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## List of supplementary materials

1. Supplementary Table S1: Database search strategy
2. Supplementary Table S2: Characteristics of studies included

**Supplementary Table S1. Database search strategy**

<b>PubMed</b>	("Eggs"[Mesh] OR egg[tw] OR eggs[tw] OR "Dietary Fats/adverse effects"[Mesh:NoExp] OR "Dietary Fats/administration and dosage"[Mesh:NoExp] OR "Dietary Proteins/adverse effects"[Mesh] OR total fat[tw] OR total protein[tw] OR dietary fat[tw] OR animal product[tw] OR animal products[tw] OR saturated fat[tw] OR animal fat[tw]) AND ("Neoplasms"[Mesh] OR cancer[tw] OR cancers[tw] OR tumor[tw] OR tumors[tw] OR tumour[tw] OR tumours[tw] OR neoplasm[tw] OR neoplasms[tw] OR neoplasia[tw] OR carcinoma[tw] OR carcinomas[tw] OR malignan*[tw] OR adenocarcinoma*[tw]) NOT ("Animals"[Mesh] NOT "Humans"[Mesh]) NOT (Comment[ptyp] OR Editorial[ptyp] OR Letter[ptyp] OR Case Reports[ptyp] OR News[ptyp] OR "Case-Control Studies"[Mesh])
<b>Embase</b>	('egg'/exp OR egg:ab,ti OR eggs:ab,ti OR total fat:ab,ti OR total protein:ab,ti OR dietary fat:ab,ti OR animal product:ab,ti OR animal products:ab,ti OR saturated fat:ab,ti OR animal fat:ab,ti) AND ('neoplasm'/exp OR cancer:ab,ti OR cancers:ab,ti OR tumor:ab,ti OR tumors:ab,ti OR tumour:ab,ti OR tumours:ab,ti OR neoplasm:ab,ti OR neoplasms:ab,ti OR neoplasia:ab,ti OR carcinoma:ab,ti OR carcinomas:ab,ti OR malignan*:ab,ti OR adenocarcinoma*:ab,ti) NOT ([animals]/lim NOT [humans]/lim ) NOT ('conference abstract'/it OR 'editorial'/it OR 'letter'/it OR 'note'/it OR 'case report'/de OR 'in vitro study'/de OR 'nonhuman'/de OR 'case control study'/exp) AND [embase]/lim

**Supplementary Table S2. Characteristics of studies included**

First author, Year, Country, Reference	Cohort name	Study period	No. cases, Age at baseline, Menopausal status	Diet assessment method (validation), Egg intake analyzed	Highest vs. lowest egg intake (egg/week)	HR* (95% CI)	Variables adjusted for
<b>Breast Cancer</b>							
Farvid 2014 USA	NHS II	1991-2011	2,826 36yrs Premenopausal	FFQ (validated)  Egg consumed as such: serving size specified as 1 egg on FFQ	3.0 vs. 0	1.01 (0.89, 1.15)	age, time period, race, family history of breast cancer in mother or sisters, history of benign breast disease, smoking, height, BMI, age at menarche, parity, age at first birth, oral contraceptive use, alcohol, total energy, hormone use, menopausal status, age at menopause
Pala 2009 Europe	EPIC	1992-2003	6,895, 51yrs (median) Mixed	FFQ (validated)  Egg consumed as such + as components of recipes: unit converted from gram to No.	5.1 vs. 0.5	1.07 (0.98, 1.16)	age, study center, age at recruitment, menopausal status, total energy intake, weight, height, smoking, education, alcohol
Missmer 2002 (pooled study)	CNBSS IWHS NHS(a) NHS(b) NLCS NYU	1976-1997	5,452 31-90yrs Mixed	FFQ (validated)  Egg consumed as such: unit converted from gram to No.	8.8 vs. 0	1.07 (0.90, 1.28)	age at menarche, age at first birth, parity, oral contraceptive use, history of benign breast disease, family history of breast cancer, menopausal status, BMI, postmenopausal hormone use, smoking, education, height, alcohol, total energy intake

Key 1999 Japan	LSS	1969-1993	400  approx. 60yrs  Mixed	FFQ (not validated)  Egg consumed as such: serving size assumed as 1 egg	6.0 vs. 0.5	1.05 (0.79, 1.38)	age, calendar period, city of residence at time of bombing (Hiroshima, Nagasaki), age at time of bombing, breast radiation dose
Gaard 1995 Norway	NHSS	1977-1991	242  43yrs  Mixed	FFQ (validated)  Egg consumed as such: serving size assumed as 1 egg	5.5 vs. 0	1.25 (0.54, 2.90)	age, height, BMI, smoking, total energy intake
Mills 1989 USA	AHS	1976-1982	208  55.4yrs  Mixed	FFQ (not validated)  Egg consumed as such: serving size assumed as 1 egg	2.5 vs. 0.5	1.07 (0.73, 1.56)	age, age at first live birth, age at menarche, menopausal status, history of benign breast disease, maternal history of breast cancer, education attainment, BMI
<b>Ovarian Cancer</b>							
Schulz 2007 Europe	EPIC	(1992/2000)- (2001/2002)	581  50yrs  Mixed	FFQ (validated)  Egg consumed as such + as components of recipes: unit converted from gram to No.	2.5 vs. 0.6	1.19 (0.85, 1.67)	BMI, total energy intake, parity, ever use of oral contraceptives, hormone replacement therapy, menopausal status, education, smoking, unilateral ovariectomy.
Genkinger 2006 (pooled study)	AHS BCDDP CNBSS CPS II IWHS	1976-2004	2,055  27-93yrs	FFQ (validated)  Egg consumed	Reported: for 1 egg increment per day	1.11 (0.99, 1.24)	age at menarche, menopausal status, oral contraceptive use, hormone replacement therapy use among postmenopausal women, parity, BMI, smoking, physical

	NLCS NYU NHS(a) NHS(b) NHS II SMC WHS		Mixed	as such: unit converted from gram to No.	Converted to: for 5 eggs increment per week	1.08 (0.99, 1.77)	activity, total energy intake
Larsson 2005 Sweden	SMC	1987-2004	288  40-76yrs  Mixed	FFQ (validated)  Egg consumed as such: serving size assumed as 1 egg	5.0 vs. 0.5	0.93 (0.55, 1.57)	age, BMI, education, parity, use of oral contraceptive, postmenopausal hormones, total energy intake, consumption of fruits, vegetables and dairy products
<b>Prostate Cancer</b>							
Allen 2008 Europe	EPIC	1989-2007	2,441  52yrs	FFQ (validated)  Egg consumed as such + as components of recipes: unit converted from gram to No.	4.5 vs. 1.3	0.96 (0.84, 1.10)	age, center, education, marital, height, weight, total energy intake
Allen 2004 Japan	LSS	1963-1996	193  51yrs	FFQ (validated)  Egg consumed as such: serving size assumed as 1 egg	7.0 vs. 1.0	1.14 (0.79, 1.65)	age, calendar period, city of residence, radiation dose, education
Schuurman 1999 Netherlands	NLCS	1986-1992	642  62yrs	FFQ (validated)  Egg consumed as such: reported as	4.1 vs. 0.7	0.96 (0.75, 1.22)	age, family history, socioeconomic status

Mills 1989 USA	AHS	1976-1982	151  ≥25yrs	No. FFQ (not validated)  Egg consumed as such: serving size assumed as 1 egg	3.5 vs. 0.5	0.76 (0.50, 1.15)	Age
Severson 1989 USA	JHCS	(1965/1968)- 1986	174  NR	FFQ (not validated)  Egg consumed as such: serving size assumed as 1 egg	6.0 vs. 0.5	1.57 (0.97, 2.54)	Age
Thompson 1989 USA	LRCPS	(1972/1974)- 1987	54  50-84yrs	Survey (not validated)  Egg consumed as such: reported as No.	Reported: for 1 egg increment per day & 90% CI  Converted to: for 5 eggs increment per week & 95% CI	1.0 (0.9, 1.1)  1.0 (0.55, 1.82)	Age, BMI, smoking, history of diabetes, history of heart disease, systolic pressure, plasma cholesterol, whole milk intake
<b>Fatal Prostate Cancer</b>							
Richman 2011 USA	HPFS	1994-2008	199  40-75yrs	FFQ (validated)  Egg consumed as such: serving size specified as 1 egg on FFQ	3.0 vs. 1.0	1.81 (1.13, 2.89)	age, total energy intake, BMI, smoking, vigorous activity, lycopene intake, total red meat and poultry intake
Iso	JACC	(1988/1990)-	164	FFQ	5.5 vs. 2.0	1.17	age, area of study

2007 Japan		2003	40-79yrs	(validated)		(0.90, 1.71)	
				Egg consumed as such: serving size assumed as 1 egg			
Hsing 1990 USA	LBS	1966-1986	149  51yrs (median)	FFQ (not validated)	6.8 vs. 0.5	0.90 (0.50, 1.50)	age, smoking
				Egg consumed as such: serving size assumed as 1 egg			
Snowdon 1984 USA	AHS	1960-1980	97  ≥60yrs	FFQ (not validated)	3.5 vs. 0.5	1.60 (0.90, 2.80)	age
				Egg consumed as such: serving size assumed as 1 egg			

Abbreviations:

AHS = Adventist Health Study, BCDDP = Breast Cancer Detection Demonstration Project Follow-up Study, BMI = body mass index, CNBSS = Canadian National Breast Screening Study, CPS II = Cancer Prevention Study II Nutrition Cohort, EPIC = European Prospective Investigation into Cancer and Nutrition Study, HPFS = Health Professional Follow-up Study, IWHS = Iowa Women's Health Study, JACC = Japan Collaborative Cohort Study for Evaluation of Cancer, JHCS = Japan-Hawaii Cancer Study, LBS = Lutheran Brotherhood Cohort Study, LRCPS = Lipid Research Clinics Prevalence Study, LSS = Life Span Study, NHS = Nurses' Health Study, NHS(a) = Nurses' Health Study (part a; 1980-1986), NHS(b) = Nurses' Health Study (part b; 1986-2002), NHS II = Nurses' Health Study II, NHSS = Norwegian National Health Screening Services, NLCS = Netherlands Cohort Study, No.= number, NYU = New York University Women's Health Study, SMC = Swedish Mammography Cohort, WHS = Women's Health Study, yrs = years

\*HR comparing extreme categories as reported in respective paper