**Online Supplementary Material**



**Supplementary Figure 1.** The relative contribution of each food source to added sugar intake.

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| **Supplementary Table 1.** Baseline characteristics between the final analytic sample and those who were lost to follow-up a | | | |
| Characteristics | Lost to follow-up | | *P* value b |
| No (analytic sample) | Yes |
| Age (years) | 36.1 (30.5, 45.6) | 38.2 (30.6, 49.4) | <0.0001 |
| Sex (men, %) | 41.8 | 40.0 | 0.02 |
| BMI (kg/m2) | 22.8 (20.8, 24.9) | 23.1 (21.1, 25.2) | <0.0001 |
| WC (cm) | 77.0 (70.0, 84.0) | 79.0 (73.0, 86.0) | <0.0001 |
| TC (mmol/L) | 4.53 (4.02, 5.11) | 4.57 (4.03, 5.19) | <0.01 |
| TG (mmol/L) | 0.90 (0.67, 1.25) | 0.93 (0.69, 1.31) | <0.0001 |
| LDL-C (mmol/L) | 2.61 (2.14, 3.12) | 2.62 (2.16, 3.18) | <0.01 |
| HDL-C (mmol/L) | 1.44 (1.22, 1.71) | 1.44 (1.20, 1.70) | 0.11 |
| SBP (mmHg) | 115 (105, 125) | 115 (110, 125) | <0.0001 |
| DBP (mmHg) | 70 (65, 80) | 75 (65, 80) | <0.001 |
| FPG (mmol/L) | 4.90 (4.60, 5.10) | 4.90 (4.60, 5.20) | <0.01 |
| ALT (U/L) | 13.0 (10.0, 19.0) | 14.0 (10.0, 19.0) | <0.001 |
| PA (MET-hour/week) | 11.6 (3.85, 23.1) | 11.6 (3.30, 25.1) | 0.02 |
| Total energy intake (kcal/day) | 2278 (1769, 2915) | 2187 (1694, 2828) | <0.0001 |
| Smoking status (%) |  |  |  |
| Current smoker | 14.2 | 17.9 | <0.0001 |
| Ex-smoker | 3.61 | 5.40 | <0.0001 |
| Non-smoker | 82.2 | 76.7 | <0.0001 |
| Alcohol drinking status (%) |  |  |  |
| Everyday drinker | 3.14 | 4.65 | <0.0001 |
| Sometime drinker | 53.2 | 52.3 | 0.31 |
| Ex-drinker | 8.96 | 10.8 | <0.0001 |
| Non-drinker | 34.7 | 32.2 | <0.01 |
| Education level (college or higher, %) | 76.5 | 51.6 | <0.0001 |
| Occupation (%) |  |  |  |
| Managers | 47.2 | 27.9 | <0.0001 |
| Professionals | 16.4 | 17.3 | 0.14 |
| Other | 36.4 | 54.8 | <0.0001 |
| Household income (≥10,000 Yuan, %) | 39.4 | 35.3 | <0.0001 |
| Hyperlipidemia (%) | 32.8 | 33.4 | 0.43 |
| Hypertension (%) | 13.0 | 16.6 | <0.0001 |
| Depressive symptoms (%) | 15.1 | 16.0 | 0.11 |
| Family history of disease (%) |  |  |  |
| CVD | 30.3 | 21.5 | <0.0001 |
| Hypertension | 50.7 | 38.4 | <0.0001 |
| Hyperlipidemia | 0.41 | 0.08 | <0.001 |
| Diabetes | 23.9 | 18.6 | <0.0001 |
| a Continuous variables are presented as medians (interquartile ranges) and categorical variables as percentages. ALT, alanine aminotransferase; BMI, body mass index; CVD, cardiovascular disease; DBP, diastolic blood pressure; FPG, fasting plasma glucose; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; MET, metabolic equivalent; PA, physical activity; SBP, systolic blood pressure; TC, total cholesterol; TG, triglycerides; WC, waist circumference. | | | |
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| b Wilcoxon rank sum tests for continuous variables or Chi-square tests for categorical variables. | | | |  |

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| **Supplementary Table 2.** Association between added sugar intake and risk of non-alcoholic fatty liver disease, excluded cases occurred within the first two years of follow-up (n=14,416) a | | | | | |
|  | Quartile category of intake | | | | *P* for trend b |
| Quartile 1 | Quartile 2 | Quartile 3 | Quartile 4 |
| **Total added sugar intake (g/day) c** | 4.29 (0.00, 8.60) | 12.5 (8.60, 16.7) | 22.0 (16.7, 28.8) | 40.9 (28.8, 258.4) | - |
| Number of participants | 3,569 | 3,603 | 3,639 | 3,605 | - |
| Number of cases | 617 | 582 | 533 | 622 | - |
| Person-years | 12,986 | 13,195 | 13,467 | 13,320 | - |
| Incidence per 1000 person-years | 48 | 44 | 40 | 47 | - |
| Model 1 | 1.00 (reference) | 1.07 (0.95, 1.20) | 0.99 (0.88, 1.12) | 1.16 (1.03, 1.30) | 0.02 |
| Model 2 | 1.00 (reference) | 1.09 (0.97, 1.23) | 1.02 (0.90, 1.15) | 1.19 (1.04, 1.35) | 0.02 |
| Model 3 | 1.00 (reference) | 1.12 (1.00, 1.26) | 1.04 (0.92, 1.17) | 1.18 (1.03, 1.35) | 0.04 |
|  |  |  |  |  |  |
| **Liquid added sugar intake (g/day) c** | 0.85 (0.00, 2.62) | 4.40 (2.67, 6.97) | 9.96 (6.97, 13.4) | 19.4 (13.4, 175.3) | - |
| Number of participants | 3,611 | 3,711 | 3,499 | 3,595 | - |
| Number of cases | 618 | 562 | 512 | 662 | - |
| Person-years | 13,048 | 13,603 | 13,099 | 13,218 | - |
| Incidence per 1000 person-years | 47 | 41 | 39 | 50 | - |
| Model 1 | 1.00 (reference) | 1.04 (0.92, 1.16) | 0.96 (0.86, 1.09) | 1.18 (1.05, 1.32) | <0.01 |
| Model 2 | 1.00 (reference) | 1.05 (0.93, 1.18) | 0.98 (0.87, 1.11) | 1.19 (1.05, 1.34) | <0.01 |
| Model 3 | 1.00 (reference) | 1.05 (0.93, 1.18) | 1.00 (0.88, 1.13) | 1.16 (1.03, 1.32) | 0.02 |
|  |  |  |  |  |  |
| **Solid added sugar intake (g/day) c** | 0.66 (0.00, 3.41) | 5.73 (3.43, 7.94) | 11.0 (7.94, 16.3) | 23.7 (16.3, 184.2) | - |
| Number of participants | 3,563 | 3,589 | 3,614 | 3,650 | - |
| Number of cases | 645 | 565 | 581 | 563 | - |
| Person-years | 13,084 | 13,172 | 13,182 | 13,531 | - |
| Incidence per 1000 person-years | 49 | 43 | 44 | 42 | - |
| Model 1 | 1.00 (reference) | 0.98 (0.87, 1.10) | 1.03 (0.92, 1.16) | 1.01 (0.90, 1.14) | 0.67 |
| Model 2 | 1.00 (reference) | 1.00 (0.89, 1.12) | 1.05 (0.94, 1.18) | 1.01 (0.89, 1.15) | 0.80 |
| Model 3 | 1.00 (reference) | 0.98 (0.87, 1.10) | 1.03 (0.91, 1.16) | 0.98 (0.86, 1.12) | 0.80 |
| a Values are hazard ratios (95% confidence interval) unless otherwise indicated. | | | | | |
| b Test for trend based on variable containing median value for each quartile. | | | | | |
| c Median (range) intake. | | | | | |
| Model 1: adjusted for age (continuous; years), sex (categorical; men or women), and baseline body mass index (continuous; kg/m2). | | | | | |
| Model 2: additionally adjusted for smoking status (categorical; current smoker, ex-smoker, or non-smoker), alcohol drinking status (categorical; everyday drinker, sometime drinker, ex-drinker, or non-drinker), educational level (categorical: < or ≥college graduate), occupation (categorical; managers, professionals, and other), annual family income (categorical: < or ≥10,000 Yuan), physical activity (continuous; MET-hour/week), family history of disease (including cardiovascular disease, hypertension, hyperlipidemia, and diabetes [each yes or no]), hypertension (yes or no), hyperlipidemia (yes or no), depressive symptoms (score < or ≥45), sedentary time (hour/day), total energy intake (kcal/day), and healthy diet score (0, 1, 2, 3, 4, or 5). | | | | | |
| Model 3: additionally adjusted for body mass index change from baseline to follow-up (continuous; kg/m2). For liquid and solid added sugars, mutual adjustment was conducted in model 3. | | | | | |