評価対象論文リスト（要因：甘味飲料、アウトカム：がん）

評価判定日：2024/9/27

①既存の系統的レビュー・メタ解析・統合解析

1	Zhang X, Albanes D, Beeson WL, et al. Risk of colon cancer and coffee, tea, and sugar-sweetened soft drink intake: pooled analysis of prospective cohort studies. JNCI: Journal of the National Cancer Institute. 2010;102(11):771-783. doi:10.1093/jnci/djq107
2	Boyle P, Koechlin A, Autier P. Sweetened carbonated beverage consumption and cancer risk: meta-analysis and review. European Journal of Cancer Prevention. 2014;23(5):481-490. doi:10.1097/CEJ.0000000000000015
3	Makarem N, Bandera EV, Nicholson JM, Parekh N. Consumption of sugars, sugary foods, and sugary beverages in relation to cancer risk: a systematic review of longitudinal studies. Annu Rev Nutr. 2018;38(1):17-39. doi:10.1146/annurev-nutr-082117-051805
4	Milajerdi A, Larijani B, Esmaillzadeh A. Sweetened beverages consumption and pancreatic cancer: a meta-analysis. Nutrition and Cancer. 2019;71(3):375-384. doi:10.1080/01635581.2019.1578390
5	Llaha F, Gil-Lespinard M, Unal P, De Villasante I, Castañeda J, Zamora-Ros R. Consumption of sweet beverages and cancer risk. A systematic review and meta-analysis of observational studies. Nutrients. 2021;13(2):516. doi:10.3390/nu13020516
6	Li Y, Guo L liangzi, He K, Huang C, Tang S. Consumption of sugar-sweetened beverages and fruit juice and human cancer: a systematic review and dose-response meta-analysis of observational studies. J Cancer. 2021;12(10):3077-3088. doi:10.7150/jca.51322
7	Zhang YB, Jiang YW, Chen JX, Xia PF, Pan A. Association of consumption of sugar-sweetened beverages or artificially sweetened beverages with mortality: a systematic review and dose–response meta-analysis of prospective cohort studies. Advances in Nutrition. 2021;12(2):374-383. doi:10.1093/advances/nmaa110
8	Pan B, Ge L, Lai H, et al. Association of soft drink and 100% fruit juice consumption with all-cause mortality, cardiovascular diseases mortality, and cancer mortality: A systematic review and dose-response meta-analysis of prospective cohort studies. Critical Reviews in Food Science and Nutrition. 2022;62(32):8908-8919.
9	Yin T, Li J, Wang Y, Liu K, Long T, Cheng L. Artificially sweetened beverage consumption and cancer risk: a comprehensive dose–response meta-analysis of prospective studies. Nutrients. 2022;14(21):4445. doi:10.3390/nu14214445

②日本人集団の個別疫学研究

10	Khairan P, Sobue T, Eshak ES, et al. Sugary drink consumption and the subsequent risk of gastric cancer: The Japan Public Health Center-based Prospective Study. Eur J Clin Nutr. 2023;77(2):218-225. doi:10.1038/s41430-022-01216-0
11	Leung CY, Abe SK, Sawada N, et al. Sugary drink consumption and risk of kidney and bladder cancer in Japanese adults. Sci Rep. 2021;11(1):21701. doi:10.1038/s41598-
12	Leung CY, Abe SK, Sawada N, et al. Sugary drink consumption and subsequent colorectal cancer risk: the japan public health center–based prospective cohort study. Cancer Epidemiology, Biomarkers & Prevention. 2021;30(4):782-788. doi:10.1158/1055-9965.EPI-20-1364

■コホート研究（コホートのプール解析含む）

Reference			Study subjects												
Author	Title	Year	Study period	Number of subjects	Source of subjects	Event followed	Number of incident cases or deaths	Participant's race	Category	Sub -category	Number among cases	Relative risk (95%CI or p)	P for trend	Per 100 ml per day incremental, HR (95% CI)	Confounding variables considered	**Magnitude of association**
Zhang X, Albanes D, Beeson WL, et al.	Risk of colon cancer and coffee, tea, and sugar-sweetened soft drink intake: pooled analysis of prospective cohort studies	2010	1976-2003	Total cohort 731,441	Pooling of 13 cohort studies	Colon cancer incidence	Men; 1,858 Women; 3,746		Sugar-sweetened carbonated soft drinks							
									Total;	Nondrinkers	2,848	1.00 (Reference)				
										>0-250	1,832	0.96 (0.91, 1.02)	0.61			
										>250-550	178	1.12 (0.90, 1.40)				
										550≥	37	0.98 (0.71, 1.37)			Education, Smoking habits, Height, Body mass index,	-
									Women;	Nondrinkers	2,119	1.00 (Reference)			Physical activity, Family history of colorectal cancer, Use of	
										>0-250	1,191	0.96 (0.89, 1.03)	0.97		nonsteroidal anti-inflammatory drugs, Multivitamin use, Red	
										>250-550	87	1.01 (0.76, 1.34)			meat intake, Total milk consumption, Alcohol consumption,	
										550≥	21	1.13 (0.73, 1.76)			Dietary folate intake, Total energy intake, Oral contraceptive	-
									Men;	Nondrinkers	729	1.00 (Reference)			use (women), Postmenopausal hormone use (women)	
										>0-250	641	0.97 (0.87, 1.08)	0.48			
										>250-550	91	1.29 (0.90, 1.86)				
										550≥	16	0.82 (0.50, 1.36)				-
Khairan P, Sobue T, Eshak ES, Kitamura T, Iwasaki M, Inoue M, Yamaji T, Iso H, Tsugane S, Sawada N.	Sugary drink consumption and the subsequent risk of gastric cancer: The Japan Public Health Center-based Prospective Study	2022	1995-2013 or 2015	Total; 74,455 Men; 35,102 Women; 39,353	The JPHC study	Gastric cancer incidence	Total; 2,141 Men; 1,465 Women; 676	Japanese	Males	Q1(0-30.5ml/d)	316	1.00 (Reference)				
										Q2(30.6-150.5ml/d)	319	1.03 (0.88, 1.20)				
										Q3(150.5-249.6ml/d)	320	1.09 (0.92, 1.28)	0.48			
										Q4(249.6-398.6ml/d)	253	0.91 (0.76, 1.08)			Age, PHC area, BMI, Smoking, Alcohol consumption, Family	
										Q5(>398.6ml/d)	257	0.98 (0.82, 1.17)			history of cancer, Physical activity in METs, Total energy	-
									Women;	Q1(0-0.04ml/d)	143	1.00 (Reference)			intake, Energy-adjusted fruit and vegetables intake, Salt-	
										Q2(0.04-94.4ml/d)	129	0.89 (0.69, 1.13)			preserved foods intake	
										Q3(94.4-165.1ml/d)	139	1.05 (0.83, 1.34)	0.47			
										Q4(165.1-278.1ml/d)	139	1.09 (0.85, 1.40)				
										Q5(>278.1ml/d)	126	1.03 (0.79, 1.33)				-
Leung CY, Abe SK, Sawada N, Ishihara J, Takachi R, Yamaji T, Iwasaki M, Hashizume M, Inoue M, Tsugane S.	Sugary drink consumption and risk of kidney and bladder cancer in Japanese adults	2021	1995-2013	Total; 73,024 Men; 33,094 Women; 39,930	The JPHC Study	Kidney cancer incidence Bladder cancer incidence		169 Japanese 297	**Kidney cancer** Men;							
									Minimally adjusted	Non-consumers	17	1.00 (Reference)				
										> 0–254	49	0.89 (0.51, 1.55)	0.86	1.01 (0.95–1.08)	Age, Public health center, Smoking status and intensity, Physical activities, Intake of total energy	-
										≥ 254	47	0.90 (0.51, 1.59)				
									Multivariable model	Non-consumers	17	1.00 (Reference)				
										> 0–254	49	0.89 (0.50, 1.56)	0.84	1.01 (0.95–1.08)	Age, Public health center, Body mass index, History of hypertension, History of diabetes, Smoking status and intensity, Consumption of alcohol, Coffee, Fruit, Vegetables, Biscuits, Cake, Chocolate, Japanese-style confectionery,	-
										≥ 254	47	0.89 (0.49, 1.62)				
									Excluding 3 years	Non-consumers	17	1.00 (Reference)			History of hypertension, history of diabetes, and body mass	
										> 0–254	49	0.82 (0.44, 1.50)			index were not adjusted for. Sugary drinks included beta-	
										≥ 254	47	0.94 (0.50, 1.76)	0.78	1.03 (0.96–1.09)	carotene-fortified beverages, calcium-fortified beverages,	
															canned coffee, carbonated beverages, 100% fruit juices (apple	-
															juice and orange juice), lactic acid bacteria beverages, and	
															vitamin-fortified beverages.	
									Women;							
									Minimally adjusted	Non-consumers	10	1.00 (Reference)				
										> 0–134	22	0.78 (0.37, 1.67)	0.74	1.04 (0.91–1.19)	age (year); public health center (10 areas); smoking status and	
										≥ 134	24	0.80 (0.37, 1.70)			intensity (never; former; current: < 20 cigarettes per day;	-
									Multivariable model	Non-consumers	10	1.00 (Reference)			current: ≥ 20 cigarettes per day); physical activities (metabolic	
										> 0–134	22	0.83 (0.38, 1.79)	0.91	1.07 (0.95–1.21)	Age, Public health center, Body mass index, History of	
										≥ 134	24	0.93 (0.43, 2.03)			hypertension, History of diabetes, Smoking status and	
															intensity, Consumption of alcohol, Coffee, Fruit, Vegetables,	
															Biscuits, Cake, Chocolate, Japanese-style confectionery,	-
															Physical activities, Height, Intake of total energy	
									Excluding 3 years	Non-consumers	10	1.00 (Reference)				
										> 0–134	22	1.06 (0.41, 2.72)	0.37	**1.11 (1.01–1.22)**	History of hypertension, History of diabetes, Body mass index	
										≥ 134	24	1.37 (0.54, 3.50)				-
									Bladder cancer Men;							
									Minimally adjusted	Non-consumers	40	1.00 (Reference)				
										> 0–254	96	0.74 (0.51, 1.07)	0.37	1.01 (0.96–1.05)	Age, Public health center, Smoking status and intensity,	
										≥ 254	93	0.75 (0.51, 1.09)			Physical activities, Intake of total energy	-
										Non-consumers	40	1.00 (Reference)				
															Age, Public health center, Body mass index, History of	

									Multivariable model	> 0–254	96	0.73 (0.50, 1.06)	0.34	1.01 (0.96–1.05)	hypertension, History of diabetes, Smoking status and intensity, Consumption of alcohol, Coffee, Fruit, Vegetables, Biscuits, Cake, Chocolate, Japanese-style confectionery, Physical activities, Height, Intake of total energy	-
										≥ 254	93	0.73 (0.49, 1.08)				
									Excluding 3 years	Non-consumers	40	1.00 (Reference)				
										> 0–254	96	0.74 (0.50, 1.11)	0.29	0.99 (0.94–1.05)	History of hypertension, History of diabetes, Body mass inde	
										≥ 254	93	0.71 (0.47, 1.09)				-
									Women;							
									Minimally adjusted	Non-consumers	10	1.00 (Reference)				
										> 0–134	30	1.25 (0.61, 2.58)	0.64	**1.10 (1.01–1.20)**	Age, Public health center, Smoking status and intensity, Physical activities, Intake of total energy	
										≥ 134	28	1.28 (0.61, 2.67)				-
									Multivariable model	Non-consumers	10	1.00 (Reference)				
										> 0–134	30	1.10 (0.53, 2.28)				
										≥ 134	28	0.95 (0.45, 2.03)	0.70	1.08 (0.97–1.20)	Age, Public health center, Body mass index, History of hypertension, History of diabetes, Smoking status and intensity, Consumption of alcohol, Coffee, Fruit, Vegetables, Biscuits, Cake, Chocolate, Japanese-style confectionery, Physical activities, Height, Intake of total energy	-
									Excluding 3 years	Non-consumers	10	1.00 (Reference)				
										> 0–134	30	0.96 (0.44, 2.10)	0.89	**1.11 (1.01–1.22)**		
										≥ 134	28	1.01 (0.46, 2.23)				-
Leung CY, Abe SK, Sawada N, Ishihara J, Takachi R, Yamaji T, Iwasaki M, Hashizume M, Inoue M, Tsugane S; JPHC Study Group.	Sugary Drink Consumption and Subsequent Colorectal Cancer Risk: The Japan Public Health Center-Based Prospective Cohort Study	2021	1995-2013	Total; 74,070 Men; 33,709 Women; 40,361	The JPHC Study	Colorectal cancer incidence	Total; 41,301 Men; 940 Women; 40,361	Japanese	Men;							
									Colorectal	Non-consumers	166	1.00 (Reference)				
										> 0–254	406	0.86 (0.71, 1.03)	0.22	0.99 (0.97–1.01)		
										≥ 254	368	0.84 (0.70, 1.02)				-
									Colon	Non-consumers	109	1.00 (Reference)				
										> 0–254	270	0.87 (0.69, 1.09)	0.11	0.99 (0.96–1.02)		
										≥ 254	227	0.80 (0.63, 1.02)				-
									Proximal colon	Non-consumers	43	1.00 (Reference)				
										> 0–254	122	0.98 (0.69, 1.40)	0.17	0.99 (0.95–1.04)	Age, Public health center, History of diabetes, Body mass index, Physical activity, Smoking status and intensity, Alcohol consumption, Colorectal cancer screening, Intakes of total energy, Vegetables, Red and processed meat, Fish	
										≥ 254	93	0.82 (0.57, 1.19)				-
									Distal colon	Non-consumers	56	1.00 (Reference)				
										> 0–254	135	0.84 (0.62, 1.16)	0.42	1.00 (0.95–1.04)		
										≥ 254	120	0.83 (0.60, 1.15)				-
									Rectal	Non-consumers	57	1.00 (Reference)				
										> 0–254	136	0.83 (0.61, 1.14)	0.94	0.98 (0.94–1.02)		
										≥ 254	141	0.91 (0.66, 1.26)				-
									Women;							
									Colorectal	Non-consumers	108	1.00 (Reference)				
										> 0–254	281	1.05 (0.83, 1.31)	0.04	1.00 (0.96–1.05)		
										≥ 254	319	1.20 (0.96, 1.50)				
									Colon	Non-consumers	70	1.00 (Reference)				
										> 0–254	212	1.21 (0.92, 1.60)	0.04	0.99 (0.93–1.04)		
										≥ 254	233	**1.36 (1.03, 1.78)**				↑
									Proximal colon	Non-consumers	39	1.00 (Reference)				
										> 0–254	144	**1.47 (1.03, 2.10)**	0.22	0.98 (0.92–1.06)	Age, Public health center, History of diabetes, Body mass index, Physical activity, Smoking status and intensity, Alcohol consumption, Colorectal cancer screening, Intakes of total energy, Vegetables, Red and processed meat, Fish	↑
										≥ 254	139	**1.45 (1.01, 2.09)**				↑
									Distal colon	Non-consumers	23	1.00 (Reference)				
										> 0–254	58	1.01 (0.62, 1.65)	0.05	1.00 (0.91–1.10)		
										≥ 254	79	1.38 (0.86, 2.22)				
									Rectal	Non-consumers	38	1.00 (Reference)				
										> 0–254	69	0.73 (0.49, 1.10)	0.66	1.04 (0.96–1.11)		
										≥ 254	86	0.91 (0.62, 1.35)				