Cohort	Study	Crude/ adjusted ORs	Study Design	Sample Size (% female)	Follow-up (years)	Exposure	Study differences by relevant modifiers	Decision
	Augestad et al (2008)	0/6	Baseline exposure	6661 (50.3)	11.00	3 doses	Studies differ based on design, follow-ups, and exposure. Augestad et al (2008) additionally stratified by sex.	Keep all
HUNT	Ernstsen et al (2016)	0/2	Change in exposure	189 (24.3)	22.00	Change		
	Harvey et al (2017)	0/1	Baseline exposure	33908 (49.5)	11.00	Binary		
	Hamer et al (2009)	0/2	Change in outcome	4323 (52.5)	4.00	2 doses	Studies differ based on design, waves used, follow-up, and exposure. Veronese et al (2017) the only study with a crude effect.	Drop Frank e al (2018)
	Ohrnberger et al (2017)	0/1	Change in outcome	10693 (55.0)	2.00	Continuous		
ELSA	Poole & Jackowska (2018)	0/1	Change in exposure	5172 (54.6)	4.00	Continuous		
	Veronese et al (2017)	1/1	Baseline exposure Change in outcome	4077 (52.5)	2.00	Binary		
	Frank et al (2018)	0/1	Baseline exposure	3809 (51.6)	2.00	Binary		
LASA	Visser et al (2018)	0/1	Change in exposure and outcome	3107 (55.0)	3.00	Binary	Studies included separately in crude and adjusted analyses.	Keep all
	Van Gool et al (2003)	1/0	Change in exposure and outcome	1104 (54.6)	6.00	Change		
NHANES	Brown et al (1996)	1/0	Baseline exposure	1322 (55.0)	8.00	Binary	Studies included separately in crude and adjusted analyses.	Keep all
11111125	Farmer et al (1988)	0/2	Baseline exposure	1163 (51.5)	9.00	Binary		
	Ball et al (2009)	4/4	Baseline exposure Change in outcome	6677 (100)	3.00	4 doses	Ball et al (2009) includes young ALSWH cohort Brown et al (2005), Mihrshahi et al (2014), and van Uffelen et al (2013) differ based on study design, follow- up, and exposure.	Keep all
ALSWH	Brown et al (2005)	0/2	Change in exposure and outcome	8855 (100)	4.00	2 doses & change		
	Mihrshahi et al (2014)	3/3	Baseline exposure	5117 (100)	3.00	3 doses		
	van Uffelen et al (2013)	0/1	Change in outcome	8950 (100)	9.00	Binary		
Young Finns	Yang et al (2014)	0/10	Change in outcome	1955 (57.5)	6.00	3 doses & change	Studies differ based on designs and exposures.	Keep both

Supplementary Table 4. Reports from the Same Cohorts

	Kaseva et al (2016)	0/1	Change in exposure and outcome Baseline exposure	1724 (50.9)	5.00	Continuous		
SHARE	Khalaila & Litwin, (2014)	0/2	Change in exposure and outcome	1524 (57.0)	4.00	Change	Khalaila & Litwin (2014) and Khalaila (2016) differ based on design, waves used, and follow-up period.	
	Khalaila, (2016)	1/1	Baseline exposure	1038 (58.2)	10.00	Binary	Lindwall et al (2011) includes total SHARE sample.	Keep all
	Lindwall et al (2011)	1/0	Baseline exposure	17593 (54.6)	2.00	Continuous		
Alameda County Study	Camacho et al (1991)	0/2	Change in exposure Change in exposure and outcome	4848 (55.6)	9.00	Binary and change	Studies differ based on design, waves used, and follow- up period. Only Strawbridge et al (2002) has crude effects.	Keep both
	Strawbridge et al (2002)	2/1	Baseline exposure	1947 (56.0)	5.00	2 doses		
	Chang et al (2017)	0/4	Change in outcome	2673 (45.5)	8.00	4 doses		
TLSA	Chi et al (2016)	0/2	Baseline exposure	2630 (46.8)	4.00	2 doses	Studies differ based on design, waves used, and follow- up.	Keep all
	Tsai et al (2013)	0/2	Baseline exposure	2145 (46.2)	8.00	2 doses		
Precursors	Cooper-Patrick et al (1997)	2/2	Baseline exposure	752 (8.0)	15.00	2 doses	Studies differ based on design, waves used, and follow- up period. Only Cooper-Patrick et al (1997) has adjusted effects.	Keep both
Study	Ford et al (1998)	1/0	Change in exposure and outcome	1190 (0)	37.00	Binary		
Health Worker	Gallegos-Carrillo et al (2013)	2/2	Change in exposure	1047 (77.5)	6.00	2 doses & change	Different cohorts.	Keep both
Cohort Study	Quezada et al (2017)	0/1	Change in outcome	456 (100)	5.00	Continuous		
SUN	Ruiz-Estigarribia et al (2019)	0/1	Baseline exposure	14908 (59.5)	18.00	Binary	Studies differ based on follow-up.	Keep both
	Sanchez-Villegas et al (2008)	0/1	Baseline exposure	10381 (54.0)	6.00	Binary		
TILDA	McDowell et al (2018)	3/3	Baseline exposure	4146 (44.6)	2.00	Binary and 2 doses	Substantial overlap – McDowell et al's primary focus is PA. Carvalho et al's focus is grip strength (PA included as covariate).	Drop Carvalho et al (2019)
	Carvalho et al (2019)	0/2	Baseline exposure	5010 (51.1)	2.00	2 doses		