**Table S1.** Minimum Excess: Overall food group based pairings, chi-square statistics, and top-food matches.

Spices and Herbs

--overall chi-square: 0.0450135384848 degrees of freedom: 8.0

 Vegetables and Vegetable Products 6106 localChiSquare: 0.02034028946 degrees of freedom: 1

 Asparagus, frozen, cooked, boiled, drained, with salt 33

 Squash, zucchini, baby, raw 30

 Asparagus, canned, no salt added, solids and liquids 29

 Edamame, frozen, unprepared 28

 Lambsquarters, raw 27

 Legumes and Legume Products 2092 localChiSquare: 0.00676871023401 degrees of freedom: 1

 Soy sauce made from soy (tamari) 25

 Winged beans, mature seeds, raw 23

 Soy sauce made from soy and wheat (shoyu) 19

 Tofu, soft, prepared with calcium sulfate and magnesium chloride (nigari) 19

 Tofu, dried-frozen (koyadofu) 19

 Tofu, hard, prepared with nigari 19

 MORI-NU, Tofu, silken, extra firm 19

 Cereal Grains and Pasta 1026 localChiSquare: 0.0114004160279 degrees of freedom: 1

 Wheat germ, crude 27

 Buckwheat groats, roasted, dry 12

 Buckwheat flour, whole-groat 12

 Buckwheat groats, roasted, cooked 10

 Quinoa, uncooked 10

 Wheat bran, crude 10

 Quinoa, cooked 10

 Oat bran, raw 9

 Oat bran, cooked 9

 Barley malt flour 9

 Fruits and Fruit Juices 917 localChiSquare: 0.00759146381893 degrees of freedom: 1

 Applesauce, canned, unsweetened, with added ascorbic acid 15

 Peaches, raw 13

 Applesauce, canned, sweetened, without salt (includes USDA commodity) 12

 Orange juice, chilled, includes from concentrate 12

 Orange juice, chilled, includes from concentrate, fortified with calcium and vitamin D 12

 Orange juice, chilled, includes from concentrate, fortified with calcium 12

 Pineapple, canned, water pack, solids and liquids 12

 Nut and Seed Products 904 localChiSquare: 0.00587737031174 degrees of freedom: 1

 Nuts, coconut meat, dried (desiccated), sweetened, flaked, packaged 17

 Seeds, pumpkin and squash seeds, whole, roasted, without salt 13

 Seeds, pumpkin and squash seeds, whole, roasted, with salt added 13

 Seeds, breadfruit seeds, roasted 12

 Seeds, sisymbrium sp. seeds, whole, dried 12

 Seeds, sunflower seed flour, partially defatted 11

 Nuts, cashew nuts, oil roasted, without salt added 11

 Nuts, cashew nuts, raw 11

 Nuts, ginkgo nuts, dried 11

 Nuts, cashew nuts, oil roasted, with salt added 11

 Breakfast Cereals 453 localChiSquare: 0.00485895102324 degrees of freedom: 1

 Cereals ready-to-eat, wheat germ, toasted, plain 28

 Cereals ready-to-eat, Ralston Crispy Hexagons 9

 Cereals ready-to-eat, USDA Commodity Corn and Rice (includes all commodity brands) 9

 Cereals ready-to-eat, GENERAL MILLS, KIX 8

 Cereals ready-to-eat, KELLOGG, KELLOGG'S CRISPIX 8

 Cereals, oats, regular and quick and instant, unenriched, cooked with water (includes boiling and microwaving), without salt 8

 Cereals, corn grits, white, regular and quick, unenriched, dry 8

 Cereals, corn grits, yellow, regular and quick, enriched, dry 8

 Spices and Herbs 210 localChiSquare: 0.000478736819785 degrees of freedom: 1

 Spices, parsley, dried 20

 Spices, fenugreek seed 20

 Spices, cinnamon, ground 16

 Mustard, prepared, yellow 14

 Spices, garlic powder 13

 Basil, fresh 10

 Dill weed, fresh 9

 Spices, fennel seed 9

 Fats and Oils 44 localChiSquare: 0.000231850249383 degrees of freedom: 1

 Salad dressing, french dressing, commercial, regular 9

 Salad dressing, italian dressing, reduced fat 9

 Sandwich spread, with chopped pickle, regular, unspecified oils 8

 Beverages 21 localChiSquare: 0.000623523129811 degrees of freedom: 1

 Orange drink, breakfast type, with juice and pulp, frozen concentrate 6

 Coffee, instant, decaffeinated, powder 5

Fats and Oils

--overall chi-square: 0.318090889038 degrees of freedom: 8.0

 Vegetables and Vegetable Products 1144 localChiSquare: 0.213937823279 degrees of freedom: 1

 Peas and carrots, frozen, cooked, boiled, drained, without salt 15

 Edamame, frozen, prepared 9

 Edamame, frozen, unprepared 8

 Lambsquarters, raw 8

 Lambsquarters, cooked, boiled, drained, without salt 8

 Squash, summer, crookneck and straightneck, raw 8

 Squash, summer, crookneck and straightneck, canned, drained, solid, without salt 8

 Squash, summer, scallop, raw 8

 Fruits and Fruit Juices 218 localChiSquare: 0.00646296547679 degrees of freedom: 1

 Pineapple, frozen, chunks, sweetened 6

 Avocados, raw, Florida 5

 Apricots, canned, juice pack, with skin, solids and liquids 4

 Apricots, canned, heavy syrup pack, without skin, solids and liquids 4

 Apricots, canned, extra heavy syrup pack, without skin, solids and liquids 4

 Apricots, dried, sulfured, stewed, with added sugar 4

 Avocados, raw, all commercial varieties 4

 Avocados, raw, California 4

 Oranges, raw, all commercial varieties 4

 Oranges, raw, California, valencias 4

 Legumes and Legume Products 170 localChiSquare: 0.0180243340965 degrees of freedom: 1

 Falafel, home-prepared 6

 Hummus, home prepared 5

 Chili with beans, canned 4

 Peas, split, mature seeds, raw 4

 Peas, split, mature seeds, cooked, boiled, without salt 4

 Chickpeas (garbanzo beans, bengal gram), mature seeds, cooked, boiled, with salt 4

 Peas, split, mature seeds, cooked, boiled, with salt 4

 Nut and Seed Products 64 localChiSquare: 0.0425897032256 degrees of freedom: 1

 Seeds, pumpkin and squash seeds, whole, roasted, without salt 6

 Nuts, coconut meat, dried (desiccated), sweetened, flaked, packaged 3

 Nuts, formulated, wheat-based, flavored, macadamia flavored, without salt 3

 Seeds, lotus seeds, raw 3

 Nuts, chestnuts, european, raw, unpeeled 2

 Nuts, chestnuts, european, raw, peeled 2

 Nuts, chestnuts, european, dried, unpeeled 2

 Nuts, chestnuts, european, dried, peeled 2

 Nuts, chestnuts, european, boiled and steamed 2

 Nuts, formulated, wheat-based, unflavored, with salt added 2

 Spices and Herbs 44 localChiSquare: 0.0079598514107 degrees of freedom: 1

 Spices, garlic powder 9

 Spices, cinnamon, ground 8

 Spices, mustard seed, ground 7

 Cereal Grains and Pasta 27 localChiSquare: 0.105037512659 degrees of freedom: 1

 Wheat germ, crude 10

 Breakfast Cereals 17 localChiSquare: 0.038062134053 degrees of freedom: 1

 Cereals ready-to-eat, wheat germ, toasted, plain 10

 Cereals, CREAM OF WHEAT, 1 minute cook time, cooked with water, stove-top, without salt 2

 Cereals, oats, instant, fortified, plain, dry 1

 Fats and Oils 4 localChiSquare: 0.00122771760406 degrees of freedom: 1

 Salad dressing, french dressing, reduced fat 2

Breakfast Cereals

--overall chi-square: 0.320955907802 degrees of freedom: 8.0

 Vegetables and Vegetable Products 10324 localChiSquare: 0.093118355101 degrees of freedom: 1

 Asparagus, frozen, cooked, boiled, drained, with salt 168

 Asparagus, canned, no salt added, solids and liquids 164

 Cauliflower, green, raw 141

 Legumes and Legume Products 4298 localChiSquare: 0.0808919977811 degrees of freedom: 1

 Soy sauce made from soy (tamari) 85

 Tofu, dried-frozen (koyadofu) 74

 Tofu, raw, regular, prepared with calcium sulfate 74

 Tofu, dried-frozen (koyadofu), prepared with calcium sulfate 74

 Tofu, soft, prepared with calcium sulfate and magnesium chloride (nigari) 73

 Winged beans, mature seeds, raw 73

 Tofu, extra firm, prepared with nigari 73

 Soybeans, mature seeds, cooked, boiled, with salt 73

 Fruits and Fruit Juices 1114 localChiSquare: 0.0169749280918 degrees of freedom: 1

 Pineapple, frozen, chunks, sweetened 82

 Applesauce, canned, unsweetened, with added ascorbic acid 67

 Watermelon, raw 52

 Applesauce, canned, sweetened, with salt 52

 Applesauce, canned, sweetened, without salt (includes USDA commodity) 51

 Spices and Herbs 453 localChiSquare: 0.00830998955141 degrees of freedom: 1

 Spices, fenugreek seed 140

 Spices, garlic powder 95

 Spices, parsley, dried 72

 Spices, cinnamon, ground 66

 Spices, onion powder 46

 Dill weed, fresh 7

 Spices, mustard seed, ground 4

 Spearmint, fresh 3

 Mustard, prepared, yellow 3

 Rosemary, fresh 2

 Cereal Grains and Pasta 436 localChiSquare: 0.0873943550608 degrees of freedom: 1

 Wheat germ, crude 133

 Oat bran, raw 4

 Oat bran, cooked 3

 Wheat bran, crude 3

 Amaranth, uncooked 2

 Nut and Seed Products 304 localChiSquare: 0.0750691918921 degrees of freedom: 1

 Nuts, coconut meat, dried (desiccated), sweetened, flaked, packaged 26

 Seeds, lotus seeds, raw 24

 Seeds, lotus seeds, dried 18

 Seeds, pumpkin and squash seeds, whole, roasted, with salt added 11

 Seeds, pumpkin and squash seeds, whole, roasted, without salt 10

 Seeds, breadfruit seeds, raw 6

 Breakfast Cereals 268 localChiSquare: 0.0291932341819 degrees of freedom: 1

 Cereals ready-to-eat, wheat germ, toasted, plain 134

 Cereals, CREAM OF WHEAT, instant, prepared with water, with salt, (wheat) 2

 Fats and Oils 17 localChiSquare: 0.00303229282333 degrees of freedom: 1

 Salad dressing, french dressing, reduced fat 4

 Margarine, regular, hard, soybean (hydrogenated) 3

 Margarine-like, vegetable oil spread, unspecified oils, approximately 37 fat, with salt 3

 Salad dressing, italian dressing, reduced fat 3

 Sandwich spread, with chopped pickle, regular, unspecified oils 2

 Beverages 8 localChiSquare: 0.00233835229034 degrees of freedom: 1

 Coffee, instant, decaffeinated, powder 2

Fruits and Fruit Juices

--overall chi-square: 0.116805960121 degrees of freedom: 8.0

 Vegetables and Vegetable Products 20733 localChiSquare: 0.0181941117293 degrees of freedom: 1

 Cauliflower, green, cooked, with salt 165

 Cauliflower, green, cooked, no salt added 164

 Cauliflower, green, raw 162

 Squash, zucchini, baby, raw 158

 Cauliflower, cooked, boiled, drained, with salt 155

 Cauliflower, frozen, cooked, boiled, drained, with salt 155

 Legumes and Legume Products 8921 localChiSquare: 0.0422309570388 degrees of freedom: 1

 Falafel, home-prepared 119

 Soy flour, defatted 107

 Soy flour, low-fat, crude protein basis (N x 6.25) 107

 Soy flour, defatted, crude protein basis (N x 6.25) 106

 Soy flour, full-fat, roasted 104

 Chickpeas (garbanzo beans, bengal gram), mature seeds, cooked, boiled, with salt 104

 Soy flour, full-fat, roasted, crude protein basis (N x 6.25) 104

 Soybeans, mature seeds, dry roasted 103

 Soy meal, defatted, raw 103

 Nut and Seed Products 3528 localChiSquare: 0.00164662793847 degrees of freedom: 1

 Seeds, pumpkin and squash seeds, whole, roasted, without salt 138

 Seeds, pumpkin and squash seeds, whole, roasted, with salt added 138

 Nuts, coconut meat, dried (desiccated), sweetened, flaked, packaged 107

 Nuts, formulated, wheat-based, flavored, macadamia flavored, without salt 98

 Nuts, formulated, wheat-based, all flavors except macadamia, without salt 88

 Nuts, formulated, wheat-based, unflavored, with salt added 83

 Seeds, lotus seeds, raw 82

 Cereal Grains and Pasta 2668 localChiSquare: 0.0291092648903 degrees of freedom: 1

 Wheat germ, crude 144

 Quinoa, uncooked 94

 Quinoa, cooked 93

 Amaranth, uncooked 70

 Fruits and Fruit Juices 2102 localChiSquare: 0.0292806607677 degrees of freedom: 1

 Applesauce, canned, unsweetened, with added ascorbic acid 61

 Dates, medjool 55

 Pineapple, frozen, chunks, sweetened 51

 Pineapple, canned, juice pack, solids and liquids 50

 Dates, deglet noor 46

 Pineapple, canned, light syrup pack, solids and liquids 46

 Breakfast Cereals 1114 localChiSquare: 0.0137955621516 degrees of freedom: 1

 Cereals ready-to-eat, wheat, shredded, plain, sugar and salt free 40

 Cereals ready-to-eat, KELLOGG, KELLOGG'S ALL-BRAN Original 27

 Incaparina, dry mix (corn and soy flours), unprepared 26

 Cereals, oats, instant, fortified, plain, dry 24

 Cereals, farina, enriched, assorted brands including CREAM OF WHEAT, quick (1-3 minutes), dry 21

 Cereals, oats, instant, fortified, plain, prepared with water (boiling water added or microwaved) 20

 Spices and Herbs 917 localChiSquare: 0.00387329283948 degrees of freedom: 1

 Spices, fenugreek seed 154

 Spices, cinnamon, ground 97

 Spices, garlic powder 75

 Spices, caraway seed 67

 Mustard, prepared, yellow 56

 Spices, poppy seed 49

 Basil, fresh 28

 Fats and Oils 218 localChiSquare: 8.1814366329e-05 degrees of freedom: 1

 Salad dressing, italian dressing, reduced fat 68

 Margarine-like, vegetable oil spread, unspecified oils, approximately 37 fat, with salt 61

 Margarine, regular, hard, soybean (hydrogenated) 56

 Salad dressing, french dressing, reduced fat 23

 Sandwich spread, with chopped pickle, regular, unspecified oils 7

 Beverages 73 localChiSquare: 0.000598250961578 degrees of freedom: 1

 Coffee, instant, decaffeinated, powder 23

Vegetables and Vegetable Products

--overall chi-square: 0.0451640379861 degrees of freedom: 8.0

 Vegetables and Vegetable Products 143356 localChiSquare: 0.0311608211534 degrees of freedom: 1

 Squash, zucchini, baby, raw 1129

 Squash, summer, zucchini, includes skin, frozen, cooked, boiled, drained, with salt 958

 Squash, summer, zucchini, includes skin, raw 915

 Squash, summer, zucchini, includes skin, frozen, unprepared 908

 Squash, summer, all varieties, raw 893

 Squash, summer, scallop, cooked, boiled, drained, without salt 876

 Squash, summer, scallop, raw 875

 Squash, summer, scallop, cooked, boiled, drained, with salt 873

 Lambs quarters, cooked, boiled, drained, with salt 869

 Legumes and Legume Products 39440 localChiSquare: 9.85770900549e-06 degrees of freedom: 1

 MORI-NU, Tofu, silken, soft 480

 Soy sauce made from soy and wheat (shoyu) 476

 Soy sauce made from soy and wheat (shoyu), low sodium 476

 Soy flour, low-fat, crude protein basis (N x 6.25) 390

 Soy flour, defatted, crude protein basis (N x 6.25) 387

 Soybeans, mature seeds, cooked, boiled, with salt 383

 Soy meal, defatted, raw, crude protein basis (N x 6.25) 382

 Cereal Grains and Pasta 23558 localChiSquare: 0.0108515228085 degrees of freedom: 1

 Wheat germ, crude 757

 Oat bran, cooked 343

 Oat bran, raw 326

 Wheat bran, crude 303

 Barley malt flour 301

 Quinoa, cooked 297

 Quinoa, uncooked 294

 Amaranth, uncooked 292

 Nut and Seed Products 22523 localChiSquare: 0.00271891024592 degrees of freedom: 1

 Nuts, coconut meat, dried (desiccated), sweetened, flaked, packaged 639

 Seeds, pumpkin and squash seeds, whole, roasted, with salt added 498

 Seeds, pumpkin and squash seeds, whole, roasted, without salt 497

 Seeds, sunflower seed flour, partially defatted 373

 Seeds, cottonseed kernels, roasted (glandless) 354

 Seeds, sesame flour, low-fat 329

 Nuts, acorns, dried 322

 Fruits and Fruit Juices 20733 localChiSquare: 0.0078454646961 degrees of freedom: 1

 Pineapple, frozen, chunks, sweetened 368

 Pineapple, canned, juice pack, solids and liquids 331

 Peaches, raw 314

 Pineapple, canned, water pack, solids and liquids 292

 Cherries, sweet, raw 285

 Pineapple, canned, extra heavy syrup pack, solids and liquids 257

 Pineapple, canned, heavy syrup pack, solids and liquids 253

 Pineapple, canned, light syrup pack, solids and liquids 252

 Breakfast Cereals 10324 localChiSquare: 0.0048054060739 degrees of freedom: 1

 Cereals ready-to-eat, wheat germ, toasted, plain 714

 Cereals, oats, regular and quick and instant, unenriched, cooked with water (includes boiling and microwaving), without salt 196

 Cereals, oats, instant, fortified, plain, prepared with water (boiling water added or microwaved) 196

 Incaparina, dry mix (corn and soy flours), unprepared 183

 Cereals, oats, instant, fortified, plain, dry 179

 Cereals, farina, enriched, cooked with water, without salt 178

 Cereals, oats, regular and quick and instant, not fortified, dry 174

 Spices and Herbs 6106 localChiSquare: 0.00391396520643 degrees of freedom: 1

 Mustard, prepared, yellow 664

 Basil, fresh 421

 Spices, garlic powder 418

 Spices, fenugreek seed 395

 Spices, cinnamon, ground 387

 Spices, caraway seed 369

 Spices, parsley, dried 352

 Spices, onion powder 285

 Fats and Oils 1144 localChiSquare: 5.56791916488e-05 degrees of freedom: 1

 Sandwich spread, with chopped pickle, regular, unspecified oils 235

 Beverages 519 localChiSquare: 0.000493870882981 degrees of freedom: 1

 Orange drink, breakfast type, with juice and pulp, frozen concentrate 155

 Coffee, instant, regular, powder 122

 Coffee, instant, decaffeinated, powder 121

Nut and Seed Products

--overall chi-square: 0.38751080118 degrees of freedom: 8.0

 Vegetables and Vegetable Products 22523 localChiSquare: 0.0525468620215 degrees of freedom: 1

 Lambsquarters, raw 293

 Lambsquarters, cooked, boiled, drained, without salt 284

 Lambs quarters, cooked, boiled, drained, with salt 284

 Peas and carrots, frozen, cooked, boiled, drained, without salt 220

 Asparagus, frozen, cooked, boiled, drained, with salt 213

 Cauliflower, green, cooked, no salt added 207

 Cauliflower, green, cooked, with salt 207

 Edamame, frozen, prepared 204

 Legumes and Legume Products 11660 localChiSquare: 0.160304737429 degrees of freedom: 1

 Soy sauce made from soy (tamari) 180

 Peas, split, mature seeds, cooked, boiled, with salt 151

 Tofu, raw, firm, prepared with calcium sulfate 144

 Falafel, home-prepared 143

 MOR-NU, Tofu, silken, lite firm 141

 MORI-NU, Tofu, silken, lite extra firm 140

 Tofu, soft, prepared with calcium sulfate and magnesium chloride (nigari) 137

 Tofu, extra firm, prepared with nigari 137

 Tofu, hard, prepared with nigari 137

 Fruits and Fruit Juices 3528 localChiSquare: 0.00293013168432 degrees of freedom: 1

 Apples, frozen, unsweetened, heated 140

 Applesauce, canned, unsweetened, without added ascorbic acid (includes USDA commodity) 137

 Applesauce, canned, unsweetened, with added ascorbic acid 137

 Applesauce, canned, sweetened, without salt (includes USDA commodity) 115

 Applesauce, canned, sweetened, with salt 115

 Apples, dried, sulfured, stewed, with added sugar 96

 Orange juice, chilled, includes from concentrate 96

 Orange juice, chilled, includes from concentrate, fortified with calcium and vitamin D 96

 Spices and Herbs 904 localChiSquare: 0.00364878727625 degrees of freedom: 1

 Spices, fenugreek seed 230

 Spices, garlic powder 134

 Spices, cinnamon, ground 96

 Dill weed, fresh 81

 Mustard, prepared, yellow 37

 Spices, ginger, ground 13

 Nut and Seed Products 714 localChiSquare: 0.0747860775898 degrees of freedom: 1

 Seeds, pumpkin and squash seeds, whole, roasted, without salt 70

 Seeds, pumpkin and squash seeds, whole, roasted, with salt added 70

 Seeds, lotus seeds, dried 53

 Seeds, lotus seeds, raw 50

 Nuts, coconut meat, dried (desiccated), sweetened, flaked, packaged 46

 Seeds, breadfruit seeds, raw 24

 Cereal Grains and Pasta 394 localChiSquare: 0.117605817335 degrees of freedom: 1

 Wheat germ, crude 193

 Amaranth, uncooked 7

 Breakfast Cereals 304 localChiSquare: 0.0424705599446 degrees of freedom: 1

 Cereals ready-to-eat, wheat germ, toasted, plain 196

 Incaparina, dry mix (corn and soy flours), unprepared 17

 Cereals ready-to-eat, MALT-O-MEAL, GOLDEN PUFFS 7

 Cereals ready-to-eat, GENERAL MILLS, CINNAMON TOAST CRUNCH 5

 Cereals, oats, instant, fortified, plain, prepared with water (boiling water added or microwaved) 5

 Cereals ready-to-eat, KELLOGG, KELLOGG'S FROSTED FLAKES 4

 Cereals, oats, instant, fortified, plain, dry 4

 Fats and Oils 64 localChiSquare: 0.00213851898354 degrees of freedom: 1

 Margarine, regular, hard, soybean (hydrogenated) 20

 Salad dressing, french dressing, reduced fat 17

 Margarine-like, vegetable oil spread, unspecified oils, approximately 37 fat, with salt 15

 Sandwich spread, with chopped pickle, regular, unspecified oils 4

 Beverages 6 localChiSquare: 0.00290936587385 degrees of freedom: 1

 Orange drink, breakfast type, with juice and pulp, frozen concentrate 4

 Coffee, instant, with chicory, powder 2

Beverages

--overall chi-square: 0.418541321691 degrees of freedom: 8.0

 Vegetables and Vegetable Products 519 localChiSquare: 0.0727403905458 degrees of freedom: 1

 Asparagus, frozen, cooked, boiled, drained, without salt 9

 Cauliflower, cooked, boiled, drained, with salt 8

 Cauliflower, cooked, boiled, drained, without salt 8

 Cauliflower, frozen, unprepared 8

 Cauliflower, green, raw 8

 Cauliflower, green, cooked, no salt added 8

 Legumes and Legume Products 257 localChiSquare: 0.154329450937 degrees of freedom: 1

 Soy sauce made from soy (tamari) 6

 Falafel, home-prepared 6

 Peas, split, mature seeds, raw 5

 Chickpeas (garbanzo beans, bengal gram), mature seeds, cooked, boiled, with salt 5

 Peas, split, mature seeds, cooked, boiled, without salt 5

 Peas, split, mature seeds, cooked, boiled, with salt 5

 Tofu, raw, regular, prepared with calcium sulfate 5

 Fruits and Fruit Juices 73 localChiSquare: 0.00550924439145 degrees of freedom: 1

 Apples, frozen, unsweetened, heated 7

 Apples, dried, sulfured, uncooked 6

 Watermelon, raw 6

 Apples, dehydrated (low moisture), sulfured, uncooked 5

 Apples, canned, sweetened, sliced, drained, unheated 3

 Apples, canned, sweetened, sliced, drained, heated 3

 Apples, dehydrated (low moisture), sulfured, stewed 3

 Apples, dried, sulfured, stewed, without added sugar 3

 Apples, dried, sulfured, stewed, with added sugar 3

 Apples, frozen, unsweetened, unheated 3

 Spices and Herbs 21 localChiSquare: 0.00470129056794 degrees of freedom: 1

 Spices, fenugreek seed 9

 Spices, cinnamon, ground 4

 Spices, parsley, dried 4

 Spices, garlic powder 3

 Breakfast Cereals 8 localChiSquare: 0.0399846403047 degrees of freedom: 1

 Cereals ready-to-eat, wheat germ, toasted, plain 8

 Cereal Grains and Pasta 8 localChiSquare: 0.119409142771 degrees of freedom: 1

 Wheat germ, crude 8

 Nut and Seed Products 6 localChiSquare: 0.0963756924588 degrees of freedom: 1

 Seeds, lotus seeds, raw 2

 Seeds, lotus seeds, dried 2

 Seeds, pumpkin and squash seeds, whole, roasted, without salt 1

Legumes and Legume Products

--overall chi-square: 0.102719975733 degrees of freedom: 8.0

 Vegetables and Vegetable Products 39440 localChiSquare: 0.00492702283856 degrees of freedom: 1

 Carrots, canned, no salt added, solids and liquids 348

 Carrots, cooked, boiled, drained, with salt 338

 Tomatoes, sun-dried 331

 Tomatoes, yellow, raw 325

 Tomatoes, orange, raw 321

 Nut and Seed Products 11660 localChiSquare: 0.0205150845021 degrees of freedom: 1

 Nuts, chestnuts, japanese, dried 318

 Nuts, chestnuts, japanese, roasted 307

 Nuts, chestnuts, japanese, raw 303

 Nuts, chestnuts, japanese, boiled and steamed 293

 Nuts, chestnuts, european, dried, peeled 288

 Nuts, chestnuts, european, roasted 281

 Nuts, chestnuts, european, dried, unpeeled 278

 Nuts, chestnuts, european, boiled and steamed 258

 Cereal Grains and Pasta 11135 localChiSquare: 0.00186850937232 degrees of freedom: 1

 Quinoa, cooked 207

 Barley malt flour 193

 Macaroni, protein-fortified, dry, enriched, (n x 6.25) 165

 Spaghetti, protein-fortified, dry, enriched (n x 6.25) 164

 Fruits and Fruit Juices 8921 localChiSquare: 0.000227765942843 degrees of freedom: 1

 Peaches, raw 291

 Pineapple, canned, water pack, solids and liquids 272

 Pineapple, canned, juice pack, solids and liquids 264

 Kiwifruit, gold, raw 252

 Pineapple, raw, all varieties 238

 Pineapple, canned, light syrup pack, solids and liquids 233

 Pineapple, canned, extra heavy syrup pack, solids and liquids 233

 Pineapple, canned, heavy syrup pack, solids and liquids 229

 Breakfast Cereals 4298 localChiSquare: 5.46568714738e-05 degrees of freedom: 1

 Cereals, oats, instant, fortified, plain, dry 176

 Cereals, oats, regular and quick and instant, unenriched, cooked with water (includes boiling and microwaving), without salt 145

 Cereals, oats, regular and quick and instant, not fortified, dry 105

 Cereals, oats, instant, fortified, plain, prepared with water (boiling water added or microwaved) 99

 Cereals ready-to-eat, wheat, shredded, plain, sugar and salt free 67

 Cereals, farina, unenriched, dry 60

 Cereals, CREAM OF WHEAT, regular (10 minute), cooked with water, without salt 58

 Cereals, CREAM OF WHEAT, instant, dry 58

 Legumes and Legume Products 3746 localChiSquare: 0.0832819741993 degrees of freedom: 1

 MORI-NU, Tofu, silken, soft 206

 Soy sauce made from soy and wheat (shoyu) 195

 Soy sauce made from soy and wheat (shoyu), low sodium 195

 Peanut flour, defatted 194

 Peanut flour, low fat 110

 Hummus, home prepared 90

 Peanuts, virginia, raw 45

 Peanuts, valencia, raw 44

 Peanuts, valencia, oil-roasted, with salt 44

 Peanuts, virginia, oil-roasted, with salt 44

 Spices and Herbs 2092 localChiSquare: 0.007293360563 degrees of freedom: 1

 Spices, cinnamon, ground 304

 Mustard, prepared, yellow 251

 Spices, garlic powder 210

 Spices, caraway seed 199

 Basil, fresh 174

 Spices, poppy seed 81

 Spices, fennel seed 58

 Beverages 257 localChiSquare: 7.06496397655e-07 degrees of freedom: 1

 Orange drink, breakfast type, with juice and pulp, frozen concentrate 90

 Coffee, instant, decaffeinated, powder 57

 Fats and Oils 170 localChiSquare: 0.00153903493252 degrees of freedom: 1

 Salad dressing, italian dressing, reduced fat 85

 Sandwich spread, with chopped pickle, regular, unspecified oils 49

Cereal Grains and Pasta

--overall chi-square: 0.399417416318 degrees of freedom: 8.0

 Vegetables and Vegetable Products 23558 localChiSquare: 0.0835215385262 degrees of freedom: 1

 Lambsquarters, raw 356

 Lambsquarters, cooked, boiled, drained, without salt 338

 Lambs quarters, cooked, boiled, drained, with salt 338

 Cauliflower, green, raw 334

 Cauliflower, green, cooked, no salt added 330

 Cauliflower, green, cooked, with salt 330

 Asparagus, canned, no salt added, solids and liquids 323

 Cauliflower, frozen, unprepared 322

 Cauliflower, cooked, boiled, drained, with salt 322

 Legumes and Legume Products 11135 localChiSquare: 0.135977091449 degrees of freedom: 1

 Soy protein isolate, PROTEIN TECHNOLOGIES INTERNATIONAL, SUPRO 192

 Soy protein isolate, potassium type, crude protein basis 191

 Soy protein concentrate, crude protein basis (N x 6.25), produced by acid wash 190

 Soy protein isolate, potassium type 190

 Soy protein concentrate, produced by acid wash 189

 MORI-NU, Tofu, silken, extra firm 187

 MORI-NU, Tofu, silken, lite extra firm 187

 Soy protein isolate, PROTEIN TECHNOLOGIES INTERNATIONAL, ProPlus 187

 Fruits and Fruit Juices 2668 localChiSquare: 0.0150753917316 degrees of freedom: 1

 Pineapple, frozen, chunks, sweetened 174

 Applesauce, canned, unsweetened, without added ascorbic acid (includes USDA commodity) 173

 Applesauce, canned, unsweetened, with added ascorbic acid 173

 Applesauce, canned, sweetened, without salt (includes USDA commodity) 146

 Applesauce, canned, sweetened, with salt 146

 Watermelon, raw 131

 Spices and Herbs 1026 localChiSquare: 0.00751623979826 degrees of freedom: 1

 Spices, fenugreek seed 339

 Spices, parsley, dried 179

 Spices, garlic powder 179

 Spices, cinnamon, ground 149

 Spices, onion powder 109

 Dill weed, fresh 26

 Mustard, prepared, yellow 16

 Spices, mustard seed, ground 11

 Spices, ginger, ground 3

 Rosemary, fresh 2

 Cereal Grains and Pasta 580 localChiSquare: 0.107895871132 degrees of freedom: 1

 Wheat germ, crude 288

 Rice, white, medium-grain, raw, enriched 3

 Quinoa, cooked 3

 Rice, white, medium-grain, raw, unenriched 3

 Amaranth, uncooked 2

 Breakfast Cereals 436 localChiSquare: 0.0365702182878 degrees of freedom: 1

 Cereals ready-to-eat, wheat germ, toasted, plain 298

 Incaparina, dry mix (corn and soy flours), unprepared 7

 Cereals, CREAM OF WHEAT, instant, prepared with water, with salt, (wheat) 2

 Nut and Seed Products 394 localChiSquare: 0.0899296988244 degrees of freedom: 1

 Nuts, coconut meat, dried (desiccated), sweetened, flaked, packaged 87

 Seeds, lotus seeds, raw 37

 Seeds, lotus seeds, dried 22

 Seeds, breadfruit seeds, boiled 13

 Seeds, pumpkin and squash seeds, whole, roasted, without salt 13

 Seeds, breadfruit seeds, raw 12

 Fats and Oils 27 localChiSquare: 0.00354574650995 degrees of freedom: 1

 Salad dressing, french dressing, reduced fat 10

 Margarine, regular, hard, soybean (hydrogenated) 6

 Margarine-like, vegetable oil spread, unspecified oils, approximately 37 fat, with salt 5

 Sandwich spread, with chopped pickle, regular, unspecified oils 2

 Beverages 8 localChiSquare: 0.0028122649222 degrees of freedom: 1

 Coffee, instant, decaffeinated, powder 2