**Appendix 1**. Energy levels used for assignment of individuals to USDA Food Patterns in the 2015-2020 Dietary Guidelines for Americans. Modified from Table E3.1.A3 from the 2015-2020 Dietary Guidelines for Americans1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Males** |  |  | **Females** |
| **Age** | **Sedentary1** | **Moderately Active2** | **Active3** | **Age** | **Sedentary1** | **Moderately Active2** | **Active3** |
| 2 | 1000 | 1000 | 1000 | 2 | 1000 | 1000 | 1000 |
| 3 | 1000 | 1400 | 1400 | 3 | 1000 | 1200 | 1400 |
| 4 | 1200 | 1400 | 1600 | 4 | 1200 | 1400 | 1400 |
| 5 | 1200 | 1400 | 1600 | 5 | 1200 | 1400 | 1600 |
| 6 | 1400 | 1600 | 1800 | 6 | 1200 | 1400 | 1600 |
| 7 | 1400 | 1600 | 1800 | 7 | 1200 | 1600 | 1800 |
| 8 | 1400 | 1600 | 2000 | 8 | 1400 | 1600 | 1800 |
| 9 | 1600 | 1800 | 2000 | 9 | 1400 | 1600 | 1800 |
| 10 | 1600 | 1800 | 2200 | 10 | 1400 | 1800 | 2000 |
| 11 | 1800 | 2000 | 2200 | 11 | 1600 | 1800 | 2000 |
| 12 | 1800 | 2200 | 2400 | 12 | 1600 | 2000 | 2200 |
| 13 | 2000 | 2200 | 2600 | 13 | 1600 | 2000 | 2200 |
| 14 | 2000 | 2400 | 2800 | 14 | 1800 | 2000 | 2400 |
| 15 | 2200 | 2600 | 3000 | 15 | 1800 | 2000 | 2400 |
| 16 | 2400 | 2800 | 3200 | 16 | 1800 | 2000 | 2400 |
| 17 | 2400 | 2800 | 3200 | 17 | 1800 | 2000 | 2400 |
| 18 | 2400 | 2800 | 3200 | 18 | 1800 | 2000 | 2400 |
| 19-20 | 2600 | 2800 | 3000 | 19-20 | 2000 | 2200 | 2400 |
| 21-25 | 2400 | 2800 | 3000 | 21-25 | 2000 | 2200 | 2400 |
| 26-30 | 2400 | 2600 | 3000 | 26-30 | 1800 | 2000 | 2400 |
| 31-35 | 2400 | 2600 | 3000 | 31-35 | 1800 | 2000 | 2200 |
| 36-40 | 2400 | 2600 | 2800 | 36-40 | 1800 | 2000 | 2200 |
| 41-45 | 2200 | 2600 | 2800 | 41-45 | 1800 | 2000 | 2200 |
| 46-50 | 2200 | 2400 | 2800 | 46-50 | 1800 | 2000 | 2200 |
| 51-55 | 2200 | 2400 | 2800 | 51-55 | 1600 | 1800 | 2200 |
| 56-60 | 2200 | 2400 | 2600 | 56-60 | 1600 | 1800 | 2200 |
| 61-65 | 2000 | 2400 | 2600 | 61-65 | 1600 | 1800 | 2000 |
| 66-70 | 2000 | 2200 | 2600 | 66-70 | 1600 | 1800 | 2000 |
| 71-75 | 2000 | 2200 | 2600 | 71-75 | 1600 | 1800 | 2000 |
| 76 and up | 2000 | 2200 | 2400 | 76 and up | 1600 | 1800 | 2000 |

1Sedentary means a lifestyle that includes only the physical activity of independent living.

2Moderately Active means a lifestyle that includes physical activity equivalent to walking about 1.5 to 3 miles per day at 3 to 4 miles per hour, in addition to the activities of independent living.

3Active means a lifestyle that includes physical activity equivalent to walking more than 3 miles per day at 3 to 4 miles per hour, in addition to the activities of independent living.

**Appendix 2.** Scoring criteria for the Dietary Guidelines for Americans Adherence Index (DGAI) for individuals with 2000 kcal/day estimated energy requirement (EER)2

|  |
| --- |
| **Components** |
|  | **Scoring Criteria** |  | **Scoring Criteria** |
| **0 Point** | **1.0 point** | **0 Point** | **1.0 point** |
| **Food Intake Sub-score** |  |  | **Healthy Choice Sub-score** |  |  |
|  | Dark green vegetable (cups1/week) | 0 | ≥ 1.5 |  | Whole grain (% of grains) | 0 | ≥ 50% |
|  | Red/orange vegetables (cup/week) | 0 | ≥ 5.5 |  | Dietary fiber density (gram/1000kcal) | 0 | ≥ 14 |
|  | Legumes (cup/week) | 0 | ≥ 1.5 |  | Total fat (% Energy) | ≤ 10%, ≥ 45% | ≥ 20%, ≤ 35% |
|  | Starchy vegetables (cup/week)2 | 0 | 5.0 |  | Saturated fatty acid (% Energy) | ≥ 15% | ≤ 10% |
|  | Other vegetables (cup/week) | 0 | ≥ 4.0 |  | Cholesterol intake (mg/day) | ≥ 450 | ≤ 300 |
|  | Fruits (cup/day) | 0 | ≥ 2 |  | Low-fat dairy, and meat products (%) | 0% | ≥ 75% |
|  | Variety of fruits and vegetables (number of components) | 0 | 6.0 |  | Sodium (mg/day) | ≥ 3450 | ≤ 2300 |
|  | Grains (oz equivalent1/day)2 | 0 | 6.0 |  | Alcohol (drinks/day)3 | ≥ 1.5 | ≤ 1.0 |
|  | Meat and beans (oz equivalent/day)2 | 0 | 26 |  |  |  |  |
|  | Dairy (cup/day)2 | 0 | 3 |  |  |  |  |
|  | Added sugar (% Energy) | ≥ 9% | ≤ 6.0% |  |  |  |  |
|  | 1One cup is defined as 237 ml (US), 0.946 cup in metric unit; 1 oz=28.35 grams2An overconsumption penalty was imposed by reducing the score proportional to the amount of overconsumption up to 1.25 times higher than the recommended intake. Intakes ≥1.25 times the recommended amount were scored as 0.5.3One drink =118 ml wine;355 ml beer; or 45 ml distilled spirit  |

**Appendix 3.** Scoring criteria for the Mediterranean-Style Dietary Pattern Score (MSDPS)3

|  |  |  |
| --- | --- | --- |
| **Component** | **Standard for maximum score (10 points)2** | **Standard for minimum score (0 points)** |
| Whole grains | ≥8 servings/day | 0 servings/day |
| Fruit | ≥3 servings/day | 0 servings/day |
| Vegetables | ≥6 servings/day | 0 servings/day |
| Dairy | ≥2 servings/day | 0 servings/day |
| Wine Men Women | 3 drinks/day1.5 drinks/day | 0 drinks/day0 drinks/day |
| Fish and other seafood | ≥6 servings/week | <6 servings/week |
| Poultry | ≥4 servings/week | <4 servings/week |
| Olives, legumes, and nuts | ≥4 servings/week | <4 servings/week |
| Potatoes and other starchy roots | ≥3 servings/week | <3 servings/week |
| Eggs | ≥3 servings/week | <3 servings/week |
| Sweets | ≥3 servings/week | <3 servings/week |
| Meat | ≥1 servings/week | <1 servings/week |
| Olive oil1 | Exclusive use | 0 points for no use of olive oil; 5 points for use with other vegetable oils |
| 1Except olive oil, all other components of the MSDPS were computed proportionately and a consumption penalty applied if intake was over the recommendation proportional to the number of servings exceeding the recommended intake.2The final total score (out of 130) was standardized to be out of 100; scores were then weighted by a factor 0-1 representing the proportion of energy coming from Mediterranean diet-type foods. |

**Appendix 4.** Scoring criteria for the Dietary Approaches to Stop Hypertension (DASH) index by Matsunaga et al.4

|  |  |  |
| --- | --- | --- |
| **Component** | **Standard for maximum score (10 points)** | **Standard for minimum score (0 points)** |
| Fruit | ≥1.2 cup equivalents1/1000kcal | 0 cup equivalents/1000kcal |
| Vegetables | ≥1.2 cup equivalents/1000kcal | 0 cup equivalents/1000kcal |
| Whole grains | ≥2.0 oz equivalents1/1000kcal | 0 oz equivalents/1000kcal |
| Dairy products | ≥1.6 cup equivalents/1000kcal | 0 cup equivalents/1000kcal |
| Plant proteins | ≥0.7 oz equivalents/1000kcal | 2 oz equivalents/1000kcal |
| Animal proteins | ≤2.4 oz equivalents/1000kcal | ≥4.5 oz equivlents/1000kcal |
| Added sugars | ≤2.3 tsp equivalents/1000kcal | ≥13.1 tsp equivalents/1000kcal |
| Sodium | ≤1095mg/1000kcal | ≥2099 mg/1000kcal |
| Saturated fat | ≤6% of total energy | ≥14% of total energy |
| 1One cup is defined as 237 ml (US), 0.946 cup in metric unit; 1 oz=28.35 grams |

|  |
| --- |
| **Appendix 5.** Pearson correlation coefficients between DASH, DGAI and MSDPS, Canadian adults from CCHS 2015 (*n*=12,110).  |
|  | DASH | DGAI | MSDPS |
| DASH | 1.00 | 0.69 | 0.44 |
| DGAI |  | 1.00 | 0.44 |
| MSDPS |  |  | 1.00 |
| Analyses were conducted on the first day of 24-dietary recall data only. |

|  |  |
| --- | --- |
|  | **Appendix 6.** Agreement or “concordance” between quintile combinations of computed DASH and DGAI scores in a sample of Canadian adults from CCHS 2015 (*n* = 12,110).  |
|  |  | **Q1 (DASH)** | **Q2 (DASH)** | **Q3 (DASH)** | **Q4 (DASH)** | **Q5 (DASH)** |
|  | **Q1 (DGAI)** | 10 | 5.3 | 2.8 | 0.9 | 0.2 |
|  | **Q2 (DGAI)** | 5.5 | 5.6 | 4.9 | 2.8 | 0.8 |
|  | **Q3 (DGAI)** | 2.6 | 4.9 | 5.2 | 3.9 | 2.4 |
|  | **Q4 (DGAI)** | 1.2 | 2.6 | 5.5 | 5.8 | 6.1 |
|  | **Q5 (DGAI)** | 0.1 | 0.3 | 2.3 | 6.6 | 11 |
|  | Analyses were conducted on the first day of 24-dietary recall data only. Each cell displays the percentage (%) of the total sample falling into the respective quintile combinations, with darker shading representing a greater percentage of the sample.  |

|  |
| --- |
| **Appendix 7.**  Agreement or “concordance” between quintile combinations of computed DGAI and MSDPS scores in a sample of Canadian adults from CCHS 2015 (*n* = 12,110).  |
|  | **Q1 (MSDPS)** | **Q2 (MSDPS)** | **Q3 (MSDPS)** | **Q4 (MSDPS)** | **Q5 (MSDPS)** |
| **Q1 (DGAI)** | 7.8 | 3.9 | 3.6 | 2.2 | 1.8 |
| **Q2 (DGAI)** | 5.0 | 4.3 | 4.7 | 2.6 | 2.5 |
| **Q3 (DGAI)** | 3.4 | 5.6 | 3.9 | 4.6 | 3.3 |
| **Q4 (DGAI)** | 2.0 | 4.0 | 4.5 | 4.3 | 5.3 |
| **Q5 (DGAI)** | 0.6 | 2.6 | 3.3 | 5.5 | 8.9 |
| Analyses were conducted on the first day of 24-dietary recall data only. Each cell includes the percentage (%) of the total sample falling into the respective quintile combinations, with darker shading representing a greater percentage of the sample. |

|  |
| --- |
| **Appendix 8.** Agreement or “concordance” between quintile combinations of computed DASH and MSDPS scores in a sample of Canadian adults from CCHS 2015 (*n* = 12,110). |
|  | **Q1 (MSDPS)** | **Q2 (MSDPS)** | **Q3 (MSDPS)** | **Q4 (MSDPS)** | **Q5 (MSDPS)** |
| **Q1 (DASH)** | 7.4 | 4.5 | 3.6 | 2.4 | 1.2 |
| **Q2 (DASH)** | 5.1 | 4.6 | 4.3 | 3.0 | 2.5 |
| **Q3 (DASH)** | 3.5 | 3.8 | 4.3 | 4.1 | 3.3 |
| **Q4 (DASH)** | 2.0 | 4.4 | 4.2 | 4.7 | 6.0 |
| **Q5 (DASH)** | 0.7 | 3.0 | 3.7 | 5.0 | 8.8 |
| Analyses were conducted on the first day of 24-dietary recall data only. Each cell includes the percentage (%) of the total sample falling into the respective quintile combinations, with darker shading representing a greater percentage of the sample. |

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