**Supplemental Material 1** Computation of the investigated dietary scores

***Programme National Nutrition Santé-Guideline Score***. The PNNS-GS includes 1 physical activity component and 12 dietary components (2): 8 components refer to food serving recommendations (fruit and vegetables without potatoes; starchy foods; whole grain products; milk and dairy products; meat, poultry eggs, fish and seafood; vegetable fat; water vs soda) and 4 refer to moderation in consumption (sweetened foods, salt, added fats, alcohol). A penalty for overconsumption was assigned to individuals whose energy intake exceeded their energy needs by at least 5%, based on basal metabolic rate (using Schofield equation) and physical activity level. In this study, we used a modified version of the PNNS-GS without the physical activity component, for a better comparison with the other tested dietary scores that were exclusively based on diet. The mPNNS-GS has a maximum of 13.5 points, with a higher score indicating better adherence to French dietary guidelines. Negative scores are theoretically possible due to the penalty system.

***Alternative Healthy Eating Index-2010***. The AHEI-2010 is based on 7 “desirable” components (including vegetables, fruit, whole grains, nuts and legumes, long chain omega-3 fatty acids, polyunsaturated fatty acids and moderate alcohol consumption) and 4 “undesirable” components (including sugar sweetened drinks and fruit juice, red and processed meat, *trans* fatty acids and sodium) (1). Each component leads to a sub-score between 0 (less healthy diet) and 10 (healthier diet), with intermediate values scored proportionally to their intake. The “desirable” components contribute positively to the score, while “undesirable” components contribute negatively. In the present study, the AHEI-2010 score, as the sum of the components, ranges from 0 point to 100 points (*trans* fatty acids intakes were not available in our study), with a higher score representing better adherence to US dietary guidelines.

***Probability of Adequate Nutrient Intake Dietary score***. The PANDiet is composed of two sub-scores: *adequacy* and *moderation* sub-score (5). For each nutrient include, the “probability of adequacy” is calculated (intake above minimum values for *adequacy* sub-score or below maximum values for *moderation* sub-score) on the basis of recommended nutritional intakes for the French population (4). In our study, nutrients included in the computation of the PANDiet are: Protein, total carbohydrate, total fat,polyunsaturated fatty acids, omega 3 and omega 6 fatty acids, fiber, thiamin, riboflavin, niacin, folate, vitamins A, B5, B6, B12, C, D and E, iodine, selenium, calcium, magnesium, zinc, phosphorus, potassium, iron, saturated fatty acids, cholesterol, free sugars, sodium, and retinol. The PANDiet ranges from 0 to 100 points, with a higher score reflecting better adherence to French nutritional recommendations and adequate nutrient intake.

***Diet Quality Index-International***. The DQI-I is composed of four groups of components (3): *variety* (overall food group variety and within-group variety for protein source), *adequacy* (vegetable group, fruit group, grain group, fiber, protein, iron, calcium and vitamin C), *moderation* (total fat, saturated fat, cholesterol, sodium, and empty calorie foods) and *overall balance* (macronutrient ratio and fatty acid ratio). For nutrients included in the DQI-I computation, we used the recommended intakes for the French population (similar to those used in the PANDiet). The DQI-I score ranges from 0 to 100 points, with a higher score representing better adherence to international guidelines and healthier eating habits.

Reference List

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