評価対象論文リスト(要因:魚、アウトカム:死亡)

評価判定日:2024/5/31

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	Kwok CS, Gulati M, Michos ED, et al. Dietary components and risk of cardiovascular disease and all-cause mortality: a review of evidence from meta-analyses. Eur J Prev Cardiolog. 2019;26(13):1415-1429. doi:10.1177/2047487319843667
3	Jayedi A, Shab-Bidar S, Eimeri S, Djafarian K. Fish consumption and risk of all-cause and cardiovascular mortality: a dose–response meta-analysis of prospective observational studies. Public Health Nutr. 2018;21(7):1297-1306. doi:10.1017/S1368980017003834
4	Yi Wan, Jusheng Zheng, Fenglei Wang, Duo Li. Fish, long chain omega-3 polyunsaturated fatty acids consumption, and risk of all-cause mortality: a systematic review and dose-response meta-analysis from 23 independent prospective cohort studies. Asia Pacific Journal of Clinical Nutrition. 2017;26(5). doi:10.6133/apjcn.072017.01
5	Zhao LG, Sun JW, Yang Y, Ma X, Wang YY, Xiang YB. Fish consumption and all-cause mortality: a meta-analysis of cohort studies. Eur J Clin Nutr. 2016;70(2):155-161. doi:10.1038/ejcn.2015.72

②日本人個別研究(ランダム化比較試験、コホート研究、症例対照研究、横断研究などの個別疫学研究)

6	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
7	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
8	Yamagishi K, Iso H, Date C, et al. Fish, ω-3 polyunsaturated fatty acids, and mortality from cardiovascular diseases in a nationwide community-based cohort of japanese men and women. Journal of the American College of Cardiology. 2008;52(12):988-996. doi:10.1016/j.jacc.2008.06.018
9	Nakamura Y, Ueshima H, Okamura T, et al. Association between fish consumption and all-cause and cause-specific mortality in Japan: NIPPON DATA80, 1980–99. The American Journal of Medicine. 2005;118(3):239-245. doi:10.1016/j.amjmed.2004.12.016
10	Nagata C. Soy and fish oil intake and mortality in a japanese community. American Journal of Epidemiology. 2002;156(9):824-831.

■メタ解析、系統的レビュー

Reference			Include study						Design	Category	Relative risk (95% CI or p)	Weight	**Magnitude of association**
Author	Title	Year	Ref No.	First author	Year	Study period	Study location	Event (*Definition)					
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)	**Fish intake (males)** Q1 Q2 Q3 Q4 **Fish intake (females)** Q1 Q2 Q3 Q4	 Ref 0.98 (0.89, 1.08) 0.98 (0.89, 1.08) 1.05 (0.95, 1.16) Ref **0.86 (0.75, 0.98)** **0.89 (0.83, 0.96)** **0.91 (0.85, 0.97)**		– ↓
Jayedi A, Shab-Bidar S, Eimeri S, Djafarian K.	Fish consumption and risk of all-cause and cardiovascular mortality: a dose-response meta-analysis of prospective observational studies	2018							Meta-analysis of prospective observational studies (including Japanese)				↓

■メタ解析、系統的レビュー

Reference			Include study						Design	Category	Relative risk (95% CI or p)	Weight	**Magnitude of association**
Author	Title	Year	Ref No.	First author	Year	Study period	Study location	Event (*Definition)					
Wan Y, Zheng J, Wang F, Li D.	Fish, long chain omega-3 polyunsaturated fatty acids consumption, and risk of all-cause mortality: a systematic review and dose-response meta-analysis from 23 independent prospective cohort studies	2017							Meta-analysis of prospective cohort studies (including Japanese)	**Fish consumption** Lowest Highest	 Ref **0.94 (0.90, 0.98)**		↓

■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	**Fish and shellfish (men)** Q1 Q2 Q3 Q4 **Fish and shellfish (women)** Q1 Q2 Q3 Q4	 56 46 61 70 30 22 33 21	 Ref 0.78 (0.53–1.16) 1.01 (0.70–1.46) 1.13 (0.79–1.62) Ref 0.69 (0.39–1.21) 1.06 (0.63–1.76) 0.66 (0.37–1.17)	0.191 0.313	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	– –
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	**Fish intake** T1 T2 T3	 142 142 138	 Ref 1.16 (0.85–1.58) 1.20 (0.89–1.63)	0.23	Sex, baseline age, body mass index, smoking status, alcohol drinking, physical activity, education, employment, and history of cancer, heart disease, stroke, hypertension, dyslipidemia, and diabetes mellitus	–
Yamagishi K, Iso H, Date C, Fukui M, Wakai K, Kikuchi S, Inaba Y, Tanabe N, Tamakoshi A	Fish, omega-3 polyunsaturated fatty acids, and mortality from cardiovascular diseases in a nationwide community-based cohort of Japanese men and women the JACC (Japan Collaborative Cohort Study for Evaluation of Cancer Risk) Study	2008	1988–2003	57,972	JACC Study Nationwide community-based sample from 45 administrative districts of Japan	All-cause mortality	7,008	Japanese	**Fish intake** Q1 Q2 Q3 Q4 Q5	 1,429 1,288 1,328 1,397 1,566	 Ref 0.96 (0.89–1.04) 0.98 (0.90–1.05) 0.96 (0.89–1.04) **0.92 (0.85–1.00)**	**0.08**	Energy intake, hypertension and diabetes mellitus, smoking status, alcohol consumption, body mass index, mental stress, walking, sports, education levels, total energy, and dietary intakes of cholesterol, saturated and ω-6 polyunsaturated fatty acids, vegetables	–
Nakamura Y, Ueshima H, Okamura T, Kadowaki T, Hayakawa T, Kita Y, Tamaki S, Okayama A; NIPPON DATA80 Research Group.	Association between fish consumption and all-cause and cause-specific mortality in Japan: NIPPON DATA80, 1980-99	2005	1980–1999	3,945 men and 4,934 women	NIPPON DATA80 Community-based subjects aged 30 years and over in 300 randomly selected health districts throughout Japan	All-cause mortality	1,745	Japanese	**Fish consumption** Seldom 1–2/wk 1/2 days 1/day 2+/day	 77 450 496 584 138	 1.12 (0.87–1.44) Ref 0.98 (0.85–1.12) 1.03 (0.88–1.20) 0.99 (0.77–1.27)	0.94	Age, sex, smoking, alcohol drinking, hypertension, body mass index, diabetes, and total cholesterol.	–

				The Takayama Study				**Fish intake (men)**						
								Q1	214	Ref				
								Q2	210	0.92 (0.76, 1.11)	0.50			
								Q3	212	0.91 (0.75, 1.10)				
								Q4	243	0.90 (0.75, 1.09)				
Nagata C, Takatsuka N, Shimizu H.	Soy and fish oil intake and mortality in a Japanese community	2002	1992–1999	13,355 males and 15,724 females	Residents of Takayama, Gifu, Japan	All-cause mortality	2,062	Japanese	Q5	284	0.94 (0.78, 1.12)		Age, total energy, marital status, body mass index, smoking status, alcohol intake, coffee intake, exercise, and history of hypertension and diabetes mellitus	–
								Fish intake (women)						
								Q1	207	Ref				
								Q2	177	0.94 (0.77, 1.15)	**0.07**			–
								Q3	171	0.95 (0.78, 1.17)				
								Q4	173	0.92 (0.75, 1.13)				
								Q5	171	**0.82 (0.67, 1.00)**				