評価対象論文リスト（要因：肉・赤肉・加工肉、アウトカム：死亡）

評価判定日：2024/6/28

①既存の系統的レビュー・メタ解析・統合解析

1	Lee JE, McLerran DF, Rolland B, et al. Meat intake and cause-specific mortality: a pooled analysis of Asian prospective cohort studies. The American Journal of Clinical Nutrition. 2013;98(4):1032-1041. doi:10.3945/ajcn.113.062638
2	Lupoli R, Vitale M, Calabrese I, Giosuè A, Riccardi G, Vaccaro O. White meat consumption, all-cause mortality, and cardiovascular events: a meta-analysis of prospective cohort studies. Nutrients. 2021;13(2):676. doi:10.3390/nu13020676
3	Vernooij RWM, Zeraatkar D, Han MA, et al. Patterns of red and processed meat consumption and risk for cardiometabolic and cancer outcomes: a systematic review and meta-analysis of cohort studies. Ann Intern Med. 2019;171(10):732-741. doi:10.7326/M19-1583
4	Zeraatkar D, Han MA, Guyatt GH, et al. Red and processed meat consumption and risk for all-cause mortality and cardiometabolic outcomes: a systematic review and meta-analysis of cohort studies. Ann Intern Med. 2019;171(10):703-710. doi:10.7326/M19-0655
5	Schwingshackl L, Schwedhelm C, Hoffmann G, et al. Food groups and risk of all-cause mortality: a systematic review and meta-analysis of prospective studies ,. The American Journal of Clinical Nutrition. 2017;105(6):1462-1473. doi:10.3945/ajcn.117.153148
6	Wang X, Lin X, Ouyang YY, et al. Red and processed meat consumption and mortality: dose–response meta-analysis of prospective cohort studies. Public Health Nutr. 2016;19(5):893-905. doi:10.1017/S1368980015002062
7	Abete I, Romaguera D, Vieira AR, Lopez De Munain A, Norat T. Association between total, processed, red and white meat consumption and all-cause, CVD and IHD mortality: a meta-analysis of cohort studies. Br J Nutr. 2014;112(5):762-775. doi:10.1017/S000711451400124X
8	Larsson SC, Orsini N. Red meat and processed meat consumption and all-cause mortality: a meta-analysis. American Journal of Epidemiology. 2014;179(3):282-289. doi:10.1093/aje/kwt261

②日本人集団の個別疫学研究

9	Sasakabe T, Wakai K, Ukawa S, et al. Food group intakes and all-cause mortality among a young older Japanese population of the same age : the New Integrated Suburban Seniority Investigation Project. February 2021. doi:10.18999/nagjms.83.1.169
10	Saito E, Tang X, Abe SK, et al. Association between meat intake and mortality due to all-cause and major causes of death in a Japanese population. Cardoso MA, ed. PLoS ONE. 2020;15(12):e0244007. doi:10.1371/journal.pone.0244007
11	Otsuka R, Tange C, Nishita Y, et al. Fish and meat intake, serum eicosapentaenoic acid and docosahexaenoic acid levels, and mortality in community-dwelling japanese older persons. IJERPH. 2019;16(10):1806. doi:10.3390/ijerph16101806

■メタ解析、系統的レビュー

Reference			Design	Category	Relative risk (95% CI or p)	Weight	**Magnitude of association**
Author	Title	Year					
Lee JE et al.	Meat intake and cause-specific mortality: a pooled analysis of Asian prospective cohort studies.	2013	Pooled analysis of cohort studies in Asian population (including Japanese)	**Red meat (males)**			
				Q1	Ref		↓
				Q2	0.94 (0.88, 1.00)		
				Q3	**0.86 (0.80, 0.93)**		
				Q4	0.93 (0.84, 1.02)		
				Poultry (males)			
				T1	Ref		↓
				T2	**0.88 (0.83, 0.93)**		
				T3	**0.89 (0.81, 0.98)**		
				Red meat (females)			
				Q1	Ref		↓
				Q2	**0.93 (0.87, 0.98)**		
				Q3	**0.88 (0.81, 0.95)**		
				Q4	0.93 (0.86, 1.00)		
				Poultry (females)			
				T1	Ref		↓
				T2	**0.91 (0.85, 0.97)**		
				T3	**0.93 (0.86, 0.99)**		
Lupoli R, Vitale M, Calabrese I, Giosuè A, Riccardi G,	White Meat Consumption, All-Cause Mortality, and Cardiovascular Events: A Meta-	2021	Meta-analysis of cohort studies (including Japanese)	**White meat consumption**			
				Lowest	Ref		↓
				Highest	**0.94 (0.90, 0.97)**		
Schwingshackl L et al.	Food groups and risk of all-cause mortality: a systematic review and meta-analysis of prospective studies	2017	Meta-analysis of prospective studies (not including Japanese)				↑

■コホート研究（コホートのプール解析含む）

Reference			Study subjects						Category	Number among cases	Relative risk (95%CI or p)	P for trend	Confounding variables considered	**Magnitude of association**
Author	Title	Year	Study period	Number of subjects	Source of subjects	Event followed	Number of incident cases or deaths	Participant's race						
Sasakabe T, Wakai K, Ukawa S, Ando M, Kawamura T, Okabayashi S, Tsushita K, Ohira H, Tamakoshi A	Food group intakes and all-cause mortality among a young older Japanese population of the same age: the New Integrated Suburban Seniority Investigation Project	2021	1996–2015	1,324 men and 1,338 women	NISSIN Project Community-dwelling older people aged 64–65 years	All-cause mortality	339	Japanese	**Meat (men)**				Energy intake, survey year, body mass index, smoking status, drinking status, walking time, sleeping time, education levels, employment status, vitamin supplement use, hypertension, and diabetes mellitus	–
									Q1	52	Ref			
									Q2	53	0.98 (0.67–1.44)	0.539		
									Q3	61	1.13 (0.77–1.64)			
									Q4	67	1.09 (0.75–1.59)			
									Meat (women)					–
									Q1	23	Ref			
									Q2	23	0.97 (0.54–1.74)	0.151		
									Q3	26	1.08 (0.61–1.92)			
									Q4	34	1.42 (0.82–2.49)			
Saito E, Tang X, Abe SK, Sawada N, Ishihara J, Takachi R, Iso H, Shimazu T, Yamaji T, Iwasaki M, Inoue M, Tsugane S; JPHC Study Group.	Association between meat intake and mortality due to all-cause and major causes of death in a Japanese population	2020	1995–2009	87,507	JPHC Study	All-cause mortality	9,886	Japanese	**All meat (men)**					↑
									Q1	1,788	Ref			
									Q2	1,501	0.98 (0.91–1.05)	**0.026**		
									Q3	1,420	0.99 (0.91–1.07)			
									Q4	1,557	**1.18 (1.06–1.31)**			
									Red meat (men)					↑
									Q1	1,819	Ref			
									Q2	1,470	0.93 (0.87–1.01)	0.079		
									Q3	1,430	0.98 (0.90–1.06)			
									Q4	1,547	**1.13 (1.02–1.26)**			
									Processed meat (men)					↓
									Q1	2,016	Ref			
									Q2	1,471	**0.91 (0.85–0.98)**	0.488		
									Q3	1,388	**0.92 (0.85–0.99)**			
									Q4	1,391	0.98 (0.91–1.07)			
									Chicken (men)				Age; public health center area; smoking status, alcohol intake, BMI, quartile of metabolic equivalent task-hours/d, history of hypertension, total energy intake, history of diabetes, intakes of fruits, vegetables, fish, dairy products, egg, sodium, and total fat	–
									Q1	1,793	Ref			
									Q2	1,504	0.97 (0.90–1.04)	0.128		
									Q3	1,454	0.95 (0.88–1.02)			
									Q4	1,515	0.94 (0.87–1.02)			
									All meat (women)					–
									Q1	1,013	Ref			
									Q2	850	0.98 (0.89–1.08)	0.164		
									Q3	834	1.02 (0.91–1.13)			
									Q4	923	1.11 (0.97–1.26)			
									Red meat (women)					–
									Q1	1,018	Ref			
									Q2	834	0.96 (0.87–1.06)	0.174		
									Q3	852	1.04 (0.94–1.16)			
									Q4	916	1.08 (0.95–1.24)			
									Processed meat (women)					–
									Q1	1,145	Ref			
									Q2	825	0.93 (0.84–1.02)	0.327		
									Q3	814	0.98 (0.89–1.08)			
									Q4	836	1.05 (0.95–1.17)			
									Chicken (women)					–
									Q1	1,008	Ref			
									Q2	863	1.00 (0.91–1.10)	0.789		
									Q3	834	0.96 (0.87–1.06)			
									Q4	915	1.00 (0.90–1.10)			
Otsuka R, Tange C, Nishita Y, Tomida M, Kato Y, Imai T, Ando F, Shimokata H.	Fish and Meat Intake, Serum Eicosapentaenoic Acid and Docosahexaenoic Acid Levels, and Mortality in Community-Dwelling Japanese Older Persons	2019	2000–2012	520 men and 534 women	NILS-LSA Non-institutionalized elderly individuals	All-cause mortality	422	Japanese	**Meat intake**				Sex, baseline age, body mass index, smoking status, alcohol drinking, physical activity, education, employment, and history of	
									T1	159	Ref	0.19		
									T2	136	0.77 (0.57–1.03)			
									T3	127	0.81 (0.60–1.11)			

	cancer, heart disease, stroke, hypertension, dyslipidemia, and diabetes mellitus	–