**Supplemental Table 1.** Food groups of the study population used for reduced rank regression in the HELIUS study

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| 1 | Red meat | All types of beef, veal, pork, other meat |
| 2 | Organ meat | Kidney$, liver & liver products |
| 3 | Processed meat | Smoked sausage, hotdog sausage, salami, ham, bacon, other cold cuts, liver sausage, chatar#, susuk# |
| 4 | Chicken | Chicken |
| 5 | Vegetarian products | Tofu, tempeh, soy and other meat substitutes  |
| 6 | Fatty fish | Herring, mackerel, salmon, eel, sardines, anjovis etc.  |
| 7 | Lean fish, crustaceans & molluscs | Tuna, cod, pangasius, trout, tilapia, fish finger, shellfish etc., crustaceans, molluscs |
| 8 | Eggs | Eggs (boiled egg, omelette) |
| 9 | Butter  | Butter (spread and cooking), herb & garlic butter, coconut fat  |
| 10 | Other fat | Frying fats & oils, vegetable oils, high fat margarine spread, margarine for cooking and baking, low fat margarine spread |
| 11 | Olive oil | Olive oil |
| 12 | High-fat dairy products | All types of high-fat milk & milk products (including yoghurt, pudding, mousse, whipped cream, custard, quark, milk-based ice cream, cream for hot dishes, coffee creamer, coconut milk$, Turkish yoghurt 10% fat#)and high-fat cheese |
| 13 | Low-fat dairy products | All types of low-fat milk & milk products, ayran# and low-fat cheese  |
| 14 | Soy dairy products | Soy milk, soy yoghurt products, soy coffee milk, soy ice cream |
| 15 | Fruit | Apple, banana, orange, mandarin, grapefruit, kiwi, strawberries, grapes, melon, other fruit |
| 16 | Nuts & seeds | Nuts & seeds in hot dishes or as snack |
| 17 | Vegetables | Tomatoes, bell pepper, cooked eggplant, antroewa$, spinach, raw salad, bitawiri$, amsoi$, cucumber, onion, carrots, green beans, courgette, other raw vegetables, other cooked vegetables, peas, sopropo$, root vegetables$, cauliflower, broccoli, Brussels sprouts, white cabbage, green cabbage |
| 18 | Legumes | Legumes, leblebi (Turkish roasted peas)# |
| 19 | Potatoes | Potatoes (boiled, baked, mashed), oven prepared French fries  |
| 20 | Fried potatoes | All types of fried French fries and fried potatoes |
| 21 | High-fibre bread products | Whole grain & dark bread, whole grain crackers & rusks, high fibre breakfast cereals, rye bread, whole grain breakfast cereals,  |
| 22 | Low-fibre bread products  | White bread, bread rolls, croissants, raisin bread, low fibre crackers & rusks, cornflakes, gingerbread, Turkish white bread#\*, corn bread, pancakes,  |
| 23 | Rice and noodles | whole grain rice, bulgur#, noodle dishes, white rice & fried rice$, |
| 24 | Pasta | White pasta, whole grain pasta, manti#, |
| 25 | Alcoholic beverages | Wine, port, sherry, vermouth, beer, spirits, liquor, distilled drinks, mixed drinks (including breezer) |
| 26 | Coffee & tea | Coffee, tea |
| 27 | Water | Water |
| 28 | Natural fruit juices | Fruit juices (100% natural)  |
| 29 | Sugar-sweetened beverages | Carbonate drinks, soft drinks, sport & energy drinks, fruit & vegetable juices with added sugar, ice lollypop  |
| 30 | Light beverages, sweeteners | All types of light & diet soft drinks and fruit juices, added sweeteners to breakfast cereals or desserts |
| 31 | Chocolate, sweets, cakes & cookies | Candy, candy bars, all types of chocolate, cake, pie, pastries, nutritional cookies, baklava#, South Asian sweets$ |
| 32 | Sugar, honey, jam | Sugar, honey, sweet bread fillings |
| 33 | Savoury bread fillings | Sandwich spread, peanut butter  |
| 34 | Savoury snacks | All types of fried fish, crackers with fish, fish salad, Chips, other salty snacks (including cheese biscuits and salty crackers), pate, other toppings, fried snacks, other hot snacks, bara$, içli köfte#, brioaut\*, deep fried plantain$ |
| 35 | Fried foods  | Shoarma, hamburger, croquette, sate, spring rolls, sausage rolls, fish sticks, Turkish, Italian or American pizza  |
| 36 | Creamy sauces | All types of mayonnaise, garlic sauce, sate sauce |
| 37 | Other sauces | Unclassified other sauces, ketchup or red sauce used with snacks and hot dishes, apple sauce, oils for salad, fresh and prepared tomato sauce |
| 38 | Soups | Soups with legumes, other soups |
|  | **Ethnic-specific food groups** |  |
| 39 | Börek/pogaca# | Börek/pogaca (savoury breakfast pastry) |
| 40 | Moroccan pancakes\* | Rghaif, beghrir  |
| 41 | Filled wine leaves# | Filled wine leaves with rice and/or meat |
| 42 | Roti$ | Indian flat bread with potatoes, yellow peas or sada roti |
| 43 | Pom$ | Pom (Surinamese festive dish) |
| 44 | Couscous\* | Couscous |
| 45 | Olives\* | Olives |
| 46 | Avocado$ | Avocado |

$ Food items only assessed in the Surinamese FFQ

# Food items only assessed in the Turkish FFQ

\* Food items only assessed in the Moroccan FFQ