

Supplementary Table S1. Prospective cohort studies on total nut consumption and total cancer mortality

Author, publication year, country	Study name	Study period	Number of participants, gender, age, number of deaths	Dietary assessment	Exposure and subgroup	Nut consumption frequency or amount	Relative risks (95% confidence intervals)	Adjustment for confounding factors
Bao Y et al, 2013, USA	Nurses' Health Study	1980-2010, 30 years follow-up	76464 women, age 34-59 years: 6535 cancer deaths	Validated FFQ, 61-116 food items	Nuts	Never <1/wk 1 2-4 ≥5	1.00 0.94 (0.88-1.01) 0.91 (0.84-0.99) 0.89 (0.82-0.98) 0.94 (0.82-1.09)	Age, race, BMI, physical activity, smoking, screening, multivitamin use, aspirin use, FH – DM, MI or cancer, history of DM, hypertension, or hypercholesterolemia, total energy, alcohol, red or processed meat, fruits, vegetables, menopausal status, HRT
Bao Y et al, 2013, USA	Health Professional's Follow-up Study	1986-2010, 24 years follow-up	42498 men, age 45-70 years: 3758 cancer deaths	Validated FFQ, 131 food items	Nuts	Never <1/wk 1 2-4 ≥5	1.00 0.91 (0.82-1.01) 0.98 (0.88-1.09) 0.95 (0.85-1.05) 0.86 (0.75-0.98)	Age, race, BMI, physical activity, smoking, screening, multivitamin use, aspirin use, FH – DM, MI or cancer, history of DM, hypertension, or hypercholesterolemia, total energy, alcohol, red or processed meat, fruits, vegetables
Guasch-Ferre M et al, 2013, Spain	PREDIMED Study	NA-NA, 4.8 years follow-up	7216 men and women, age 55-80 years: 130 cancer deaths	Validated FFQ, 137 food items	Nuts	Never 1-3 serv/wk >3	1.00 0.79 (0.52-1.20) 0.60 (0.37-0.98)	Age, sex, and intervention group, BMI, smoking status, education, leisure time physical activity, DM, hypercholesterolemia, oral antidiabetic medication, antihypertensive medication, use of statins, total energy, vegetables, fruits, red meat, eggs, fish, alcohol, Mediterranean diet adherence
Hshieh TT et al, 2015, USA	Physicians' Health Study	1999-2002 – NA, 9.6 years follow-up	20742 men, mean age 66 years: 868 cancer deaths	FFQ, 19 food items (validated in other cohorts)	Nuts	<1 serv/mo 1-3 1 serv/wk 2-4 ≥5	1.00 0.91 (0.77-1.08) 0.88 (0.72-1.07) 0.87 (0.68-1.09) 0.87 (0.66-1.15)	Age, BMI, alcohol, smoking, exercise, calories, SFA, fruit and vegetables, red meat, prevalent DM, hypertension

Luu HN et al, 2015, USA	Southern Community Cohort Study	2002-2009 - NA, 5.4 years follow-up	71764 men and women, age 40-79 years: 1551 cancer deaths	FFQ, 89 food items	Total nuts and peanut butter, African Americans Total nuts and peanut butter, Caucasians	<0.95 g/d 0.95-<3.08 3.08-<7.30 7.30-<18.45 ≥18.45 <0.95 g/d 0.95-<3.08 3.08-<7.30 7.30-<18.45 ≥18.45	1.00 0.89 (0.73-1.07) 0.85 (0.69-1.05) 0.91 (0.74-1.11) 0.74 (0.60-0.92) 1.00 0.98 (0.72-1.32) 0.89 (0.65-1.21) 0.68 (0.48-0.94) 0.93 (0.68-1.29)	Age, sex, race, education, occupation, household income, marital status, smoking pack-years, alcohol, BMI, physical activity, vitamin supplement use, Charlson Comorbidity Index, metabolic conditions (hypertension, heart disease, DM, obesity, hypercholesterolemia), total energy, red meat, chicken and duck intake, seafood, vegetables, fruits
van den Brandt PA et al, 2015, Netherlands	Netherlands Cohort Study	1986-1996, 10 years follow-up	3202 subcohort members, men and women, age 55-69 years: 3917 cancer deaths	Validated FFQ, 150 food items	Total nuts	0 g/d 0.1-<5 5-<10 ≥10	1.00 0.92 (0.81-1.05) 0.82 (0.68-0.98) 0.79 (0.67-0.93)	Age, sex, cigarette smoking, number of cigarettes per day, years of smoking, hypertension, DM, body height, BMI, non-occupational physical activity, highest level of education, alcohol, vegetables, fruits, energy, nutritional supplement use, women: HRT
Eslamparast T et al, 2016, Iran	Golestan Cohort Study	2004 - 2013, 7 years follow-up	50045 men and women, age ≥40 years: 887 cancer deaths	Validated FFQ	Nuts, all Nuts, women Nuts, men	Never <1 serv/wk 1-<3 ≥3 Never <1 serv/wk 1-<3 ≥3 Never <1 serv/wk 1-<3 ≥3	1.00 0.96 (0.82-1.11) 0.84 (0.65-1.07) 0.62 (0.38-1.01) 1.00 0.91 (0.73-1.14) 0.72 (0.48-1.07) 0.43 (0.18-1.01) 1.00 0.98 (0.80-1.20) 0.90 (0.65-1.25) 0.73 (0.41-1.33)	Age, sex, BMI, education, place of residence, smoking status, opium, alcohol, physical activity, wealth score, diabetes, hypertension, total energy, fish, red meat, chicken, fruits, vegetables, dairy products, eggs, total fiber, magnesium, zinc, copper
Neelakantan N et al, 2018, Singapore	Singapore Chinese Health Study	1993-1998 - 2014, 17.2 years follow-up	57078 men and women, age 45-74 years: 5306 cancer deaths	Validated FFQ, 165 food items	Nuts	Per 28 g/d (nuts) or 16 g/d (peanut butter)	0.92 (0.84-1.01)	Age, sex, total energy, dialect, education, smoking status, cigarettes per day, physical activity, sleep duration, BMI, diabetes mellitus, hypertension, vegetables, fruit, whole grains, nuts, legumes, dairy products, fish, sugar-sweetened beverages and fruit juice, alcohol

Amba V et al, 2019, USA	NIH-AARP Diet and Health Study	1995-1996 - NA, 15.5 years follow-up	374101/380351 men and women, age 50-71 years: 26685 cancer deaths	Validated FFQ, 124 food items	Nuts	0 g/1000 kcal/d 0.11 0.51 2.20 Per 2.15 g/d	1.00 0.91 (0.87-0.95) 0.88 (0.83-0.92) 0.88 (0.84-0.92) 0.99 (0.98-1.00)	Age, sex, BMI, education, race, self-reported health condition, smoking status, cigarettes per day, total energy, alcohol, vitamin use, physical activity, white meat, red meat, whole grains, vegetables, fruits
de Souza RJ et al, 2020, International	The Prospective Urban Rural Epidemiology (PURE) study	2003-2019 - 2019, 9.5 years follow-up	124329 men and women, age 35-70 years: 1768 cancer deaths	Validated FFQ	Nuts	<30 g/mo 30 g/mo-<30g/wk 30 g/wk-<120 g/wk ≥120 g/wk Per 30 g/d	1.00 0.91 (0.79-1.06) 0.95 (0.82-1.10) 0.81 (0.65-1.00) 0.89 (0.76-1.04)	Age, sex, follow-up time, urban/rural location, center, lifestyle factors, education, tobacco use, BMI, WHR, physical activity, family history of CVD, DM and cancer, fish, fruits, vegetables, red/processed meat, legumes, total energy
Sun Y et al, 2021, USA	Women's Health Initiative	1993-1998-2017, 18.3 years follow-up	102521 women, age 50-79 years: 7516 cancer deaths	Validated FFQ, 122 food items	Nuts	1 2 3 4 5 Per oz equivalent/day	1.00 0.95 (0.88-1.02) 0.94 (0.87-1.01) 0.95 (0.89-1.03) 0.99 (0.92-1.06) 1.00 (0.95-1.04)	Age, race/ethnicity, education, income, Observational Study/Clinical Trials, unopposed estrogen use, estrogen+progesterone use, smoking status, physical activity, alcohol intake, total energy intake, DM, high blood cholesterol, FH - heart attack/stroke, whole grains, vegetables, fruits, sugar-sweetened beverages, unprocessed red meat, processed red meat, poultry, fish/shellfish, eggs, dairy products, legumes
Yang J et al, 2022, Hong Kong	Mr. Osteoporosis and Ms. OS study	2001-2003 - 2017, 13.75 years follow-up	3995 men and women, age ≥65 years: 469 cancer deaths	Validated FFQ, 280 food items	Nuts, all Nuts, men Nuts, women	<0.21 g/d 0.21-1.63 1.63-4.23 >4.23 <0.41 g/d 0.41-1.98 1.98-5.12 >5.12 0.00 g/d 0.00-1.15 1.15-3.54 >3.54	1.00 0.84 (0.65-1.08) 0.87 (0.68-1.12) 0.72 (0.55-0.94) 1.00 0.87 (0.62-1.21) 0.93 (0.67-1.28) 0.67 (0.48-0.94) 1.00 0.81 (0.54-1.20) 0.79 (0.52-1.19) 0.84 (0.54-1.33)	Age, sex, energy intake, BMI, physical activity, systolic blood pressure, medical history - DM, hypertension, stroke, heart attack, angina, congestive heart failure, cancer, smoking habits, alcohol, education

Yamakawa et al, 2022	The Takayama Study	1992-2008, 14.1 years follow-up	31552 men and women, age ≥ 35 years: 1620 cancer deaths	Validated FFQ, 169 food items	Total nuts, men	0 g/d	1.00	Age, marital status, education, BMI, diabetes, hypertension, smoking status, alcohol intake, physical activity, use of any vitamin supplement, dietary intake of total energy, vegetables, fruits, and red meat, and for women only: menopausal status
						0.8	0.87 (0.71-1.06)	
						1.5	0.85 (0.69-1.06)	
						3.0	0.84 (0.68-1.03)	
					Total nuts, women	0.1 g/d	1.00	
						0.9	1.01 (0.78-1.29)	
						1.4	0.96 (0.74-1.26)	
	2.6	1.18 (0.93-1.51)						

BMI=body mass index, CVD=cardiovascular disease, DM=diabetes mellitus, FFQ=food frequency questionnaire, FH=family history, HRT=hormone replacement therapy, MI=myocardial infarction, NA=not available, SFA=saturated fatty acids, WHR=waist-to-hip ratio