Supplementary Table 1. Association between sugar intake and cancer types

| Sex | Cancer site | | Sex-specific quartiles of sugar intake[1)] | | | |
|---|---|---|---|---|---|---|
| | | | Q1 | Q2 | Q3 | Q4 |
| | | | OR (95% CI) | OR (95% CI) | OR (95% CI) | OR (95% CI) |
| Total | All cancer | | | | | |
| | | Model 1 | 1 | 1.11 (0.87–1.43) | 1.05 (0.82–1.35) | 1.16 (0.91–1.48) |
| | | Model 2 | 1 | 1.17 (0.91–1.51) | 1.23 (0.95–1.59) | 1.47 (1.14–1.90)* |
| | | Model 3 | 1 | 1.16 (0.90–1.50) | 1.21 (0.94–1.56) | 1.45 (1.12–1.87)* |
| | | Model 4 | 1 | 1.12 (0.87–1.45) | 1.12 (0.87–1.45) | 1.30 (1.00–1.67)* |
| | | Model 5 | 1 | 1.07 (0.83–1.39) | 1.02 (0.77–1.35) | 1.08 (0.80–1.47) |
| | Gastric cancer | | | | | |
| | | Model 1 | 1 | 1.67 (0.95–2.95) | 1.00 (0.53–1.89) | 0.96 (0.50–1.83) |
| | | Model 2 | 1 | 1.85 (1.05–3.26)* | 1.30 (0.69–2.46) | 1.47 (0.77–2.79) |
| | | Model 3 | 1 | 1.91 (1.07–3.39)* | 1.34 (0.70–2.59) | 1.53 (0.80–2.93) |
| | | Model 4 | 1 | 1.81 (1.01–3.26)* | 1.24 (0.65–2.36) | 1.37 (0.73–2.59) |
| | | Model 5 | 1 | 1.82 (0.97–3.41) | 1.24 (0.60–2.57) | 1.35 (0.63–2.87) |
| | Liver cancer | | | | | |
| | | Model 1 | 1 | 1.46 (0.51–4.18) | 0.71 (0.13–4.01) | 1.23 (0.30–5.02) |
| | | Model 2 | 1 | 1.64 (0.58–4.67) | 0.97 (0.18–5.23) | 2.13 (0.49–9.23) |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | Model 3 | 1 | 1.63 (0.56–4.69) | 0.96 (0.17–5.36) | 2.09 (0.45–9.73) |
| | | Model 4 | 1 | 1.53 (0.51–4.65) | 0.92 (0.17–4.97) | 1.93 (0.43–8.73) |
| | | Model 5 | 1 | 1.69 (0.52–5.51) | 1.11 (0.15–7.92) | 2.59 (0.45–15.02) |
| | Colon cancer | | | | | |
| | | Model 1 | 1 | 0.79 (0.45–1.38) | 1.10 (0.64–1.88) | 0.94 (0.52–1.71) |
| | | Model 2 | 1 | 0.85 (0.49–1.49) | 1.38 (0.81–2.35) | 1.35 (0.76–2.41) |
| | | Model 3 | 1 | 0.86 (0.49–1.49) | 1.39 (0.82–2.36) | 1.37 (0.77–2.45) |
| | | Model 4 | 1 | 0.84 (0.48–1.46) | 1.32 (0.79–2.21) | 1.25 (0.69–2.27) |
| | | Model 5 | 1 | 0.76 (0.43–1.38) | 1.16 (0.67–2.00) | 0.96 (0.41–2.25) |
| | Breast cancer[2)] | | | | | |
| | | Model 1 | 1 | 1.35 (0.72–2.52) | 1.14 (0.58–2.23) | 1.28 (0.67–2.44) |
| | | Model 2 | 1 | 1.42 (0.75–2.68) | 1.34 (0.67–2.69) | 1.53 (0.79–2.99) |
| | | Model 3 | 1 | 1.39 (0.73–2.62) | 1.31 (0.66–2.60) | 1.48 (0.77–2.84) |
| | | Model 4 | 1 | 1.28 (0.68–2.41) | 1.14 (0.57–2.30) | 1.19 (0.63–2.27) |
| | | Model 5 | 1 | 1.28 (0.68–2.41) | 1.10 (0.53–2.27) | 1.07 (0.45–2.51) |
| | Lung cancer | | | | | |
| | | Model 1 | 1 | 3.30 (1.23–8.90)* | 1.92 (0.58–6.33) | 1.19 (0.32–4.39) |
| | | Model | 1 | 3.65 (1.34– | 2.51 (0.77– | 1.83 (0.48–6.95) |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | 2 | | 9.93)* | 8.18) | |
| | | Model 3 | 1 | 3.63 (1.32–10.01)* | 2.49 (0.75–8.29) | 1.80 (0.47–6.99) |
| | | Model 4 | 1 | 3.53 (1.27–9.82)* | 2.39 (0.70–8.13) | 1.68 (0.38–7.47) |
| | | Model 5 | 1 | 3.98 (1.46–10.87)* | 2.94 (0.80–10.79) | 2.46 (0.49–12.31) |
| | Thyroid cancer | | | | | |
| | | Model 1 | 1 | 1.08 (0.64–1.83) | 1.12 (0.66–1.91) | 1.15 (0.67–1.99) |
| | | Model 2 | 1 | 1.08 (0.64–1.84) | 1.13 (0.66–1.94) | 1.19 (0.68–2.08) |
| | | Model 3 | 1 | 1.08 (0.64–1.85) | 1.13 (0.66–1.94) | 1.19 (0.68–2.08) |
| | | Model 4 | 1 | 1.02 (0.60–1.74) | 1.01 (0.59–1.73) | 1.01 (0.57–1.77) |
| | | Model 5 | 1 | 0.92 (0.53–1.60) | 0.83 (0.47–1.46) | 0.70 (0.37–1.35) |
| | Other cancers | | | | | |
| | | Model 1 | 1 | 0.79 (0.47–1.33) | 0.94 (0.60–1.48) | 1.07 (0.69–1.66) |
| | | Model 2 | 1 | 0.84 (0.50–1.41) | 1.13 (0.72–1.77) | 1.46 (0.94–2.27) |
| | | Model 3 | 1 | 0.83 (0.49–1.39) | 1.11 (0.71–1.74) | 1.43 (0.93–2.22) |
| | | Model 4 | 1 | 0.81 (0.48–1.36) | 1.05 (0.66–1.69) | 1.33 (0.85–2.09) |
| | | Model 5 | 1 | 0.80 (0.47–1.38) | 1.00 (0.58–1.70) | 1.20 (0.67–2.17) |

Values were calculated by logistic regression analysis.

OR, odds ratio; CI, confidence interval.

Model 1: Unadjusted.

Model 2: Adjusted for age (continuous) and sex (categorical: male, female).

Model 3: Adjusted for model 2 plus height (continuous, cm) and BMI (continuous, $kg/m^2$).

Model 4: Adjusted for model 3 plus education level (categorical: ≤ elementary school degree, middle school degree, high school degree, ≥ college degree), smoking status (categorical: yes, no), physical activities (categorical: yes, no) and drinking status (categorical: yes, no).

Model 5: Adjusted for model 4 plus energy intake (continuous variable: kcal/d), SFA intake (continuous, g/d), sodium intake (continuous, g/d), dietary fiber intake (continuous, g/d) and carbohydrate intake (continuous, g/d).

Model 2 for male and female table was adjusted except for sex.

Model 5 for sugar energy rate was adjusted except for energy intake.

[1)]Sex-specific quartiles of sugar intake: Quartile cutoffs were 31.5, 51.8, and 80.2 g/day for men and 29.0, 47.0, and 72.0 g/day for women.

[2)] Values corresponding to female participants.

*$P < 0.05$.