**Supplementary Material**

**Supplemental Table 1**. Food Categorisation Table adapted from Dunford(17) showing 10 main categories of data collected for both branded and generic products

|  |  |  |
| --- | --- | --- |
| Category | Subcategory | Description |
| Bread | Bread | Including crumpets |
|  | Wraps |  |
| Cereal | Breakfast Cereals | Including tortillas, tacos and other corn-based cereal products |
| Convenience Food/Mixed Dishes | Pizza | Including frozen pizzas  |
|  | Pre-prepared salads and sandwiches |  |
|  | Ready Meals | Including chilled, frozen and ready-to-eat meals and pre-prepared foods such as quiches, pasta |
|  | Soup |  |
| Dairy | Cheese | Excluding vegan cheeses |
|  | Milk | All milk, powdered and flavoured, and milk alternatives e.g. almond, coconut, soy and rice |
|  | Yoghurt |  |
| Discretionary Food | Biscuits | Including savoury and sweet biscuits, crackers and crispbreads |
|  | Cakes, muffins and pastries |  |
|  | Cereal Bars | Muesli and snack bars |
|  | Confectionery |  |
|  | Desserts | Including dairy-based desserts e.g. ice-cream, custards and pudding and soy-based ice cream |
| Fish |  | All canned, chilled and frozen fish and seafood |
| Fruit and Vegetables | Fruit | All canned, dried, frozen and pre-packaged fruit |
|  | Juice | Including fruit and vegetable juices |
|  | Vegetables | All canned and frozen vegetables (including potato products) and canned and dried beans and legumes |
| Meat and Alternatives | Meat Alternatives | Including all chilled and frozen meat alternatives |
|  | Nuts and Seeds | Including all varieties of salted and unsalted nuts/mixed nuts and seeds |
|  | Processed meat and derivatives | Including chilled pies, sausage rolls and frozen party food varieties |
| Snacks |  | Including crisps and popcorn |
| Spreads |  | Including nut spreads such as peanut butter and almond and tahini |

**Supplemental Table 2.** Total number of branded and generic products and number of paired samples in each category with percentage of HSR products

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Categories | Paired Samples (n) |  | Products (n) | Products with HSR (%) |
| Bread |  |
|  Bread | 15 | BrandedGeneric | 10460 | 40 (38)39 (65) |
|  Wraps | 1 | BrandedGeneric | 61 | 2 (33)1 (100) |
| Cereal  |  |  |  |  |
|  Breakfast Cereals | 15 | BrandedGeneric | 15962 | 82 (52)45 (73) |
| Convenience Food(Mixed Dishes) |  |  |  |  |
|  Pizza | 3 | BrandedGeneric | 54 | 3 (60)4 (100) |
|  Soups(a) | 8 | BrandedGeneric | 10449 | 48 (46)42 (86) |
|  Ready Meals(b) | 15 | BrandedGeneric | 11759 | 66 (56)48 (81) |
| Dairy |  |  |  |  |
|  Dairy Cheese | 1 | BrandedGeneric | 6136 | 1 (2)19 (53) |
|  Milk | 7 | BrandedGeneric | 7946 | 25 (32)19 (41) |
|  Yoghurt | 3 | BrandedGeneric | 585 | 10 (17)4 (80) |
| Discretionary Food |  |  |  |  |
|  Cereal Bars | 7 | BrandedGeneric | 9138 | 38 (42)19 (50) |
|  Biscuits(c) | 10 | BrandedGeneric | 10478 | 34 (33)38 (49) |
| Fish |  |  |  |  |
|  Canned Fish and Seafood | 10 | BrandedGeneric | 106140 | 23 (22)73 (52) |
|  Chilled Fish | 4 | BrandedGeneric | 810 |  3 (38)6 (60) |
|  Frozen Fish | 5 | BrandedGeneric | 5321 | 23 (43)12 (57) |
| Fruit and Vegetables |  |  |  |  |
|  Fruit and Vegetable Juices | 10 | BrandedGeneric | 19649 | 57 (29)42 (86) |
|  Vegetables(d) | 13 | BrandedGeneric | 7471 | 53 (72)47 (66) |
|  Fruit(e) | 4 | BrandedGeneric | 911 | 7 (78)5 (45) |
| Meat and Alternatives |  |  |  |  |
|  Nuts and Seeds | 8 | BrandedGeneric | 3556 | 11 (31)28 (50) |
|  Meat Alternatives | 1 | BrandedGeneric | 95 | 5 (56)5 (100) |
|  Processed Meat  and Derivatives | 1 | BrandedGeneric | 277 | 4 (15)5 (71) |
| Spreads  |  |  |  |  |
|  Spreads | 5 | BrandedGeneric | 3822 | 18 (47)17 (77) |
| Total | 146 | BrandedGeneric | 1443830 | 550 (38)518 (62) |

(a) Excluding concentrated and powdered soups needing preparation other than heating

(b) Including chilled and frozen ready-meals

(c) Including sweet and savoury biscuits

(d) Including canned and frozen vegetables as well as frozen potato products

(e) Frozen fruit only

**Supplemental Table 3.** Table showing paired sample products within each category, number of products and percentage of products with a HSR

|  |  |  |  |
| --- | --- | --- | --- |
| Categories |  | Products (n) | Products with HSR (%) |
| Bread |  |  |  |
|  Bread |  |  |  |
|  Brioche | BrandedGeneric | 83 | 1 (13)2 (67) |
|  Fruit/Raisin | BrandedGeneric | 86 | 6 (75)4 (67) |
|  GF Mixed Seeds | BrandedGeneric | 24 | 1 (50)3 (75) |
|  GF Raisin Bread | Branded Generic | 11 | 1 (100)1 (100) |
|  GF Seeded Rolls | BrandedGeneric | 21 | 1 (50)1 (100) |
|  GF White Bread | BrandedGeneric | 13 | 1 (100)2 (67) |
|  GF White Rolls | BrandedGeneric | 21 | 1 (50)1 (100) |
|  Grains & Seeds | BrandedGeneric | 113 | 2 (18)3 (100) |
|  Mixed Grains | BrandedGeneric | 73 | 2 (29)3 (100) |
|  Multigrain | BrandedGeneric | 95 | 3 (33)2 (40) |
|  Rye | BrandedGeneric | 103 | 2 (20)2 (67) |
|  Soy & Linseed | BrandedGeneric | 33 | 1 (33)2 (67) |
|  White | BrandedGeneric | 2316 | 9 (39)8 (50) |
|  Wholemeal | BrandedGeneric | 167 | 8 (50)4 (57) |
|  Wholemeal  (Added Fibre) | BrandedGeneric | 11 | 1 (100)1 (100) |
|  Wraps |  |  |  |
|  Wholemeal | BrandedGeneric | 61 | 2 (33)1 (100) |
| Cereal |  |  |  |
|  Rolled Oats | BrandedGeneric | 2117 | 13 (62)11 (65) |
|  Whole Wheat Biscuit | BrandedGeneric | 31 | 3 (100)1 (100) |
|  Gluten Free Muesli | BrandedGeneric | 233 | 6 (26)1 (33) |
|  Toasted Muesli with added Dried Fruit & Nuts | BrandedGeneric | 145 | 4 (29)2 (40) |
|  Toasted Muesli with added Nuts | BrandedGeneric | 217 | 7 (33)6 (86) |
|  Untoasted Muesli  with added Dried Fruit | BrandedGeneric | 1812 | 10 (55)9 (75) |
|  Untoasted Low Fat Muesli With added Dried Fruit | BrandedGeneric | 11 | 1 (100)1 (100) |
|  Untoasted Muesli with added Dried Fruit & Nuts | BrandedGeneric | 206 | 9 (45)4 (67) |
|  Rolled Oats, mixed  with Sugar or Honey | BrandedGeneric | 141 | 11 (79)1 (100) |
|  Rice Flakes Added Vitamins & Minerals | BrandedGeneric | 12 | 1 (100)2 (100) |
|  Cocoa Coating Puffed Rice Added Vitamins & Minerals | BrandedGeneric | 61 | 4 (67)1 (100) |
|  Mixed Grain (Wheat, Oat & Corn) Added Vitamins & Minerals | BrandedGeneric | 81 | 6 (75)1 (100) |
|  Fruit Flavoured Mixed Grain (Wheat, Oat & Corn) Added Vitamins & Minerals | BrandedGeneric | 31 | 2 (67)1 (100) |
|  Cocoa Coating Crispy Pillow Mixed Grain (Wheat, Corn, Rice & Oat)  Added Vitamins & Minerals | BrandedGeneric | 12 | 1 (100)2 (100) |
|  Apricot & Sultana Mixed Grain Flakes (Wheat & Oat) Added Vitamins & Minerals | BrandedGeneric | 21 | 1 (50)1 (100) |
|  Porridge, Rolled Oats mixed with  Sugar & Dried Fruit | BrandedGeneric | 31 | 3 (100)1 (100) |
| Convenience Food(Mixed Dishes) |  |  |  |
|  Pizza |  |  |  |
|  Chicken & Bacon Pizza  | BrandedGeneric | 11 | 1 (100)1 (100) |
|  Meat Lovers Pizza  | BrandedGeneric | 22 | 1 (50)2 (100) |
|  Supreme Pizza | BrandedGeneric | 21 | 1 (50)1 (100) |
|  Soups |  |  |  |
|  Chicken & Corn | BrandedGeneric | 66 | 63 (50)5 (83) |
|  Chicken & Vegetable | BrandedGeneric | 127 | 3 (25)6 (86) |
|  Meat & Vegetable | BrandedGeneric | 2013 | 11 (55)11 (85) |
|  Minestrone | BrandedGeneric | 52 | 1 (20)2 (100) |
|  Pea & Ham | BrandedGeneric | 52 | 2 (40)1 (50) |
|  Pumpkin | BrandedGeneric | 1710 | 6 (35)8 (80) |
|  Tomato | BrandedGeneric | 41 | 2 (50)1 (100) |
|  Vegetable | BrandedGeneric | 358 | 20 (57)8 (100) |
|  Ready Meals |  |  |  |
|  Fresh Pasta Filled with Vegetables | BrandedGeneric | 82 | 3 (38)1 (50) |
|  Fresh Pasta Filled with Meat | BrandedGeneric | 186 | 5 (28)4 (67) |
|  Fresh Pasta Filled with Spinach & Ricotta | BrandedGeneric | 65 | 2 (33)4 (80) |
|  Indian Style Chicken Curry with Rice | BrandedGeneric | 17 | 1 (100)5 (71) |
|  Beef & Vegetables  | BrandedGeneric | 75 | 3 (43)5 (100) |
|  Beef Lasagne | BrandedGeneric | 75 | 2 (29)4 (80) |
|  Beef & Noodles or Pasta  | BrandedGeneric | 121 | 9 (75)1 (100) |
|  Beef & Rice  | BrandedGeneric | 62 | 3 (50)2 (100) |
|  Chicken & Vegetables  | BrandedGeneric | 12 | 1 (100)1 (50) |
|  Chicken, Vegetables & Noodles or Pasta | BrandedGeneric | 147 | 7 (50)7 (100) |
|  Indian Style Chicken Curry & Rice | BrandedGeneric | 34 | 1 (33)3 (75) |
|  Chicken Curry & Rice Energy Controlled Portion | BrandedGeneric | 319 | 20 (65)9 (100) |
|  Vegetables & Pasta or Noodles | BrandedGeneric | 173 | 7 (41)3 (100) |
|  Tuna Mornay with Pasta & White Sauce | BrandedGeneric | 42 | 2 (50)2 (100) |
|  Prawn & Rice | BrandedGeneric | 92 | 4 (44)2 (100) |
| Dairy |  |  |  |
|  Cheese |  |  |  |
|  Hard Cheddar Regular Fat | BrandedGeneric | 6136 | 1 (2)19 (53) |
|  Milk (and Milk Alternatives) |  |  |  |
|  Full Cream, Cow’s Milk | BrandedGeneric | 3016 | 5 (17)4 (25) |
|  Reduced Fat, Cow’s Milk | BrandedGeneric | 1414 | 5 (36)7 (50) |
|  Skim, Cow’s Milk | BrandedGeneric | 157 | 1 (7)3 (43) |
|  Almond | BrandedGeneric | 126 | 7 (58)2 (33) |
|  Coconut | BrandedGeneric | 31 | 2 (67)1 (100) |
|  Soy, Reduced Fat | BrandedGeneric | 11 | 1 (100)1 (100) |
|  Soy, Regular Fat | BrandedGeneric | 41 | 4 (100)1 (100) |
|  Yoghurt |  |  |  |
|  Reduced Fat, Berry Flavoured | BrandedGeneric | 121 | 4 (33)1 (100) |
|  Reduced Fat, Vanilla Flavoured | BrandedGeneric | 153 | 3 (20)2 (67) |
|  Regular Fat, Tropical Flavoured | BrandedGeneric | 261 | 3 (12)1 (100) |
| Discretionary Food |  |  |  |
|  Cereal Bars |  |  |  |
|  Plain or with 10% Dried Fruit | BrandedGeneric | 284 | 13 (46)2 (50) |
|  With Chocolate Chips or Coating | BrandedGeneric | 179 | 14 (82)6 (67) |
|  Chocolate-Coated with 10% Dried Fruit & 45% Nuts | BrandedGeneric | 167 | 2 (13)3 (43) |
|  With 10% Dried Fruit  & 60% Nuts | BrandedGeneric | 42 | 1 (25)1 (50) |
|  Chocolate-Coated, Plain or with 10% Dried Fruit | BrandedGeneric | 143 | 5 (36)1 (33) |
|  Yoghurt-Coated, Plain or with 10% Dried Fruit | BrandedGeneric | 1213 | 3 (25)6 (46) |
|  Biscuits (Sweet and Savoury) |  |  |  |
|  Cheese-Flavoured,  from White Wheat Flour | BrandedGeneric | 911 | 4 (44)7 (64) |
|  Other-Flavoured, from White Wheat Flour | BrandedGeneric | 208 | 10 (50)5 (63) |
|  Chocolate Chip  | BrandedGeneric | 2014 | 1 (5)6 (43) |
|  Chocolate-Coated, Caramel Filling, Biscuit Base | BrandedGeneric | 24 | 2 (100)3 (75) |
|  Chocolate-Coated, Cream Filling,  Sandwich Style | BrandedGeneric | 145 | 5 (36)4 (80) |
|  Chocolate-Coated, Marshmallow Filling | BrandedGeneric | 44 | 2 (50)2 (50) |
|  Chocolate-Coated, Mint Filling,  Biscuit Base | BrandedGeneric | 45 | 3 (75)2 (40) |
|  Chocolate-Coated, Wheatmeal | BrandedGeneric | 76 | 1 (14)5 (83) |
|  Plain Chocolate-Coated | BrandedGeneric | 910 | 2 (22)2 (20) |
|  Shortbread Style  | BrandedGeneric | 1511 | 4 (27)2 (18) |
| Fish  |  |  |  |
|  Canned Fish and Seafood |  |  |  |
|  Flavoured Salmon | BrandedGeneric | 1211 | 3 (25)2 (18) |
|  Sardines in Oil | BrandedGeneric | 65 | 1 (17)2 (40) |
|  Sardines in Tomato Sauce | BrandedGeneric | 45 | 1 (25)2 (40) |
|  Sardines in Water | BrandedGeneric | 34 | 1 (33)2 (50) |
|  Flavoured Tuna | BrandedGeneric | 4755 | 10 (21)33 (60) |
|  Unflavoured Salmon in Water | BrandedGeneric | 42 | 1 (25)1 (50) |
|  Smoked Oysters in Oil | BrandedGeneric | 26 | 1 (50)1 (17) |
|  Unflavoured Tuna in Brine | BrandedGeneric | 611 | 2 (33)6 (55) |
|  Unflavoured Tuna in Vegetable Oil | BrandedGeneric | 1121 | 1 (9)13 (62) |
|  Unflavoured Tuna in Water | BrandedGeneric | 1120 | 2 (18)11 (55) |
|  Chilled Fish |  |  |  |
|  Raw Salmon with Marinade | BrandedGeneric | 33 | 1 (33)1 (33) |
|  Raw Salmon Skin Off | BrandedGeneric | 22 | 1 (50)2 (100) |
|  Raw Salmon Skin On | BrandedGeneric | 35 | 1 (33)3 (60) |
|  Frozen Fish |  |  |  |
|  Coated Squid or Calamari | BrandedGeneric | 75 | 4 (57)3 (60) |
|  Crumbed Fish Finger | BrandedGeneric | 42 | 3 (75)1 (50) |
|  Battered White Flesh Fish | BrandedGeneric | 57 | 1 (20)1 (14) |
|  Coated Cod or Hake | BrandedGeneric | 91 | 2 (22)1 (100) |
|  Coated Blue Grenadier | BrandedGeneric | 286 | 13 (46)6 (100) |
| Fruit and Vegetables |  |  |  |
|  Fruit and Vegetable Juices |  |  |  |
|  Apple | BrandedGeneric | 2914 | 6 (21)11 (79) |
|  Apple Blackcurrant | BrandedGeneric | 96 | 2 (22)5 (83) |
|  Apple Mango | BrandedGeneric | 52 | 3 (60)1 (50) |
|  Breakfast | BrandedGeneric | 81 | 4 (50)1 (100) |
|  Coconut | BrandedGeneric | 413 | 7 (17)3 (100) |
|  Fruit & Vegetable  | BrandedGeneric | 271 | 10 (37)1 (100) |
|  Orange | BrandedGeneric | 4315 | 13 (30)13 (87) |
|  Orange and Mango | BrandedGeneric | 51 | 2 (40)1 (100) |
|  Smoothie, Fruit Juice Based with Mixed Fruit | BrandedGeneric | 104 | 2 (20)4 (100) |
|  Tropical | BrandedGeneric | 192 | 8 (42)2 (100) |
|  Vegetables (Canned and Frozen) |  |  |  |
|  Par-fried Potato Fries In Canola Oil | BrandedGeneric | 35 | 2 (67)1 (20) |
|  Baked or Roasted Potato Chips | BrandedGeneric | 55 | 1 (20)3 (60) |
|  Beetroot | BrandedGeneric | 34 | 3 (100)4 (100) |
|  Creamed Sweetcorn | BrandedGeneric | 12 | 1 (100)2 (100) |
|  Sweetcorn Kernels | BrandedGeneric | 65 | 6 (100)5 (100) |
|  Whole Tomatoes, in Tomato Juice | BrandedGeneric | 69 | 6 (100)9 (100) |
|  Mixed Salad Vegetables (For use in Garden Salads) | BrandedGeneric | 11 | 1 (100)1 (100) |
|  Raw Mixed Vegetables  | BrandedGeneric | 3417 | 23 (68)9 (53) |
|  Cooked Mixed Vegetables (For use in Stir-fry) | BrandedGeneric | 21 | 1 (50)1 (100) |
|  Sweetcorn on the cob | BrandedGeneric | 23 | 1 (50)2 (67) |
|  Sweetcorn kernels | BrandedGeneric | 44 | 2 (50)2 (50) |
|  Green Beans | BrandedGeneric | 75 | 2 (29)2 (40) |
|  Green Peas | BrandedGeneric | 910 | 4 (44)6 (60) |
|  Fruit (Frozen) |  |  |  |
|  Blueberry | BrandedGeneric | 43 | 3 (75)1 (33) |
|  Mixed Berry | BrandedGeneric | 34 | 2 (67)2 (50) |
|  Raspberry | BrandedGeneric | 13 | 1 (100)1 (33) |
|  Tropical Mix | BrandedGeneric | 11 | 1 (100)1 (100) |
| Meat and Alternatives |  |  |  |
|  Nuts and Seeds |  |  |  |
|  Almond Meal | BrandedGeneric | 46 | 1 (25)1 (17) |
|  Almonds, Raw & Unsalted | BrandedGeneric | 714 | 1 (14)6 (43) |
|  Chia Seeds | BrandedGeneric | 56 | 2 (40)5 (83) |
|  Macadamia Nuts, Raw & Unsalted | BrandedGeneric | 36 | 1 (33)4 (67) |
|  Pecan Nuts | BrandedGeneric | 25 | 2 (100)3 (60) |
|  Pine Nuts | BrandedGeneric | 64 | 2 (33)1 (25) |
|  Roasted Almonds | BrandedGeneric | 35 | 1 (33)3 (60) |
|  Walnuts, Raw & Unsalted | BrandedGeneric | 510 | 1 (20)5 (50) |
|  Meat Alternatives |  |  |  |
|  Vegetarian Burgers | BrandedGeneric | 95 | 5 (56)5 (100) |
|  Processed Meat and Derivatives |  |  |  |
|  Pies | BrandedGeneric | 277 | 4 (15)5 (71) |
| Spreads |  |  |  |
|  Crunchy Peanut Butter Added Sugar or Salt | BrandedGeneric | 107 | 2 (20)5 (71) |
|  Crunchy Peanut Butter  No Added Sugar or Salt | BrandedGeneric | 81 | 6 (75)1 (100) |
|  Smooth Peanut Butter Added Sugar or Salt | BrandedGeneric | 910 | 2 (22)7 (70) |
|  Smooth Peanut Butter No Added Sugar or Salt | BrandedGeneric | 81 | 6 (75)1 (100) |
|  Tahini | BrandedGeneric | 33 | 2 (67)3 (100) |