

**Table S1.** Details and descriptions of all food categories, including all 8-digit codes included in each food category <sup>1</sup>.

| Major food group (2-digit code)  | Food category  | Description  | 8-digit codes included   |
|--|--|--|--|
| Nonalcoholic beverages (11)  | Fruit and vegetable juice                              | Commercial and non-commercial juices   | 11301001-11306003  |
|  | Sweetened beverages                                    | Fruit drinks, cordials, soft drinks, flavoured mineral waters, sports drinks, and energy drinks  | 11307001-11604003  |
|  | Liquid breakfast, fortified beverages (like Milo)      | Milo prepared with milk, unfortified beverage flavourings prepared with milk, beverage bases unmixed, and breakfast cereal beverages   | 11801001-11806002  |
|  | Rice, grains and flours                                | Oats, rice, quinoa and cous-cous without additions   | 12101001-12104002  |
|  | Breads and rolls, wholegrain, fortified <sup>2,3</sup> | Bagels, bread, English muffins, and flat breads with mandatory or additional fortification, all grains including gluten-free varieties   | 12204001-12204018; 12207001-12207022; 12210001-12210010; 12205; 12208001-12208008; 12211   |
|  | Breads and rolls, refined grain, fortified             | White (including gluten-free) bagels, bread, English muffins, and flat breads with mandatory or additional fortification   | 12201001-12201029; 12202001-12202010   |
|  |  |  | 12301004-12301005; 12302004-12302005; 12302008-12302011; 12303001-12303007; 12206001-12206006; 12209001-12209009; 12212001-12212004; 12213001-12213006   |
| Cereals and cereal products (12)   | Breads and rolls, wholegrain (all grains), unfortified | Bagels, bread, English muffins, and flat breads with no fortification, all grains including gluten-free varieties  | 12301001-12301003; 12302001-12302003; 12302006-12302007; 12302012-12302014; 12203001-12203023; 12304001-12304008; 12307001-12307004; 12305001-12305006   |
|  | Breads and rolls, refined grain (white), unfortified   | White (including gluten-free) bagels, bread, English muffins, and flat breads with no fortification  | 12305007-12305010; 12306001-12306009; 13101001-13107001; 13301001-13303077; 13304011-13304014; 13304018-13304019; 13305001-13306029; 13308003; 13309001- |
| Cereals and cereal products (12); Cereal-based products and dishes (13); Fruit products and dishes (16); Milk products and dishes (19); Sugar products and dishes (27) | Desserts   | Sweet buns, sweet biscuits, cakes, cupcakes, banana breads, cake-style muffins with chocolate, pudding, pie, danishes, éclairs, doughnuts, ice cream, toppings, pavlova, and ice confections |  |

|                                       |   |  |  |
|---------------------------------------|---|--|--|
|                                       |   | 13309004; 13402001-13403021; 13605001-13605011; 16901001-16901007; 19501001-19508011; 19601001-19602007; 19701001-19702007; 27301001-27304015; 27103001-27103006 |  |
| Cereals and cereal products<br>(12)   | Pasta and noodles, plain  | Pasta and noodles without additions.   | 12401001-12403007  |
|                                       | Pasta and noodles, with additions   | Filled pasta (meat, spinach, cheese, vegetables)   | 12404001-12404004  |
|                                       | Breakfast cereal, RTE, fortified, sugars $\leq 20\text{g}/100\text{g}$ <sup>4</sup> | Fortified ready-to-eat breakfast cereals and muesli varieties, with or without fruit and nuts, and lower in sugar. E.g., Weet-bix, Just Right                    | 12506001-12516015; 12512001-12512006; 12502001-12502007; 12502011-12502012; 12504001-12504008; 12509001-12509007; 12502008-12502010; 12515001-12515027             |
|                                       | Breakfast cereal, RTE, fortified, sugars $> 20\text{g}/100\text{g}$                 | Fortified ready-to-eat breakfast cereals and muesli, with or without fruit and nuts high in sugar. E.g., cocoa puffs, Sultana Bran                               | 12507001-12507002; 12513001-12513010; 12510001-12510003  |
|                                       | Breakfast cereal, RTE, unfortified, sugars $\leq 20\text{g}/100\text{g}$            | Unfortified ready-to-eat breakfast cereals and muesli varieties, lower in sugar. E.g., Puffed wheat, natural muesli  | 12501001-12501003; 12501007; 12503001-12503002; 12505001-12505006; 12511005; 12514010-12516001-12516003; 12514001; 12514004; 12514007; 12514018-12414024; 12516003 |
|                                       | Breakfast cereal, RTE, unfortified, sugars $> 20\text{g}/100\text{g}$               | Unfortified ready-to-eat breakfast cereals and muesli high in sugar. E.g., muesli with sugar and syrup added   | 12503003; 12505007; 12511002-12511004; 12514002; 12414003; 12514005; 12514017; 12515006; 12516001-12516002   |
|                                       | Hot porridge  | Porridge with and without (milk, sugar, honey and dried fruit)   | 12601001-12601018; 12602001-12602003   |
|                                       | Savoury biscuits  | Crackers, wafers, rice cakes, and crispbreads,   | 13201001-13205003  |
|                                       | Muffins and scones  | Un-iced cake-style muffins and scones  | 13304001-13304010; 13304015-13304017; 13304020-13304021; 13307001-13308002   |
|                                       | Batter-based products   | Crepes, pancakes, pikelet, waffles, fritters, Yorkshire pudding, crumpets without additions.   | 13601001-13604010; 13606001-13606003   |
| Cereal-based products and dishes (13) |   |  |  |

|   |   |   |   |
|---|---|---|---|
| Fats and oils (14)                              | Solid fats  | Butter and other solid fats   | 14101001-14102002;<br>14501001-14503001; 14602001   |
|   | Oils  | Cooking oils  | 14401001-14403001   |
|   | Margarines and margarine-like spreads             | Dairy blends, margarines and table spreads                            | 14201001-14203001;<br>14301001-14307011;<br>14601001-14601002   |
| Fish and seafood products and dishes (15)       | Fish, unprocessed, without additions <sup>5</sup> | Fish (baked, boiled, roasted, smoked). Crabs, prawns, scallops, squid | 15101001-15503005   |
|   | Fish, processed, battered or crumbed              | Fish and shellfish, battered and fried                                | 15501001-15504016   |
|   | Fish, processed, tinned                           | Canned and processed fish   | 15401001-15402003<br>16101001-16101020;<br>16103001-16103011;<br>16105001-16105002;<br>16201001-16201012;<br>16301001-16303005;<br>16401001-16401011;<br>16403001-16403006;<br>16501001-16504012;<br>16601001-16701032<br>16102001; 16104001-<br>16104003; 16304001;<br>16402001-16402003;<br>16404001-16404003;<br>16505001-16505003;<br>16505005-16505007;<br>16702001; 16702014-16702105 |
| Fruit products and dishes (16)                  | Fruit   | Raw fruits and fruit salads   |   |
|   | Commercial fruit, in brine or juice               | Canned fruits (drained, with juice)                                   |   |
|   | Commercial fruit, in syrup                        | Canned fruits (in syrup)  | 16104004-16104013;<br>16202001-16202010;<br>16304002-16304004;<br>16402004-16402013;<br>16404004-16404018;<br>16505004; 16505008-<br>16505010; 16702013   |
| Egg products and dishes (17)                    | Dried fruit                                       | Prunes, raisins, sultanas, dates, figs                                | 16801001-16802014   |
|   | Eggs, without additions                           | Eggs, plain (poached, hard-boiled)                                    | 17101001-17103006   |
|   |   |   | 18101005; 18101012-<br>18101016; 18101025;<br>18101032-18101035;<br>18101040-18101044;<br>18101047-18101057;<br>18101064-18101071;<br>18101087-18101088;<br>18101092; 18101103-<br>18101109; 18101121-<br>18101128; 18101148-<br>18101154; 18101165-<br>18101171; 18101180-<br>18101186; 18101201-  |
| Meat, poultry and game products and dishes (18) | Red meat, fat fully-trimmed                       | Beef, lamb, pork, veal, kangaroo with fat fully removed               |   |

|  |  |   |
|--|--|---|
|  |  | 18101208; 18101217-<br>18101219; 18101233-<br>18101235; 18101244-<br>18101247; 18101253-<br>18101259; 18102004;<br>18102007-18102012;<br>18102015-18102023;<br>18102042-18102043;<br>18102052-18102055;<br>18102060; 18102064-<br>18102065; 18102072-<br>18102073; 18102081-<br>18102088; 18102098-<br>18102101; 18102114-<br>18102115; 18102122-<br>18102123; 18102137-<br>18102138; 18102145-<br>18102146; 18102054-<br>18102157; 18102168-<br>18102170; 18102180-<br>18102182; 18102194-<br>18102195; 18102202-<br>18102203; 18103006-<br>18103010; 18103015-<br>18103035; 18103040-<br>18103041; 18103057-<br>18103064; 18103081-<br>18103083; 18103090-<br>18103092; 18103106-<br>18103107; 18103110-<br>18103113; 18103118-<br>18103119; 18103123-<br>18103124; 18103126-<br>18103130; 18103141-<br>18103144; 18104005-<br>18104007; 18104014-<br>18104017; 18104022-<br>18104028; 18104035-<br>18104036; 18104043-<br>18104044; 18201001-<br>18201008; 18202013-18202021 |
| Red meat, untrimmed or<br>semi-trimmed | Beef, lamb, pork, veal, kan-<br>garoo with all fat remaining<br>or partially removed | 18101007; 18101017-<br>18101023; 18101027;<br>18101036-18101037;<br>18101045-18101046;<br>18101058-18101061;<br>18101072-18101086;<br>18101089-18101090;<br>18101094-18101096;<br>18101110-18101114;<br>18101129-18101147;<br>18101155-18101164;  |

|                       |  |   |
|-----------------------|--|---|
|                       |  | 18101172-18101177;<br>18101187-18101196;<br>18101209-18101210;<br>18101220-18101229;<br>18101236-18101240;<br>18101249-18101251;<br>18101261-18101273;<br>18102006; 18102013;<br>18102025-18102039;<br>18102044-18102049;<br>18102056-18102057;<br>18102061; 18102066-<br>18102069; 18102074-<br>18102077; 18102089-<br>18102095; 18102102-<br>18102109; 18102116-<br>18102119; 18102124-<br>18102134; 18102139-<br>18102143; 18102148-<br>18102151; 18102158-<br>18102165; 18102171-<br>18102179; 18102183-<br>18102185; 18102196-<br>18102197; 18102204-<br>18102207; 18103001-<br>18103004; 18103011-<br>18103013; 18103036-<br>18103039; 18103042-<br>18103048; 18103066-<br>18103078; 18103084-<br>18103087; 18103093-<br>18103103; 18103108;<br>18103114-18103115;<br>18103120-18103122;<br>18103125; 18103131-<br>18103140; 18103145;<br>18104008-18104011;<br>18104018-18104019;<br>18104029-18104030;<br>18104038-18104040;<br>18104045-18104046;<br>18202001-18202012 |
| Poultry               | Chicken, duck, feathered<br>game   | 18301001-18303010   |
| Ultra-processed meats | Sausages (beef, pork,<br>chicken), frankfurters, save-<br>loys)                                  | 18501001-18503009   |
| Processed meat        | Bacon, ham, prosciutto, sa-<br>lami, corned beef, turkey<br>deli-sliced, spam, and beef<br>jerky | 18601001-18607001   |

|                                       |                                 |  |   |
|---------------------------------------|---------------------------------|--|---|
| Milk products and dishes<br>(19)      | Dairy milk, full fat            | Full fat fluid milk, condensed milk, and milk powder   | 19101001-19101008;<br>19102001; 19106001;<br>19106004; 19107001;<br>19108001-19108003;<br>19109001-19109003 |
|                                       | Dairy milk, reduced fat or skim | Reduced fat fluid milk, condensed milk, and milk powder  | 19103001-19105005;<br>19106002-19106003;<br>19106005; 19107012<br>19201001-19201005;<br>19204001-19206003;  |
|                                       | Yoghurt, full fat               | Full fat and high fat yoghurt, plain and sweetened   | 19211001-19211002;<br>19211011; 19211013;<br>19212001-19212012<br>19202001-19202003;<br>19203001; 19207001- |
|                                       | Yoghurt, reduced fat            | Reduced fat yoghurt, plain and sweetened   | 19209010; 19210001-<br>19210003; 19211003-<br>19211010; 19211012;<br>19211014-19211015                      |
|                                       | Cream                           | Cream, sour cream, and whipped cream   | 19301001-19306004   |
|                                       | Cheese                          | Blocks and grated, all varieties   | 19401001-19405003   |
|                                       | Ultra-processed cheese          | Cheese slices ('plastic' cheese)   | 19406001-19408003   |
|                                       | Flavoured milk                  | Iced coffee, milk with flavouring, milkshakes, thick shakes, and fruit smoothies with milk         | 19801001-19806007   |
|                                       | Dairy milk substitutes          | Soy beverages and rice beverages including smoothies and milkshakes, and soy based yogurts         | 20101001-20502003   |
|                                       | Meat substitutes and dishes     | Vegetarian sausages, tofu, tempeh, veggie burgers, stir-fry with tofu                              | 20601001-20701004   |
| Seed and nut products and dishes (22) | Seeds and nuts                  | Chia seeds, nuts (peanuts, almonds, pistachio, pine), peanut butter, satay sauce, and coconut milk | 22101001-22205019   |
| Savoury sauces and condiments (23)    | Dips                            | Dairy-based dips, hummus and guacamole   | 23501001-23501010;<br>23502001-23504003   |
| Vegetable products and dishes (24)    | Potatoes, unprocessed           | Baked, boiled, fried, grilled, or BBQed potatoes.  | 24101001-24101065   |
|                                       | Potatoes, processed             | Fries, hash browns, and wedges.  | 24102001-24102036   |
|                                       | Orange/yellow vegetables        | Carrots, orange sweet potato, pumpkin  | 24301001-24301013;<br>24302034-24302042;<br>24701001-24701028   |
|                                       | Green leafy vegetables          | Lettuce, rocket, spinach   | 24401001-24401025   |
|                                       | Other vegetables                | Broccoli, cabbage and cauliflower, leeks, onions, peas   | 24201001-24202017;<br>24302001-24302033;  |

|  |                           |  |   |
|--|---------------------------|--|---|
|  |                           | and beans, beetroot, root vegetables that are not orange or yellow, zucchini, tomato, mushrooms, onions and leeks  | 24302049-24302054;<br>24402001-24602009;<br>24702001-24802026                       |
|  | Vegetable dishes          | Vegetable casseroles, vegetable curries with (rice, noodles), vegetable stir-fry, vegetable salads with additions (cheese, fruit, nuts meat, eggs), coleslaw, and potato salad | 24901001-24905023   |
| Legume and pulse products and dishes (25)            | Legumes and legume dishes | Beans, lentils, baked beans plain and in (sauces, curry, salads and casseroles)  | 25101001-25202016   |
| Snack foods (26)                                     | Savoury snacks            | Potato crisps, potato straws, corn chips, popcorn with additions (salt, butter), extruded snacks, snack mixes, and pretzels  | 26101001-26401016   |
| Sugar products and dishes (27)                       | Sweet spreads and syrups  | Fruit jams, chocolate/hazelnut spread; Sugar, honey, and maple syrups  | 27101001-27102005;<br>27201001-27205003   |
| Confectionery and cereal, nut, fruit, seed bars (28) | Sweet snacks              | Muesli and cereal bars (fruit bars, fruit leathers, muesli bars with and without coatings or chocolate chips), chocolate, bars, licorice, honeycomb, lollies, marshmallows     | 28101001-28104001;<br>28201001-28202008;<br>28301001-28305004;<br>28401001-28405003 |

<sup>1</sup> Each food category can be matched to a major food group, at the 2-digit code level. The 2-digit codes pertaining to each major food group are given in brackets. Some of the food categories align with more than one major food group (2-digit code); details are provided where necessary. The aggregation of the sub-minor food groups into food categories was carried out based on the nutritional and processing properties of each sub-major food group (3-digit code), minor food group (5-digit code), and individual food (8-digit code). <sup>2</sup> Where specified, fortified foods were grouped together; non-fortified foods were thus also grouped together. <sup>3</sup> Where specified, wholegrain versions of a food were grouped together; thus, refined versions of a food were also grouped together. <sup>4</sup> Where applicable, the AUSNUT classifications based on nutritional properties were used: High or moderate fat foods were grouped together, and reduced or skimmed versions of a food were grouped together; Foods with a similar sugar content were grouped together; Foods high in sugar and classified as discretionary were grouped together. <sup>5</sup> Where possible, foods within each level of processing (NOVA classification) were grouped together. A selection of 2-digit codes were excluded. These were: mixed dishes and takeaway foods, due to them containing more than one food category and therefore creating added complexity that would be unfeasible to model; breads and rolls with flour not defined, as it was not possible to determine the status as wholegrain or refined; organ meats and offal, due to a low frequency of consumption; tea and coffee, due to contributing negligible calories to the diet; water, due to contributing negligible calories to the diet; alcohol, due to contributing negligible nutrients to the diet; supplements, due to contributing negligible calories to the diet; infant formula and baby foods, due to no household member being an infant or baby.

**Supplementary Methods S1.** The calculation of NRF9.3, adapted to the Australian Dietary Guidelines and Nutrient Reference Values.

The NRF9.3/100 kcal provides an algorithm to assess the proportion of nutrient requirements that are provided by a food, in relation to the energy provided by the food. There are nine positively weighted nutrients (protein, dietary fibre, calcium, iron, potassium, magnesium, and vitamins A, C and E), and three negatively weighted nutrients (saturated fat, added sugar, and sodium).

The NRF9.3/100 kcal was calculated for each of the three representative foods in each of the 57 food categories (171 foods in total), with daily values calculated as a percentage per 100 kcal and capped at 100%.

The complete calculation for the NRF9.3/100 kcal is:

1. NR9 subscore:

$$\text{NR9/serving} = \sum_{1-9} (\text{nutrient/daily value}) \times 100$$

$$\text{NR9/100 kcal} = \sum_{1-9} (\text{nutrient/daily value}) / (\text{kcal per serve}) \times 100$$

2. LIM subscore:

$$\text{LIM/serving} = \sum_{1-3} (\text{nutrient/maximum recommended value}) \times 100$$

$$\text{LIM/100 kcal} = \sum_{1-3} (\text{nutrient/maximum recommended value}) / (\text{kcal per serve}) \times 100$$

3. Composite NRF9.3/100 kcal

$$\text{NRF9.3/100 kcal} = \text{NR9}_{100 \text{ kcal}} - \text{LIM}_{100 \text{ kcal}}$$

Since the nutrients used in the NRF9.3 are mostly in line with the Nutrient Profiling Scoring Criterion (NPSC, Food Standards Australia and New Zealand), it was deemed unnecessary to change all the nutrients included in the Australian-modified NRF 9.3 [37]. However, the full set of reference values were determined based on the following additional criteria:

- a. The reference used was an adult aged 18–50 years.
- b. When men and women had a different RDI or AI, the higher value was chosen. For example, the recommended dietary intake (RDI) for iron for men was 8 mg/day, and for women was 18 mg/day; therefore, the higher value of 18 mg/day was chosen.
- c. When men and women had a different maximum recommended value (MRV), the lower value was chosen. For example, the saturated fat MRV is 9% of dietary energy. The total dietary energy was based on the lowest average daily energy requirement for a sedentary working female (physical activity level [PAL] of 1.6) [37].



- d. The upper limit for Added Sugar was based on the WHO recommendations that added sugar should not be more than 10% of dietary energy, assuming an energy intake of 8400 kJ/day for an adult female, as per the rationale above [37].
- e. The upper limit for Sodium was based on suggested dietary target to reduce chronic disease in the nutrient reference values (NRVs) (<2,000 mg/day sodium) [37].

**Table S2.** Reference Values from NRF 9.3 [36] and corresponding Australian Nutrient Reference Values [37] used in the current study.

|                   | RDV (US) | MRV (US) | RDI/AI (AUS) | MRV (AUS) |
|-------------------|----------|----------|--------------|-----------|
| Protein (g)       | 50       |          | 64           |           |
| Fibre (g)         | 25       |          | 30           |           |
| Vitamin A         | 5000 IU  |          | 900 µg/day   |           |
| Vitamin C (mg)    | 60       |          | 45           |           |
| Vitamin E (mg)    | 20       |          | 10           |           |
| Calcium (mg)      | 1000     |          | 1000         |           |
| Iron (mg)         | 18       |          | 18           |           |
| Potassium (mg)    | 3500     |          | 3800         |           |
| Magnesium (mg)    | 400      |          | 420          |           |
| Saturated fat (g) |          | 20       |              | 20        |
| Added Sugar (g)   |          | 50       |              | 50        |
| Sodium (mg)       |          | 2400     |              | 2000      |

RDV: Reference daily value. MRV: Maximum recommended value. US: United States. RDI: Recommended dietary intake. AI: Adequate intake. AUS: Australia.

#### **Supplementary Methods S2:** Rules used to develop the substitution modelling protocol.

The substitution modelling algorithm was developed and employed according to the following substitution rules:

1. All substituted healthier diets aim to meet Australian Dietary Guidelines for core food groups [39], with no allowance for discretionary foods. To reduce complexity in the modelling protocol and align with consumer perceptions, legumes were considered in the meat and alternatives core food group only.
2. Number of servings for each core food group was calculated by dividing the weight of each food category consumed by the weight per serve, as defined in the Australian Dietary Guidelines [39], followed by summing the serves of all food categories within a core food group. For example, for the vegetables core food group, the number of servings was totalled from the following food categories: potatoes, unprocessed; orange/yellow vegetables; green leafy vegetables; other vegetables; vegetable dishes. One discretionary serving was calculated as being equivalent to 150 kcal.
3. All substitutions replaced food categories in the current diet placed in the lowest three nutrient density to cost ratio quartiles with core food categories from the highest quartile of nutrient density to cost, as identified in Step 1 of the modelling protocol.
4. Where more than one replacement option in the highest quartile was possible, selection of the replacement food category was random. For example, ready to eat breakfast cereals, unfortified, sugars >20g/100g, could

be replaced with ready to eat breakfast cereals, fortified, sugars  $\leq 20\text{g}/100\text{g}$ ; ready to eat breakfast cereals, unfortified, sugars  $\leq 20\text{g}/100\text{g}$ ; or hot porridge.

5. If no food category was appropriate to be substituted using the highest quartile of nutrient density to cost, the highest ranking food category from the second quartile was used.
6. Each substitution was made according to the 'like for like' principle, whereby each food category in the current diet was substituted for a healthier (more nutrient-dense) version of that food, keeping as close to the original food as possible. For example, white bread was substituted with wholegrain bread or processed meat was substituted with lean fresh meat.
7. The substitution of discretionary food categories for core food categories was also made according to the 'like for like' principle. For example, sweetened beverages were replaced with fruit juices. Where a direct substitution was not possible due to there being no similar core food, the selection of the replacement food was based upon cost and the judgment of the investigators. For example, chocolate bars were replaced with a random selection from the top quartile of food categories from the grains and cereals core food group.
8. If a 'like for like' substitution was not possible due to the dietary guidelines for that food category already being met; or the food category being discretionary and needing to be replaced with a core food category, the substitution was made using a more nutrient-dense, lower cost food category from the next most lacking core food group, according to the following hierarchy, based on the highest to the lowest level of intake within the current Australian diet across both children and adults [1]: Vegetables > Meat and alternatives > Dairy and dairy alternatives > Cereals and grain foods > Fruit.
9. In cases when a healthier version of the food to be substituted was not available, the selection of the replacement food was based upon cost and the judgment of the investigators.

**Table S3.** Nutrient density (NRF9.3/100 kcal), cost (AUD/100 kcal) and the nutrient density to cost ratio <sup>1</sup> (with quartile rankings) for all 57 food categories. The classification according to the NOVA processing levels is also shown.

| Food categories             | NRF9.3/100 kcal (SD) | AUD/100 kcal (SD) | Nutrient density to cost ratio<br>Value (SD) | Quartile | NOVA processing classification |
|-----------------------------|----------------------|-------------------|--|----------|--------------------------------|
| <b>Core food categories</b> |                      |                   |  |          |                                |
| <b>Vegetables</b>           |                      |                   |  |          |                                |
| Potatoes, unprocessed       | 97.07 (4.6)          | 0.48 (0.1)        | 216.94 (73.2)                                | 1        | Unprocessed                    |
| Orange/yellow vegetables    | 302.23 (126.0)       | 0.69 (0.1)        | 492.29 (304.5)                               | 1        | Unprocessed                    |
| Other vegetables            | 443.02 (160.6)       | 2.16 (1.4)        | 293.39 (171.9)                               | 1        | Unprocessed                    |
| Green leafy vegetables      | 479.24 (123.0)       | 6.01 (3.6)        | 166.15 (191.0)                               | 2        | Unprocessed                    |
| Vegetable dishes            | 54.39 (39.8)         | 0.76 (0.2)        | 66.15 (36.6)                                 | 3        | Unprocessed                    |
| <b>Fruit</b>                |                      |                   |  |          |                                |
| Fruit juice                 | 273.65 (124.8)       | 0.46 (0.2)        | 650.08 (318.9)                               | 1        | Processed                      |
| Dried fruit                 | 28.56 (9.0)          | 0.19 (0.1)        | 170.99 (80.1)                                | 1        | Unprocessed                    |
| Whole fruit                 | 55.74 (21.3)         | 0.74 (0.3)        | 92.31 (60.9)                                 | 2        | Unprocessed                    |
| Commercial fruit, in syrup  | 50.94 (59.9)         | 0.61 (0.2)        | 87.38 (106.3)                                | 2        | Ultra-processed                |
| Commercial fruit, in juice  | 50.97 (22.5)         | 0.86 (0.2)        | 61.84 (24.3)                                 | 3        | Processed                      |
| <b>Cereals and grains</b>   |                      |                   |  |          |                                |

|  |              |            |                |   |                    |
|--|--------------|------------|----------------|---|--------------------|
| Rice, grains and flours                                | 12.87 (4.6)  | 0.04 (0.0) | 348.27 (196.5) | 1 | Unprocessed        |
| Pasta and noodles, plain                               | 20.71 (9.0)  | 0.07 (0.0) | 304.58 (43.6)  | 1 | Unprocessed        |
| Hot porridge   | 22.61 (7.6)  | 0.15 (0.1) | 290.93 (219.8) | 1 | Unprocessed        |
| Breads, wholegrain and fortified                       | 25.14 (3.1)  | 0.12 (0.0) | 212.96 (57.7)  | 1 | Ultra-processed    |
| RTE breakfast cereals, fortified, sugar ≤20g/100g      | 25.25 (26.4) | 0.12 (0.0) | 200.07 (178.4) | 1 | Ultra-processed    |
| RTE breakfast cereals, unfortified, sugar ≤20g/100g    | 24.90 (10.8) | 0.18 (0.1) | 176.09 (117.8) | 1 | Ultra-processed    |
| Breads and rolls, refined grain, fortified             | 12.11 (1.7)  | 0.11 (0.0) | 116.16 (15.9)  | 2 | Ultra-processed    |
| Breads and rolls, wholegrain (all grains), unfortified | 29.19 (2.8)  | 0.30 (0.2) | 130.19 (67.7)  | 2 | Ultra-processed    |
| RTE breakfast cereals, unfortified, sugar >20g/100g    | 14.19 (17.4) | 0.31 (0.0) | 52.37 (39.9)   | 3 | Ultra-processed    |
| Pasta and noodles, with additions                      | 26.28 (21.7) | 0.89 (0.3) | 29.38 (23.2)   | 3 | Ultra-processed    |
| Breads and rolls, refined grain (white), unfortified   | 17.11 (2.5)  | 0.69 (0.4) | 34.40 (19.0)   | 3 | Ultra-processed    |
| Batter-based products                                  | -0.64 (4.7)  | 0.52 (0.2) | 2.80 (2.3)     | 4 | Ultra-processed    |
| <b>Dairy and dairy alternatives</b>                    |              |            |                |   |                    |
| Dairy milk substitutes                                 | 50.07 (30.7) | 0.27 (0.1) | 214.06 (161.3) | 1 | Ultra-processed    |
| Dairy milk, reduced fat or skim                        | 58.00 (13.0) | 0.30 (0.1) | 209.92 (79.0)  | 1 | Unprocessed        |
| Dairy milk, full fat                                   | 24.29 (1.8)  | 0.17 (0.0) | 146.43 (45.7)  | 2 | Unprocessed        |
| Liquid breakfast, fortified beverages                  | 77.03 (4.6)  | 0.85 (0.1) | 91.46 (10.1)   | 2 | Ultra-processed    |
| Yoghurt, reduced fat                                   | 32.39 (19.9) | 0.48 (0.2) | 64.54 (21.0)   | 3 | Ultra-processed    |
| Flavoured milk   | 27.61 (20.4) | 0.48 (0.3) | 56.61 (13.6)   | 3 | Ultra-processed    |
| Cheese   | 6.25 (5.5)   | 0.23 (0.0) | 26.13 (20.1)   | 4 | Processed          |
| Ultra-processed cheese                                 | -1.99 (9.7)  | 0.31 (0.1) | 10.15 (23.7)   | 4 | Ultra-processed    |
| Yoghurt, full fat                                      | 12.14 (13.3) | 0.43 (0.1) | 23.58 (18.3)   | 4 | Unprocessed        |
| <b>Meat and alternatives</b>                           |              |            |                |   |                    |
| Legumes and legume dishes                              | 42.56 (5.6)  | 0.19 (0.0) | 231.38 (50.0)  | 1 | Processed          |
| Eggs, without additions                                | 42.41 (0.0)  | 0.48 (0.1) | 90.96 (16.0)   | 2 | Unprocessed        |
| Meat substitutes and dishes                            | 66.92 (16.5) | 0.80 (0.4) | 113.09 (63.4)  | 2 | Ultra-processed    |
| Seeds and nuts   | 4.73 (33.3)  | 0.20 (0.2) | 150.56 (135.5) | 2 | Unprocessed        |
| Fish, unprocessed, without additions                   | 60.47 (7.2)  | 1.29 (0.3) | 50.22 (18.0)   | 3 | Unprocessed        |
| Fish, processed, tinned                                | 32.13 (21.7) | 0.50 (0.3) | 84.88 (70.8)   | 3 | Processed          |
| Red meat, fat fully-trimmed                            | 35.93 (8.0)  | 1.36 (0.3) | 26.74 (4.4)    | 3 | Unprocessed        |
| Red meat, untrimmed or semi-trimmed                    | 20.09 (8.7)  | 0.68 (0.2) | 32.52 (19.2)   | 3 | Unprocessed        |
| Poultry  | 26.19 (14.9) | 0.32 (0.1) | 79.67 (38.5)   | 3 | Unprocessed        |
| <b>Other foods</b>                                     |              |            |                |   |                    |
| Margarines and margarine-like spreads                  | 10.19 (3.6)  | 0.08 (0.0) | 135.42 (47.8)  | 2 | Ultra-processed    |
| Oils   | 5.84 (1.0)   | 0.04 (0.0) | 154.91 (26.6)  | 2 | Culinary processed |
| <b>Discretionary food categories</b>                   |              |            |                |   |                    |
| Potatoes, processed                                    | 37.34 (4.9)  | 0.10 (0.0) | 403.54 (109.3) | 1 | Ultra-processed    |
| RTE breakfast cereals, fortified, sugar >20g/100g      | 23.62 (22.4) | 0.17 (0.0) | 136.83 (107.0) | 2 | Ultra-processed    |
| Dips   | 23.73 (22.9) | 0.38 (0.2) | 87.44 (71.6)   | 2 | Ultra-processed    |
| Savoury snacks   | 8.91 (15.0)  | 0.19 (0.0) | 59.77 (72.9)   | 3 | Ultra-processed    |

|                                      |               |             |              |   |                    |
|--------------------------------------|---------------|-------------|--------------|---|--------------------|
| Sweet snacks                         | 14.07 (20.0)  | 0.25 (0.1)  | 69.93 (65.0) | 3 | Ultra-processed    |
| Muffins and scones                   | -0.26 (5.1)   | 0.38 (0.2)  | 5.60 (5.9)   | 4 | Ultra-processed    |
| Ultra-processed meats                | -9.58 (0.6)   | 0.23 (0.0)  | 0.00 (0.0)   | 4 | Ultra-processed    |
| Processed meat                       | -22.29 (8.4)  | 0.74 (0.4)  | 0.00 (0.0)   | 4 | Processed          |
| Cream                                | -10.13 (4.6)  | 0.21 (0.1)  | 0.00 (0.0)   | 4 | Culinary processed |
| Sweet spreads and syrups             | -14.29 (15.1) | 0.19 (0.1)  | 1.19 (1.8)   | 4 | Ultra-processed    |
| Savoury biscuits                     | -0.19 (1.5)   | 0.12 (0.0)  | 4.30 (5.2)   | 4 | Ultra-processed    |
| Fish processed, battered and crumbed | 6.26 (3.0)    | 0.37 (0.1)  | 18.06 (11.0) | 4 | Ultra-processed    |
| Solid fats                           | -0.02 (2.8)   | 0.16 (0.0)  | 7.58 (8.2)   | 4 | Culinary processed |
| Sweetened beverages                  | -13.45 (43.5) | 5.88 (12.9) | 0.73 (0.8)   | 4 | Ultra-processed    |
| Desserts                             | -14.26 (17.7) | 0.44 (0.7)  | 0.00 (0.0)   | 4 | Ultra-processed    |

<sup>1</sup> The nutrient density to cost ratio was calculated according to the following formula: (mean NRF9.3/100 kcal) / (mean cost/100 kcal).

**Table S4.** Micronutrient analysis <sup>1</sup> of the (a) current and (b) healthier, low-cost diets for each member of both low and medium socioeconomic households.

(a)

| Current diet -<br>Micronutrients (per day) | Low socioeconomic household |                   |                |                 |                | Middle socioeconomic household |                   |                |                 |                |
|--|-----------------------------|-------------------|----------------|-----------------|----------------|--------------------------------|-------------------|----------------|-----------------|----------------|
|  | Male<br>31-50 y             | Female<br>31-50 y | Male<br>9-13 y | Female<br>4-8 y | Total          | Male<br>31-50 y                | Female<br>31-50 y | Male<br>9-13 y | Female<br>4-8 y | Total          |
| <i>n</i>                                   | 281                         | 301               | 73             | 74              |                | 324                            | 408               | 86             | 73              |                |
| Current Diet                               |                             |                   |                |                 |                |                                |                   |                |                 |                |
| Vitamin A (ug)                             | 571.3 (86.1)                | 526.4 (33.4)      | 461.8 (41.3)   | 493.1 (40.6)    | 2052.6 (109.0) | 504.2 (39.8)                   | 572.5 (35.5)      | 497.6 (51.6)   | 483.0 (27.1)    | 2057.4 (79.0)  |
| Thiamine (mg)                              | 1.4 (0.1)                   | 1.3 (0.1)         | 1.2 (0.1)      | 0.9 (0.0)       | 4.8 (0.2)      | 1.6 (0.1)                      | 1.4 (0.0)         | 1.1 (0.1)      | 1.1 (0.0)       | 5.0 (0.1)      |
| Riboflavin (mg)                            | 2.1 (0.2)                   | 1.8 (0.1)         | 1.9 (0.1)      | 1.4 (0.1)       | 7.2 (0.3)      | 2.3 (0.2)                      | 1.9 (0.1)         | 1.9 (0.1)      | 1.5 (0.1)       | 7.6 (0.3)      |
| Niacin equivalents (mg)                    | 25.4 (1.5)                  | 28.0 (1.1)        | 21.6 (1.2)     | 19.9 (0.7)      | 94.9 (2.3)     | 27.0 (1.3)                     | 28.6 (0.9)        | 19.3 (1.1)     | 22.9 (0.7)      | 97.8 (2.0)     |
| Vitamin B6 (ug)                            | 1.1 (0.1)                   | 1.1 (0.0)         | 0.9 (0.0)      | 0.8 (0.0)       | 3.8 (0.1)      | 1.1 (0.1)                      | 1.1 (0.0)         | 0.9 (0.1)      | 0.9 (0.0)       | 4.0 (0.1)      |
| Folate equivalents (ug)                    | 492.5 (28.8)                | 483.5 (19.8)      | 408.0 (22.0)   | 363.6 (13.7)    | 1746.4 (43.5)  | 584.2 (31.2)                   | 490.2 (15.8)      | 391.2 (23.5)   | 389.3 (11.8)    | 1854.9 (43.8)  |
| Vitamin B12 (ug)                           | 4.2 (0.5)                   | 4.1 (0.2)         | 3.7 (0.3)      | 3.0 (0.1)       | 15.0 (0.6)     | 4.3 (0.4)                      | 4.2 (0.2)         | 3.5 (0.3)      | 3.5 (0.2)       | 15.5 (0.6)     |
| Vitamin E (ug)                             | 6.1 (0.5)                   | 6.2 (0.3)         | 5.5 (0.3)      | 4.9 (0.2)       | 22.7 (0.7)     | 6.7 (0.4)                      | 6.2 (0.2)         | 5.2 (0.3)      | 5.8 (0.2)       | 23.9 (0.6)     |
| Calcium(mg)                                | 974.3 (102.4)               | 811.7 (38.7)      | 879.0 (69.2)   | 670.2 (29.6)    | 3335.3 (132.8) | 989.2 (87.4)                   | 814.4 (35.3)      | 898.5 (73.8)   | 708.9 (27.6)    | 3411.4 (122.9) |
| Iron (mg)                                  | 7.6 (0.4)                   | 7.9 (0.3)         | 6.4 (0.4)      | 5.4 (0.2)       | 27.4 (0.7)     | 9.1 (0.5)                      | 8.3 (0.3)         | 6.1 (0.3)      | 6.4 (0.2)       | 29.9 (0.7)     |
| Magnesium (mg)                             | 239.7 (15.8)                | 245.5 (9.4)       | 207.5 (10.2)   | 181.9 (6.1)     | 874.6 (21.9)   | 255.9 (12.9)                   | 247.3 (7.6)       | 205.2 (11.8)   | 205.0 (5.6)     | 913.4 (19.9)   |
| Potassium (mg)                             | 2521.3 (186.2)              | 2389.4 (85.2)     | 2081.1 (111.9) | 1855.8 (65.2)   | 8847.4 (242.3) | 2465.2 (143.7)                 | 2461.9 (77.6)     | 2167.6 (125.7) | 2064.2 (58.3)   | 9158.9 (214.2) |
| Sodium (mg)                                | 1737.4 (112.5)              | 1665.3 (66.9)     | 1439.6 (84.3)  | 1181.1 (46.5)   | 6023.4 (162.5) | 1795.0 (111.2)                 | 1722.5 (64.1)     | 1401.8 (72.1)  | 1328.2 (42.5)   | 6247.5 (153.2) |
| Zinc (mg)                                  | 7.3 (0.5)                   | 7.8 (0.3)         | 6.3 (0.3)      | 5.6 (0.2)       | 27.0 (0.7)     | 7.7 (0.4)                      | 8.1 (0.3)         | 5.8 (0.3)      | 6.3 (0.2)       | 27.9 (0.6)     |

(b)

| Modelled healthier diet - Micro-nutrients (per day) | Low socioeconomic household |                   |                |                 |                | Middle socioeconomic household |                   |                |                 |                | Statistical comparison (p-value) <sup>2</sup> |              |
|---|-----------------------------|-------------------|----------------|-----------------|----------------|--------------------------------|-------------------|----------------|-----------------|----------------|---|--------------|
|   | Male<br>31-50 y             | Female<br>31-50 y | Male<br>9-13 y | Female<br>4-8 y | Total          | Male<br>31-50 y                | Female<br>31-50 y | Male<br>9-13 y | Female<br>4-8 y | Total          | Diet low SES                                  | Diet med SES |
| <i>n</i>  | 281                         | 301               | 73             | 74              |                | 324                            | 408               | 86             | 73              |                |   |              |
| Vitamin A (ug)                                      | 1433.6 (170.6)              | 1355.7 (109.7)    | 981.3 (119.5)  | 1114.1 (79.4)   | 4884.7 (248.4) | 1444.0 (168.3)                 | 1421.7 (89.0)     | 1029.7 (134.5) | 1086.9 (57.4)   | 4982.3 (240.1) | <0.001  | <0.001       |
| Thiamine (mg)                                       | 1.4 (0.1)                   | 1.5 (0.1)         | 1.2 (0.1)      | 1.0 (0.0)       | 5.1 (0.2)      | 1.6 (0.1)                      | 1.5 (0.1)         | 1.1 (0.1)      | 1.1 (0.0)       | 5.3 (0.2)      | 0.001   | <0.001       |
| Riboflavin (mg)                                     | 2.4 (0.2)                   | 2.3 (0.1)         | 1.8 (0.1)      | 1.7 (0.1)       | 8.2 (0.3)      | 2.6 (0.2)                      | 2.2 (0.1)         | 1.9 (0.2)      | 1.8 (0.1)       | 8.5 (0.3)      | <0.001  | <0.001       |
| Niacin equivalents (mg)                             | 25.3 (1.5)                  | 27.6 (1.1)        | 20.0 (1.0)     | 19.2 (0.7)      | 92.2 (2.2)     | 27.6 (1.4)                     | 26.7 (0.8)        | 20.3 (1.4)     | 21.0 (0.6)      | 95.6 (2.2)     | 0.173   | 0.252        |

|                         |                |                |                |                |                 |                |                |                |                |                 |        |        |
|-------------------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|-----------------|--------|--------|
| Vitamin B6 (ug)         | 1.2 (0.1)      | 1.3 (0.0)      | 0.9 (0.0)      | 0.9 (0.0)      | 4.4 (0.1)       | 1.3 (0.1)      | 1.3 (0.0)      | 1.0 (0.1)      | 1.0 (0.0)      | 4.6 (0.1)       | <0.001 | <0.001 |
| Folate equivalents (ug) | 660.4 (36.5)   | 707.5 (27.3)   | 543.8 (29.7)   | 506.5 (19.0)   | 2418.2 (57.6)   | 735.1 (35.7)   | 725.6 (23.8)   | 538.2 (31.0)   | 534.7 (15.4)   | 2533.6 (55.1)   | <0.001 | <0.001 |
| Vitamin B12 (ug)        | 4.4 (0.5)      | 4.2 (0.3)      | 3.2 (0.3)      | 3.0 (0.2)      | 14.8 (0.7)      | 4.5 (0.6)      | 3.8 (0.2)      | 3.6 (0.4)      | 3.3 (0.2)      | 15.2 (0.8)      | 0.750  | 0.631  |
| Vitamin E (ug)          | 7.2 (0.6)      | 8.1 (0.4)      | 6.6 (0.5)      | 5.9 (0.3)      | 27.7 (0.9)      | 7.7 (0.5)      | 8.1 (0.3)      | 6.1 (0.4)      | 6.6 (0.2)      | 28.6 (0.7)      | <0.001 | <0.001 |
| Calcium(mg)             | 1326.1 (135.6) | 1315.9 (86.8)  | 938.4 (77.8)   | 928.1 (47.9)   | 4508.4 (185.1)  | 1370.5 (150.4) | 1208.1 (64.0)  | 1062.3 (109.2) | 1009.0 (53.2)  | 4649.8 (203.6)  | <0.001 | <0.001 |
| Iron (mg)               | 11.0 (0.7)     | 12.3 (0.5)     | 9.3 (0.6)      | 8.6 (0.3)      | 41.1 (1.1)      | 12.2 (0.6)     | 12.8 (0.5)     | 9.2 (0.5)      | 9.8 (0.3)      | 44.0 (1.0)      | <0.001 | <0.001 |
| Magnesium (mg)          | 358.9 (22.0)   | 390.8 (14.7)   | 291.4 (15.0)   | 278.4 (9.8)    | 1319.6 (32.0)   | 387.1 (19.0)   | 386.6 (12.4)   | 302.1 (18.1)   | 308.4 (9.2)    | 1384.2 (30.4)   | <0.001 | <0.001 |
| Potassium (mg)          | 3955.8 (245.6) | 4148.7 (157.4) | 2997.5 (146.0) | 3030.5 (102.6) | 14132.5 (342.0) | 4253.6 (240.8) | 4080.9 (130.4) | 3323.6 (195.2) | 3327.9 (101.1) | 14986.0 (342.1) | <0.001 | <0.001 |
| Sodium (mg)             | 1621.1 (118.9) | 1863.7 (87.9)  | 1256.8 (87.3)  | 1277.8 (56.2)  | 6019.4 (180.7)  | 1695.6 (97.1)  | 1894.5 (76.6)  | 1320.3 (101.0) | 1445.3 (49.4)  | 6355.7 (167.1)  | 0.983  | 0.541  |
| Zinc (mg)               | 8.2 (0.6)      | 9.0 (0.4)      | 6.2 (0.4)      | 6.3 (0.2)      | 29.8 (0.8)      | 8.8 (0.5)      | 8.8 (0.3)      | 6.6 (0.5)      | 6.9 (0.2)      | 31.2 (0.8)      | <0.001 | <0.001 |

<sup>1</sup> All data is mean (SEM). <sup>2</sup> Statistical comparison is between low and medium socioeconomic total households. Statistical comparison is between current vs healthier diet for low socioeconomic household (diet low SES); or current vs healthier diet for medium socioeconomic household (diet med SES). *p*-values comparing diets are obtained from a general linear model for change in values with SES, age-sex group and their interaction as fixed factors. For statistical significance, *p* < 0.005. SES, socioeconomic status.

**Table S5.** Individual component scores for the HEIFA-2013 and DGI-CA for each member of both low and medium SES households.

|                                       | Low SES household |                |                              | Medium SES household |                |                              |
|---------------------------------------|-------------------|----------------|------------------------------|----------------------|----------------|------------------------------|
|                                       | Current diet      | Healthier diet | <i>p</i> -value <sup>2</sup> | Current diet         | Healthier diet | <i>p</i> -value <sup>2</sup> |
| <b>HEIFA-2013 Scores <sup>1</sup></b> |                   |                |                              |                      |                |                              |
| <b>Male (31–50 years)</b>             |                   |                |                              |                      |                |                              |
| <i>n</i>                              | 281               | 281            |                              | 324                  | 324            |                              |
| Component 1: Discretionary            | 5.0 (0.3)         | 10.0 (0.0)     | <0.001                       | 4.8 (0.2)            | 10.0 (0.0)     | <0.001                       |
| Component 2: Vegetables               | 1.7 (0.1)         | 6.0 (0.1)      | <0.001                       | 1.7 (0.1)            | 6.5 (0.1)      | <0.001                       |
| Component 3: Fruits                   | 2.0 (0.2)         | 2.2 (0.2)      | 0.500                        | 2.3 (0.2)            | 2.8 (0.2)      | 0.076                        |
| Component 4: Grains                   | 2.8 (0.2)         | 4.5 (0.2)      | <0.001                       | 3.1 (0.2)            | 4.7 (0.2)      | <0.001                       |
| Component 5: Meat                     | 2.7 (0.2)         | 4.4 (0.3)      | <0.001                       | 2.9 (0.2)            | 4.7 (0.2)      | <0.001                       |
| Component 6: Dairy                    | 3.8 (0.2)         | 4.7 (0.3)      | 0.008                        | 3.7 (0.2)            | 4.7 (0.2)      | 0.001                        |
| Component 7: Water                    | 5.0 (0.0)         | 5.0 (0.0)      | -                            | 5.0 (0.0)            | 5.0 (0.0)      | -                            |
| Component 8: Fat                      | 2.0 (0.1)         | 5.3 (0.1)      | <0.001                       | 1.8 (0.1)            | 5.2 (0.1)      | <0.001                       |
| Component 9: Sodium                   | 5.1 (0.3)         | 10.0 (0.0)     | <0.001                       | 4.7 (0.3)            | 9.8 (0.1)      | <0.001                       |
| Component 10: Added sugars            | 8.7 (0.2)         | 10.0 (0.0)     | <0.001                       | 8.7 (0.2)            | 10.0 (0.0)     | <0.001                       |
| Component 11: Alcohol                 | 5.0 (0.0)         | 5.0 (0.0)      | -                            | 5.0 (0.0)            | 5.0 (0.0)      | -                            |
| HEIFA-2013 TOTAL SCORE                | 43.8 (0.7)        | 67.1 (0.6)     | <0.001                       | 43.7 (0.6)           | 68.5 (0.6)     | <0.001                       |

|                             |            |            |        |            |            |        |
|-----------------------------|------------|------------|--------|------------|------------|--------|
| <b>Female (31–50 years)</b> |            |            |        |            |            |        |
| <i>n</i>                    | 301        | 301        |        | 408        | 408        |        |
| Component 1: Discretionary  | 6.0 (0.2)  | 10.0 (0.0) | <0.001 | 5.6 (0.2)  | 10.0 (0.0) | <0.001 |
| Component 2: Vegetables     | 1.5 (0.1)  | 5.6 (0.1)  | <0.001 | 1.7 (0.1)  | 6.2 (0.1)  | <0.001 |
| Component 3: Fruits         | 2.1 (0.2)  | 2.6 (0.2)  | 0.076  | 2.5 (0.1)  | 2.7 (0.2)  | 0.259  |
| Component 4: Grains         | 2.2 (0.1)  | 3.4 (0.2)  | <0.001 | 2.2 (0.1)  | 3.3 (0.1)  | <0.001 |
| Component 5: Meat           | 2.6 (0.2)  | 3.9 (0.2)  | <0.001 | 3.2 (0.2)  | 4.9 (0.2)  | <0.001 |
| Component 6: Dairy          | 3.3 (0.2)  | 3.8 (0.2)  | 0.080  | 3.3 (0.2)  | 4.2 (0.2)  | <0.001 |
| Component 7: Water          | 5.0 (0.0)  | 5.0 (0.0)  | -      | 5.0 (0.0)  | 5.0 (0.0)  | -      |
| Component 8: Fat            | 1.9 (0.1)  | 5.5 (0.1)  | <0.001 | 1.8 (0.1)  | 5.6 (0.1)  | <0.001 |
| Component 9: Sodium         | 5.7 (0.3)  | 10.0 (0.0) | <0.001 | 5.2 (0.2)  | 10.0 (0.0) | <0.001 |
| Component 10: Added sugars  | 8.6 (0.2)  | 10.0 (0.0) | <0.001 | 9.2 (0.1)  | 10.0 (0.0) | <0.001 |
| Component 11: Alcohol       | 5.0 (0.0)  | 5.0 (0.0)  | -      | 5.0 (0.0)  | 5.0 (0.0)  | -      |
| HEIFA-2013 TOTAL SCORE      | 44.0 (0.6) | 64.9 (0.6) | <0.001 | 44.6 (0.5) | 66.8 (0.5) | <0.001 |

**DGI-CA Scores <sup>1</sup>**

|  |            |            |        |            |            |        |
|--|------------|------------|--------|------------|------------|--------|
| <b>Male (9-13 years)</b>               |            |            |        |            |            |        |
| <i>n</i>                               | 73         | 73         |        | 86         | 86         |        |
| Component 1: Variety                   | 6.1 (0.2)  | 7.8 (0.2)  | <0.001 | 6.1 (0.2)  | 8.1 (0.2)  | <0.001 |
| Component 2: Vegetables                | 2.2 (0.4)  | 8.7 (0.3)  | <0.001 | 1.6 (0.3)  | 9.2 (0.2)  | <0.001 |
| Component 3: Fruits                    | 5.9 (0.5)  | 6.2 (0.5)  | 0.667  | 5.9 (0.5)  | 6.2 (0.5)  | 0.677  |
| Component 4: Grains                    | 2.8 (0.3)  | 6.3 (0.4)  | <0.001 | 3.6 (0.3)  | 6.7 (0.3)  | <0.001 |
| Component 5: Meat                      | 3.3 (0.5)  | 5.7 (0.6)  | 0.003  | 4.0 (0.5)  | 6.4 (0.5)  | <0.001 |
| Component 6: Dairy                     | 3.3 (0.3)  | 5.4 (0.4)  | <0.001 | 3.0 (0.3)  | 5.2 (0.4)  | <0.001 |
| Component 7: Water                     | 10.0 (0.0) | 10.0 (0.0) | -      | 10.0 (0.0) | 10.0 (0.0) | -      |
| Component 8: Discretionary/extra foods | 5.1 (0.9)  | 20.0 (0.0) | <0.001 | 3.7 (0.7)  | 20.0 (0.0) | <0.001 |
| Component 9: Saturated fat             | 5.4 (0.1)  | 6.7 (0.2)  | <0.001 | 5.4 (0.1)  | 7.2 (0.1)  | <0.001 |
| DGI-CA TOTAL SCORE                     | 44.0 (1.8) | 76.8 (1.4) | <0.001 | 43.2 (1.5) | 79.1 (1.3) | <0.001 |

| <b>Female (4-8 years)</b>              |            |            |        |            |            |        |
|--|------------|------------|--------|------------|------------|--------|
| <i>n</i>                               | 74         | 74         |        | 73         | 73         |        |
| Component 1: Variety                   | 6.2 (0.2)  | 7.9 (0.2)  | <0.001 | 6.4 (0.2)  | 8.1 (0.2)  | <0.001 |
| Component 2: Vegetables                | 1.8 (0.3)  | 8.9 (0.3)  | <0.001 | 2.5 (0.4)  | 9.4 (0.2)  | <0.001 |
| Component 3: Fruits                    | 6.9 (0.5)  | 7.2 (0.5)  | 0.691  | 7.9 (0.4)  | 7.9 (0.4)  | 1      |
| Component 4: Grains                    | 3.7 (0.3)  | 6.9 (0.3)  | <0.001 | 3.7 (0.3)  | 6.7 (0.3)  | <0.001 |
| Component 5: Meat                      | 3.8 (0.5)  | 6.0 (0.5)  | 0.004  | 3.1 (0.5)  | 5.8 (0.6)  | <0.001 |
| Component 6: Dairy                     | 3.9 (0.3)  | 5.4 (0.3)  | <0.001 | 3.8 (0.3)  | 5.3 (0.4)  | 0.002  |
| Component 7: Water                     | 10.0 (0.0) | 10.0 (0.0) | -      | 10.0 (0.0) | 10.0 (0.0) | -      |
| Component 8: Discretionary/extra foods | 7.4 (1.0)  | 20.0 (0.0) | <0.001 | 6.9 (1.0)  | 20.0 (0.0) | <0.001 |
| Component 9: Saturated fat             | 5.4 (0.1)  | 7.3 (0.1)  | <0.001 | 5.2 (0.1)  | 7.5 (0.1)  | <0.001 |
| DGI-CA TOTAL SCORE                     | 49.0 (1.6) | 79.5 (1.2) | <0.001 | 49.5 (1.7) | 80.6 (1.1) | <0.001 |

---

<sup>1</sup> All scores are mean (SEM). <sup>2</sup> Statistical significance is set at  $p < 0.005$ . A hyphen indicates that the values for comparison were exactly the same among all samples from within a group, and thus between both current vs healthier diets, and low vs middle socioeconomic households.