**A prospective cohort study of starchy and nonstarchy vegetable intake and mortality risk**

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**Supplementary Table 1.** The definitions of starchy and nonstarchy vegetables

|  |  |
| --- | --- |
| **Foods or food groups** | **Food items** |
| **Starchy vegetables** |  |
| potatoes | Baked, boiled, mashed, scalloped, and fried potatoes; potato chips; and mixtures having potatoes as a main ingredient, such as potato salad, stuffed baked potatoes, and potato soup, etc. |
| Other starchy vegetables | Immature peas, lima beans, corn, breadfruit, burdock, cassava, dasheen, green bananas, hominy, jicama, lotus root, parsnips, plantains, salsify, tannier, tapioca, and taro, etc. |
| **Nonstarchy vegetables** |  |
| Dark-green vegetables | Raw and cooked broccoli and dark green leafy vegetables such as romaine, collards, mustard and turnip greens, kale, and spinach, etc. |
| Deep-yellow vegetables | Raw and cooked deep yellow or orange vegetables such as carrots, pumpkin, winter squash, and sweet potatoes, etc. |
| Other nonstarchy vegetables | Tomatoes, lettuce and mixed salad greens, lettuce salad with assorted vegetables, and other lettuce-based salads, etc. |

**Supplementary Table 2.** Sensitivity analyses on the association of starchy and nonstarchy vegetables with risk of all-cause mortality in NHANES (1999-2014)

|  |  |  |
| --- | --- | --- |
|  | HR (95% CI) |  |
|  | 0 servings/day | < 1 serving/day | ≥ 1 servings/day | *P* trendd |
| **Sensitivity analysis Ⅰ(*N* =** 33,264**)**a |  |  |  |
| **Starchy vegetables** |  |  |  |  |
| No. of deaths/person-years | 1197/119105 | 709/83935 | 723/77218 |  |
| Multivariable adjusted modelc | 1 (Reference) | 0.97 (0.82-1.14) | 0.86 (0.74-1.00) | 0.049 |
| **Nonstarchy vegetables** |  |  |  |  |
| No. of deaths/person-years | 607/55214 | 844/100757 | 1178/124286 |  |
| Multivariable adjusted modelc | 1 (Reference) | 0.83 (0.69-1.00) | 0.73 (0.61-0.88) | 0.008 |
| **Sensitivity analysis Ⅱ(*N* =** 38,766**)**b |  |  |  |
| **Starchy vegetables** |  |  |  |  |
| No. of deaths/person-years | 1615/136729 | 934/96715 | 1047/90344 |  |
| Multivariable adjusted modelc | 1 (Reference) | 0.98 (0.84-1.13) | 0.89 (0.79-1.01) | 0.070 |
| **Nonstarchy vegetables** |  |  |  |  |
| No. of deaths/person-years | 753/62156 | 1134/114856 | 1709/146776 |  |
| Multivariable adjusted modelc | 1 (Reference) | 0.81 (0.68-0.98) | 0.74 (0.62-0.88) | 0.006 |

CI, confidence interval; CVD, Cardiovascular diseases; GED, general educational development HR, hazard ratio; METS, Metabolic equivalent tasks; NHANES, National Health and Nutrition Examination Survey.

a Sensitivity analysis with exclusion of individuals with a history of congestive heart failure, angina pectoris, coronary heart disease, heart attack, stroke, cancer, or diabetes at baseline;

b Sensitivity analysis with exclusion of individuals who had died within 3 years after dietary assessment;

c Multivariable adjusted model was adjusted for sex (male, female), age (18-45, 46-65, ≥66 years), and total energy intake (kcal/day, tertile), race/ethnicity (non-Hispanic white, non-Hispanic black, Hispanic or other race), education (≤ 12th grade, high school graduate/GED or equivalent, or more than high school), [marital status](#DMDMARTL) (married, widowed/divorced/separated, or never married), ratio of family income to poverty (<1.30, 1.30-3.49, or ≥3.50), physical activity (<8.3, 8.3-16.7, or >16.7 METS-h/week), smoking (never smokers, former smokers, or current smokers), drinking (never drinking, low to moderate drinking, heavy drinking), body mass index (<18.5, 18.5-24.9, 25.0-29.9, and ≥30.0 kg/m2), diabetes (no, yes), hypertension (no, yes), other CVDs (no, yes), and cancer (no, yes), hei-2015 (tertile). Of note, starchy and nonstarchy vegetables were mutually adjusted.

d Linear trend test was conducted by assigning medians to each quintile as continuous variable in the models.

NHANES 1999-2014

*N* = 82,091

*N* = 47,356

Individuals were excluded:

* < 18 years (n = 34,735)

*N* = 40,124

Individuals were excluded:

* had missing dietary data (n = 5,132)
* had implausible energy intake (n = 2,100)

*N* = 40,074

Individuals were excluded:

* had no linked mortality data (n = 50)

**Supplementary Figure 1.** Flow chart of selecting participants from the NHANES 1999-2000 cycle to 2013-2014 cycle in this analysis. NHANES, National Health and Nutrition Examination Survey.

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**Supplementary Figure 2.** Proportion of consumption (a, grams) and energy intake (b, kcal) of five different types of vegetables in the energy intake of total vegetables in NHNAES (1999-2014).

NHANES, National Health and Nutrition Examination Survey.