

Supplementary Material

Table S1. Food groups and food items included in the cluster analysis.

| Food group | Food items included | Portion size used |
|---|---|---------------------------------------|
| Refined flour products | All types of bread including Lebanese bread, crisp bread, croissant, "Mankouche" (Lebanese dough-based product) | 1 oz of bread or ½ cup cooked cereals |
| Whole cereals and products | Whole wheat, whole wheat bread, oat breads and bulgur | |
| Rice | White rice | |
| Pizza and pasta | Bread equivalent of pizza, pasta | |
| Corn and breakfast cereals | Breakfast cereals and corn | |
| Potato | Potatoes and potato products | ½ cup vegetable |
| Raw vegetables | Raw green leafy vegetables, tomatoes, cucumbers, mushrooms, sprouts and mixed salad/vegetables | |
| Cooked vegetables | Green beans, cooked cruciferous, zucchini, eggplants, carrots, pumpkins, bell peppers, sweet potatoes, green peas, onions, garlic | |
| Fruits | Fresh and dried fruits, fresh and bottled fruit juice | Usual portion size |
| Legumes | Lentils, chickpeas and beans, except soya | 1 oz of meat or equivalent |
| Meat & poultry | Beef, veal, lamb/mutton, goat, poultry, organ meat, processed meat from red meat or poultry (e.g. Ham, sausages) | |
| Eggs | Eggs boiled or fried | |
| Fish and shellfish | Fresh and canned fish, fish products and seafood. | |
| Vegetable oils | Vegetable oils including corn, peanut, sunflower, and canola oils, and mayonnaise | 1 teaspoon equivalent of fat |
| Olive, seeds and oleaginous fruits | Olives, olive oil, sesame paste ("Tahini") avocado, nuts | |
| Processed and saturated fats | Margarine, ghee and butter | 1 cup of milk equivalent |
| Milk & dairy products | Whole, light, or skimmed liquid milk, processed milk (condensed, dried), dairy dishes, cheeses | |
| Low fat sweets | Wafers, "Meghle", gelatin-based dessert, milk-based puddings | Usual serving size |
| High fat sweets | Oriental sweets and baklava, cakes and desserts, chocolate | |
| Sugars and jams | Sugar and confectionery sugar, jam, marmalade, honey, "Halawa", soft drinks. | Teaspoon of sugar |

Table S2. Consumption of predefined food categories according to dietary patterns for men and women separately.

N=352.

| | Men(N=176) | | | | Women (N=176) | | | |
|---|----------------|------------------|----------------|--------|----------------|-----------------|-----------------|--------|
| | WDP | HI-MED DP | MOD-MED DP | P | WDP | HI-MED DP | MOD-MED DP | P |
| Sample | (N=29) | (N=21) | (N=126) | | (N=13) | (N=60) | (N=103) | |
| Age(years) | 70 (66-81) | 79 (71-84) | 73 (68-79) | 0.183 | 75 (72-82) | 71 (67-77) | 73 (66-78) | 0.238 |
| Refined cereals products | 6.6 (4.3-8.6) | 5.9 (3-7.7) | 3.5 (0.9-5.7) | 0.01 | 4 (2.7-4.8) | 1.5 (0.6-4.2) | 3.01 (1.3-4.5) | 0.002 |
| Whole breads & cereals (including burghul) | 0.4 (0.1-1.1) | 0.7 (0.3-2.3) | 1.06 (0.3-2.7) | 0.07 | 1 (0.1-2.3) | 2.05 (0.4-3.02) | 0.5 (0.2-2.03) | 0.004 |
| Potato | 0.6 (0.3-0.9) | 0.4 (0.14-0.6) | 0.3 (0.1-0.6) | 0.16 | 0.3 (0.07-0.4) | 0.2 (0.09-0.4) | 0.2 (0.07-0.3) | 0.305 |
| Vegetables | 2.8 (2.1-3.5) | 4.3 (3-5.4) | 3 (2.2-4.4) | 0.13 | 3.3 (1.3-4.7) | 3.6 (2.5-5.2) | 2.8 (2-4.9) | 0.071 |
| Fruits | 1.9(1.1-2.9) | 3.01 (2.5-3.9) | 2.1 (1.2-3.01) | 0.01 | 2.4 (1.5-2.7) | 2 (1.4-3.3) | 1.8 (1.4-2.6) | 0.099 |
| Legumes | 0.4 (0.2-0.9) | 0.9 (0.6-1.15) | 0.3 (0.13-0.6) | 0.03 | 0.3 (0.2-0.6) | 0.6 (0.2-0.9) | 0.3 (0.07-0.6) | 0.129 |
| Meat & Poultry | 2.6 (1.7-4.1) | 3 (2.5-3.7) | 2.1 (1.03-3.1) | 0.01 | 1.6 (1.4-2.3) | 1.9 (1.4-2.5) | 1.8 (1.3-2.7) | 0.445 |
| Eggs | 0.6 (0.3-0.9) | 0.4 (0.3-0.7) | 0.3 (0.1-0.6) | 0.06 | 0.3 (0.1-0.9) | 0.3 (0.1-0.5) | 0.3 (0.07-0.5) | 0.502 |
| Fish & shellfish | 0.4 (0.1-0.8) | 0.5 (0.2-1.2) | 0.4 (0.2-0.9) | 0.95 | 0.4 (0.3-0.5) | 0.4 (0.2-0.8) | 0.2 (0.1-0.6) | 0.071 |
| Milk and Dairy products | 1.8 (1.2-2.2) | 2.4 (1.1-3.06) | 1.3 (0.8-1.9) | 0.03 | 2.3 (1-3.3) | 1.6 (0.99-2.07) | 1.45 (0.9-2.2) | 0.061 |
| Vegetable oils | 2 (0.7-4) | 3 (1-6) | 3 (1.8-3) | 0.17 | 3 (2-3) | 3 (1.5-3.2) | 3 (2-3.4) | 0.829 |
| Olive, seeds and oleaginous fruits | 3.4 (3-5.03) | 12.4 (10.7-15.4) | 5 (3.4-6.8) | <0.001 | 4.4 (3.4-6.4) | 9 (7.3-11.7) | 3.8 (3-4.8) | <0.001 |
| Processed and saturated fats | 0.14 (0-1.2) | 0 (0-0.4) | 0 (0-0.2) | 0.05 | 0 (0-0.6) | 0 (0-0.14) | 0 (0-0.14) | 0.722 |
| Low Fat Sweets | 0.3 (0.04-1.4) | 0.6 (0.13-1.1) | 0.08 (0-0.3) | 0.02 | 1.1 (0.5-2.3) | 0.37 (0.08-1.9) | 0.18 (0.02-0.5) | 0.002 |
| High Fat Sweets | 0.2 (0.07-0.6) | 0.3 (0.01-0.7) | 0.06 (0-0.2) | 0.01 | 0.2 (0.1-0.3) | 0.12 (0-0.3) | 0.07 (0-0.3) | 0.074 |
| Sugars and jams | 7.1 (5.4-9.4) | 4 (2.4-6.7) | 1 (0.2-2.1) | <0.001 | 13 (9.7-18) | 2.6 (0.8-4.05) | 1.07 (0.14-2.1) | <0.001 |

Numeric variables are represented as median (interquartile range).

Abbreviations: WDP: Westernized dietary pattern; Hi-Med DP: high-intake Mediterranean dietary pattern; MOD-Med: moderate-intake Mediterranean dietary pattern.

Table S3. Nutritional characteristics of the dietary patterns.

| | Total sample (N=352) | | | | Men (N=176) | | | | Women (N=176) | | | |
|----------------------------|-----------------------|------------------------|-----------------------|------------------|------------------------|----------------------|-------------------------|------------------|------------------------|------------------------|----------------------|------------------|
| | WDP | HI-MED DP | MOD-MED DP | P-value | WDP | HI-MED DP | MOD-MED DP | P-value | WDP | HI-MED DP | MOD-MED DP | P-value |
| Calories/d | 2261 (1968-2838) | 2028 (1652-2451) | 1743 (1457-2122) | <0.001 | 2264 (2151-2864) | 3017 (2033-3317) | 1832 (1543-2277) | <0.001 | 1968 (1423-2625) | 1886 (1582.5-2298) | 1627 (1350-1853) | 0.001 |
| KCal/kg BW | 31.2 (27.2-36.5) | 28.2 (22.6-36.2) | 24 (18.6-29) | <0.001 | 30.5 (27.2-34.9) | 34.3 (28.2-42.8) | 24.49 (18.95-28.55) | <0.001 | 32.64 (21.49-36.46) | 26.49 (22.15-35.28) | 23.7 (17.7-29.6) | 0.003 |
| Protein (g)/d | 78.65 (70.4-98.7) | 67.9 (53.7-89.6) | 63.6 (47.8-78.2) | <0.001 | 80.2 (73.4-99.1) | 94.1 (66.8-116) | 68.3 (53.2-86.4) | <0.001 | 70.4 (46-83.2) | 65.45 (51.3-82.55) | 56.4 (44.9-68.7) | 0.08 |
| Protein (g)/kg BW | 1.1 (0.9-1.3) | 0.95 (0.7-1.3) | 0.87 (0.6-1.08) | <0.001 | 1.1 (0.9-1.3) | 1.2 (0.9-1.5) | 0.91 (0.7-1.07) | 0.001 | 1 (0.67-1.27) | 0.9 (0.71-1.23) | 0.8 (0.6-1.1) | 0.08 |
| Carbohydrates (g)/d | 285 (229-331) | 206 (166-261) | 188 (155-241) | <0.001 | 294 (247-318) | 344 (224-359) | 203.5 (169-255) | <0.001 | 229 (163-335) | 198 (157.5-213.5) | 175 (139-215) | 0.022 |
| Fat (g) /d | 102 (83.5-121) | 106 (86.8-138) | 81.1 (69.4-102) | <0.001 | 104 (87.8-119) | 136 (90.2-162) | 82.75 (71-108) | <0.001 | 90.7 (66.2-121) | 101.5 (83.8-126) | 79.3 (64.4-93.5) | <0.001 |
| MUFA (%TEI) | 16.81 (14.7-18.6) | 21.8 (19.1-25.1) | 18.5 (16.1-21.3) | <0.001 | 15.4 (14.5-18.1) | 19 (16.8-22.6) | 18.35 (16.1-20.8) | 0.005 | 17.9 (16-18.6) | 22.8 (19.9-25.4) | 18.9 (16.2-21.6) | <0.001 |
| PUFA (%TEI) | 7.65 (6-9) | 9 (7.3-10.6) | 8.6 (7.5-10.4) | <0.001 | 6.8 (5.7-8.7) | 9.3 (7.7-9.9) | 8.5 (7.5-10.1) | 0.003 | 8.1 (6.2-9.2) | 8.95 (7.3-11.1) | 8.7 (7.43-10.7) | 0.204 |
| SAFA (%TEI) | 12 (10.5-13.6) | 12.2 (11-13.9) | 12.2 (10.3-14.1) | 0.66 | 12.2 (9.9-14.1) | 11.6 (10.6-12.7) | 11.75 (9.9-13.6) | 0.838 | 11.7 (11.1-12.9) | 12.4 (11.15-14.5) | 12.97 (11.1-14.6) | 0.438 |
| ω3 FA (g/d) | 0.6455 (0.52-0.81) | 0.96 (0.61-1.35) | 0.62 (0.477-0.88) | <0.001 | 0.68 (0.57-0.96) | 1 (0.7-1.68) | 0.7105 (0.51-0.93) | 0.03 | 0.63 (0.41-0.69) | 0.95 (0.585-1.245) | 0.54 (0.44-0.733) | <0.001 |
| ω6/ω3 ratio | 19.27 (12.5-24.34) | 15.27 (11.11-20.87) | 20.7 (13.26-24.57) | 0.002 | 16.89 (11.05-24.34) | 16.44 (12.5-19.2) | 18.645 (12.34-23.94) | 0.408 | 20.8 (13.3-24.34) | 14.75 (10.86-22.19) | 22.4 (15.5-25.2) | 0.001 |
| Fibers (g/d) | 19.95 (16-23.6) | 21.2 (17.3-28.2) | 17.8 (13.7-23.9) | <0.001 | 20.5 (18.7-23.8) | 30.3 (19.3-35.2) | 19.2 (14.7-25.8) | 0.001 | 18.2 (13.4-21.8) | 20.35 (16.95-25.8) | 16.4 (12.7-19.8) | 0.001 |

Numeric variables are reported as median (interquartile range).

Abbreviations: WDP: Westernized dietary pattern; Hi-Med DP: high-intake Mediterranean dietary pattern; MOD-Med: moderate-intake Mediterranean dietary pattern; Kcal/d: Calories per day; Calories/kg BW: Calories per kg body weight; Protein/kg BW: Proteins per kg body weight; MUFA: mono-unsaturated fat acids; %TEI: percentage total energy intake; PUFA: poly-unsaturated fatty acids; SAFA: saturated fatty acids; FA: fatty acids; ω6/ω3 ratio: omega-6 polyunsaturated fatty acids/omega-3 polyunsaturated fatty acids ratio.