

Supplementary Table 3. Association between sugar intake and cancer types in women

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)	
Female	All cancer						
		Model 1	1	1.31 (0.95–1.82)	1.16 (0.82–1.64)	1.32 (0.96–1.81)	
		Model 2	1	1.36 (0.98–1.88)	1.31 (0.93–1.85)	1.50 (1.09–2.07)*	
		Model 3	1	1.34 (0.96–1.86)	1.28 (0.91–1.81)	1.46 (1.06–2.01)*	
		Model 4	1	1.29 (0.92–1.79)	1.19 (0.84–1.68)	1.30 (0.94–1.79)	
		Model 5	1	1.22 (0.87–1.71)	1.06 (0.73–1.53)	1.02 (0.67–1.55)	
	Gastric cancer						
		Model 1	1	1.78 (0.71–4.48)	0.66 (0.23–1.93)	0.86 (0.29–2.55)	
		Model 2	1	1.97 (0.80–4.82)	0.88 (0.31–2.52)	1.18 (0.40–3.50)	
		Model 3	1	2.27 (0.87–5.88)	1.02 (0.35–2.94)	1.41 (0.47–4.21)	
		Model 4	1	2.15 (0.81–5.67)	0.96 (0.33–2.79)	1.23 (0.40–3.82)	
		Model 5	1	2.15 (0.78–5.89)	0.82 (0.27–2.46)	0.81 (0.20–3.37)	
	Liver cancer						
		Model 1	1	4.38 (0.32–59.26)	– ²⁾	– ²⁾	
		Model 2	1	5.11 (0.38–68.03)	– ²⁾	– ²⁾	

		Model 3	1	5.66 (0.41–77.44)	– ²⁾	– ²⁾
		Model 4	1	6.08 (0.39–94.81)	– ²⁾	– ²⁾
		Model 5	1	2.89 (0.28–30.06)	– ²⁾	– ²⁾
	Colon cancer					
		Model 1	1	1.06 (0.32–3.54)	1.55 (0.50–4.79)	1.55 (0.50–4.79)
		Model 2	1	1.11 (0.34–3.66)	1.84 (0.61–5.51)	1.87 (0.64–5.48)
		Model 3	1	1.12 (0.34–3.72)	1.82 (0.62–5.37)	1.86 (0.63–5.49)
		Model 4	1	1.08 (0.35–3.34)	1.66 (0.65–4.28)	1.60 (0.57–4.45)
		Model 5	1	0.93 (0.29–2.98)	1.27 (0.46–3.49)	0.94 (0.25–3.53)
	Breast cancer					
		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)
	Premenopausal breast cancer ³⁾					
		Model 1	1	0.40 (0.07–2.29)	0.70 (0.12–4.20)	1.03 (0.25–4.21)

		Model 2	1	0.35 (0.06–2.06)	0.60 (0.10–3.75)	0.87 (0.21–3.59)
		Model 3	1	0.33 (0.06–1.80)	0.57 (0.10–3.26)	0.80 (0.21–3.03)
		Model 4	1	0.31 (0.06–1.63)	0.51 (0.10–2.78)	0.67 (0.17–2.64)
		Model 5	1	0.26 (0.05–1.49)	0.44 (0.08–2.32)	0.36 (0.04–3.46)
	Postmenopausal breast cancer ³⁾					
		Model 1	1	1.67 (0.84–3.34)	1.40 (0.68–2.87)	1.40 (0.69–2.84)
		Model 2	1	1.62 (0.81–3.26)	1.30 (0.60–2.77)	1.27 (0.60–2.68)
		Model 3	1	1.60 (0.80–3.22)	1.27 (0.60–2.73)	1.25 (0.60–2.58)
		Model 4	1	1.57 (0.79–3.12)	1.21 (0.56–2.61)	1.16 (0.58–2.32)
		Model 5	1	1.57 (0.80–3.10)	1.22 (0.55–2.70)	1.21 (0.51–2.91)
	Cervical cancer					
		Model 1	1	0.87 (0.33–2.29)	0.53 (0.19–1.51)	1.56 (0.69–3.53)
		Model 2	1	0.94 (0.36–2.46)	0.68 (0.24–1.94)	2.05 (0.95–4.45)
		Model 3	1	0.95 (0.35–2.56)	0.69 (0.24–1.98)	2.09 (0.96–4.55)
		Model 4	1	1.01 (0.38–2.73)	0.77 (0.27–2.19)	2.75 (1.30–5.83)*
		Model 5	1	0.86 (0.30–2.50)	0.55 (0.16–1.91)	1.35 (0.42–4.31)
	Premenopausal					

	cervical cancer ³⁾					
		Model 1	1	4.81 (0.42–54.79)	1.01 (0.06–16.27)	15.28 (1.73–135.31)*
		Model 2	1	4.72 (0.42–53.27)	0.99 (0.06–15.98)	15.09 (1.69–134.79)*
		Model 3	1	5.40 (0.45–64.34)	1.12 (0.06–19.57)	17.81 (1.48–214.62)*
		Model 4	1	4.36 (0.37–51.76)	0.99 (0.06–16.93)	18.63 (2.08–166.43)*
		Model 5	1	3.52 (0.23–53.62)	0.52 (0.02–11.25)	11.57 (0.82–162.60)
	Postmenopausal cervical cancer ³⁾					
		Model 1	1	0.72 (0.24–2.13)	0.56 (0.19–1.67)	1.07 (0.41–2.75)
		Model 2	1	0.81 (0.28–2.39)	0.73 (0.24–2.24)	1.54 (0.62–3.83)
		Model 3	1	0.83 (0.27–2.54)	0.75 (0.24–2.29)	1.58 (0.65–3.85)
		Model 4	1	0.87 (0.28–2.69)	0.82 (0.27–2.50)	2.06 (0.86–4.91)
		Model 5	1	0.73 (0.21–2.47)	0.53 (0.13–2.16)	0.74 (0.19–2.89)
	Lung cancer					
		Model 1	1	2.69 (0.30–24.04)	4.51 (0.49–41.12)	1.34 (0.12–14.85)
		Model 2	1	2.88 (0.33–25.36)	5.58 (0.66–47.40)	1.70 (0.15–18.98)
		Model 3	1	2.65 (0.30–23.44)	5.10 (0.57–45.38)	1.50 (0.13–17.02)
		Model 4	1	2.51 (0.26–24.52)	4.75 (0.47–47.61)	1.23 (0.08–19.34)

		Model 5	1	2.61 (0.25–27.34)	5.03 (0.36–69.53)	1.26 (0.04–43.71)
	Thyroid cancer					
		Model 1	1	1.21 (0.71–2.05)	1.25 (0.74–2.12)	0.99 (0.56–1.75)
		Model 2	1	1.22 (0.72–2.06)	1.28 (0.76–2.17)	1.02 (0.57–1.81)
		Model 3	1	1.20 (0.70–2.05)	1.26 (0.74–2.14)	1.00 (0.56–1.78)
		Model 4	1	1.11 (0.65–1.91)	1.12 (0.66–1.92)	0.84 (0.47–1.51)
		Model 5	1	1.05 (0.6–1.85)	1.00 (0.57–1.77)	0.69 (0.34–1.41)
	Other cancers					
		Model 1	1	1.50 (0.56–4.00)	1.40 (0.51–3.82)	2.28 (0.92–5.66)
		Model 2	1	1.56 (0.59–4.13)	1.60 (0.60–4.29)	2.65 (1.08–6.49)*
		Model 3	1	1.49 (0.56–3.96)	1.52 (0.57–4.08)	2.47 (1.02–5.98)*
		Model 4	1	1.50 (0.59–3.80)	1.49 (0.59–3.74)	2.24 (1.00–5.01)
		Model 5	1	1.51 (0.57–3.96)	1.50 (0.54–4.21)	2.24 (0.73–6.86)

Values were calculated by logistic regression analysis.

OR, odds ratio; CI, confidence interval.

Model 1: Unadjusted.

Model 2: Adjusted for age (continuous).

Model 3: Adjusted for model 2 plus height (continuous, cm) and BMI (continuous, kg/m²).

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.

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

²Small frequency issue: The frequency of this level is too small to confirm the results.

³Menopausal status: Assessed at the time of the survey, not at the time of diagnosis.

* $P < 0.05$.