Table 1: Hypothetical diet and exercise interventions emulated in the NuAge cohort study, by sex*1*

|  | Recommended foods, RA/day | | | | | |  | Foods and beverages not recommended, RA/day*2* | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sex | Vegetables & fruits | Whole grains | Protein foods, plant-based | Protein foods, animal-based | Milk & Plant-based bev. with protein | Unsaturated oils & fats | Dietary supplement*3* | Other foods | Sugary drinks, alcohol | Non-whole grains | Physical activity, minutes/day*4* |
| 1. Control (no change)*5* | | | | | | | | | | | |
| Males | - | - | - | - | - | - | - | - | - | - | - |
| Females | - | - | - | - | - | - | - | - | - | - | - |
| 2. Adhering to Canada's Food Guide 2019 recommendations on healthy food choices*6* | | | | | | | | | | | |
| Males | 6 | 1.5 | 1.0 | 2.0 | 1.0 | 1 | No change | Minimum | Minimum | Minimum | No change |
| Females | 5 | 1.5 | 0.8 | 1.5 | 1.0 | 1 | No change | Minimum | Minimum | Minimum | No change |
| 3. Same as 2 + extra protein*7* | | | | | | | | | | | |
| Males | 6 | 1.5 | 1.5 | 3.5 | 1.5 | 1 | No change | Minimum | Minimum | Minimum | No change |
| Females | 5 | 1.5 | 1.3 | 3.0 | 1.5 | 1 | No change | Minimum | Minimum | Minimum | No change |
| 4. Same as 3 + physical activity | | | | | | | | | | | |
| Males | 6 | 1.5 | 1.5 | 3.5 | 1.5 | 1 | No change | Minimum | Minimum | Minimum | 30 or more |
| Females | 5 | 1.5 | 1.3 | 3.0 | 1.5 | 1 | No change | Minimum | Minimum | Minimum | 30 or more |
| *1*The emulation of all hypothetical interventions will be implemented using a substitution approach in statistical models. In all models, one variable for 'total food intake' and one variable for 'total beverage intake' will be included, and foods not recommended will be left out from the models (i.e., non-whole grain foods, other low nutritive value foods, juice, sugary drinks and alcohol, and fatty foods rich in saturated fats). CFG, Canada's Food Guide; NuAge, Quebec Longitudinal Study on Nutrition and Successful Aging; RA, reference amount; y, year | | | | | | | | | | | |
| *2*Minimum indicates that consumption would be set at the smallest amount permitting a concomitant increase in recommended foods to meet Canada's Food Guide targets. Portions for foods not recommended may vary on an individual basis. | | | | | | | | | | | |
| *3*Dietary supplements were not intervened on, but were nonetheless excluded from foods and beverages not recommended to avoid being considered in the substitution. In other words, participants would be not be instructed to modify their dietary supplements in the hypothetical trial. | | | | | | | | | | | |
| *4*Physical activity corresponds to aerobic exercise of moderate intensity or higher (Bauer et al. 2013). | | | | | | | | | | | |
| *5*Values are averages observed at baseline in the NuAge cohort. In other words, values are the observed intakes for the food categories or amount of physical activity when no change is applied. | | | | | | | | | | | |
| *6*Values are derived from Health Canada's simulated composite diets of adults 71 years or older. Participants would be expected to meet these targets for each food categories. The specific food choices within these categories would be at the participants' discretion. Values for vegetables and fruits, whole-grain foods and plant-based protein foods were truncated to correspond, at most, to the 90th percentile of the distribution of usual intakes among Canadians aged 65 years in 2015. | | | | | | | | | | | |
| *7*Extra protein foods were added as follows: +0.5 RA of plant-based protein foods (e.g., 25 grams of nuts), +1.5 RA of animal-based protein foods (e.g., 150 grams of cooked unprocessed red meat, fish or poultry or 3 small eggs), +0.5 RA of milk or plant-based beverage with protein (e.g., 125 ml of milk or plant-based beverages with sufficient protein). | | | | | | | | | | | |