**Supplemental material 2**. Age-adjusted dietary nutrient intake, fasting blood glucose, and cases and person-years of two sensitivity analysis datasets according to quartiles (Q) of dietary mushroom consumption

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Characteristics | Total | Dietary mushroom consumption (serving/d) | | | | *P* difference3 | *P* linearity4 |
| Q1 | Q2 | Q3 | Q4 |
| **MEN** |  |  |  |  |  |  |  |
| *N* | ***6,162*** | ***1,492*** | ***1,589*** | ***1,543*** | ***1,538*** |  |  |
| Cases/Person years | 410 / 35,831 | 102 / 7,460 | 103 / 9,820 | 111 / 9,353 | 94 / 9,198 |  |  |
| Median intake (min, max) | 0.05 (0, 2.36) | 0 (0, 0.01) | 0.03 (0.01, 0.05) | 0.08 (0.05, 0.13) | 0.25 (0.19, 2.36) |  |  |
|  |  |  |  |  |  |  |  |
| **Age-adjusted dietary intake of** |  |  |  |  |  |  |  |
| Calcium (mg/d) | 340.7 ± 132 | 311.6 ± 3.4 a | 315.4 ± 3.2 a | 348.4 ± 3.3 b | 387.5 ± 3.3 c | <.0001 | <.0001 |
| Folate (μg/d) | 401.9 ± 118.3 | 383.6 ± 3.0 a | 377.1 ± 2.9 a | 398.5 ± 2.9 b | 448.5 ± 3.0 c | <.0001 | <.0001 |
| Isoflavones (mg/d) | 17.3 ± 12.8 | 15.8 ± 0.3 a | 16.3 ± 0.3 a | 17.9 ± 0.3 b | 19.1 ± 0.3 b | <.0001 | <.0001 |
| Glycemic load | 188.5 ± 18.8 | 193.1 ± 0.5a | 191.8 ± 0.5 a | 187.2 ± 0.5 b | 182.1 ± 0.5 c | <.0001 | <.0001 |
| Iron (mg/d) | 9.6 ± 2.0 | 9.0 ± 0.1 a | 9.1 ± 0.1 a | 9.7 ± 0.1 b | 10.7 ± 0.1 c | <.0001 | <.0001 |
| Fiber (g/d) | 15.5 ± 4.5 | 14.6 ± 0.1 a | 14.6 ± 0.1 a | 15.4 ± 0.1 b | 17.2 ± 0.1 c | <.0001 | <.0001 |
| Magnesium (mg/d) | 95.3 ± 17.5 | 94.1 ± 0.5 a | 93.1 ± 0.4 a | 94.1 ± 0.4 a | 100.1 ± 0.4 b | <.0001 | <.0001 |
| **Fasting blood glucose at baseline** | 95.5 ± 10.1 | 95.4 ± 0.27 | 95.4 ± 0.25 | 95.6± 0.26 | 95.7 ± 0.26 | 0.8430 | 0.4005 |
|  |  |  |  |  |  |  |  |
| **Cases/person-years** |  |  |  |  |  |  |  |
| After excluding cases of type 2 diabetes that occurred within the first year | 318/35,819 | 89 / 7,453 | 99 / 9,819 | 105 / 9,352 | 88 / 9,195 |  |  |
| Among non-users of multinutrients and functional dietary food supplements at baseline | 206/17,694 | 59 / 4,670 | 58 / 5,094 | 56 / 4,367 | 33 / 3,563 |  |  |
|  |  |  |  |  |  |  |  |
| **WOMEN** |  |  |  |  |  |  |  |
| *N* | ***10,504*** | ***2,697*** | ***2,564*** | ***2,621*** | ***2,622*** |  |  |
| Cases/Person-years | 535 /61,114 | 163 / 13,429 | 136 / 16,098 | 117 / 15,866 | 119 / 15,721 |  |  |
| Median intake (min, max) | 0.05 (0, 6.00) | 0 (0, 0.01) | 0.03 (0.01, 0.05) | 0.10 (0.06, 0.17) | 0.30 (0.17, 6.00) |  |  |
|  |  |  |  |  |  |  |  |
| **Age--adjusted dietary intake of** |  |  |  |  |  |  |  |
| Calcium (mg/d) | 341.9 ± 144.9 | 289.8 ± 2.8 a | 318.0 ± 2.7 b | 353.8 ± 2.7 c | 407.1 ± 2.8 d | <.0001 | <.0001 |
| Folate (μg/d) | 380.9 ± 118.4 | 346.6 ± 2.3 a | 359.0 ± 2.2 b | 386.1 ± 2.2 c | 432.3 ± 2.3 d | <.0001 | <.0001 |
| Isoflavones (mg/d) | 16.6 ± 12.4 | 14.3 ± 0.2 a | 16.0 ± 0.2 b | 16.7 ± 0.2 b | 19.6 ± 0.2 c | <.0001 | <.0001 |
| Glycemic load | 170.6 ± 18.8 | 178.1 ± 0.3 a | 173.6 ± 0.3 b | 168.5 ± 0.3 c | 162.1 ± 0.3 d | <.0001 | <.0001 |
| Iron (mg/d) | 9.1 ± 2.2 | 8.2 ± 0.04 a | 8.6 ± 0.04 b | 9.2 ± 0.04 c | 10.3 ± 0.04 d | <.0001 | <.0001 |
| Fiber (g/d) | 14.7 ± 4.5 | 13.2 ± 0.1 a | 13.8 ± 0.1 b | 14.8 ± 0.1 c | 16.7 ± 0.1 d | <.0001 | <.0001 |
| Magnesium (mg/d) | 85.9 ± 17.4 | 83.7 ± 0.3 a | 82.8 ± 0.3 a | 85.6 ± 0.3 b | 91.7 ± 0.3 c | <.0001 | <.0001 |
| **Fasting blood glucose at baseline** | 92.4 ± 9.4 | 92.9 ± 0.19 a | 92.1 ± 0.19 b | 92.1 ± 0.18 b | 92.4 ± 0.19 b | 0.0046 | 0.5610 |
|  |  |  |  |  |  |  |  |
| **Cases/person-years** |  |  |  |  |  |  |  |
| After excluding cases of type 2 diabetes that occurred within the first year | 506/61,102 | 153 / 13,426 | 130 / 16,095 | 110 / 15,864 | 113 / 15,717 |  |  |
| Among non-users of multi-nutrients and functional dietary food supplements at baseline | 281/30,368 | 107 / 8,813 | 72 / 8,509 | 58 / 7,075 | 44 / 5,971 |  |  |

The values are expressed as mean ± SD in total participants and age-adjusted values in men and women, and mean ± SE for continuous variables or percentage for categorical variables. All nutrients were energy-adjusted values using the residual method. Covariates obtained at the baseline survey were used, except for dietary factors.

1 High school graduate (≥ 12 years of education).

2 Regular exercise (≥ 3 times/week and ≥ 30 min/session)

3 *P* values for differences were determined by general linear model (Tukey’s multiple comparisons)

4 *P* values for linear trends were obtained by the median value of each quartile and treating it as a continuous variable.