

Supplementary Table 5. Association between sugar energy rate and cancer types in men

Sex	Cancer site		Sugar energy rate <sup>1</sup> < 10%	Sugar energy rate <sup>1</sup> 10–20%	Sugar energy rate <sup>1</sup> > 20%	Sugar energy rate <sup>1</sup> < 10%	Sugar energy rate <sup>1</sup> ≥10%
			OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Male	All cancer						
		Model 1	1	1.49 (1.13–1.95)*	1.00 (0.61–1.63)	1	1.39 (1.07–1.79)*
		Model 2	1	1.42 (1.07–1.88)*	1.11 (0.66–1.86)	1	1.36 (1.04–1.78)*
		Model 3	1	1.41 (1.07–1.87)*	1.12 (0.67–1.88)	1	1.36 (1.04–1.77)*
		Model 4	1	1.31 (0.98–1.74)	1.00 (0.59–1.70)	1	1.25 (0.95–1.65)
		Model 5	1	1.22 (0.90–1.64)	0.88 (0.50–1.55)	1	1.16 (0.87–1.56)
	Gastric cancer						
		Model 1	1	1.82 (1.06–3.12)*	1.16 (0.37–3.68)	1	1.68 (0.99–2.87)
		Model 2	1	1.71 (0.99–2.94)	1.31 (0.41–4.20)	1	1.64 (0.96–2.80)
		Model	1	1.67 (0.96–	1.34	1	1.61

		3		2.90)	(0.41– 4.38)		(0.94– 2.77)
		Model 4	1	1.49 (0.86– 2.58)	1.17 (0.37– 3.66)	1	1.44 (0.84– 2.44)
		Model 5	1	1.50 (0.84– 2.67)	1.16 (0.38– 3.55)	1	1.45 (0.83– 2.53)
	Liver cancer						
		Model 1	1	2.13 (0.66– 6.90)	– <sup>2)</sup>	1	1.69 (0.52– 5.46)
		Model 2	1	1.99 (0.62– 6.38)	– <sup>2)</sup>	1	1.64 (0.51– 5.25)
		Model 3	1	1.96 (0.60– 6.43)	– <sup>2)</sup>	1	1.62 (0.49– 5.33)
		Model 4	1	1.63 (0.48– 5.55)	– <sup>2)</sup>	1	1.34 (0.39– 4.57)
		Model 5	1	1.51 (0.38– 6.00)	– <sup>2)</sup>	1	1.28 (0.31– 5.19)
	Colon cancer						
		Model 1	1	0.82 (0.47– 1.44)	0.60 (0.17– 2.09)	1	0.77 (0.45– 1.35)
		Model 2	1	0.76 (0.43– 1.34)	0.67 (0.19– 2.38)	1	0.74 (0.42– 1.30)
		Model 3	1	0.76 (0.43– 1.34)	0.68 (0.19–	1	0.75 (0.43–

					2.43)		1.30)
		Model 4	1	0.75 (0.42– 1.33)	0.68 (0.19– 2.45)	1	0.74 (0.42– 1.30)
		Model 5	1	0.75 (0.39– 1.46)	0.72 (0.17– 3.07)	1	0.75 (0.38– 1.46)
	Breast cancer						
		Model 1	1	0.00 (0.00– 0.00)	0.00 (0.00– 0.00)	1	0.00 (0.00– 0.00)
		Model 2	1	0.00 (0.00– 0.00)	0.00 (0.00– 0.00)	1	0.00 (0.00– 0.00)
		Model 3	1	0.00 (0.00– 0.00)	0.00 (0.00– 0.00)	1	0.00 (0.00– 0.00)
		Model 4	1	0.00 (0.00– 0.00)	0.00 (0.00– 0.00)	1	0.00 (0.00– 0.00)
		Model 5	1	0.00 (0.00– 0.00)	0.00 (0.00– 0.00)	1	0.00 (0.00– 0.00)
	Lung cancer						
		Model 1	1	1.88 (0.80– 4.46)	0.22 (0.03– 1.72)	1	1.54 (0.66– 3.61)
		Model 2	1	1.76 (0.74– 4.20)	0.25 (0.03– 1.96)	1	1.49 (0.63– 3.53)
		Model 3	1	1.78 (0.75– 4.23)	0.26 (0.03– 2.07)	1	1.53 (0.65– 3.57)

		Model 4	1	1.66 (0.68– 4.08)	0.23 (0.03– 1.84)	1	1.41 (0.58– 3.43)
		Model 5	1	1.67 (0.65– 4.28)	0.21 (0.03– 1.82)	1	1.44 (0.55– 3.76)
	Thyroid cancer						
		Model 1	1	1.52 (0.54– 4.25)	0.98 (0.27– 3.51)	1	1.41 (0.52– 3.78)
		Model 2	1	1.49 (0.53– 4.14)	1.00 (0.27– 3.63)	1	1.39 (0.52– 3.72)
		Model 3	1	1.54 (0.55– 4.28)	0.96 (0.26– 3.58)	1	1.41 (0.53– 3.79)
		Model 4	1	1.35 (0.48– 3.82)	0.83 (0.21– 3.23)	1	1.24 (0.45– 3.40)
		Model 5	1	1.08 (0.38– 3.11)	0.65 (0.17– 2.44)	1	1.00 (0.36– 2.79)
	Other cancers						
		Model 1	1	1.51 (0.99– 2.30)	1.21 (0.57– 2.56)	1	1.45 (0.96– 2.18)
		Model 2	1	1.43 (0.93– 2.19)	1.34 (0.62– 2.87)	1	1.41 (0.93– 2.14)
		Model 3	1	1.41 (0.92– 2.16)	1.35 (0.63– 2.89)	1	1.40 (0.93– 2.12)
		Model	1	1.33 (0.85–	1.24	1	1.31

		4		2.07)	(0.57– 2.71)		(0.85– 2.02)
		Model 5	1	1.20 (0.76– 1.88)	0.94 (0.41– 2.17)	1	1.16 (0.73– 1.82)

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<sup>2</sup>).

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.

<sup>1)</sup> Sugar energy rate formula: (Total sugar intake (g) × 4) / Energy intake (g) × 100.

<sup>2)</sup> Small frequency issue: The frequency of this level is too small to confirm the results.

\**P* < 0.05.