'Thai eggplants', 'snow peas', "za'atar", 'buffalo sauce', 'un sweetened shredded dried coconut', 'Ritz Crackers', 'shrimp small uncook', 'pork loin', 'croutons', 'mole sauce', 'bo neless magret duck breast halves', 'pressed tofu', 'ginger ale', 'garlic sauce', 'extra large eggs', 'light soy sauc e', 'garden cress', 'kimchi juice', 'branca menta', 'chicken breast halves', 'unsalted roasted peanuts', 'whitefish', 'burgundy snails', 'chinese turnip', 'gumbo', 'Jimmy Dean All Natural Regular Pork Sausage', 'pork tail', 'potato sta rch', 'maple sugar', 'milkfish', 'low-fat plain greek yogurt', 'seasoned ground turkey', 'garlic herb feta', 'hillshi re farms low fat sausage', 'citrus', 'steamed brown rice', 'KRAFT Zesty Italian Dressing', 'fowl', 'cheese', 'sweet c orn', 'white truffle oil', 'quick oats', 'Crispy Rice Cereal', 'asian fish sauce', 'wild rice', 'lasagna sheets', 'fr esh tomatoes', 'cooked meatballs', 'pâte brisée', 'organic buttermilk', 'turtle', 'guanabana', 'sweet potatoes', 'lig ht kidney beans', 'fish fillets', 'japanese peanuts', 'arrow root', 'brie cheese', 'greater galangal', 'white bread f lour', 'organic chicken broth', 'panko breadcrumbs', 'chicken noodle soup', 'fat-free refried beans', 'madeira wine', 'sweet italian pork sausage', 'cream cheese spread', 'buns', 'nonfat vanilla frozen yogurt', 'regular soy sauce', 'spicy pork sausage', 'angel food cake', 'low sodium chicken', 'wonton skins', 'langoustines', 'roasted rice powder', 's avoy spinach', 'savoy cabbage', 'Stonefire Italian Thin Pizza Crust', 'seasoned bread crumbs', 'meat marinade', 'cann ed chopped tomatoes', 'solid white tuna in oil', 'bows', 'rice syrup', 'Haas avocados', 'clamato juice', 'dried black beans', "Old El Paso™ Thick 'n Chunky salsa", 'bhaji', 'other vegetables', 'low-fat ricotta', 'cucumber salad', 'Taiw anese bok choy', 'crispy bacon', 'chicken parts', 'recipe crumbles', 'frozen seafood', 'pico de gallo', 'vegetable fa ts', 'soft rolls', 'annatto powder', 'ground sirloin', 'Cholula Hot Sauce', 'corn syrup', 'bloody mary mix', 'sweet i talian sausage', 'chicken', 'mustard', 'olive oil flavored cooking spray', 'whole wheat couscous', 'small green chil e', 'low-fat vanilla ice cream', 'chiltepín', 'macarons', 'boiled eggs', 'erythritol', 'ice cream salt', 'disco empan ada frozen', 'artichoke hearts', 'veal shoulder', 'chèvre', 'fettuccine pasta', 'peach nectar', 'boudin', 'bacon drip pings', 'red pepper hot sauce', '33% less sodium cooked ham', 'loaves', 'sweet soy sauce', 'whole wheat bread toaste d', 'filet', 'low-fat mozzarella cheese', 'nonfat frozen yogurt', 'helix snails', 'powdered gelatin', 'tilapia', 'vea l loin', 'balsamic vinaigrette', 'caul fat', 'salt free chili powder', 'mozzarella string cheese', 'toasted unsweetened coconut', 'ground fennel', 'guajillo chiles', 'low fat mozzarella', 'brown ale', 'puff paste', 'provolone cheese', 'stewed tomatoes', 'plain low fat greek yogurt', 'medium firm tofu', 'oats', 'cilantro sprigs', 'pie dough', 'mung be an sprouts', 'tricolor quinoa', 'hot red pepper flakes', 'celery seed', 'smoked fully cooked ham', 'millet', 'sweet g herkin', 'anise basil', 'true cinnamon', 'dried black mushrooms', 'Shaoxing wine', 'brown gravy mix', 'chicken base', 'tamarind purée', 'Ibarra Chocolate', 'tuna drained and flaked', 'extra virgin coconut oil', 'vanilla almondmilk', 'K RAFT Shredded Pepper Jack Cheese with a TOUCH OF PHILADELPHIA', 'sole fillet', 'string cheese', 'pork heart', 'turkey giblet stock', 'dried plum', 'almond flour', 'shoyu', 'coke zero', 'corn tortilla chips', 'poi', 'small potatoes', 'w hite chocolate chips', 'dark chicken stock', 'quinoa', 'bacon rind', 'white chocolate', 'old bay seasoning', 'radish sprouts', 'umeboshi plum vinegar', 'red quinoa', 'turkey broth', 'chicken bouillon', 'salt and ground black pepper', 'chicken cutlets', 'clam juice', 'boneless salmon fillets', 'flaked', 'portabello mushroom', 'wheatberries', 'sweetbr

eads', 'ranch dip mix', 'scrod fillets', 'long green pepper', 'imitation crab meat', 'yellow miso', 'meat-filled tortellini', 'tonic water', 'wild mushrooms', 'basa fillets', 'pineapple chunks in natural juice', 'cane sugar', 'white button mushrooms', 'granola', 'boneless, skinless chicken breast', 'panela', 'habanero chile', 'vanilla sugar', 'cornbread crumbs', 'sazon seasoning', 'Italian basil', 'raclette', 'polish sausage', 'pastry tart shell', '40% less sodium taco seasoning', 'frozen onion rings', 'salt free cajun creole seasoning', 'octopuses', 'Crisco Pure Vegetable Oil', 'buttermilk ranch dressing', 'salted roasted pecans', 'pork chops', 'red russian kale', 'whole wheat breadcrumbs', 'whole wheat rigatoni', 'espresso beans', 'cinnamon rolls', 'fresh coriander', 'Tabasco Pepper Sauce', 'basil mayonnaise', 'vanilla vodka', 'chicken pan drippings', 'red grapefruit', 'sundried tomato pesto', 'sliced leeks', 'part-skim ricotta cheese', 'apricots', 'barbecue seasoning', 'calamata olives', 'tandoori seasoning', 'black mushrooms', 'stevia extract', 'kale', 'ground paprika', 'seasoned croutons', 'bagel chips', 'chicken carcass', 'tiger prawn', 'tentacles', 'chinese parsley', 'baby broccoli', 'broccolini', 'dried cascabel chile', 'quick-cooking oats', 'red curry paste', 'poppyseeds', 'sweet & sour stir fry sauce', 'chocolate sticks', 'sweet chili sauce', 'chinese chili paste', 'Marshmallow Fluff', 'cracker crumbs', 'gluten free corn tortillas', 'firmly packed brown sugar', 'braggs liquid aminos', 'mashed potatoes', 'condensed golden mushroom soup', 'pork cutlets', 'port wine', 'chopped garlic', 'black', 'palm oil', 'Neufchâtel', 'nonfat chicken broth', 'pineapple juice', 'tuong', 'jeera', 'whole wheat pasta shells', 'pozole', 'prune puree', 'light coconut milk', 'fresh chorizo', 'mostarda', 'jambalaya rice mix', 'giardiniera', 'val', 'matzos', 'summer squash', 'cracked black pepper', 'cubed ham', 'orange peel', 'pecan halves', 'filo dough', 'white corn tortillas', 'absinthe', 'pepper flakes', 'bread slices', 'matcha green tea powder', 'Old El Paso Taco Seasoning Mix', 'fresh lima beans', 'bartlett pears', 'processed cheese', 'shredded basil', 'nonfat dried milk', 'bone-in ribeye steak', 'kokum', 'low-fat sharp cheddar cheese', 'vegetarian chicken', 'sumac', 'claws', 'asafoetida powder', 'grape tomatoes', 'soy glaze', 'curly endive', 'rapeseed oil', 'blanched almonds', 'ground roasted sichuan peppers', 'merlot', 'chip plain tortilla', 'chicken flavored rice', 'toasted shredded coconut', 'roquefort', 'spring roll wrappers', 'store bought low sodium chicken broth', 'curry paste', 'dried kelp', 'chinese jujubes', 'sprite', 'pitted kalamata olive s', 'sashimi grade tuna', 'lop chong', 'horseradish root', 'apple brandy', 'marinara sauce', 'chopped pecans', 'escargot', 'puff pastry cups', 'lemon grass', 'pumpkinseed kernels', 'croissant dough', 'clementine sections', 'hummus', 'bacon, crisp-cooked and crumbled', 'less sodium reduced fat ham', 'ground dried shrimp', 'crispy rice cereal', 'low sodium pinto beans', 'ziti', 'sweet vermouth', 'liquorice', 'grape vine leaves', 'whole wheat pita bread', 'frozen orange juice concentrate', 'vegetarian oyster sauce', 'boiling potatoes', 'chili garlic paste', 'whole grain pasta', 'turkey breast steaks', 'whole wheat submarine loaves', 'bonito', 'pastry flour', 'dhaniya powder', 'shrimp and crab boil seasoning', 'sub buns', 'andouille chicken sausage', 'sweet onion', 'white sugar', 'chile puree', 'crabmeat frozen', 'canned tomatoes', 'Crystal Hot Sauce', 'Bertolli® Alfredo Sauce', 'stevia powder', "Campbell's Condensed Cheddar Cheese Soup", 'low sodium stock', 'chicken fillets', 'scallops', 'gluten-free rolled oats', 'Zatarains Creole Seasoning', 'whole wheat pita pockets', 'powdered egg whites', 'bow-tie pasta', 'duck drumsticks', 'sesame salt', 'peeled diced tomatoes', 'creamed horseradish', 'large egg whites', '33% less sodium cooked deli ham', 'sodium free chicken broth', 'fresh oregano leaves', 'cavatelli', 'cooked barley', 'dried allspice berries', 'glucose syrup', 'coconut butter', 'mineral water', 'caramel flavored syrup', 'sorghum molasses', 'tuna, drain and flake', 'sansho', 'greek seasoning', 'petits pois', 'pasta', 'serrano', 'rotisserie chicken', 'asparagus spears', 'Hidden Valley® Farmhouse Originals Italian with Herbs Dressing', 'conger eel', '( oz.) tomato paste', 'kosher salt', 'rhubarb', 'starchy potatoes', 'angelos', 'spring onions', 'ngo gai', 'jello', 'wheat crackers', 'dried peach', 'watermelon radishes', 'parsnips', 'dark miso', 'phyllo dough', 'cutlet', 'lard', 'vegan yogurt', 'cocoa powder', 'chunky', 'crab', 'mozzarella cheese', 'diced ham', 'reduced fat mayonnaise', 'fresh chicken stock', 'fresh pasta', 'field peas', 'whipped topping', 'dried tart cherries', 'dried tomatoes', 'Italian bread', 'chunky tomatoes', 'gold potatoes', 'mini pepperoni slices', 'Italian seasoned panko bread crumbs', 'brussels sprouts', 'truffle salt', 'indian flat bread', 'KRAFT Mexican Style 2% Milk Finely Shredded Four Cheese', 'ground black pepper', 'root vegetables', 'butter-flavored spray', 'five spice', 'white corn syrup', 'urad dal split', 'mint', 'hot pepper sauce', 'rapid rise yeast', 'aioli', 'fish', 'Thai red curry paste', 'holy basil', 'squash seeds', 'pickled vegetables', 'ground sage', 'semi firm tofu', 'gluten-free pie crust', 'soy yogurt', 'lobster tails', 'maca powder', 'flour for dusting', 'whole wheat linguine', 'anchovy fillets', 'pasta shell small', 'cheddar cheese', 'chiffonade', 'taco sauce', 'heavy cream', 'lentilles du puy', 'dried red chile peppers', 'turkey', 'pancit bihon', 'wasabi', 'smoked kielbasa', 'hungarian hot paprika', 'soy milk', 'lavender flowers', 'frozen broccoli', 'tea bags', 'whole grain bread', 'Manischewitz Potato Starch', 'organic low sodium chicken broth', 'bicarbonate of soda', 'hearts of romaine', 'drummettes', 'gingersnap', 'condensed cream of potato soup', 'side pork', 'piri-piri sauce', 'low sodium beef bouillon granules', 'gluten free cooking spray', 'barbecued pork', 'full fat cream cheese', 'jack cheese', 'french onion soup', 'ramen noodles seasoning', 'bottled italian dressing', 'mein', 'Japanese Mayonnaise', 'sandwich bread', 'medium cheddar cheese', 'beef bouillon powder', 'almond paste', 'Homemade Yogurt', 'frankfurters', 'Oscar Mayer Bacon', 'kale leaves', 'mezcal', 'peeled fresh ginger', 'oil packed anchovy fillets', 'Conimex Woksaus Specials Vietnamese Gember Knoflook', 'fat free reduced sodium chicken broth', 'sliced carrots', 'sweet biscuit crumbs', 'organic granulated sugar', 'pickled onion', 'champagne vinegar', 'cold meatloaf', 'low sodium chili sauce', 'perch fillets', 'saki', 'queso asadero', 'achiote powder', 'bengal gram', 'chinese pancakes', 'red vermouth', 'unseasoned breadcrumbs', 'fat free whipped topping', 'fish bones', 'ragu cheese classic alfredo sauce', 'extra sharp cheddar cheese', 'beet juice', 'Argo Corn Starch', 'Bertolli Tomato & Basil Sauce', 'cherry pie filling', 'venison roast', 'strip loin', 'and fat free half half', 'cake mix', 'chunky pasta sauce', 'veal', 'sauce mix', 'elderflower cordial', 'lamb stock', 'smoked ham hocks', 'turkey bacon', 'coconut oil', 'sour mix', 'schmaltz', 'quick yeast', 'bitters', 'mincemeat', 'butter pecan ice cream', 'curly-leaf parsley', 'Daiya', 'almond oil', 'rib-eye roast', 'beer', 'frying oil', 'knorr homestyle stock chicken', 'Melba toast', 'nonfat yogurt', 'grated lemon peel', 'unsalted margarine', 'cooked brown rice', 'shaoxing', 'boned skinned duck breast halves', 'low-fat ricotta cheese', 'roasted salted cashews', 'cod fillets', 'amber', 'plum wine', 'candy bar', 'apple cider vinegar', 'bertolli vineyard premium collect marinara with burgundi wine sauc', 'unsweetened dried coconut', 'sausages', 'cornflour', 'bocconcini', 'gruyere cheese', 'asian barbecue sauce', 'satsuma imo', 'light mayonnaise', 'herb seasoned stuffing', 'sirloin steak', 'diced bell pepper', 'cake', 'curly kale', 'dried lentils', 'reduced sodium black beans', 'low-fat bottled italian dressing', 'Hurst Family Harvest Chipotle Lime Black Bean Soup mix', 'calabaza', 'burgers', 'green cardamom', 'hamburger', 'pie shell', 'jaggery', 'peppermint schnapps', 'hungarian sweet paprika', 'eye of the round', 'nonfat plain greek yogurt', 'mie', 'gluten-free penne', 'maui onion', 'milk & cream', 'liver', "Hellmann's Light Mayonnaise", 'fire roasted diced tomatoes', 'one third less sodium chicken broth', 'kefir', 'miniature semisweet chocolate chips', 'linguisa', 'bermuda onion', 'sushi vinegar', 'Tapatio Hot Sauce', 'kippered herring fillets', 'pickled jalapeno peppers', 'skinless chicken fillets', 'instant potato flakes', 'glace de viande', 'romana', 'pita wedges', 'skim milk', 'lemon twists', 'sushi rice', 'blackberries', 'single malt Scotch', 'single crust pie', 'country white bread', 'low-fat cream cheese', 'coconut juice', 'palm vinegar', 'ground round', 'eggplant', 'meat seasoning', 'egg beaters', 'cheddar cheese soup', 'orange flower water', 'prego fresh mushroom italian sauce', 'polenta', 'lardons', 'low sodium vegetable juice', 'plain flour', 'knorr garlic minicub', 'lower sodium chicken broth', 'white radish', 'daikon sprouts', 'dried oysters', 'gumbo file', 'boneless chicken breast', 'boneless chicken', 'chicken fingers', 'venison', 'sponge cake', 'medium curry powder', 'Crystal Farms Butter', 'bread crumb fresh', 'agave nectar', 'sliced green olives', 'shark', 'wine syrup', 'melted butter', 'gyoza', 'Niçoise olives', 'low sodium store bought chicken stock', 'dried beef', 'game', 'italian style seasoning', 'beef demi-glace', 'mission figs', 'baby lima beans', 'ground poppy seed', 'Nido Milk Powder', 'shungiku', 't-bone steak', 'condensed cream of broccoli soup', 'tahini paste', 'queso panela', 'Johnsonville® Mild Italian Ground Sausage', 'fruit filling', 'duck fat', 'gyoza skins', 'black turtle beans', 'shredded lowfat monterey jack cheese', 'strip loin steak', 'San Marzano Diced Tomatoes', 'snails', 'KRAFT Shredded Colby & Monterey Jack Cheese', 'shell steak', 'trout fillet', 'jamaican rum', 'taco toppings', 'campanelle', 'whole nutmegs', 'green bell pepper, slice', 'msg', 'dry milk powder', 'tzatziki', 'dessert wine', 'knorr cilantro minicub', 'ground turkey', 'cherry

juice', 'ragu', 'Mexican seasoning mix', 'tart crust', 'lemon lime beverage', 'porterhouse steaks', 'asian noodles', 'dri basil leaves, crush', 'almond milk', 'vanilla bean ice cream', 'large flour tortillas', 'cabrales', 'brown cardamom', 'vodka', 'huatlacoche', 'shortcakes', 'ginger piece', 'boy choy', 'celery flakes', 'fried rice', 'fresh parsley', 'hot dogs', 'mexican cooking sauce', 'shredded cheddar cheese', 'part-skim mozzarella', 'chrysanthemum', 'chili pepper', 'white cabbage', 'Pure Wesson Vegetable Oil', 'parsley flakes', 'DeLallo Extra Virgin Olive Oil', 'Smithfield Ham', 'cornflakes', 'artichokes', 'hoagie buns', 'buffalo', 'cooked steak', 'lean beef', 'port', 'pork butt roast', 'lipton green tea bag', 'poolish', 'pork stew meat', 'ratatouille', 'cranberries', 'artichoke bottoms', 'french rolls', 'all purpose unbleached flour', 'beef rib roast', 'chorizo sausage', 'asian eggplants', 'do chua', 'beef tongue', 'purple grapes', 'yellow curry paste', 'bresaola', 'roast turkey', 'masur dal', 'caesar salad dressing', 'light cream', 'kirschenliqueur', 'amaretti', 'dillweed', 'peas', 'KRAFT Shredded Low-Moisture Part-Skim Mozzarella Cheese', 'fermented bean paste', 'hamachi', 'biga', 'cassava root flour', 'butternut squash', 'caster', 'manicotti shells', 'dried navy beans', 'glace cherries', 'lobster stock', 'sweet pickle relish', 'groundnut', 'dried porcini mushrooms', 'salad', 'Mrs. Dash', 'reduced fat sharp cheddar cheese', 'shredded extra sharp cheddar cheese', 'haloumi cheese', 'Lipton® Iced Tea Brew Family Size Tea Bags', 'Good Seasons Italian Dressing Mix', 'lager', 'varnish clams', 'greek style plain yogurt', 'habanero', 'basil leaves', 'spanish chorizo', 'catfish fillets', 'brandy', 'basil dried leaves', 'mushrooms', 'flat iron steaks', 'coconut aminos', 'smoked almonds', 'carbonated water', 'cocktail cherries', 'piquillo peppers', 'kumquats in syrup', 'vermouth', 'queso manchego', 'whole wheat dough', 'peperoncino', 'gluten-free pasta', 'fresh ginger', 'fresh masa', 'hazelnut flour', 'cinnamon sugar', 'agar', 'steak tips', 'medium shrimp uncook', 'whole wheat sourdough bread', 'breast', 'jerusalem artichokes', 'shelled pistachios', 'Spanish olives', 'morsels', 'cooked rigatoni', 'cubed meat', 'minced beef', 'sangria', 'frozen whip topping, thaw', 'Herdez Salsa Casera', 'brownies', 'fresh cheese', 'shoepeg corn', 'La Victoria Red Chile Sauce', 'fromage blanc', 'adobo sauce', 'full fat sour cream', 'chopped cooked meat', 'tomate verde', 'mini m&ms', 'chicken bones', 'head on shrimp', 'sunflower oil', 'rock salt', 'bulgur wheat', 'natural pistachios', 'cheese curds', 'habanero pepper', 'paprika', 'Better Than Bouillon Chicken Base', 'whipping heavy cream', 'corn oil', 'red kidney beans, rins and drain', 'pie filling', 'Mexican cheese', 'gluten free lasagna noodle', 'low-sodium fat-free chicken broth', 'salt free southwest chipotle seasoning', 'ginger purée', 'pig's trotters', 'goose', 'cream cheese lowfat', 'cole slaw mix', 'honey mustard', 'dry red wine', 'yu choy', 'chicken tenderloin', 'cubed potatoes', 'miniature chocolate chips', 'pear tomatoes', 'frozen peas and carrots', 'blanched almond flour', 'filling', 'dried chives', 'evaporated cane juice', 'gari', 'poultry seasoning', 'potsticker wrapper', 'golden syrup', 'wheat germ', 'spaghetti, cook and drain', 'pita loaves', 'chinkiang vinegar', 'rib pork chops', 'leaves', 'ti leaves', 'grill seasoning', 'yellow lentils', 'pork tenderloin medallions', 'parboiled rice', 'mandarin juice', 'jamaican curry powder', 'fresh chevre', 'waxy potatoes', 'duck drippings', 'pace picante sauce', 'champagne', 'free range chicken breasts', 'portobello caps', 'hen', 'lily buds', 'wing sauce', 'Velveeta Queso Blanco', 'sardines', 'serrano chilies', 'whole wheat rotini', 'refrigerated fettuccine', 'McCormick Parsley Flakes', 'Jameson Whiskey', 'softened butter', 'strawberry gelatin', 'star anise', 'carambola', 'brewed coffee', 'lowfat pepper jack cheese', 'Old El Paso Green Chiles', 'japanese rice', 'pectin', 'garnish', 'bok choy', 'quick-cooking barley', 'marsala wine', 'dandelion greens', 'neutral oil', 'au jus gravy mix', 'borlotti beans', 'crisco', 'drippings', 'red sockeye', 'turkey breast cutlets', 'garbanzo beans', 'low-fat crème fraîche', 'potato chips', 'reduced sodium chicken flavor stuffing mix', 'butter cake', 'cherry vanilla ice cream', 'shirataki', 'grilled chicken breasts', 'ginger', 'masa harina', 'duck breasts', 'chinese plum sauce', 'dip mix', 'lamb', 'chocolate chunks', 'pork stock', 'Kikkoman Soy Sauce', 'crusty whole wheat toast', 'pizza shells', 'frozen banana leaf', 'mushroom broth', 'adobo seasoning', 'prepar pesto', 'lean minced lamb', 'hierba santa', 'split peas', 'sliced green onions', 'red chard', 'celery', 'agave tequila', 'dried fig', 'yams', 'sesame seeds buns', 'bean threads', 'low-fat vanilla wafers', 'spiny lobsters', 'melon liqueur', 'rock sugar', 'Hidden Valley® Original Ranch Salad® Dressing & Seasoning Mix', 'salted dry roasted peanuts', 'chicken broth', 'bâtarde', 'sweet and sour mix', 'nappa cabbage', 'queso crema', 'Alexia Waffle Fries', 'cajun seasoning mix', 'amber rum', 'bay scallops', 'vidalia', 'foie gras terrine', 'rounds', 'low sodium garbanzo beans', 'Ragu Classic Alfredo Sauce', 'cubed bread', 'ground mustard', 'Fisher Pecan Halves', 'frozen whole kernel corn', 'herbed goat cheese', 'fresh pineapple', 'mixed dried fruit', 'cola', 'mango chutney', 'low-fat turkey kielbasa', 'peach schnapps', 'mashed cauliflower', 'seedless green grape', 'soft shelled crabs', 'sliced cucumber', 'Mazola Canola Oil', 'toasted sesame seeds', 'chuka soba noodles', 'Ragu Traditional Sauce', 'kasseri', 'wakame', 'baby bok choy', 'fronds', 'brown basmati rice', 'prepared pizza crust', 'pistou', 'jamaican pumpkin', 'chopped green chilies', 'tatsoi', 'rice stick noodles', 'prime rib', 'malted milk powder', 'light brown muscovado sugar', 'custard', 'moose', 'homemade vegetable stock', 'italian style rolls', 'white bread slices', 'mild sausage', 'winter savory', 'frozen mixed berries', 'liqueur', 'unsweetened applesauce', 'vanilla instant pudding', 'potato gnocchi', 'tapioca pearls', 'Old El Paso™ chopped green chiles', 'plum tomatoes', 'long-grain rice', 'chutney', 'callaloo', 'frozen petit pois', 'non-fat sour cream', 'flaked coconut', 'cereal flakes', 'low fat coleslaw dressing', 'tomato basil sauce', 'coconut vinegar', 'white mushrooms', 'fajita seasoning mix', 'broad beans', 'european cucumber', 'top sirloin steak', 'frozen cranberry juice concentrate', 'carnaroli rice', 'pan drippings', 'salted butter', 'bhindi', 'pita bread rounds', 'regular cucumber', 'bone in', 'Knorr® Pasta Sides™ - Chicken flavor', 'frozen broad beans', 'frozen mixed vegetables', 'sesame chili oil', 'furikake', 'raspberry puree', 'pesto sauce', 'hard salami', 'boysenberries', 'perilla', 'raspberry lambic', 'McCormick® Pure Vanilla Extract', 'japanese eggplants', 'bean thread vermicelli', 'oysters', 'salted cashews', 'orange bell pepper', 'flaxseed', 'sobrasada', 'chocolate milk mix', 'taro', 'hot spanish paprika', 'grated horseradish', 'instant white rice', 'duck bones', 'low sodium crushed tomatoes', 'jackfruit', 'Earth Balance Natural Buttery Spread', 'pepperoni slices', 'paneer cheese', 'romaine lettuce', 'small new potatoes', 'beef tendons', 'uncooked rigatoni', 'italian style stewed tomatoes', 'links', 'Soy Vay® Toasted Sesame Dressing & Marinade', 'currant jelly', 'grated coconut', 'pork chops, 1 inch thick', 'monkfish', 'Mizkan Oigatsu Soups Base', 'new potatoes', 'Corn Flakes Cereal', 'cooked bone in ham', 'granular no-calorie sucralose sweetener', 'leg of veal', 'sliced almonds', 'baking yeast', 'chinese black vinegar', 'english cucumber', 'cabbage lettuce', 'goose fat', 'gyoza wrappers', 'fresh turmeric', 'chicken nugget', 'asafoetida', 'gaeta olives', 'pure vanilla', 'orange flavored brandy', 'Italian turkey sausage', 'mexican chocolate', 'low-fat refried beans', 'nuoc nam', 'chuck short ribs', 'semisweet chocolate chunks', 'mole poblano', 'vegetable shortening', 'table syrup', 'carbonated beverages', 'awase miso', 'pot roast', 'dried apple', 'powdered turmeric', 'halibut steak', 'crumbled corn bread', 'roasted ground cumin', 'flat leaf parsley', 'spice cake mix', 'chicken legs', 'veal stock', 'chicken schmaltz', 'garlic chives', 'cipollini onions', 'Jell-O Gelatin Dessert', 'oliv pit ripe', 'reduced-fat cheese', 'candied peel', 'flowering chinese chives', 'barley grits', 'knorr rice side cheddar broccoli', 'cooking sherry', 'A Taste of Thai Rice Noodles', 'maifun', 'meat', 'black radish', 'pearl tapioca', 'pimentos', 'bran flakes', 'fresh tomato salsa', 'Quorn crumbles', 'boneless ham', 'soup mix', 'asparagus bean', 'chocolate syrup', 'adobo', 'wonton noodles', 'wish bone guacamol ranch dress', 'Pernod Liqueur', 'small curd cottage cheese', 'chocolate extract', 'extra light olive oil', 'curly parsley', 'crushed pretzels', 'beef kidney', 'canton noodles', 'chenpi', 'warm buns', 'low-fat salad dressing', 'bread dough', 'habanero hot sauce', '2% reduced-fat milk', 'Piment d'Espelette', 'matsutake mushrooms', 'agar agar flakes', 'Breyers® Natural Vanilla Ice Cream', 'chinese radish', 'alfredo sauce mix', 'deli rolls', 'bittersweet chocolate', 'clams', 'heavy whipping cream', 'cola-flavored carbonated beverage', 'nonfat milk powder', 'sub rolls', 'pizza sauce', 'pea pods', 'fine granulated sugar', 'topping', 'OREO® Cookies', 'spelt flour', 'hong kong-style noodles', 'gochugaru', 'solid white tuna', 'green tea leaves', 'chunky peanut butter', 'fideos pasta', 'frozen lemonade concentrate, thawed and undiluted', 'riesling', 'fat-free chicken broth', 'ice water', 'country style italian bread', 'confectioners sugar', 'poblano chilies', 'iceberg lettuce', 'cabernet sauvignon', 'sturgeon', 'catfish', 'marrons glacés', 'vermicelli noodles', 'ham', 'stick butter', 'candied chestnuts', 'veggie crumbles', 'raspberry liqueur', 'reduced fat creamy peanut butter', 'ice', 'ground beef', 'oriental radish', 'zucchini blossoms', 'cabernet', 'açai', 'broccoli', 'Crystal Farms Shredded Gouda Cheese', 'Knox unflavored gelatin', 'me lon', 'Jonshonville® Cajun Style Chicken Sausage', 'dark brown sugar', 'breasts halves', 'bone-in chicken', 'posole',

'lamb fillet', 'strawberries', 'yellow bell pepper', 'fresh bean', 'vanilla wafer crumbs', 'glucose', 'veal for ste w', 'meringue', 'malt powder', 'salad dressing mix', 'fresh chervil', 'cream cheese with chives and onion', 'golden b eets', 'english breakfast tea leaves', 'fat-free shredded cheddar cheese', 'onion slices', 'Johnsonville Mild Italian Sausage Links', 'sticky rice', 'Pillsbury™ Crescent Recipe Creations® refrigerated seamless dough sheet', 'knorr past a side cheesi cheddar', 'casings', 'caramel ice cream', 'apple juice', 'homemade chicken broth', 'kamaboko', 'pure olive oil', 'light brown sugar', 'Wolf Brand Chili', 'korean vermicelli', 'mentaiko', 'plain yogurt', 'ginger root', 'curly leaf spinach', 'Cointreau Liqueur', 'lavash', 'malt syrup', 'clear honey', 'wafer', 'skinned boned duck breast halves', 'evapor low-fat milk', 'french dressing', 'black beans', 'yellow corn meal', 'fresh salmon', 'strozzapreti', 'chicken leg quarters', 'lump crab meat', 'salsa verde', 'Irish whiskey', 'lamb rib chops', 'italian meatballs', 'rockfish', 'asian pear', 'french fried onions', 'pepperocini', 'arrowroot flour', 'Breakstone's Sour Cream', 'lipton tea bags', 'Success White Rice', 'glazed pecans', 'frozen lemonade concentrate', 'ponzu', 'ladys house seasoning', 'whole wheat sandwich bread', 'rock cornish game hens', 'plain low-fat yogurt', 'onion rings', 'grated pecorino', 'pickling liquid', 'whole chicken', 'light agave nectar', 'freshly ground pepper', 'pollock', 'blood', 'nigella seeds', 'cod', 'riblets', 'white grape juice', 'instant coffee', 'mustard seeds', 'cake mix or white yellow', 'unsmoked bacon', 'calimyrna figs', 'stilton', 'pork fillet', 'Everglades Seasoning', 'oleo', 'cocoa', 'achiote paste', 'Spice Islands Bay Leaves', 'dried shrimp', 'teardrop tomatoes', 'Guinness Lager', 'yellow bean sauce', 'boiled ham', 'cointreau', "Campbell's Condensed Cream of Mushroom Soup", 'persimmon', 'low-fat parmesan cheese', 'grated parmesan cheese', 'pies', 'chuck', 'self rising flour', 'roquefort cheese', 'Jameson Irish Whiskey', 'cream of celery soup', 'black trumpet mushrooms', 'low-fat plain yogurt', 'cacao nibs', 'Oscar Mayer Deli Fresh Smoked Ham', 'jerk marinade', 'green peppercorns', 'idaho potatoes', 'Karo Corn Syrup', 'sorrel', 'sambuca', 'beef rump steaks', 'granulated white sugar', 'center cut pork chops', 'whitefish fillets', 'key lime', 'citric acid powder', 'turkey burger', 'white distilled vinegar', 'scotch', 'edamame', 'virgin olive oil', 'breadfruit', 'low fat graham cracker crumbs', 'other', 'swiss cheese', 'vanilla powder', 'fresh mint', 'fast-rising active dry yeast', 'spring water', 'cooking fat', 'franks', 'taco seasoning mix', 'ruby port', 'dark meat', 'nondairy whipped topping', 'umeboshi paste', 'tamarind pod', 'frisee', 'toasted pecans', 'pasilla pepper', 'tomato salsa', 'dried cranberries', 'bread and butter pickle slices', 'pansies', 'red chili peppers', 'crumbled ricotta salata cheese', 'lychees', 'sole', 'buttermilk', 'catsup', 'herbes de provence', 'sazon', 'Nielsen-Massey Vanilla Extract', 'liverwurst', 'table wine', 'black lentil', 'shredded Monterey Jack cheese', 'dash een', 'mirlitons', 'lime rind', 'ladyfingers', 'pepperoni', 'chocolate chip cookie dough ice cream', 'fresh tuna steaks', 'cooking wine', 'ricotta cheese', 'paneer', 'shuck corn', 'red preserved bean curd', 'Anaheim chile', 'chopped tomatoes', 'jerk seasoning mix', 'flounder', '2% lowfat greek yogurt', 'moong dal', 'large garlic cloves', 'buttercup squash', 'bread ciabatta', 'English muffins', 'low-fat white sauce', 'white almond bark', 'jambon de bayonne', 'old ginger', 'veal rib chops', 'seasoning', 'ras el hanout', 'pita wraps', 'flower petals', 'hard cider', 'peach preserves', 'tri-tip steak', 'veal medallions', 'chana dal', 'vanilla bean paste', 'ragu cheesi doubl cheddar sauc', 'anise', 'tomatoes with juice', 'Domino Light Brown Sugar', 'cornish game hens', 'Baileys Irish Cream Liqueur', 'bai cai', 'sesame seed paste', 'shredded bamboo', 'pork shoulder', 'reduced sodium beef broth', 'Meyer lemon peel', 'beni shoga', 'stewing hen', 'honey graham crackers', 'small eggs', 'pork neck', 'mi', 'stone-ground cornmeal', 'fresh veget', 'peanut butter', 'pareve margarine', 'pork liver', 'wheat bran', 'sliced ham', 'dill', 'Progresso Diced Tomatoes', 'chinese rice wine', 'pumpernickel bread', 'non dairy sour cream', 'ice cream', 'soft-shelled crabs', 'whole wheat thin italian pizza crust', 'swordfish fillets', 'bucatini', 'vegetable juice', 'crushed pineapples in juice', 'grits', 'ikura', 'walnut halves', 'peppercorns', 'brine cured green olives', 'savoy cabbage leaves', 'yogurt low fat', 'black mission figs', 'red beans', 'basil', 'Pompeian Canola Oil and Extra Virgin Olive Oil', 'toasted cashews', 'Land O Lakes® Butter', 'lemon-lime soda', 'plum jam', 'watercress', 'pork leg', 'muffin mix', 'Ciabatta rolls', 'low-fat balsamic vinaigrette', 'asti spumante', 'knorr italian side creami garlic shell', 'coconut milk', 'fresh raspberries', 'feet', 'chocolate graham crackers', 'turkey salami', 'garlic herb spreadable cheese', 'genoa salami', 'sato imo', 'squash blossoms', 'beef stock cubes', 'file powder', 'ramen soup mix', 'chinese celery', 'torn romain lettuc leav', 'long green beans', 'anise oil', 'all-purpose flour', 'doritos', 'sweet bean paste', 'lemon pepper seasoning', 'toasted sesame oil', 'nonstick spray', 'soy', 'fino sherry', 'key lime juice', 'kimchi', 'dried cloud ears', 'strained yogurt', 'peperoncini', 'shanghai noodles', 'belacan', 'medium dry sherry', 'white onion', 'shrimp powder', 'guinea hens', 'blackcurrant syrup', 'toasted sunflower seeds', 'cornbread', 'nacho chips', 'glaze', 'manicotti', 'ravva', 'cherrystone clams', 'dough', 'lamb sausage', 'Knorr® Pasta Sides™ - Alfredo', 'alum', 'baby zucchini', 'gluten-free oat', 'redfish fillet', 'chocolate-hazelnut spread', 'muesli', 'coconut syrup', 'green pumpkin seeds', 'cream of chicken soup', 'Spice Islands Garlic Salt', 'peppermint', 'whole milk', 'irish bacon', 'frozen sweet peas', 'chili pepper flakes', 'chocolate ice cream', 'korean buckwheat noodles', 'broiler chicken', 'hot tea', 'panch phoran', 'kidney', 'bottled low sodium salsa', 'turnip greens', 'refrigerated seamless crescent dough', 'mandarin orange juice', 'sharp cheddar cheese', 'golden mushroom soup', 'bone in skin on chicken thigh', 'pink grapefruit', 'farro', 'shrimp', 'burgundy', 'ginger juice', 'feta cheese crumbles', 'panko', 'toor dal', 'sirloin tip roast', 'Burgundy wine', 'shrimp tails', 'dende oil', 'buckwheat honey', 'medjool date', 'grated jack cheese', 'baked pita chips', 'smoked pork', 'ginger liqueur', 'fresh brussels sprouts', 'black vinegar', 'yellow mustard', 'lamb racks', 'dark muscovado sugar', 'pancit canton', 'roasted unsalted cashews', 'pumpkin seed mole', 'flavored syrup', 'orange marmalade', '(14.5 oz.) diced tomatoes', 'meat extract', 'Bartlett Pear', 'red chili powder', 'nonfat mayonnaise', 'skinless chicken breast fillets', 'nonfat greek yogurt', 'proscuitto di parma', 'kasuri methi', 'queso anejo', 'diced apples', 'skirt steak', 'cucuzza', 'arak', 'smoked whitefish', 'condensed fiesta nacho cheese soup', 'teriyaki sauce', 'soup bones', 'smoked mackerel', 'cake pound prepar', 'capon', 'hibiscus tea', 'center-cut salmon fillet', 'firm tofu', 'curry mix', 'jumbo pasta shells', 'beef bones', 'milk chocolate kisses', 'crumbled cheese', 'speck', 'rouille', 'smoked chorizo', 'emerils original essence', 'turkey legs', 'light butter', 'English mustard', 'french fri frozen', 'suckling pig', 'tomato ketchup', 'hot sausage', 'ginger syrup', 'nutritional yeast flakes', 'apricot brandy', 'sherry', 'cream sherry', 'friselle', 'malo ato chiles', 'quatre épices', 'fresh blueberries', 'whole okra', 'keema', 'fritos', 'spelt', 'granulated sugar', 'diced tomatoes', 'asian chili red sauc', 'chilled seltzer', 'rum extract', 'chai tea concentrate', 'sun dried tomato dressing', 'asian chile paste', 'boneless skinless chicken tenderloins', 'dried sage', 'textured soy protein', 'worcestshire sauce low sodium', 'lamb neck', 'curry powder', 'haddock fillets', 'baby gem lettuce', 'starch', 'macaroni', 'chocolatecovered espresso beans', 'chili bean sauce', 'beef bouillon', 'small capers, rins and drain', 'rajma', 'accent', 'century eggs', 'mandarin oranges', 'raw milk', 'butter flavor vegetable shortening', 'zinfandel', 'Italian seasoned breadcrumbs', 'wheat', 'Gourmet Garden Oregano', 'red anjou pears', 'cheese tortellini', 'wonton wrappers', 'Saffron Road Vegetable Broth', 'longaniza', 'lotus seeds', 'shredded low-fat jarlsberg cheese', 'pomegranate seeds', 'ampalaya', 'food colouring', 'camembert', 'roasted pepitas', 'cress', 'winter squash', 'prepared guacamole', 'panda n essence', 'vegetable oil cooking spray', 'azuki bean', 'mahimahi fillet', 'konnyaku', 'coleslaw', 'toasted nori', 'hot bean paste', 'ground sausage', 'frozen green beans', 'pure maple syrup', 'oil packed dried tomatoes', 'poundcake', 'tortilla chips', 'cured pork', 'manicotti pasta', 'skinless chicken thighs', 'grass-fed butter', 'digestive biscuit', 'sliced black olives', 'burger rolls', 'Dole Seven Lettuces', 'tofu puffs', 'brandy extract', 'regular tofu', 'dried bonito flakes', 'yuzu', 'chocolate sprinkles', 'sorghum flour', 'banana squash', 'burgundy wine', 'minced pork', 'pasta sheets', 'striped bass', 'garlic bulb', 'dipping sauces', 'lemon rind', 'pork rib chops', 'stout', 'steak seasoning', 'instant chicken bouillon', 'curds', 'lamb for stew', 'sumac powder', 'fat free cream of mushroom soup', 'hash brown', 'olive oil spray', 'grape juice', 'Turkish bay leaves', 'purple potatoes', 'rosemary needles', 'lemon pepper', 'V8 Juice', 'salted roasted almonds', 'Toulouse sausage', 'comice pears', 'chocolate sandwich cookies', 'smoked haddock', 'reduced fat milk', 'pickles', 'gram flour', 'angus', 'jumbo shell pasta', 'cook and drain', 'oat groats', 'low sodium gluten free soy sauce', 'breakfast sausages', 'CURRY GUY Smoked Spicy Salt', 'poppy seeds', 'feta cheese', 'Jimmy Dean Pork Sausage', 'fennel fronds', 'razor clams', 'xanthan gum', 'cauliflowerets', 'sliced kalamata olives', 'broiler', 'boned lamb shoulder', 'diced pimentos', 'smooth natural peanut butter', 'sliced mango', 'condensed

cream of mushroom soup', 'channa dal', 'cooked vegetables', 'Sugar in the Raw', 'shredded reduced fat reduced sodium swiss cheese', 'mung bean noodles', 'Camellia Red Kidney Beans', 'flank steak', 'honeydew', 'roasting chickens', 'mint sauce', 'frozen strawberries', 'chicken flavor stuffing mix', 'Hidden Valley® Original Ranch® Dips Mix', 'guava paste', 'mian', 'yukon gold potatoes', 'roti', 'bone-in pork chops', 'nonfat cottage cheese', 'Crystal Farms® Shredded Cheddar Cheese', 'chipotle salsa', 'white sesame seeds', 'kampyo', 'homemade meatballs', 'soybean oil', 'pina colada mix', 'condensed cream of celery soup', 'red snapper', 'chinese wolfberries', 'unsweetened cocoa powder', 'chocolate truffle', 'bonito flakes', 'sack', 'skate', 'Kikkoman Oyster Sauce', 'clarified butter', 'cooked vermicelli', 'chick peas', 'sake', 'lettuce leaves', 'pimenton', 'salsify', 'citrus peel', 'fine salt', 'chopped fresh mint', 'whole grain rice', 'cajeta', 'Ragu Sauce', 'parmigiano reggiano', 'refrigerated crescent rolls', 'yellowfin', 'trout', 'pure vanilla extract', 'yuzu juice', 'beef smoked sausage', 'cooking oil', 'minute steaks', 'spring greens', 'miso', 'swanson beef broth', 'baobab fruit powder', 'malt vinegar', 'canola mayonnaise', 'meringue powder', 'low sodium black beans', 'baking chocolate', 'white rice flour', 'maple flavored extract', 'double concentrate tomato paste', 'dried tarragon leaves', 'marjoram leaves', 'diced celery', 'slab bacon', 'long grain brown rice', 'buttermilk biscuits', 'cilantro pesto', 'light margarine', 'sweet rice flour', 'bone-in chicken breast halves', 'chocolate leaves', 'pork cubes', 'rose essence', 'smoked haddock fillet', 'greek style seasoning', 'reduced fat swiss cheese', 'uncooked ziti', 'satsuma juice', 'mullet', 'chili con carne', 'arame', 'dried shallots', 'Bertolli® Classico Olive Oil', 'whole wheat lasagna noodles', 'McCormick Poppy Seed', 'karo syrup', 'hing (powder)', 'Best Foods® Real Mayonnaise', 'semi pearled farro', 'cajun seasoning', 'Kraft Big Slice Pepper Jack Cheese Slices', 'choy sum', 'freshly grated parmesan', 'pepper leaves', 'fillet red snapper', 'kasu', 'garam masala', 'microgreens', 'center cut bacon', 'crouton italian season', 'dark ale', 'mushroom powder', 'garlic puree', 'kewra essence', 'yaki-nori', 'robiola', 'sunchokes', 'rigatoni or large tube pasta', 'pandan extract', 'pickle spears', 'eggroll wrappers', 'Knorr® Beef Bouillon', 'harusame', 'mini cucumbers', 'hot chili', 'crosswise', 'salted pistachios', 'chipotle peppers', 'tri tip', 'asiago', 'lotus leaves', 'tree ears', 'hot smoked paprika', 'grouper', 'vegetable soup', 'orange zest', 'shoga', 'rainbow trout', 'boneless beef short ribs', 'roasted pumpkin seeds', 'bawang goreng', 'ancho powder', 'canela', 'butterscotch chips', 'fresh herbs', 'stone flower', 'linguini', 'truffle puree', 'thick-cut bacon', 'linguine', 'arhar dal', 'white vermouth', 'frozen corn', 'meat stock', 'diced yellow onion', 'frozen cod fillets', 'whole kernel corn, drain', 'japanese radish', 'dry pasta', 'roasted almond oil', 'canned low sodium chicken broth', 'barramundi fillets', 'margarine', 'low sodium vegetable broth', 'corn bread', 'pepper sauce', 'chocolate liqueur', 'arctic char', 'lean chuck roast', 'low-fat monterey jack', 'orange bitters', 'picholine', 'chinese celery cabbage', 'swiss chard', 'calf liver', 'southern comfort', 'sodium reduced beef broth', "i can't believ it' not butter! made with olive oil spread", 'low sodium soy sauce', 'whole wheat baguette', 'frozen mini ravioli', 'sweet chorizo', 'pepperoni turkei', 'lean ground pork', 'petite peas', 'barbecue sauce', 'white zinfandel', 'red raspberries', 'boneless pork shoulder roast', 'Yuzukosho', 'anasazi beans', 'stem ginger in syrup', 'dried salted codfish', 'cooked white rice', 'wish-bone', 'red bartlett pears', 'russet', 'chocolate hips', 'low sodium tomato sauce', 'papalo', 'bananas', 'frozen sweetened raspberries', 'thyme sprigs', 'fat free lemon curd', 'maple extract', 'bacon slices', 'crushed pineapple', 'smoked gouda', 'white vinegar', 'soya bean', 'low sodium taco seasoning', 'fresh yeast', 'chuck steaks', 'beef shoulder', 'hots', 'tumeric', 'whipped butter', 'old fashioned stone ground grits', 'dried prawns', 'whole wheat tortillas', 'limeade', 'corned beef', 'Quinoa Flour', 'bay leaves', 'yucca root', 'kielbasa', 'grapefruit', 'lamb cubes', 'ground pork', 'porcini powder', 'mcintosh apples', 'italian-style meatballs', 'merluza', 'free range egg', 'guajillo', 'empanada dough', 'rendered bacon fat', 'banana extract', 'reduced sodium italian style stewed tomatoes', 'low-fat vanilla yogurt', 'ground flaxseed', 'country gravy', 'pastry', 'baking sugar', 'low salt chicken broth', 'pitted Medjool dates', 'extra lean ground beef', 'less sodium mushroom flavored soy sauce', 'thai noodles', 'shredded zucchini', 'rotelle', 'peach sorbet', 'Louisiana Cajun Seasoning', 'extra-virgin olive oil', 'nonfat yogurt plain', 'andouille turkey sausages', 'Heath Candy Bars', 'pomelo', 'wild garlic', 'dashi powder', 'pane di casa', 'rum raisin ice cream', 'thin deli ham', 'cajun remoulade', '(14 oz.) sweetened condensed milk', 'low fat cream', 'stone ground mustard', 'homemade stock', 'baking potatoes', 'sea scallops', 'pitas', 'collard leaves', 'vegetable juice cocktail', 'jasmine rice', 'unsweetened vanilla almond milk', 'bolillo', 'beurre manié', 'ground coffee', 'Thai fish sauce', 'cooked long-grain brown rice', 'chicken and rice soup', 'progresso reduced sodium chicken broth', 'green soybeans', 'light rum', 'Flora Original', 'nonfat milk', 'barley flour', 'distilled malt vinegar', 'Fuyu persimmons', 'ham steak', 'pink beans', 'hominy grits', 'lambs liver', 'sunflower seeds', 'fingerling', 'eel', 'low-fat vegetable primavera spaghetti sauce', 'mortadella', 'Vegeta Seasoning', 'Kitchen Bouquet', 'brown rice flour', 'red serrano peppers', 'fat free ground turkey breast', 'high gluten bread flour', 'seeds', 'ginkgo nut', 'cranberry juice', 'fuji apples', 'Lea & Perrins Worcestershire Sauce', 'St Germain Liqueur', 'McCormick Ground White Pepper', 'cavatappi', 'dried shiitake mushrooms', 'less sodium beef broth', 'rape', 'large snails', 'low-fat yogurt', 'dried currants', 'cranberry juice cocktail', 'turkey sausage links', 'iceberg', 'cremini mushrooms', 'diced green chilies', 'radicchio', 'molasses', 'fry mix', 'sherbet', 'ficelle', 'wheat berries', 'reduced fat Mexican cheese', 'piment despelette', 'chopped fresh chives', 'pork back ribs', 'reduced sodium soy sauce', 'syrup', 'lemon dressing', 'boiling onions', 'baked corn tortilla chips', 'eau de vie', 'peach slices', 'light alfredo sauce', 'Kraft Extra Sharp Cheddar Cheese', 'butterscotch filling', 'pancetta', 'brine', 'roast pork seasoning mix', 'Lipton Lemon Iced Tea Mix', 'tapioca', 'nam prik', 'chocolate flavored liqueur', 'yellow onion', 'high-fructose corn syrup', 'split black lentils', 'haddock', 'frozen okra', 'Vadouvan curry', 'reduced fat reduced sodium cream of mushroom soup', 'soft fresh goat cheese', 'broccoli rabe', 'spring rolls', 'Philadelphia Cream Cheese', 'cake batter', 'olive oil cooking spray', 'ibarra', 'low-fat spaghetti sauce', 'Angostura bitters', 'fiber one', 'chiles', 'ground cayenne pepper', 'brats', 'ketchup', 'deli ham', 'beef tenderloin steaks', 'arepa flour', 'hickory smoke', 'collard greens', 'sauterne', 'dried fruit', 'non dairy milk', 'sliced fresh fruit', 'small red potato', 'low-fat cheese', 'king oyster mushroom', 'pomegranate', 'coffee liqueur', 'pear nectar', 'cubed mango', 'cheese ravioli', 'cider', 'semisweet chocolate', 'ace', 'acini di pepe', 'energy drink', 'double smoked bacon', 'idli', 'back ribs', 'spot prawns', 'frozen peppers and onions', 'chicken-apple sausage', 'dried mango', 'celery ribs', 'Saigon cinnamon', 'yardlong beans', 'nonfat mozzarella cheese', 'cold water', 'mixed mushrooms', 'methi leaves', 'nonfat dry milk', 'Manzanilla olives', 'hoja santa leaves', 'hard-boiled egg', 'ground peppercorn', 'red', 'pound cake mix', 'pineapple rings', 'powdered buttermilk', 'carnation', 'chocolate glaze', 'conchiglie', 'candied citron peel', 'cointreau liqueur', 'bbq seasoning', 'Morton Salt', 'barbecue rub', 'dark sesame oil', 'gran marnier', 'Neapolitan ice cream', 'boneless skinless chicken', 'savory', 'pork sausage casing', 'fast rising yeast', 'mussels', 'gluten-free bread', 'ornamental kale', 'granary bread', 'ricotta', 'pinot blanc', 'parsley sprigs', 'chicken pieces', 'guacamole seasoning mix', 'kaffir lime', 'organic butter', 'unsweetened apple juice', 'pineapple salsa', 'condensed cream', 'almond syrup', 'shelled hemp seeds', 'icing', 'chine cinnamon', 'colby cheese', 'Cara Cara orange', 'annatto oil', 'minced chicken', 'clementines', 'blackpepper', 'chihuahua cheese', 'poppy seed dressing', 'Praline Liqueur', 'relish', 'chocolate morsels', '(10 oz.) frozen chopped spinach, thawed and squeezed dry', 'fresh shiitake mushrooms', '33% less sodium ham', 'sanding sugar', 'edible gold leaf', 'alphabet pasta', 'black walnut', 'semisweet baking chocolate', 'wasabi paste', 'bone in skinless chicken thigh', 'sirloin', 'chopped fresh herbs', 'pancake', 'extract', 'salsa', 'nonhydrogenated margarine', 'whole wheat bread', 'oyster-flavor sauc', 'brown rice syrup', 'cinnamon candy canes', 'fat free beef broth', '(15 oz.) refried beans', 'soy chorizo', 'low sodium fat free vegetable broth', 'sparkling rosé wine', 'lipton recip secret golden onion soup mix', 'Chianti', 'cardamom seeds', 'hops', 'greek seasoning mix', 'pink salmon', 'tapioca flour', 'orchid', 'imitation seafood', 'great northern beans', 'beef ribs', 'pasilla chiles', 'chapati flour', 'vegetable bouillon', 'kalonji', 'large tomato', 'apple schnapps', 'brown beech mushrooms', 'tarragon leaves', 'cashew butter', 'plain breadcrumbs', 'sugar', 'beef carpaccio', 'pot stickers', 'chili habanero pepper', 'sweet basil', 'breast of lamb', 'whole wheat tortilla wraps', 'raw sugar', 'bertolli organic tradit sauc', 'szechwan peppercorns', 'beaujolais', 'bertolli vodka sauc made with fresh cream', 'prosecco', 'Johnsonville Hot & Spicy Breakfast Links', 'cubed beef', 'sparkling wine', 'rose water', 'butter-margarine blend', 'unsalted dry roast peanuts', 'tostitos', 'condensed french onion soup', 'golden raisi

ns', 'rich chicken stock', 'Kraft Miracle Whip Dressing', 'whole wheat rotini pasta', 'fresh spinach leaves, rins and pat dry', 'won ton wrappers', 'chile de arbol', 'cornmeal', 'Pillsbury™ classic pizza crust', 'reduced fat cream cheese', 'Kerrygold Pure Irish Butter', 'tex-mex shredded cheese', 'roasted red peppers', 'apple cider', 'cooking apple s', 'capers', 'precooked meatballs', 'Cinnamon Toast Crunch Cereal', 'Mazola Corn Oil', 'dried scallops', 'hot cocoa mix', 'celery powder', 'meatballs', 'italian salad dressing mix', 'ground chile', 'mango juice', 'almond meal', 'white italian tuna in olive oil', 'top loin steaks', 'pea shoots', 'beef stew seasoning mix', 'rye', 'skinless haddock', 'pandanus leaf', 'sour salt', 'basil olive oil', 'ranch dip', 'dark crème de cacao', 'bacon fat', 'spanish paprika', 'boneless skinless chicken thigh fillets', 'hard shelled clams', 'hot salsa', 'dried pappardelle', 'artificial sweetener', 'gluten free barbecue sauce', 'cured meats', 'ginseng', 'greens', 'cold milk', 'rosemary', 'top round steak', 'whipped cream', 'yellow peas', 'plain whole-milk yogurt', 'baby spinach leaves', 'japanese breadcrumbs', 'hot italian turkey sausage', 'filo', 'tuna packed in olive oil', 'ground bison', 'Jell-O Gelatin', 'snow crab', 'salad greens', 'olive tapenade', 'greek-style vinaigrette', 'compressed yeast', 'goji berries', 'extra sharp white cheddar cheese', 'saffron threads', 'unagi', 'cuttlefish balls', 'unsweetened almond milk', 'shredded parmesan cheese', 'burger style crumbles', 'barilla', 'ground rosemary', 'glutinous rice', 'canadian bacon', 'nama shoyu', 'cooked deli ham', 'pumpernickel', 'chinese chives', 'tomatoes on the vine', 'rice wine', 'reduced sodium tamari', 'San Marzano tomatoes', 'Pepperidge Farm Puff Pastry Sheets', 'vegetable slaw', 'havarti cheese', 'buttermilk self-rising white cornmeal mix', 'pastry shell', 'assam', 'Bob Evans Italian Sausage', 'butter cooking spray', 'Kahlua Liqueur', 'italian rolls', 'cake yeast', 'porridge oats', 'kha', 'jerk rub seasoning', 'low sodium beef broth', 'uncooked vermicelli', 'marshmallow creme', 'loin pork chops', 'white creme de cacao', 'baby radishes', 'turmeric root', 'tex mex seasoning', 'calvados', 'vanilla frosting', 'fresh orange', 'benne seed', 'mint sprigs', 'brown mustard', 'fat skinned chicken broth', 'vanilla cream', 'boneless pork shoulder', 'strawberry ice cream', 'low-fat sweetened condensed milk', 'ragu old world style pasta sauc', 'condensed tomato soup', 'long beans', 'pepperidge farm puff pastry', 'Pillsbury Pie Crusts', 'bulgur', 'blanched hazelnuts', 'whole milk greek yogurt', 'Old Bay Blackened Seasoning', 'pinhead oatmeal', 'diced tomatoes in juice', 'soup', 'baby arugula', 'canned chicken breast', 'chourico', 'oyster liquor', 'dried basil', 'boneless skinless chicken breasts', 'gravlax', 'unsweetened pineapple juice', 'cooking liquid', 'mild curry powder', 'aby artichokes', 'truffle oil', 'meat fats', 'sugar pearls', 'summer savory', 'tom yum paste', 'ground pepper', 'fish fingers', 'vegan parmesan cheese', '40% less sodium taco seasoning mix', 'whole grain thin spaghetti', 'bacon grease', 'aleppo pepper', 'peaches in heavy syrup', 'large shrimp', 'shanghai bok choy', 'extra firm tofu', 'green lentil', 'sunflower kernels', 'chinese five-spice powder', 'thai green curry paste', 'dijon', 'Thai chili garlic sauce', 'reduced sodium fat free chicken broth', 'chile piquin', 'smithfield ham', 'lemon extract', 'nopales', 'Hellmann's Dijonnaise Creamy Dijon Mustard", 'chile pepper', 'hamburger buns', 'shrimp meat', 'chips', 'turkey ham', 'longan', 'pappadams', 'sourdough starter', 'soybean paste', 'seville oranges', 'low fat mild Italian turkey sausage', 'lotus seed paste', 'green cauliflower', 'Lipton Sparkling Diet Green Tea with Strawberry Kiwi', 'figs', 'guajillo chile powder', 'crayfish', 'whole grain buns', 'cut up cooked chicken', 'semi sweet mini chocolate chips', 'aspic', 'multi-grain penne pasta', 'beau monde seasoning', 'brine-cured black olives', 'fennel bulb', 'squirt', 'unhulled sesame seeds', 'allspice berries', 'black grapes', 'taco seasoned cheese', 'fresh leav spinach', 'dried dates', 'veal cutlets', 'double-dark soi sauc', 'cream of tartar', 'mutton', 'grated cotija', 'nuoc cham', 'gingerroot', 'stem ginger', 'mushroom soup', 'instant couscous', 'Mission Corn Tortillas', 'earl grey tea leaves', 'cocktail sauce', 'sultana', 'jerk sauce', 'sundried tomato paste', 'yam bean', 'Mo Qua', 'korean chile', 'juniper berries', 'stir fry sauce', 'corn bread crumbs', 'dill pickles', 'lamb kidneys', 'fresh pork fat', 'canola oil', 'Kikkoman Less Sodium Soy Sauce', 'roasted white sesame seeds', 'rub seasoning', 'swanson chicken broth', 'dried chipotle pepper', 'mackerel fillets', 'regular chicken broth', 'ajinomoto', 'lily flowers', 'roasted tomatoes', 'passion fruit', 'tart', 'dark leafy greens', 'smoked turkey', 'grate lime peel', 'thin rice stick noodles', 'crème fraîche', 'lemon thyme', 'low-sodium low-fat chicken broth', 'rice paddy herb', 'reduced-fat sour cream', 'bitter melon', 'double cream', 'chaat masala', 'Texas toast bread', 'Swanson Vegetable Broth', 'brown mustard seeds', 'angel food cake mix', 'coconut cream', 'Tuaca Liqueur', 'straight bourbon whiskey', 'vodka sauce', 'gorgonzola dolce', 'annatto', 'crab boil', 'slaw mix', 'ground walnuts', 'honey dijon mustard', 'veal shanks', 'slaw', 'cardamom pods', 'sweet relish', 'lima beans', 'regular or convert rice', 'canned beans', 'pappardelle', 'chardonnay', 'prawns', 'chili flakes', 'mini bananas', 'dr. pepper', 'angel hair', 'pineapple juice concentrate', 'dried Thai chili', 'seasoned panko bread crumbs', 'nonfat dry milk powder', 'mochi', 'fenugreek', 'skinless boneless turkey breast halves', 'picholine olives', 'loin pork roast', 'Braeburn Apple', 'wagon wheels', 'Sargento® Traditional Cut Shredded 4 Cheese Mexican', 'sooji', 'gelato', 'ceci bean', 'frozen cheese ravioli', 'cappuccino', 'durum wheat flour', 'green plantains', 'tamarind concentrate', 'sweet pepper', 'caviar', 'Maggi', 'low-fat canned coconut milk', 'acai juice', 'vegetarian refried beans', 'eggnog', 'lean ground meat', 'brown gravy', 'silken tofu', 'pita pockets', 'sambal olek', 'pork bones', 'vegetable seasoning', 'unsalted pistachios', 'jam', 'beefsteak tomatoes', 'focaccia', 'low-fat vegetarian chili with beans', 'Jagermeister Liqueur', 'cayenne', 'round loaf', 'seafood breader', 'Adobo All Purpose Seasoning', 'crabapples', 'lime leaves', 'pilsner', 'marshmallows', 'shahi jeera', 'sparkling sangria tradicional', 'pak choi', 'tomato juice', 'crumbled blue cheese', 'asadero', 'tamarind water', 'kidney beans', 'pork meat', 'black pudding', 'Truvia® Baking Blend', 'boquerones', 'bean soup', 'english walnuts', 'baby turnips', 'persian cucumber', 'low sodium canned chicken stock', 'instant tapioca', 'Gochujang base', 'verjus', 'crème de cassis', 'banh hoi', 'dark corn syrup', 'tupelo honey', 'soft margarine', 'bamboo shoots', 'lemonade', 'sofrito', 'low-fat cottage cheese', 'green chilies', 'fish paste', 'escarole', 'mango nectar', 'soya flour', 'Alfredo sauce', 'vietnamese fish sauce', 'ground sumac', 'vegetarian protein crumbles', 'coarse salt', 'praline', 'couscous', 'canned corn', 'toffee sauce', 'brown chicken stock', 'comino', 'low sodium broth', 'hollandaise sauce', 'boston butt', 'asafetida', 'dried mixed herbs', 'unsalted shelled pistachio', 'oat milk', 'fava beans', 'chili bean paste', 'garlic juice', 'praline topping', 'spaghetti sauce seasoning mix', 'spinach leaves', 'liquid smoke', 'marrow bones', 'pattypan squash', 'masoor dal', 'powdered milk', 'powdered sugar icing', 'rock shrimp', 'medium zucchini', 'parmigiano reggiano cheese', 'custard powder', 'white asparagus', 'onion powder', 'chili oil', 'asparagus tips', 'candied ginger', 'melted fat', 'sliced olives', 'smoked turkey drumstick', 'chocolate mousse', 'Knudsen Light Sour Cream', 'extra', 'chocolate graham cracker crumbs', 'bean sauce', 'black-eyed peas', 'chicken bouillon granules', 'french sandwich rolls', 'silver dragees', 'popcorn', 'American cheese', 'Nutella', 'cactus', 'shiso leaves', 'vanilla soy milk', 'greater yam', 'european style butter', 'Tipo 00 flour', 'ground lamb', 'vine tomatoes', 'earl grey tea bags', 'frogs legs', 'ground nutmeg', 'kefalotyri', 'salted fish', 'cured chorizo', 'dark molasses', 'black moss', 'rye flour', 'seltzer', 'Kraft Sun Dried Tomato Vinaigrette', 'abbamele', 'fenugreek leaves', 'boneless center cut pork chops', 'potatoes', 'fresh parsley leaves', 'picante sauce', 'gram dal', 'luke warm water', 'corn muffin', 'salted seaweed', 'phyllo pastry', 'green tomato relish', 'pork sausage links', 'chicken breasts', 'jerk paste', 'Asian sweet chili sauce', 'bread, cut french into loaf', 'pork shoulder roast', 'boneless chicken cutlet', 'cucumber', 'candied orange peel', 'dark turkey meat', 'quickcooking grits', 'jamaican jerk rub', 'bean curd skins', 'shellfish', 'reduced sodium beef stock', 'fresh mushrooms', 'canning salt', 'red chile sauce', 'strawberry yogurt', 'tofu sour cream', 'apple puree', 'whole wheat bread cubes', 'mushroom caps', 'tamari almonds', 'gherkins', 'streaky bacon', 'dried chickpeas', 'yellow corn', 'borage', 'swede', 'veal chops', 'caramel topping', 'marrons', 'Elmlea Single Light', 'cashew nuts', 'meyer lemon', 'togarashi', 'dry rub', 'fat skinned reduced sodium chicken broth', 'freeze-dried strawberries', 'minced peperoncini', 'chicken gravy mix', 'smoked trout', 'waffle fries', 'fresh spinach', 'hen of the woods', 'pearl barley', 'fat free greek yogurt', 'chorizo spanish', 'pâté', 'dried dill', 'turkey carcass', 'pearl onions', 'pasta wagon wheel', 'white sandwich bread', 'lap cheong', 'instant rice', 'candlenuts', 'fontina cheese', 'bell pepper', 'center cut pork roast', 'halibut fillets', 'canned snails', 'yellowfin tuna', 'organic unsalted butter', 'bouillon cube', 'ragu old world style tradit pasta sauc', 'whole wheat cereal', 'rustic bread', 'sodium reduced chicken broth', 'masa', 'free-range chickens', 'carp', 'sour cream', 'green onions', 'ground peanut', 'baby beets', 'taco meat', 'lean steak', 'lamb shanks', 'coco', 'Kim Crawford Sauvignon Blanc', 'bone-in short ribs', 'parsley root', 'chicken breast tenders', 'sea

weed', 'plain soy yogurt', 'small shells', 'candied jalapeno', 'onions', 'wide egg noodles', 'chicken soup base', 'herb dressing', 'frozen crabmeat, thaw and drain', 'granny smith apples', 'boneless turkey breast', 'pudding', 'eye steaks', 'clams, well scrub', 'red cabbage', 'hot green chile', 'sesame paste', 'finely chopped fresh parsley', 'tongue', 'shredded coleslaw mix', 'broiler-fryer chicken', 'butternut', 'Nestle Table Cream', 'braeburn apple', 'reduced sodium vegetable broth', 'salmon caviar', 'beef rib short', 'mahi mahi', 'corn tortillas', 'ditalini pasta', 'capellini', 'hyssop', "Campbell's Condensed Cream of Chicken Soup", 'sorghum', 'mesquite flavored seasoning mix', 'lillet', 'Wish-Bone Italian Dressing', 'cane syrup', 'naan', 'Italian seasoned diced tomatoes', 'frozen chopped spinach', 'vanilla flavoring', 'preserved lemon', 'instant tea powder', 'chilled prosecco', 'low sodium chicken stock', 'olive oil mayonnaise', 'frozen artichoke hearts', 'dark chocolate', 'roast beef deli meat', 'raki', 'lemon slices', 'turkey breast deli meat', 'pepper', 'arrowroot', 'chard', 'green apples', 'chicken consomme', 'morcilla', 'lime slices', 'gin', 'gray salt', 'shredded pepper jack cheese', 'veal bones', 'pastis', 'lacinato kale', 'ginseng tea', 'mint leaves', 'epitas', 'beet greens', 'tea cake', 'mixed bell peppers', 'dried thyme', 'redcurrant jelly', 'tasso', 'radishes', 'armagnac', 'stellette', 'squabs', 'orange soda', 'pancake batter', 'frozen blueberries', 'golden delicious apples', 'whole wheat penne', 'bibb lettuce', 'beef bouillon granules', 'pointed peppers', 'ahi tuna steaks', 'herring fillets', 'poblano peppers', 'pork blood', 'fat-free buttermilk', 'treviso radicchio', 'knorr chicken flavor bouillon', 'chestnuts', 'drumstick', 'dried rosemary', 'prepared pie crusts', 'fat free milk', 'date molasses', 'cardoons', 'chat masa la', 'dried oregano', 'kaffir lime leaves', 'crumb topping', 'marzipan', 'cuminseed', 'taco shells', 'organic cane sugar', 'Pam No-Stick Cooking Spray', 'ancho chili ground pepper', 'shredded American cheese', 'pink food coloring', 'regular sugar', 'fresh tofu', 'whole wheat penne rigate', 'snaps', 'vanilla pudding', 'soya cheese', 'soybean sprouts', 'large curd cottage cheese', 'decorating sugars', 'Edam', 'light lager', 'rice powder', 'potato starch flour', 'swanson chicken stock', 'turkey meatballs', 'flax egg', 'fresh flounder fillets', 'fenugreek seeds', 'fatfree cream of chicken soup', 'salmon sashimi', 'won ton skins', 'harissa sauce', 'lemon vodka', 'Mazola® Chicken Flavor Bouillon Powder', 'ham hock', 'chocolate chip cookie mix', 'knoblauch', 'whole almonds', 'butter crackers', 'creole mustard', 'green garlic', 'Progresso Balsamic Vinegar', 'whole wheat berries', 'chile paste', 'crumbled goat cheese', 'peach purée', 'confit duck leg', 'pippin apples', 'onion soup mix', 'cactus pad', 'whole wheat angel hair pasta', 'whiteeddar cheese', 'rotel tomatoes', 'pierogi', 'muenster', 'prebaked pizza crusts', 'bone-in chicken breasts', 'crusty sandwich rolls', 'natural yogurt', 'wood mushrooms', 'raw prawn', 'white bread crumbs', 'baking powder', 'adobo style seasoning', 'dark chocolate chip', 'gluten-free baking powder', 'Barilla Linguine', 'zucchini', 'oil of orange', 'essence', 'kelp noodles', 'pink peppercorns', 'fresh lime', 'chopped cilantro fresh', 'honey', 'Daisy Sour Cream', 'wood ear mushrooms', 'chili sauce', '% low-fat cottage cheese', 'hot Italian sausages', 'Soy Vay® Veri Veri Teriyaki® Marinade & Sauce', 'toasted almonds', 'dried strawberries', 'green chile sauce', 'toasted nuts', 'house seasoning', 'seasoned flour', 'chopped hazelnuts', 'unbaked pie crusts', 'vidalia onion', 'peaches in syrup', 'brown rice', 'spicy brown mustard', 'rooster', 'skinless and boneless chicken breast fillet', 'shredded coconut', 'japanese style bread crumbs', 'clove', 'toasted slivered almonds', 'reduced fat reduced sodium tomato and herb pasta sauce', 'chervil', 'vegetable stock', 'jumbo shells', 'boneless duck breast', 'nutritional yeast', 'raisin bread', 'wish-bone light asian same ginger vinaigrette dressing', 'chipotle chile', 'steel-cut oats', 'Belgian endive', 'red swiss chard', 'mashed banana', 'cod cheeks', 'red velvet cake mix', 'satsumas', 'roasted hazelnuts', 'pasta shapes', 'turkey breast', 'chinese baby corn', 'whole wheat thin spaghetti', 'shrimp paste', 'min', 'calabrese sausage', 'dried rigatoni', 'cottage cheese', 'Dungeness crabs', 'less sodium fat free chicken broth', 'chicken stock', 'smoked salmon', 'crimini mushroom s', 'poblano chiles', 'lean ground turkey', 'Goya Extra Virgin Olive Oil', 'Balsamico Bianco', 'KRAFT Zesty Lime Vinaigrette Dressing', 'hake fillets', 'loin', 'swiss', 'pappardelle pasta', 'demi baguette', 'creole seasoning mix', 'ground white pepper', 'currant', 'lasagna noodles', 'liquid', 'chocolate baking bar', 'buckwheat noodles', 'smoked trout fillets', 'pinot grigio', 'condiments', 'ground blanched almonds', 'refried beans', 'chinese buns', 'brown shrimp', 'juice', 'knorr chipoltl minicub', 'ramen noodle soup', 'light pancake syrup', 'mayonaise', 'shiitake mushroom caps', 'shoulder roast', 'flour', 'homemade beef stock', 'sirloin tip', 'whole wheat pizza crust', 'black treacle', 'Greek feta', 'medium whole wheat tortillas', 'sloe gin', 'dried chestnuts', 'blanco tequila', 'brown rice spaghetti', 'pernod', 'prepared coleslaw', 'bologna', 'knorr pasta side', 'Frangelico', 'grated orange', 'ginger beer', 'New York Style Panetini® toasts', 'vegan sour cream', 'India Pale Ale', 'sourdough baguette', 'firmly packed light brown sugar', 'McCormick Ground Ginger', 'organic tomato', 'extra-lean ground beef', 'aka miso', 'pecan pie', 'hazelnut butter', 'rosemary leaves', 'potato flakes', 'soppressata', 'açai powder', 'pancit', 'Bertolli® Arrabbiata Sauce', 'mostaccoli', 'chuck roast', 'gluten-free breadcrumbs', 'diced chicken', 'cream', 'papad', 'chilli bean sauce', 'Herdez Salsa', 'queso fresco', 'dried apple rings', 'piecrust', 'white tequila', 'Chambord Liqueur', "Uncle Ben's Original Converted Brand rice", 'rosemary sprigs', 'Bragg Liquid Aminos', 'chimichurri', 'rice bran oil', 'chili seasoning mix', 'canned tuna', 'soda bread', 'mixed vegetables', 'pike', 'mild pork sausage', 'tonkatsu sauce', 'frozen chopped spinach', 'thawed and squeezed dry', 'bass fillets', 'sourdough rolls', 'mojo marinade', 'coarse kosher salt', 'sichuan pepper oil', 'romano cheese', 'blood orange', 'sparkling sugar', 'straw mushrooms', 'banana flower', 'chicken heart', 'solid pack pumpkin', 'boneless sirloin', 'Tokyo negi', 'kalamansi juice', 'frozen broccoli florets', 'fresh ginger root', 'baby carrots', 'foie gras', 'orange blossom honey', 'angled loafah', 'panettone', 'frozen brussels sprouts', 'white pepper', 'rye whiskey', 'toasted coconut', 'cilantro', 'eating apple', 'lime juice', 'San Marzano Crushed Tomatoes', 'onion tops', 'ground meat', 'nonfat sweetened condensed milk', 'Hidden Valley® Original Ranch® Dressing', 'mexican style 4 cheese blend', 'pasta spiral', 'small red beans', 'pork loin chops', 'cold coffee', 'Quorn Chik'n Tenders', 'passover wine', 'wish bone ranch dress', 'beef round', 'quahog clams', 'mackerel', 'black cherries', 'winesap', 'butter pecan cake mix', 'corn kernel whole', 'sage', 'red pepper flakes', 'flour tortillas', 'pisco', 'stilton cheese', 'lavender honey', 'grapefruit juice', 'dried udon', 'parsley leaves', 'cookie crumbs', 'vanilla extract', 'aiser rolls', 'high-gluten flour', 'black tea', 'beef soup bones', 'low sodium worcestershire sauce', 'assorted fresh vegetables', 'banana bread', 'beef cheek', 'huckleberries', 'fresh udon', 'taco seasoning', 'preserv raspberri seedless', 'black rice vinegar', 'toasted baguette', 'orange pekoe tea', 'creamy peanut butter', 'dill tips', 'canned beef broth', 'yoplait', 'green olives', 'splenda granular', 'grenadine syrup', 'marjoram', 'Progresso Black Beans', 'yogurt dressing', 'chinese cabbage', 'roast red peppers, drain', 'rice cakes', 'lapsang', 'whipped dessert topping', 'peeled shrimp', 'knorr tomato bouillon with chicken flavor', 'remoulade', 'roasted bell peppers', 'dry vermouth', 'cooked rice', 'lingcod', 'fine sea salt', 'salad dressing', 'wheat beer', 'mustard greens', 'low-fat sour cream', 'chicken livers', 'campari', 'unsalted roasted pistachios', 'sweet sherry', 'balsamic vinaigrette salad dressing', 'cherry coke', 'fresh sage', 'almonds', 'stewing beef', 'mahlab', 'parmigiano', 'whole grain rotini', 'Pale Ale', 'french baguete', 'kirby cucumbers', 'cook egg hard', 'sweet white miso paste', 'gelatin', 'tubettini', 'whole wheat pizza dough', 'instant pudding mix', 'icing mix', 'banger', 'orange slices', 'Nakano Seasoned Rice Vinegar', 'low sodium tomato', 'sharp white cheddar cheese', 'dried lavender blossoms', 'frozen peach slices', '% low-fat milk', 'reduced-sodium tamari sauce', 'haloumi', 'bitter gourd', 'egg yolks', 'tortelloni', 'heirloom tomatoes', 'cacao powder', 'ground nut s', 'gold tequila', 'bourbon whiskey', 'pummelo', 'Martha White Cornbread Mix', 'minute rice', 'beef stew', 'matcha', 'pecorino romano cheese', 'merguez sausage', 'pain au levain', 'calabash', 'haricots verts', 'whipping cream', 'sauvignon blanc', 'Greek dressing', 'tortillas', 'light beer', 'toast points', 'coconut sugar', 'Red Gold® diced tomatoes', 'dashi', 'fat-free cottage cheese', 'grilled chicken', 'fresh thyme', 'baking apples', 'stir fry vegetable blend', 'salt peter', 'flowering garlic chives', 'poha', 'kiwi fruits', 'raw peeled prawns', 'bread machine yeast', 'reduced fat cream of mushroom soup', 'double crust pie', 'branston pickle', 'black bean sauce', 'ricard', 'pitted prunes', 'herbsaint', 'raw pistachios', 'green cardamom pods', 'Biryani Masala', 'pink salt', 'frozen peaches', 'moonshine', 'madeleine', 'pork and beans', 'guacamole', 'salad seasoning mix', 'rutabaga', 'monterey jack', 'frozen hash brown s', 'low sodium canned chicken broth', 'fresh mozzarella balls', 'stew', 'instant yeast', 'Johnsonville Andouille Dinner Sausage', 'spices', 'veal scallopini', 'sausage meat', 'fat free yogurt', 'new york strip steaks', 'ciabatta', 'taiwan jasmin rice', 'fettucine', 'fruit juice', 'veal kidneys', 'dried chile peppers', 'crumb crust', 'dried guajillo

chiles', 'orange roughy', 'ground hazelnuts', 'prunes', 'veal loin chops', 'sirloin tip steak', 'sheep's milk cheese', 'tamales', 'chicken wing drummettes', 'nian gao', 'crawfish', 'chicken feet', 'goya sazon', 'pickling cucumbers', "devil's food cake mix", 'boar', 'shredded sharp cheddar cheese', 'Knorr Beef Stock Cubes', 'grated nutmeg', 'tea leaves', 'soft buns', 'sprouts', 'fryer chickens', 'albacore tuna in water', 'lemon verbena', 'dumpling wrappers', 'shredded low-fat cheddar cheese', 'mozzarella balls', 'wieners', "Campbell's Condensed Tomato Soup", 'fresh corn', 'long pasta', 'korean chile paste', 'pork blade steaks', 'Manischewitz Matzo Meal', 'hominy', 'light molasses', 'olives', 'white hominy', 'red drum', 'buffalo mozzarella', 'skinless chicken breasts', 'organic vegetable stock', 'skate wing', 'fresh chile', 'low fat chunky mushroom pasta sauce', 'soy bean paste', 'bottom round', 'pie pastry', 'organic milk', 'tuna packed in water', 'forest fruit', 'fat-free cheddar cheese', 'ranch salad dressing mix', 'white baking bar', 'dinosaur kale', 'pasta water', 'reduced fat ranch dressing', 'balsamic reduction', 'genmai miso', 'sliced salami', 'soft corn tortillas', 'rice', 'matzo cake meal', 'mace', 'and cook drain pasta ziti', 'orange roughy fillet', 'maitake mushrooms', 'oregano leaves', 'boneless rib eye steaks', 'cherry vinegar', 'smoked sea salt', 'italian eggplant', 'snip fresh dill', 'dulong', 'meat sauce', 'macaroni and cheese dinner', 'whole snapper', 'basmati rice', 'yeast', 'lemon zest', 'pumpkin pie spice', 'gnocchi', "I Can't Believe It's Not Butter!® All Purpose Sticks", 'no-calorie sweetener', 'Progresso Artichoke Hearts', 'italian vinaigrette', 'squash', 'red beets', 'grapeseed oil', 'manzanilla', 'rigatoni', 'Sriracha', 'fresh chives', 'hot chili powder', 'Flora Buttery', 'cream ic peach', 'seasoned rice wine vinegar', 'natural peanut butter', 'sambal chile paste', 'dried pasta', 'rosé wine', 'celery salt', 'Bisquick Baking Mix', 'cantaloupe', 'curry leaves', 'coffee ice cream', 'cornstarch noodles', 'garlic olive oil', 'chinese mustard', 'sourdough', 'tempeh', 'edamame beans', 'manioc flour', 'vindaloo paste', 'apple jelly', 'fat free ice cream', 'lamb steaks', 'oven-ready lasagna noodles', 'caper berries', 'head cauliflower', 'long grain white rice', 'canned chicken', 'lower sodium beef broth', 'madagascar bourbon vanilla extract', 'frozen meatballs', 'cream powder', 'vegetable stock powder', 'linguine, cook and drain', 'chicken meat', 'reduced sugar ketchup', 'cross rib roast', 'kumquats', 'ground oregano', 'udon', 'egg substitute', 'milk chocolate', 'corn grits', 'flaked oats', 'ground caraway', 'sablefish', 'sweet rice', 'oregano', 'sugarcane', 'galangal', 'dal', 'pizza crust mix', 'coleslaw dressing', 'Guinness Beer', 'vanilla custard', 'low fat monterey jack cheese', 'Oscar Mayer Cotto Salami', 'curry sauce mix', 'club soda', 'nutmeg', 'organic vegetable broth', 'whole grain English muffins', 'pink lentil', 'plain dry bread crumb', 'chopped ham', 'mantou', 'reduced sodium ham', 'mixed seafood', 'crescent rolls', 'sweet italian sausage links, cut into', 'palm sugar', 'Betty Crocker™ oatmeal cookie mix', 'cooked quinoa', 'chateaubriand', 'semisweet vegan chocolate chips', 'sweet pickle', 'cannelloni shells', 'low-fat flour tortillas', 'large marshmallows', 'achiote', 'refrigerated chocolate chip cookie dough', 'Knorr Chicken Stock Cubes', 'pearl rice', 'vietnamese rice paper', 'flax seeds', 'salt free seasoning', 'whole garam masala', 'maldon sea salt', 'stir fry beef meat', 'black truffle oil', 'pot pie', 'yellow chives', 'rib roast', 'Ro-Tel Diced Tomatoes & Green Chilies', 'dried neem leaves', 'tenderloin', 'unflavored gelatin', 'penn e rigate', 'low fat part skim ricotta cheese', 'smoked turkey breast', 'prepared pasta sauce', 'celery stick', 'dried cornhusks', 'lamb neck fillets', 'Holland House White Wine Vinegar', 'chinese ham', 'char siu sauce', 'black gram', 'beef marrow', '1% low-fat cottage cheese', 'Barilla Plus Pasta', 'Heinz Chili Sauce', 'chipotle paste', 'peanut butter chips', 'shell-on shrimp', 'color food green', 'pigeon peas', 'hearts of palm', 'mincemeat pie filling', 'bulb fennel', 'Johnsonville Smoked Sausage', 'duck', 'red bell pepper, sliced', 'dried lavender flowers', 'dragon fruit', 'tostadas', 'sweetened red beans', 'eye of round roast', 'broth', 'butterflied leg of lamb', 'snapper head', 'iced tea', 'shichimi togarashi', 'morel', 'pizza seasoning', 'french fries', 'buttermilk cornbread', 'low-fat cheddar', 'sago', 'beef gravy', 'pasta shells', 'coriander powder', 'jamaican jerk marinade', 'shaved chocolate', 'dried sardines', 'lumpia wrappers', 'chocolate drink', 'skinless chicken pieces', 'tapenade', 'chocolate covered coffee beans', 'tamarind soy sauce', 'crab meat', 'pitted cherries', 'sauerkraut juice', 'tuna steaks', 'myzithra', 'anisette', 'low sodium chicken broth', 'aonori', 'pompano fillets', 'potato bread', 'chicken breast tenderloins', 'canned black beans', 'garlic chili sauce', 'tomato cream sauce', 'liquor', 'vegetable demi-glace', 'baby goat', 'bisquick', 'riso', 'apricot jelly', 'vin santo', 'asafetida (powder)', 'diet dr. pepper', 'chees fresh mozzarella', 'reduced sodium smoked ham', 'smoked & dried fish', 'bigoli', 'crushed garlic', 'hass avocado', 'whole wheat french bread', 'frozen popcorn chicken', 'semolina flour', 'Castelvetrano olives', 'chicken drumsticks', 'apple juice concentrate', 'hot pork sausage', 'boneless chicken thighs', 'light whipping cream', 'cooked shrimp', 'spring mix', 'sponge', 'lime', 'oxtails', 'Marcona almonds', 'low-fat goat cheese', 'whole wheat peasant bread', 'carrot juice', 'hibiscus', 'sweet white wine', 'pork spare ribs', 'veggies', 'enchilada sauce', 'seafood stock', 'brine-cured olives', 'guava', 'fresh curry leaves', 'baby potatoes', 'pimenton de la vera', 'cream style cottage cheese', 'tapioca starch', 'vanilla ice cream', 'low fat reduced sodium pasta sauce', 'beef heart', 'hoagi or roll', 'english muffins, split and toasted', 'gravenstein apple', 'mandarin pancakes', 'pork loin rib chops', 'egg roll wraps', 'tagliatelle', 'sherry vinegar', 'hibiscus flowers', 'shrimp stock', 'tarama', 'onion salt', 'tagliarini', 'tubetti', 'Pam Cooking Spray', 'empanada wrappers', 'sweet mustard', 'fat-free mayonnaise', 'demi-glace', 'chicken wings', 'bacon pieces', 'pineapple syrup', 'small yellow onion', 'llox', 'tortellini', 'sunflower seed butter', 'gobo root', 'yellowtail', 'condensed soup', "Colman's Mustard Powder", 'honey glazed ham', 'red mullet', 'beef stew meat', 'vegan Worcestershire sauce', 'breadcrumb mix', 'reduced sugar orange marmalade', 'gluten free soy sauce', 'sherry wine', 'nonpareils', 'low-fat shredded cheddar cheese', 'jamaican jerk', 'anise extract', 'orzo', 'Mae Ploy Sweet Chili Sauce', 'katsuo bushi', 'edible flowers', 'cooked ham', 'v8', 'Kraft Shredded Pepper Jack Cheese', 'frozen potatoes', 'Progresso™ Chicken Broth', 'frozen ravioli', 'tofu', 'organic sugar', 'green enchilada sauce', 'atlantic cod fillets', 'knockwurst', 'dashi kombu', 'sliced mushrooms', 'polenta prepar', 'tart cherries', 'cornichons', 'Swerve Sweetener', 'okra pods', 'celery heart', 'gluten free cornmeal', 'beansprouts', 'raspberry sherbet', 'nopalitos', 'red leaf lettuce', 'crushed ice', 'cider vinegar', 'chop fine pecan', 'ground pecans', 'farmer cheese', 'suet', 'red chile powder', 'eye of round steak', 'cream sauce', 'italian chicken sausage', 'blue corn tortilla chips', 'fusilli', 'tuna', 'rub', 'strip steaks', 'refrigerated piecrusts', 'low sodium tomato paste', 'asian rice noodles', 'bean curd', 'chocolate milk', 'gluten-free hoisin sauce', 'hoop cheese', 'sweet potatoes or yams', 'candy canes', 'applesauce', 'dried oregano leaves, crush', 'beef sausage', 'chocolate frosting', 'garlic paste', 'kecap manis', 'braising steak', 'culantro', 'risotto rice', 'low moisture mozzarella', 'shredded mozzarella cheese', 'lecithin', 'green tomatoes', 'kohlrabi', 'red enchilada sauce', 'bourbon liqueur', 'red miso', 'winter melon', 'rib', 'sweet peas', 'golden zucchini', 'hot chili sauce', 'vanilla beans', 'Philadelphia Light Cream Cheese', 'roast', 'Country Crock® Spread', 'rye bread', 'red vinegar', 'black salt', 'full fat coconut milk', 'frozen chopped broccoli', 'smoked cheddar cheese', 'salad oil', 'konbu', 'Splenda Brown Sugar Blend', 'water crackers', 'unsalted peanut butter', 'pepperidge farm puff pastry sheets', 'Emmenthal', 'ground chicken', 'five-spice powder', 'dairy free coconut ice cream', 'cola soft drink', 'vegetable-filled ravioli', 'hot chili oil', 'lady apples', 'bone marrow', 'cognac', 'low-fat natural yogurt', 'curaçao', 'wasabi powder', 'paratha', 'honey mustard dressing', 'beef rump', 'baby eggplants', 'mixed frozen seafood', 'ground asafetida', 'lite coconut milk', 'kingfish', 'tobiko', 'clove garlic, fine chop', 'crusty rolls', 'pijoncillo', 'whole turkey', 'lamb stew meat', 'tomato garlic pasta sauce', 'cracked wheat', 'reduced fat chunky peanut butter', 'cherry gelatin', 'orecchiette', 'chilegarlic sauce', 'boneless beef chuck roast', 'carnitas', 'herb seasoned stuffing mix', 'ranch-style seasoning', 'cauliflower', 'vegan cheese', 'boneless veal shoulder', 'spanish rice', 'reduced sodium chicken broth', 'white arborio rice', 'japanese pumpkin', 'peach vodka', 'chinese barbecue sauce', 'chili powder', 'tarragon vinegar', 'Grand Marnier', 'pork tongue', 'cheese soup', 'fat free less sodium vegetable broth', 'espresso powder', 'collard green leaves', 'chicken gravy', 'Rotel Diced Tomatoes & Green Chilies', 'mung beans', 'pastry dough', 'white kidney beans', 'sugarcane sticks', 'shredded cabbage', 'runny honey', 'diced tomatoes with garlic and onion', 'whole grain baguette', 'natural sugar', 'Jiffy Corn Muffin Mix', 'curry leaf', 'instant oats', 'diced lamb', 'gluten free blend', 'cornflake crumbs', 'self raising flour', 'dijon mustard', 'Spice Islands Ground Cumin Seed', 'pepperoncini', 'chicken chorizo sausages', 'grated Gruyère cheese', 'sesame', 'creole spice mix', 'Tabasco Green Pepper Sauce', 'multigrain cereal', 'lager beer', 'baking spray', 'white corn', 'sea bass fillets', 'gluten-free flour', 'italian seasoning mix', 'chicken thighs', 'fresh rosemary', 'roma tomato'

oes', 'sheepshead', 'whole grain dijon mustard', 'whole grain mustard', 'grated orange peel', 'vanilla glaze', 'tomat illo salsa', 'yellow tomato', 'yukon gold', 'mint extract', 'KRAFT Shredded Cheddar Cheese', 'Knorr Chicken Flavor Bo uillon', 'French mustard', 'banana puree', 'sea bass', 'medium egg noodles', 'short pasta', 'Nilla Wafers', 'Mission Yellow Corn Tortillas', 'tangerine zest', 'whole wheat bread flour', 'leg of lamb', 'tangerine', 'american cheese fo od', 'accompaniment', 'jamon serrano', 'roasted almonds', 'mustard oil', 'chicken-flavored soup powder', 'chinese egg plants', 'tamarind', 'gala apples', 'beer batter', 'garlic pepper seasoning', 'candied cherries', 'brisket', 'fudge c ake mix', 'graham flour', 'less sodium soy sauce', 'corn husks', 'Kraft Slim Cut Mozzarella Cheese Slices', 'whole pe el tomatoes, undrain and chop', 'amaranth', 'saba', 'fresh asparagus', 'low-fat cheddar cheese', 'low-fat buttermil k', 'wheat bread', 'soursop', 'linguica', 'dried parsley', 'base', 'sweet and sour sauce', 'chinese roast pork', 'Spi ce Islands® Minced Garlic', 'hazelnut meal', 'andouille sausage', 'hoisin sauce', 'chopped bell pepper', 'burrito sea soning mix', 'rusk', 'bean curd stick', 'frozen pound cake', 'Kewpie Mayonnaise', 'white miso', 'nori sheets', 'satsu ma orange', 'pitted date', 'Chinese egg noodles', 'chile powder', 'Texas Pete Hot Sauce', 'baby spinach', 'brazil nut s', 'oloroso sherry', 'creamer potatoes', 'taleggio', 'skin on bone in chicken legs', 'anjou pears', 'sauce', 'yellow peppers', 'miso paste', 'Spike Seasoning', 'psyllium husks', 'process cheese spread', 'teriyaki marinade', 'toffee bits', 'apple pie filling', 'penne pasta', 'bouquet garni', 'blackening seasoning', 'hot chili paste', 'garlic mayonnaise', 'hellmannâ€™s or best food canola cholesterol free mayonnais', 'small tomatoes', 'crescent dinner rolls', 'roux', 'green figs', 'dhal', 'bean soup mix', 'Stonefire Italian Artisan Pizza Crust', 'cracker meal', 'plums', 'dri leav th yme', 'bay leaf', 'flax seed meal', 'crushed tomatoes', 'Flora pro.activ', 'rump steak', 'gluten free chicken broth', 'tater tots', 'mentsuyu', 'broccoli stems', 'italian tomatoes', 'TABASCO® Chipotle Pepper Sauce', 'roasted cashews', 'nut oil', 'KRAFT Mexican Style Shredded Four Cheese with a TOUCH OF PHILADELPHIA', 'kiwifruit', 'young coconut mea t', 'reduced fat alfredo sauce', 'ground tumeric', 'cortland apples', 'fiddlehead ferns', 'cherry preserves', 'cardam om', 'pickled jalapenos', 'fried garlic', 'long pepper', 'smoked paprika', 'barley', 'poultry', 'black cumin seeds', 'caponata', 'grassfed beef', 'lamb chops', 'lamb shoulder', 'Sicilian olives', 'frozen banana', 'chestnut purée', 'poppy seed filling', 'fried wonton strips', 'leek tops', 'lo mein noodles', 'fresh lemon juice', 'sichuanese chili pas te', 'quail eggs', 'ragu old world style sweet tomato basil pasta sauc', 'maraschino', 'masala', 'chile verde', 'red food coloring', 'browning', 'frozen stir fry vegetable blend', 'Wholesome Sweeteners Organic Sugar', 'ground cashe w', 'country crock honey spread', 'refined sugar', 'distilled vinegar', 'Crisco Pure Canola Oil', 'boneless lamb', 'low fat shred cheddar chees sharp varieti', 'coconut meat', 'tamarind paste', 'adzuki beans', 'plum sauce', 'caciocava llo', 'duck stock', 'vanilla lowfat yogurt', 'chopped almonds', 'Zatarain's Jambalaya Mix', 'raspberry preserves', 'apples', 'buckwheat soba noodles', 'Knorr® Fiesta Sides™ - Mexican Rice', 'quick-cooking tapioca', 'dried fish flake s', 'kashmiri chile', 'evaporated milk', 'tomato sauce', 'sweet baking chocolate', 'valencia rice', 'chopped nuts', 'white flour', 'umeboshi', 'garlic powder', 'prosciutto', 'vinaigrette dressing', 'shanks', 'fideos', 'table salt', 'chees fresco queso', 'tenderloin steaks', 'grained', 'brioche buns', 'sun-dried tomatoes', 'scallion greens', 'queso blanco', 'low sodium vegetable stock', 'Pure Wesson Canola Oil', 'mild cheddar cheese', 'bottled lime juice', 'beef brisket', 'cheese spread', 'ascorbic acid', 'tuna in oil', 'thai chile', 'ammonium bicarbonate', 'steak sauce', 'wond ra', 'I Can't Believe It's Not Butter!® Spread', 'cuban peppers', 'unsweetened iced tea', 'black pepper', 'chestnut flour', 'tawny port', 'kirschwasser', 'tomatoes', 'stevia', 'baked beans', 'whole wheat spaghetti noodles', 'lasagna n oodles, cooked and drained', 'japanese cucumber', 'mini marshmallows', 'lamb strips', 'drambuie', 'flat leaf spinac h', 'baton', 'red apples', 'endive', 'dried hibiscus blossoms', 'boneless moulard duck breast halves', 'tamarind pulp', '8 ounc ziti pasta, cook and drain', 'foccacia', 'ground cloves', 'coconut rum', 'puy lentils']

5000

['blackberries', 'low-fat bottled italian dressing', 'roasted bell peppers', 'fresh basil leaves', 'cod cheeks', 'blanched almonds', 'dried dillweed', 'cola soft drink', 'beef rib short', 'chicken drumsticks', 'dijon', 'coarse sea salt', 'toasted baguette', 'bone in skin on chicken thigh', 'garlic salt', 'vermouth', 'bawang goreng', 'pepperoni slices', 'peaches in heavy syrup', 'pork picnic roast', 'gluten-free rolled oats', 'powdered sugar', 'peppermint', 'granular no-calorie sucralose sweetener', 'condiments', 'whole wheat pastry flour', 'peppermint schnapps', 'orange pekoe tea', 'limoncello', 'dill tips', 'beef stock cubes', 'white mushrooms', 'whole chicken', 'beef rump steaks', 'cornbread', 'gnocchi', 'veggies', 'garlic mayonnaise', 'juniper berries', 'chocolate milk mix', 'Thai red curry paste', 'shredded sharp cheddar cheese', 'Grand Marnier', 'gouda', 'wieners', 'fritos', 'butter-flavored spray', 'herbs', 'ground coriander', 'torn romain lettuc leav']

kb type &lt;class 'list'&gt;

50

500

In [15]:

```

n =501
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 ):
        while 1:
            recipe_index = random.randint(1,len(recipe_prim)-1)
            ing_index = random.randint(0,recipe_size-1)
            random_recipe = recipe_prim['recipe'+str(recipe_index)]
            #Selecting random ingredient from the selected random recipe
            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])
                    random_recipe.sort()
                    recipe_prim['recipe'+str(n)] = random_recipe
                    n = n+1
                    break
        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(recipe_size_data.keys()),list(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) )
plt.legend()
plt.grid()
plt.show()
print("\n")

#####
# Plot for Frequency Rank Distribution

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

values, counts = np.unique(total_inge, 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()

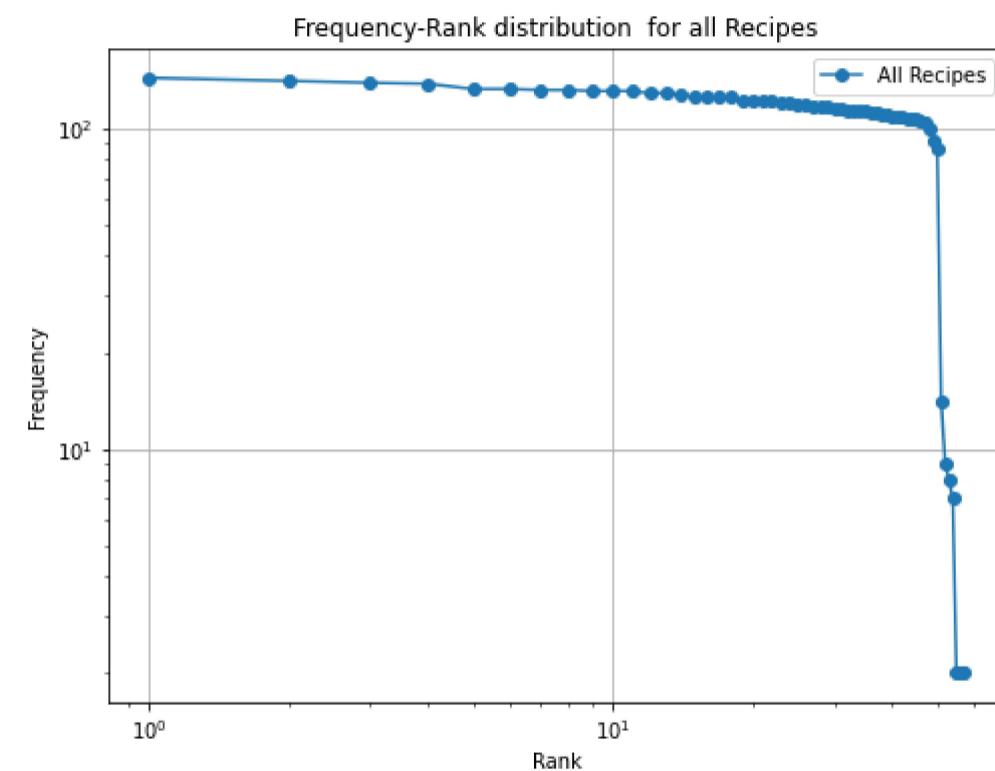
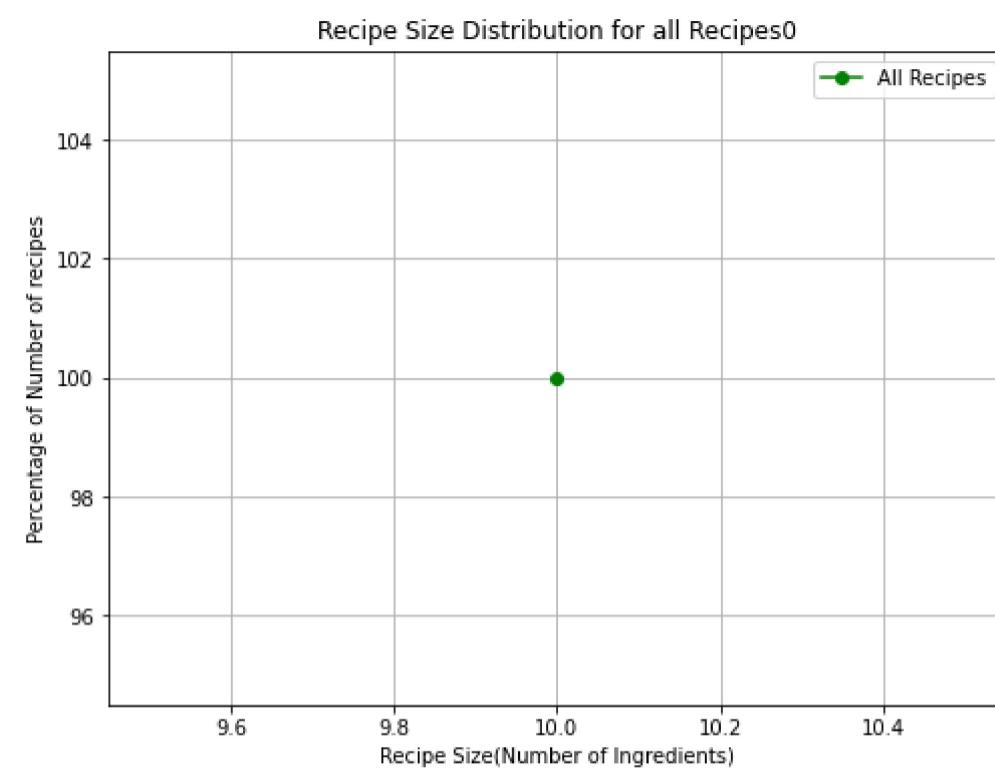
```

```
plt.show()

print("Epoch ",curr_epoch + 1, " Ended\n")
print("Recipe Length :",len(recipe_prim))
print("Kitchen Basket :",len(kb))
print("New Kitchen Basket : ",(kb_new_size))
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



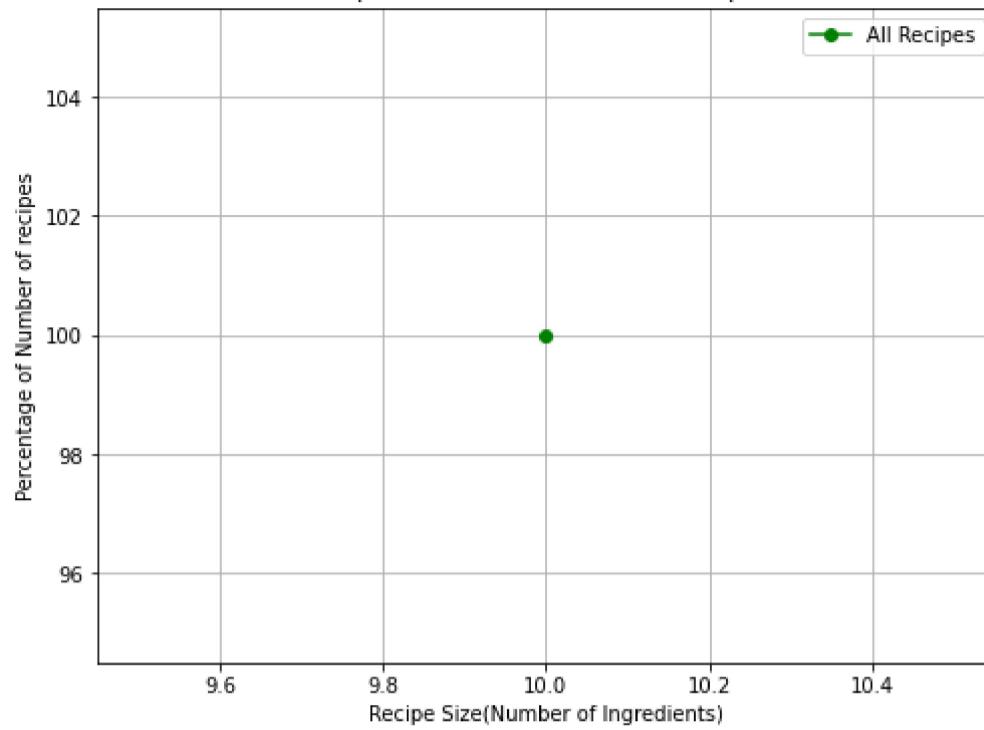
Epoch 1 Ended

Recipe Length : 600  
Kitchen Basket : 60  
New Kitchen Basket : 60  
Nature Basket : 4990

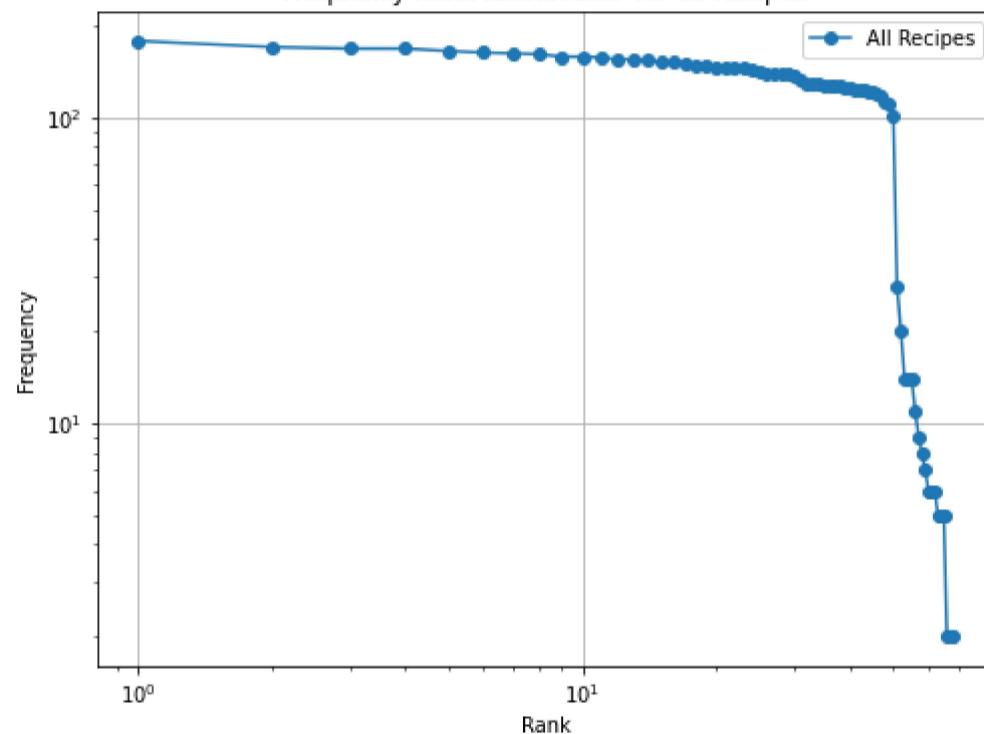
Epoch 2 Started

Recipe Size : 10  
Kitchen Basket : 60  
Nature Basket : 4990  
Number of recipe in primordial cuisine epoch 2 = 600

Recipe Size Distribution for all Recipes1



Frequency-Rank distribution for all Recipes



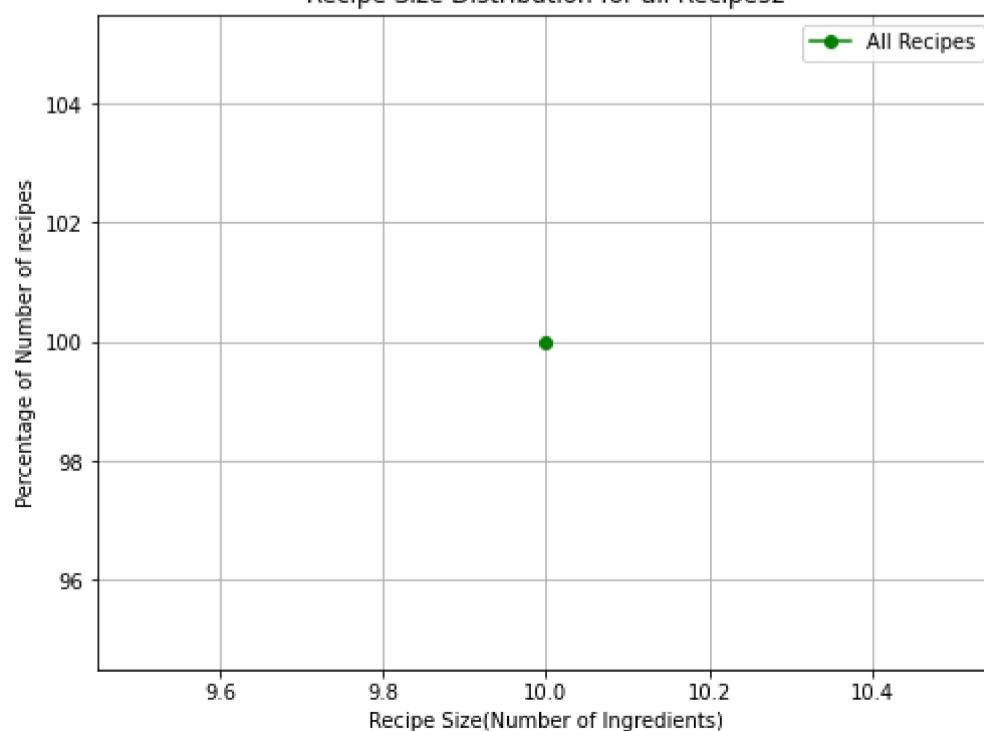
Epoch 2 Ended

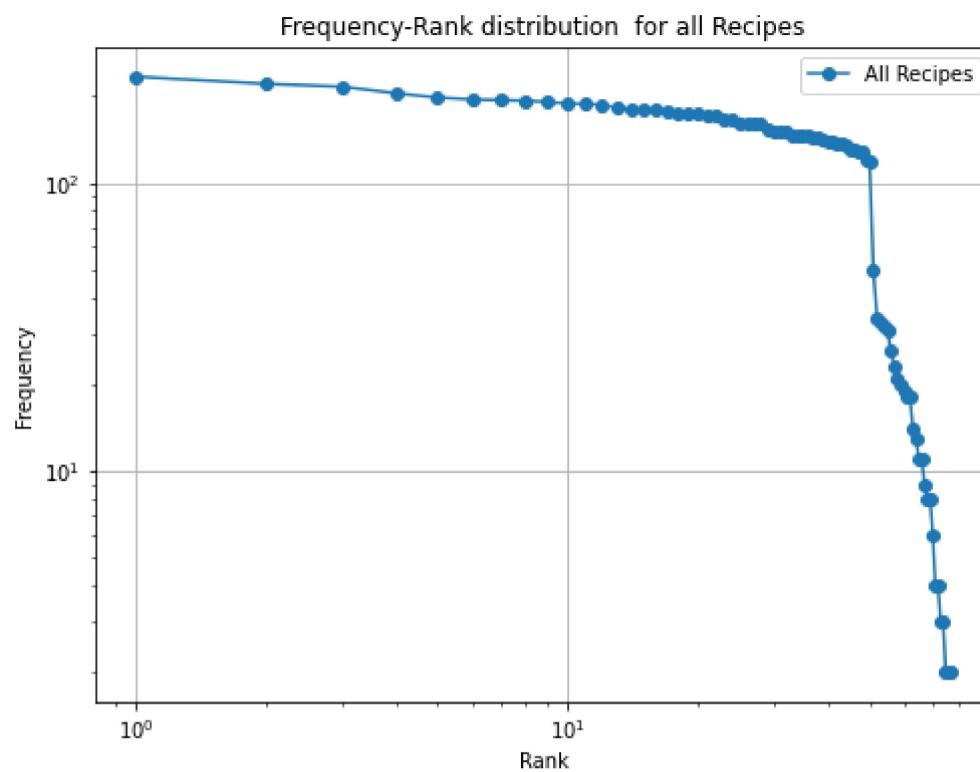
```
Recipe Length : 720
Kitchen Basket : 72
New Kitchen Basket : 72
Nature Basket : 4978
```

Epoch 3 Started

```
Recipe Size : 10
Kitchen Basket : 72
Nature Basket : 4978
Number of recipe in primordial cuisine epoch 3 = 720
```

Recipe Size Distribution for all Recipes2



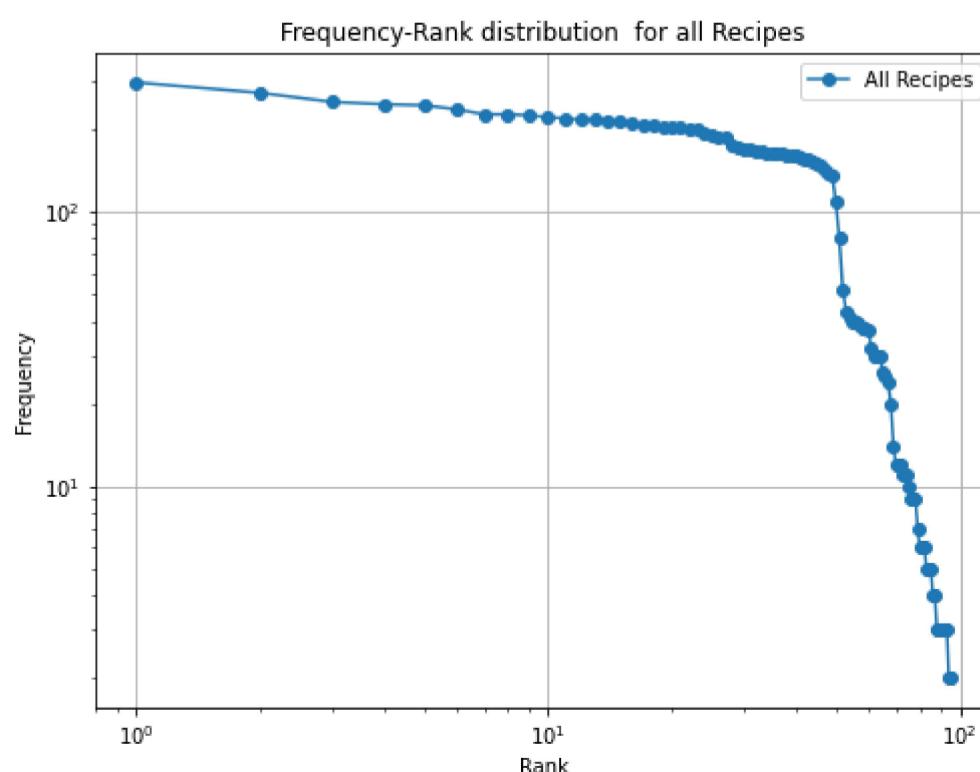
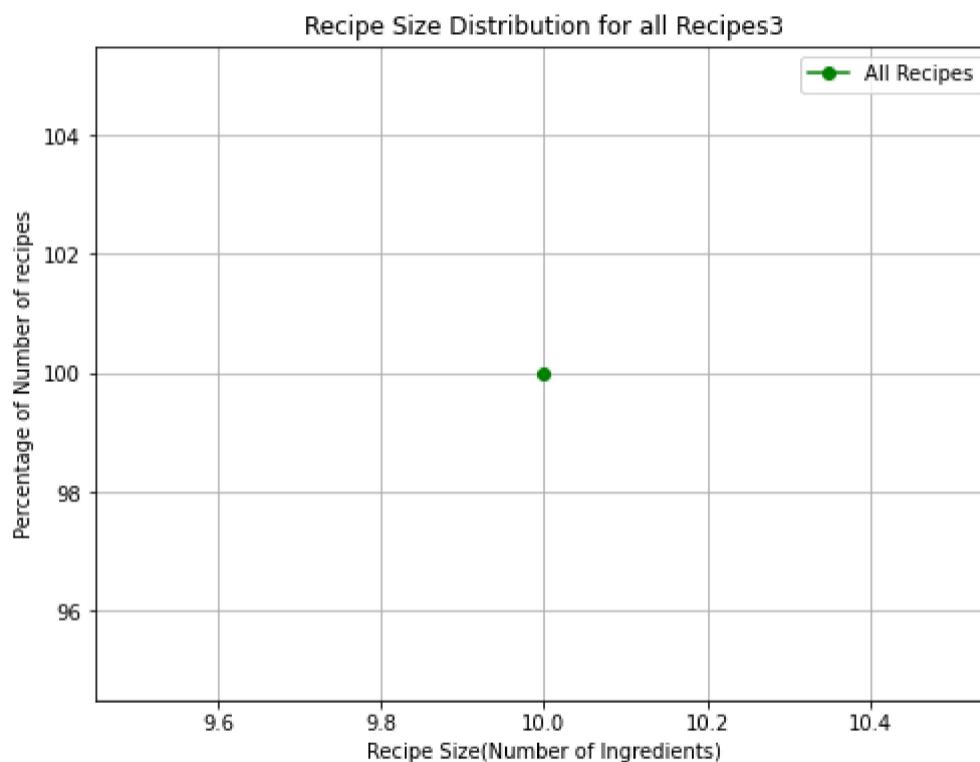


Epoch 3 Ended

Recipe Length : 864  
 Kitchen Basket : 86  
 New Kitchen Basket : 86  
 Nature Basket : 4964

Epoch 4 Started

Recipe Size : 10  
 Kitchen Basket : 86  
 Nature Basket : 4964  
 Number of recipe in primordial cuisine epoch 4 = 864

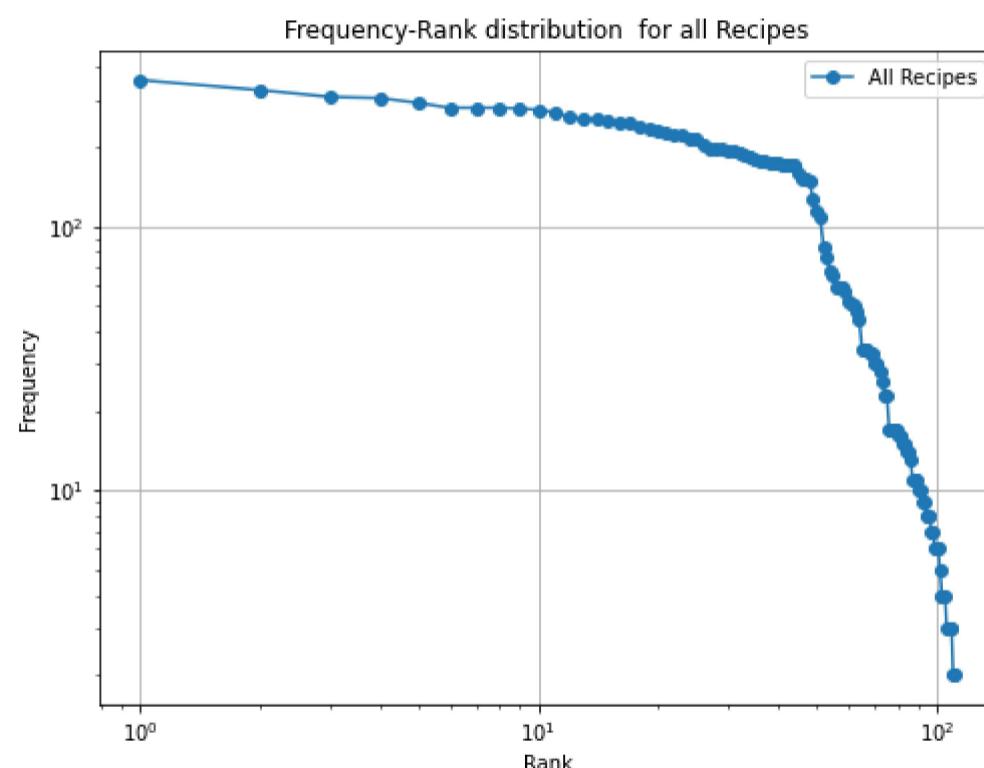
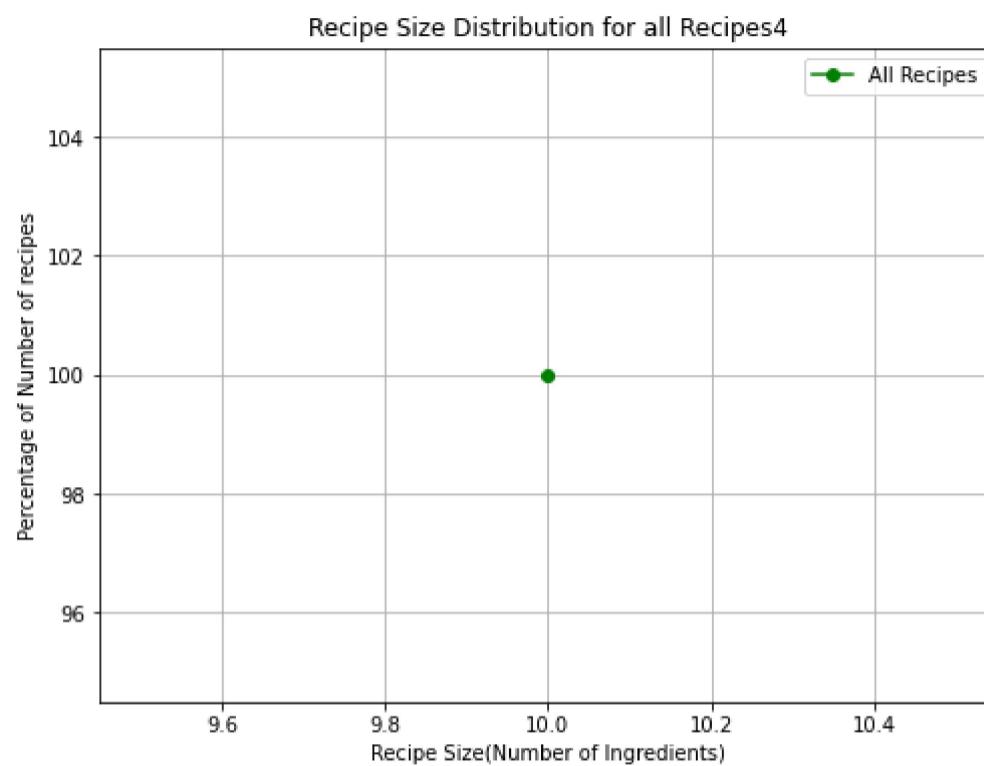


Epoch 4 Ended

```
Recipe Length : 1037
Kitchen Basket : 104
New Kitchen Basket : 104
Nature Basket : 4946
```

Epoch 5 Started

```
Recipe Size : 10
Kitchen Basket : 104
Nature Basket : 4946
Number of recipe in primordial cuisine epoch 5 = 1037
```



Epoch 5 Ended

```
Recipe Length : 1244
Kitchen Basket : 124
New Kitchen Basket : 124
Nature Basket : 4926
```

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 remains constant. The frequency rank follows delta function.

In [17]:

```
%shell
jupyter nbconvert --to html /content/drive/MyDrive/SEM3/CGAS/Assignment2/CGAS_A2_Q1.ipynb
```

```
[NbConvertApp] Converting notebook /content/drive/MyDrive/SEM3/CGAS/Assignment2/CGAS_A2_Q1.ipynb to html
[NbConvertApp] Writing 613255 bytes to /content/drive/MyDrive/SEM3/CGAS/Assignment2/CGAS_A2_Q1.html
```

Out[17]:

```
In [16]: # nb_new=[]
# for i in nb:
#   if i not in kb:
#     nb_new.append(i)
# # nb_new = [i for i in nb if i not in kb]
# print(nb_new)
# print(len(nb_new))
```