**Supplementary Materials:**

The following supporting information consists on: Figure S1: Participant recruitment flowchart; Figure S2: Five-year follow-up and attrition flowchart; Table S1: STROBE checklist; Table S2. Normality Assessment of Continuous Variables; Table S3. Effect Size Estimates for Sex Differences (with 95% Confidence Intervals); Table S4. Normality Assessment of Macro-nutrient Variables; Table S5. Effect Sizes for Sex Differences in Macronutrient Intake (95% CI); Table S6. Normality Assessment of Minerals Variables; Table S7. Effect Sizes for Sex Differences in Minerals Intake (95% CI).

**Appendix B. Supplementary material**

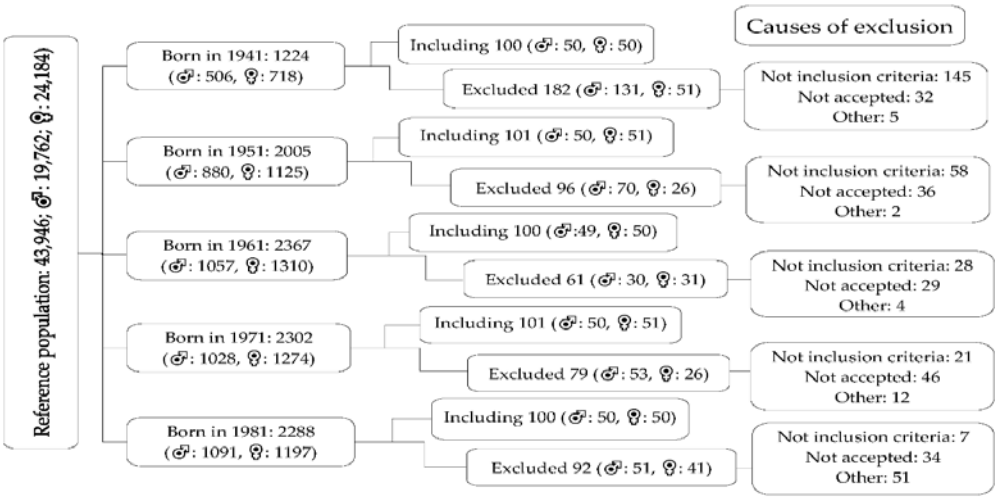



**Figure S1.** EVA study flowchart. Diagram showing the reference population by age group and sex, the number of subjects screened, included, and excluded, and the main reasons for exclusion. In total, 259 individuals did not meet the inclusion criteria, 177 declined participation, and 74 could not be contacted (change of address or telephone number). The replenishment rate was 35.4% and the response rate was 64.6%. Symbols: ♂, males; ♀, females.

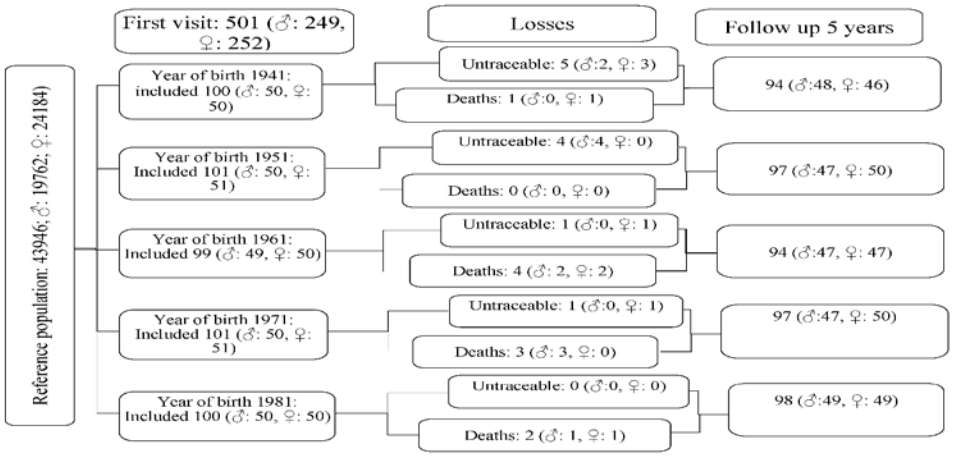



**Figure S2.** Flowchart of the EVA study follow-up phase. Diagram summarizing participant status over five years. During follow-up, 10 participants died (6 ♂; 4 ♀) and 11 could not be contacted (6 ♂; 5 ♀).

**Table S1. STROBE Statement—checklist of items that should be included in reports of observational studies**

| | Item No | Recommendation | Page No |
|---|---|---|---|
| **Title and abstract** | 1 | (*a*) Indicate the study's design with a commonly used term in the title or the abstract | Title (page 1) |
| | | (*b*) Provide in the abstract an informative and balanced summary of what was done and what was found | Abstract (pages 1–2) |
| **Introduction** | | | |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported | Introduction (pages 3–4) |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | Introduction (last paragraph, pages 3–4) |
| **Methods** | | | |
| Study design | 4 | Present key elements of study design early in the paper | Methods section 2.1 (page 4) |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | Methods section 2.1 (page 4) |
| Participants | 6 | (*a*) *Cohort study*—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up | Methods section 2.1 (page 4); Figures S1–S2 |

| | | | |
|---|---|---|---|
| | | *Case-control study*—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls<br>*Cross-sectional study*—Give the eligibility criteria, and the sources and methods of selection of participants | |
| | | (*b*) *Cohort study*—For matched studies, give matching criteria and number of exposed and unexposed<br>*Case-control study*—For matched studies, give matching criteria and the number of controls per case | Not applicable |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable | Methods sections 2.2–2.4 (pages 5–6) |
| Data sources/ measurement | 8* | For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group | Methods sections 2.2–2.3 (pages 5–6) |
| Bias | 9 | Describe any efforts to address potential sources of bias | Statistical analysis (pages 6–7); Discussion section 4.6 (page 18) |
| Study size | 10 | Explain how the study size was arrived at | Methods section 2.1 (page 4) |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why | Statistical analysis (page 6) |
| Statistical methods | 12 | (*a*) Describe all statistical methods, including those used to control for confounding | Statistical analysis (pages 6–7) |
| | | (*b*) Describe any methods used to examine subgroups and interactions | Not applicable |
| | | (*c*) Explain how missing data were addressed | Methods section 2.1 (complete-case analysis); Discussion section 4.6 (page 18) |
| | | (*d*) *Cohort study*—If applicable, explain how loss to follow-up was addressed<br>*Case-control study*—If applicable, explain how matching of cases and controls was addressed | Methods section 2.1 (page 4); Figures S1–S2 |

| | |
|---|---|
| *Cross-sectional study*—If applicable, describe analytical methods taking account of sampling strategy | |
| (*e*) Describe any sensitivity analyses | Results section 3.5 (page 11) |

Continued on next page

| | | | |
|---|---|---|---|
| **Results** | | | |
| Participants | 13* | (a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed | Methods section 2.1 (page 4); Figures S1–S2 (Supplementary Materials) |
| | | (b) Give reasons for non-participation at each stage | Figures S1–S2 (Supplementary Materials) |
| | | (c) Consider use of a flow diagram | Figures S1–S2 (Supplementary Materials) |
| Descriptive data | 14* | (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders | Results, Table 1 (page 7) |
| | | (b) Indicate number of participants with missing data for each variable of interest | Methods section 2.1 (page 4) |
| | | (c) *Cohort study*—Summarise follow-up time (eg, average and total amount) | Methods section 2.1 (page 4) |
| Outcome data | 15* | *Cohort study*—Report numbers of outcome events or summary measures over time | Results sections 3.4–3.5 (pages 9–12) |
| | | *Case-control study*—Report numbers in each exposure category, or summary measures of exposure | Not applicable |
| | | *Cross-sectional study*—Report numbers of outcome events or summary measures | Not applicable |
| Main results | 16 | (*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included | Results section 3.4–3.5 (pages 10–11) |
| | | (*b*) Report category boundaries when continuous variables were categorized | Not applicable |
| | | (*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period | Results section 3.4–3.5 (pages 10–11) |
| Other analyses | 17 | Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses | Results section 3.5 (sensitivity analysis) (page 11) |
| **Discussion** | | | |
| Key results | 18 | Summarise key results with reference to study objectives | Discussion section 4.1 (page 14) |
| Limitations | 19 | Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias | Discussion section 4.6 (page 18) |

| | | | |
|---|---|---|---|
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence | Discussion (pages 14–17) |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | Discussion (pages 16–17) |
| **Other information** | | | |
| Funding | 22 | Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based | Funding section (page 19) |

*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/ Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.

**Table S2.** Normality Assessment of Continuous Variables.

| Variable | Shapiro–Wilk p (Total) | Shapiro–Wilk p (Men) | Shapiro–Wilk p (Women) | Skewness (Total) | Kurtosis (Total) |
|---|---|---|---|---|---|
| Age (years) | <0.001 | <0.001 | <0.001 | -0.0057 | -1.2663 |
| Alcohol (g/week) | <0.001 | <0.001 | <0.001 | 2.4576 | 7.4007 |
| Mediterranean diet score | <0.001 | <0.001 | <0.001 | 0.0937 | -0.278 |
| Total physical activity (MET-min/week) | <0.001 | <0.001 | <0.001 | 3.9024 | 19.6888 |
| Sitting time (h/week) | <0.001 | 0.0728 | <0.001 | 0.3252 | -0.1918 |
| Systolic BP (mmHg) | <0.001 | <0.001 | <0.001 | 0.5941 | 0.6537 |
| Diastolic BP (mmHg) | 0.1410 | 0.0339 | 0.0568 | 0.2059 | 0.1333 |
| Pulse pressure (mmHg) | <0.001 | <0.001 | <0.001 | 0.7805 | 0.5088 |
| Heart rate (bpm) | 0.0020 | 0.0045 | 0.1167 | 0.3692 | 0.6871 |
| Total cholesterol (mg/dL) | 0.8738 | 0.9978 | 0.1082 | 0.0904 | -0.0314 |
| LDL cholesterol (mg/dL) | 0.6717 | 0.9904 | 0.1632 | 0.1461 | 0.1355 |
| Glucose (mg/dL) | <0.001 | <0.001 | <0.001 | 3.7205 | 27.3711 |
| Weight (kg) | <0.001 | <0.001 | <0.001 | 0.5226 | 0.6028 |

| | | | | | |
|---|---|---|---|---|---|
| Height (cm) | 0.0130 | 0.3617 | 0.1916 | 0.0235 | -0.5631 |
| Body mass index (kg/m²) | <0.001 | <0.001 | <0.001 | 0.5662 | 0.8602 |
| Pulse wave velocity (m/s) | <0.001 | <0.001 | <0.001 | 1.4193 | 2.2292 |
| ΔcfPWV (m/s) | <0.001 | <0.001 | <0.001 | -0.3258 | 2.7153 |
| Mean CAVI | <0.001 | 0.1291 | <0.001 | 0.3827 | -0.0087 |
| ΔCAVI | <0.001 | 0.0176 | <0.001 | -0.1391 | 1.8532 |

Normality was assessed using the Shapiro–Wilk test. Skewness and kurtosis values correspond to the overall sample. A p-value < 0.05 indicates deviation from normal distribution.

**Table S3. Effect Size Estimates for Sex Differences (with 95% Confidence Intervals).**

| Variable | Statistical Test | Effect Size (95% CI) |
|---|---|---|
| Age (years) | Mann–Whitney U | r = 0.007 [-0.084, 0.097] |
| Alcohol (g/week) | Mann–Whitney U | r = 0.320 [0.236, 0.399] |
| Mediterranean diet score | Mann–Whitney U | r = 0.203 [0.114, 0.288] |
| Total physical activity (MET-min/week) | Mann–Whitney U | r = 0.323 [0.240, 0.402] |
| Sitting time (h/week) | Mann–Whitney U | r = 0.328 [0.244, 0.407] |
| Pulse pressure (mmHg) | Mann–Whitney U | r = 0.343 [0.260, 0.420] |
| Heart rate (bpm) | Mann–Whitney U | r = 0.121 [0.031, 0.210] |
| Total cholesterol (mg/dL) | Student's t-test | d = -0.140 [-0.322, 0.042] |
| LDL cholesterol (mg/dL) | Student's t-test | d = 0.133 [-0.049, 0.316] |
| Glucose (mg/dL) | Mann–Whitney U | r = 0.152 [0.062, 0.240] |
| Weight (kg) | Mann–Whitney U | r = 0.536 [0.468, 0.597] |
| Height (cm) | Student's t-test | d = 1.836 [1.619, 2.052] |
| Body mass index (kg/m²) | Mann–Whitney U | r = 0.137 [0.046, 0.225] |
| Pulse wave velocity (m/s) | Mann–Whitney U | r = 0.158 [0.068, 0.245] |
| ΔcfPWV (m/s) | Mann–Whitney U | r = 0.110 [0.019, 0.198] |
| Mean CAVI | Mann–Whitney U | r = 0.112 [0.022, 0.201] |
| ΔCAVI | Mann–Whitney U | r = 0.102 [0.011, 0.191] |

**Table S4. Normality Assessment of Macronutrient Variables.**

| Variable | Shapiro–Wilk p (Total) | Skewness | Kurtosis | Distribution |
|---|---|---|---|---|
| Energy intake (kcal/day) | <0.001 | 0.763 | 1.300 | Non-normal |
| Protein (g/day) | <0.001 | 0.850 | 2.028 | Non-normal |
| Carbohydrates (g/day) | <0.001 | 0.704 | 0.744 | Non-normal |
| Dietary fiber (g/day) | <0.001 | 0.526 | 0.086 | Non-normal |
| Total fat (g/day) | <0.001 | 0.926 | 1.510 | Non-normal |
| Saturated fatty acids (g/day) | <0.001 | 0.891 | 1.303 | Non-normal |

| | | | | |
|---|---|---|---|---|
| Monounsaturated fatty acids (g/day) | <0.001 | 0.917 | 1.268 | Non-normal |
| Polyunsaturated fatty acids (g/day) | <0.001 | 1.081 | 1.381 | Non-normal |
| Dietary cholesterol (mg/day) | <0.001 | 0.840 | 0.826 | Non-normal |
| Alcohol (g/day) | <0.001 | 3.197 | 12.613 | Non-normal |
| Water (mL/day) | 0.003 | 0.368 | 0.814 | Non-normal |

Normality was assessed using the Shapiro–Wilk test. Positive skewness indicates right-tailed distribution.

## Table S5. Effect Sizes for Sex Differences in Macronutrient Intake (95% CI).

| Variable | Statistical Test | Effect Size (95% CI) |
|---|---|---|
| Energy intake (kcal/day) | Mann–Whitney U | r = 0.171 [0.081, 0.258] |
| Protein (g/day) | Mann–Whitney U | r = 0.182 [0.093, 0.269] |
| Carbohydrates (g/day) | Mann–Whitney U | r = 0.087 [-0.004, 0.177] |
| Dietary fiber (g/day) | Mann–Whitney U | r = 0.002 [-0.089, 0.093] |
| Total fat (g/day) | Mann–Whitney U | r = 0.168 [0.079, 0.255] |
| Saturated fatty acids (g/day) | Mann–Whitney U | r = 0.146 [0.056, 0.234] |
| Monounsaturated fatty acids (g/day) | Mann–Whitney U | r = 0.191 [0.102, 0.277] |
| Polyunsaturated fatty acids (g/day) | Mann–Whitney U | r = 0.078 [-0.013, 0.167] |
| Dietary cholesterol (mg/day) | Mann–Whitney U | r = 0.218 [0.129, 0.303] |
| Alcohol (g/day) | Mann–Whitney U | r = 0.205 [0.116, 0.290] |
| Water (mL/day) | Mann–Whitney U | r = 0.057 [-0.034, 0.147] |

Effect sizes are presented as Cohen's d for parametric comparisons and r for non-parametric comparisons. Confidence intervals were calculated using standard formulas.

## Table S6. Normality Assessment of Minerals Variables.

| Variable | Shapiro–Wilk p (Total) | Skewness | Kurtosis | Distribution |
|---|---|---|---|---|
| Iron (mg/day) | <0.001 | 0.739 | 0.973 | Non-normal |
| Iodine (μg/day) | <0.001 | 2.075 | 8.473 | Non-normal |
| Magnesium (mg/day) | <0.001 | 0.547 | 0.534 | Non-normal |
| Zinc (mg/day) | <0.001 | 0.831 | 1.440 | Non-normal |
| Selenium (μg/day) | <0.001 | 0.781 | 1.025 | Non-normal |
| Sodium (mg/day) | <0.001 | 1.158 | 2.230 | Non-normal |
| Potassium (mg/day) | 0.008 | 0.295 | 0.246 | Non-normal |

Normality was assessed using the Shapiro–Wilk test. Positive skewness indicates right-tailed distribution.

**Table S7. Effect Sizes for Sex Differences in Minerals Intake (95% CI).**

| Variable | Statistical Test | Effect Size (95% CI) |
|---|---|---|
| Iron (mg/day) | Mann–Whitney U | r = 0.110 [0.020, 0.199] |
| Iodine (μg/day) | Mann–Whitney U | r = 0.104 [0.014, 0.193] |
| Magnesium (mg/day) | Mann–Whitney U | r = 0.037 [-0.054, 0.128] |
| Zinc (mg/day) | Mann–Whitney U | r = 0.128 [0.037, 0.216] |
| Selenium (μg/day) | Mann–Whitney U | r = 0.122 [0.032, 0.211] |
| Sodium (mg/day) | Mann–Whitney U | r = 0.174 [0.084, 0.260] |
| Potassium (mg/day) | Mann–Whitney U | r = 0.067 [-0.024, 0.157] |

Effect sizes are presented as Cohen's d for parametric comparisons and r for non-parametric comparisons. Confidence intervals were calculated using standard formulas.