Appendix 3: Supplementary table [posted as supplied by author]

Table A: Calcium intake and vitamin D status of participants in randomised controlled trials of calcium intake reporting fractures

Trial	Dietary calcium (mg/d)	Baseline 25OHD (nmol/L)	Achieved 25OHD Calcium group (nmol/)	Achieved 25OHD Controls (nmol/)
Inkovaara 1983[13]				
Hansson 1987[73]				
Chapuy 1992,1994[15,16]	513 (165)	36 (25)	105 (28)	28 (18)
Reid 1993[74,75]	750 (290)	94 (39)		
Chevalley 1994[21]	619 (318)	60 (30)		
Recker 1996[76]	433 (193)	64 (19)		
Dawson-Hughes 1997[77]	730 (349)	74 (33)	112 (37)	69 (29)
Riggs 1998[78]	714 (286)	75 (26)		
Baron 1999[79,80]	877 (437)	73 (27)		
Ruml 1999[81]	613 (189)			
Peacock 2000[82]	597 (291)	62 (27)		
Lau 2001[20]	477 (230)			
Chapuy 2002[83]	557 (238)	22 (16)	77	15
Avenell 2004[84]				
Fujita 2004[85]	600			
Harwood 2004[86]		29	47	33
Larsen 2004[14]		36 (19)	47 (20)	38 (18)
Grant 2005[87]		38 (16)	+24 (CaD), +4 (Ca)	+24 (D), +8 (P)
Porthouse 2005[88]	1079 (341)			
Jackson 2006[9]	1151 (656)[a]	48	+28%	
Prince 2006[89]	915 (335)	67 winter/ 87 summer		
Reid 2006[90]	857 (386)	52 (19)		
Bolton-Smith 2007[91]	1073 (264)	60 (15)	75 (15)	49 (13)
Bonnick 2007[92]	1242 (580)			
Reid 2008[93]	867 (452)	92 (33)		
Salovaara 2010[94]	957 (486)	50 (18)	75 (22)	56 (22)
Sambrook 2012[18]		34 (17)		

Data are mean (SD) unless stated

[a] includes non-protocol, personal calcium supplements

Abbreviations: 25OHD- 25hydroxyvitamin D; Ca- calcium group; CaD co-administered calcium and vitamin D; D- vitamin D; P- placebo

Table B: Risk of bias assessment for randomised controlled trials

Trial	Random Sequence generation described	Allocation concealment	Blinding of participant/ personnel	Blinding of outcome assessment	Incomplete outcome data	Differential drop out	Other bias	Primary endpoint	Funding	Investigator conflict of interest	Overall assessment of risk of biasa
Inkovaara 1983[13]	Quasi (DOB)	Yes	Double-blind	Yes	No	No	Yes[b]	No	NS	Yes	High
Hansson 1987[73]	NS	NS	NS	NS	No	No	No	No	IF	NS	Moderate
Chapuy 1992,1994[15,16]	NS	NS	NS	NS	No	No	Yes[c]	Yes	IF, Tab	NS	Moderate
Reid 1993,1995[74,75]	NS	NS	Double-blind	Yes	No	No	Yes[d]	No	IF, Tab	NS	Moderate
Chevalley 1994[21]	NS	NS	Double-blind	Yes	No	No	No	No	IF, Tab	No	Moderate
Recker 1996[76]	NS	NS	Double-blind	Yes	Yes	NS	No	Yes	IF, Ind, Tab	Yes	High
Dawson-Hughes 1997[77]	NS	NS	Double-blind	Yes	Yes	No	No	No	IF	NS	High
Riggs 1998[78]	NS	NS	Double-blind	Yes	No	No	No	No	IF, Tab	NS	Moderate
Baron 1999[79,80]	Yes	Yes	Double-blind	Yes	No	No	No	No	IF, Tab	No	Moderate
Ruml 1999[81]	NS	NS	Double-blind	Yes	No	Yes	No	No	IF, Tab	No	High
Peacock 2000[82]	NS	NS	Double-blind	Yes	Yes	No	No	No	IF, Ind, Tab	NS	High
Lau 2001[20]	NS	NS	No	NS	No	Yes	No	No	Ind	NS	High
Chapuy 2002[83]	NS	NS	Double blind	Yes	Yes	No	Yes[e]	No	Ind	Yes	High
Avenell 2004[84]	NS	NS	No	Yes	No	Yes	No	No	IF, Tab	NS	High
Fujita 2004[85]	NS	NS	Double-blind	Yes	Yes	No	No	No	NS	NS	High
Harwood 2004[86]	Yes	Yes	No	No	No	Yes	Yes[f]	No	Ind	NS	High
Larsen 2004[14]	Quasi (location)	No	No	Yes	No	No	No	Yes	IF, Tab	No	High
Grant 2005[87]	Yes	Yes	Double blind	Yes	No	No	No	Yes	IF, Tab	Yes	Low
Porthouse 2005[88]	Yes	Yes	No	No	No	No	No	Yes	IF, Tab	Yes	Moderate
Jackson 2006[9]	NS	NS	Double-blind	Yes	No	No	Yes[g]	Yes	IF, Tab	Yes	High (hip)

Trial	Random Sequence generation described	Allocation concealment	Blinding of participant/ personnel	Blinding of outcome assessment	Incomplete outcome data	Differential drop out	Other bias	Primary endpoint	Funding	Investigator conflict of interest	Overall assessment of risk of biasa
											Low (others)
Prince 2006[89]	Yes	Yes	Double-blind	Yes	No	No	No	Yes	IF	No	Low
Reid 2006[90]	Yes	Yes	Double-blind	Yes	No	No	No	Yes	IF, Tab	NS	Low
Bolton-Smith 2007[91]	Yes	NS	Double-blind	Yes	No	Yes	Yes[f]	No	IF, Tab	No	High
Bonnick 2007[92]	NS	NS	Double-blind	Yes	No	No	Yes[f]	No	Ind	Yes	High
Reid 2008[93]	Yes	Yes	Double-blind	Yes	No	No	No	No	IF, Tab	Yes	Moderate
Salovaara 2010[94]	Yes	NS	No	No	No	No	No	Yes	IF, Tab	No	Moderate
Sambrook 2012[18]	Yes	Yes	No	No	No	No	No	No	IF	No	High

[a] For each study, we assessed an overall risk of bias based on the features of the study design in the Table. We gave the greatest weighting in assessing a study as higher risk to quasi-randomisation, lack of blinding, incomplete outcome data (eg per-protocol analysis) or differential drop out, lack of fracture as primary endpoint/small size of study, and other specific biases as described in the Table. Thus, low risk studies were randomised, double-blind, placebo-controlled studies with fracture as the primary endpoint and without other important potential biases. Funding source and conflict of interests were not included in our assessment.

[b] Unclear whether total fracture events or number of participants with a fracture

[c] Methods describe cluster trial where participants were randomly assigned in groups of four but analysis performed as if participants individually randomised

[d] Includes data from two year extension trial that 86/122 participants completing the original two-year trial entered

[e] baseline group numbers are inconsistently reported throughout the text

[f] Fractures were self-reported and not verified

[g] Interaction between hormone treatment, calcium and vitamin D treatment, and risk of hip fracture reported in 2013 (see text)

Abbreviations- DOB- quasi-randomized by date of birth; NS- not stated; IF- funding by grants from independent funders; Ind- funded by grants from industry and/or run by industry; Tab- study tablets provided by pharmaceutical company.

Table C: Selected characteristics of cohort studies

Study	Study name	Baseline calcium intake (mg/d)	Baseline milk intake	Baseline dairy intake	Calcium supplement usage (%)	Method of estimate intake	Duration of recall/ FFQ	Method of analysis	Covariates adjusted for
Riggs 1982[22]		NS	NS	NS	38	NS	NS	Rates	0
Holbrook 1988[23]	Rancho Bernardo	691	NS	NS	NS	Diet recall	24 h	CPH	5-9
Wickham 1989[24]	DHSS	801	NS	NS	NS	Dietary record	7 d	LR	2-4
Paganini-Hill 1991[25]	Leisure World	371	NS	NS	NS	FFQ	1 y	PR	Age
Looker 1993[26]	NHANES 1	645	NS	NS	NS	Diet recall	24 h	CPH	5-9
Huang 1996[27]	NHANES 1	592	NS	10 serve/w	NS	FFQ/ diet recall	3 m	CPH	Age
Mussolino 1998[32]	NHANES 1	788	NS	NS	NS	NS	NS	CPH	≥10
Cumming 1997[28]	SOF	714	<1 gl/d	NS	43	FFQ	1 y	CPH	≥10
Fujiwara 1997[29]	AHS	550	2-4 gl/w	NS	NS	FFQ	NS	PR	5-9
Meyer 1997[30]		712	NS	NS	NS	FFQ	NS	CPH	5-9
Owusu 1997[31]	HPFS	NS	NS	NS	16	FFQ	1 y	LR	5-9
Munger 1999[33]	IWHS	843	NS	NS	NS	FFQ	12 m	TT	0
Honkanen 2000[34]	Kuopio	830	NS	NS	NS	FFQ	NS	CPH	5-9
Huopio 2000[35]	Kuopio	795	NS	NS	NS	NS	NS	CPH	5-9
Kato 2000[36]	NYU WHS	NS	NS	NS	NS	Questionnaires	NS	CPH	Age
Nguyen 2001[37]	Dubbo	631	NS	NS	NS	FFQ	NS	CPH	2-4
Nguyen 2007[52]	Dubbo	576	NS	NS	NS	FFQ	NS	NS	NS
Meier 2008[55]	Dubbo	635	NS	NS	NS	NS	NS	CPH	5-9
Dargent-Molina 2002[38]	Epidos	NS	NS	NS	NS	NS	NS	NS	NS
Albrand 2003[39]	OFELY	822	NS	NS	NS	FFQ	NS	TT	0
Feskanich 2003[40]	NHS	730	240 ml/d	NS	14	FFQ	1 y	CPH	≥10
Michaelsson 2003[41]	SMC	749	NS	NS	NS	FFQ	6 m	CPH	Age
Warensjo 2011[63]	SMC	911	NS	NS	6	FFQ	NS	CPH	≥10
Melton 2003[42]	Rochester	NS	NS	NS	NS	Dietary recall	7 d	CPH	Age
Roy 2003[43]	EPOS	NS	<1 gl/d	NS	NS	FFQ	NS	PR	2
van def Klift 2004[44]	Rotterdam	1131	NS	NS	NS	FFQ	12 m	TT	0
Kanis 2005[45]	Meta-analysis	NS	NS	NS	NS	Varied	Varied	PR	5-9
Papaioannou 2005[46]	CaMOs	NS	NS	NS	NS	FFQ	1y	CPH	≥10
Cauley 2007[47]	WHI	NS	NS	NS	NS	NS	NS	CPH	0
Prentice 2013[67]	WHI OS	738	NS	NS	46	SFQ	At baseline	CPH	≥10
Diez-Perez 2007[48]	ECOSAP	881	NS	NS	NS	NS	NS	CPH	5-9
Key 2007[49]	Epic-Oxford	1007	NS	NS	15	FFQ	12 m	CPH	≥10
Kung 2007[50]	Hong Kong	679	NS	NS	NS	FFQ	NS	CPH	≥10
Lewis 2007[51]	MrOs	NS	NS	NS	NS	FFQ	NS	TT	0
Van Geel 2007[53]	Maastricht	877	NS	NS	NS	NS	NS	CPH	0
Dargent-Molina 2008[54]	E3N	1045	NS	NS	NS	FFQ	NS	CPH	≥10
Nieves 2008[56]	NORA	600	NS	NS	60	FFQ	NS	LR	5-9
Koh 2009[57]	SCHS	NS	NS	NS	3	FFQ	NS	CPH	≥10
Nakamura 2009[58]	JPHC	415	NS	NS	NS	FFQ	1 m	LR	5-9
Thomas-John 2009[59]	CVAMC	NS	NS	NS	12	NS	NS	Uni	0
Gronskag 2010[60]	HUNT	NS	>1 gl/d	NS	NS	NS	NS	NS	5-9
Benetou 2011[61]	EPIC	736-1083	NS	NS	NS	FFQ	1 y	CPH	5-9
Nakamura 2011[62]	Muramatsu	586	NS	NS	NS	FFQ	NS	CPH	5-9
Khan 2012[64]	MCCS	NS	NS	NS	NS	FFQ	NS	CPH	NS
Rouzi 2012[65]	CEOR	532	NS	NS	NS	FFQ	NS	LR	5-9

Study	Study name	Baseline calcium intake (mg/d)	Baseline milk intake	Baseline dairy intake	Calcium supplement usage (%)	Method of estimate intake	Duration of recall/ FFQ	Method of analysis	Covariates adjusted for
Feart 2013[66]	3 Cities	NS	4 serve/w	18 serve/w	NS	FFQ/ dietary recall	NS	CPH	≥10
Samieri 2013[68]	3 Cities	863	NS	NS	9	FFQ/ dietary recall	NS	CPH	0
Sahni 2013[69]	Framingham offspring	829	6 serve/w	10 serve/w	22	FFQ	1 y	CPH	≥10
Domiciano 2014[70]	SPAH	NS	NS	437 mg/d	6	NS	NS	TT	0
Sahni 2014[71]	Framingham	726	6 serve/w	NS	17	FFQ	1 y	CPH	≥10

Data are mean, median, range or percentage.

Abbreviations: Study name –refer to original references. Gl- glass; serve- servings; w- week; m month; h- hour; FFQ- food frequency questionnaire; SFQ supplement frequency questionnaire. Rates –comparison of event rates; CPH- cox proportional hazard models; LR logistic regression; PR poisson regresson; TT- t-test; Uni- univariate tests; NS- not stated.

Table D: association between milk intake and risk of fracture in cohort studies

Study	Fracture[a]/ Participa s (n)	Associatin	Grous (n)	Group 1 Risk or daily milk intake[6]	Group 2 Risk or daily milk intake[6]	Group 3 Risk	Group 4 Risk	Group 5 Risk	Range (units) for each group
All fractures									
Kanis 2005[45]	2469/39563	Nil	2	1.06 (0.95-1.19)	1				<1; 1+ gl/d
Feart 2013[66]	155/1482	Nil	2	1.10 (0.79-1.53)	1				<0.25; 0.25+ serve/w
Cumming 1997[28]	1950/9704	Nil	4	1	1.0 (0.9-1.1)	1.0 (0.9-1.1)	1.0 (0.8-1.2)		rarely/never; <1; 1-2.5; 3+ gl/d
Michaelsson 2003[41]	3986/60689	Nil	5	1.0 (0.92-1.09)	1	0.99 (0.91-1.08)	0.96 (0.82-1.12)	1.12 (0.87-1.43)	0; 1; 2; 3; 4+ gl/d
Hip fracture									
Gronskag 2010[60]	391/4851	Nil		Milk intake not associated with risk of fracture					
Munger 1999[33]	44/32050	Nil	2	0.15 (0.14)	0.12 (0.10)				No fracture; fracture
Kanis 2005[45]	413/39563	Nil	2	1.10 (0.83-1.47)	1				<1; 1+ gl/d
Feart 2013[66]	57/1482	Nil	2	1.16 (0.67-2.02)	1				<0.25; 0.25+ serve/w
Cumming 1997[28]	332/9704	Nil	4	1	0.9 (0.7-1.3)	0.9 (0.7-1.3)	0.9 (0.5-1.7)		rarely/never; <1; 1-2.5; 3+ gl/d
Fujiwara 1997[29]	55/4573	Nil	3	1	1.09 (0.48-2.30)	0.54 (0.25-1.07)			≤1; 2-4; 5+ u/w
Meyer (F) 1997[30]	154/19752	Nil	4	1	0.78 (0.53-1.14)	0.79 (0.48-1.30)	0.83 (0.44-1.56)		≤1; 2; 3; 4+ gl/d
Meyer (M) 1997[30]	56/20035	Inverse	4	1	0.57 (0.27-1.19)	0.95 (0.48-1.88)	0.46 (0.22-0.98)		≤1; 2; 3; 4+ gl/d
Owusu 1997[31]	56/43063	Nil	5	1	0.91 (0.38-2.19)	1.73 (0.65-4.64)	1.70 (0.72-4.03)	0.97 (0.39-2.42)	≤1; 2-6 gl/w; 1; 1-2.5; >2.5 gl/d

Study	Fracture[a]/ Participa s (n)	Associatin	Grous (n)	Group 1 Risk or daily milk intake[6]	Group 2 Risk or daily milk intake[6]	Group 3 Risk	Group 4 Risk	Group 5 Risk	Range (units) for each group
Feskanich 2003[40]	603/72337	Nil	5	1	1.13 (0.89-1.44)	0.85 (0.65-1.12)	1.02 (0.78-1.33)	0.83 (0.61-1.10)	<1; 1-3.9; 4-6.9 gl/w; 1-1.4 ; 1.5+ gl/d
Michaelsson 2003[41]	1535/60689	Nil	5	1.03 (0.91-1.17)	1	1.10 (0.97-1.25)	1.07 (0.86-1.32)	1.10 (0.76-1.59)	0; 1; 2; 3; 4+ gl/d
Sahni 2013[69]	43/3212	Nil	3	1	0.78 (0.37-1.63)	0.50 (0.22-1.13)			NS; NS; NS
Sahni 2014[71]	97/764	Nil	3	1	0.61 (0.36-1.08)	0.58 (0.31-1.06)			≤1; 2-6; 7+ serve/w
Vertebral fracture									
Roy (M) 2003[43]	80/3173	Nil	2	1	0.74 (0.44-1.26)				<1; 1+ gl/d
Roy (F) 2003[43]	144/3402	Nil	2	1	1.04 (0.71-1.50)				<1; 1+ gl/d
Feart 2013[66]	43/1482	Nil	2	1.15 (0.60-2.20)	1				<0.25; 0.25+ serve/w
Cumming 1997[28]	389/9704	Nil	4	1	1.1 (0.8-1.5)	1.3 (0.9-1.7)	1.4 (0.8-2.3)		rarely/never; <1; 1-2.5; 3+ gl/d
Nakamura (M) 2009[c58]	52/15440	Nil	4	0.66 (0.30-1.44)	0.82 (0.39-1.73)	1.18 (0.58-2.40)	1		<1; 1-2; 3-4, 5+ gl/w
Nakamura (W) 2009[c58]	78/18412	Inverse	4	1.78 (1.00-3.18)	1.58 (0.86-2.93)	1.29 (0.68-2.44)	1		<1; 1-2; 3-4, 5+ gl/w
Nakamura (M) 2009[d58]	82/18910	Nil	5	1.62 (0.87-3.01)	1.57 (0.89-2.78)	0.70 (0.28-1.73)	1.08 (0.49-2.35)	1	rarely; occasionally; 1-2; 3-4; 5+ gl/w
Nakamura (W) 2009[d58]	145/22107	Inverse	5	1.67 (1.08-2.60)	1.19 (0.76-1.87)	0.73 (0.37-1.44)	1.10 (0.67-1.82)	1	
Forearm fracture									
Feart 2013[66]	73/1482	Nil	2	0.96 (0.59-1.56)	1				<0.25; 0.25+ serve/w

Study	Fracture[a]/ Participa s (n)	Associatin	Grous (n)	Group 1 Risk or daily milk intake[6]	Group 2 Risk or daily milk intake[6]	Group 3 Risk	Group 4 Risk	Group 5 Risk	Range (units) for each group
Cumming 1997[28]	467/9704	Nil	4	1	1.0 (0.8-1.4)	1.1 (0.9-1.4)	0.8 (0.5-1.4)		rarely/never; <1; 1-2.5; 3+ gl/d
Owusu 1997[31]	201/43063	Nil	5	1	1.09 (0.72-1.67)	1.13 (0.65-1.96)	0.95 (0.60-1.51)	1.06 (0.69-1.62)	≤1; 2-6 gl/w; 1; 1-2.5; >2.5 gl/d

[a] Number of participants with fracture

[b] Hazard ratio or Relative Risk (95% confidence interval) or mean (SD) units/d

[c] Cohort 1 in paper. [d] Cohort 2 in paper.

Nil: no association between milk intake and risk of fracture. Inverse: higher milk intake is associated with decreased risk of fracture or lower milk intake is associated with higher risk of fracture.

Abbreviations- SD standard deviation. M- male, F- female. gl- glass, u- unit, serve- serving, d- day, w- week. NS- not stated

Table E: association between dairy intake and risk of fracture in cohort studies

Study	Fracture[a]/ Participants (n)	Association	Groups (n)	Group 1 Risk or daily dairy intake[6]	Group 2 Risk or daily dairy intake[6]	Group 3 Risk	Group 4 Risk	Group 5 Risk	Range (units) for each group or unit for pooled risk
All fractures									
Thomas-John 2009[59]	41/257	Nil	2	60 (20)	50 (13)				No fracture; fracture
Feart 2013[66]	155/1482	Inverse	2	1.51 (1.07-2.11)	1				<17.6; 17.6+ serve/w
Michaelsson 2003[41]	3986/60689	Nil	5	1.00 (0.90-1.12)	1.02 (0.92-1.13)	1	0.92 (0.82-1.02)	0.98 (0.88-1.09)	<42.3; 42.3-70; 70.1-91; 91.1-117.0; >117 serve/m
Hip fracture									
Sahni 2013[69]	43/3212	Nil		Dairy intake not associated with risk of fracture					
Munger 1999[33]	44/32050	Nil	2	0.51 (0.27)	0.48 (0.21)				No fracture; fracture
Huang 1996[27]	130/2513	Nil		1.05 (0.89-1.24)					per SD increase
Benetou 2011[61]	275/29122	Nil		1.02 (0.93-1.12)					per quintile increase
Feart 2013[66]	57/1482	Nil	2	0.95 (0.54-1.68)	1				<17.6; 17.6+ serve/w
Michaelsson 2003[41]	1535/60689	Nil	5	1.09 (0.93-1.28)	1.00 (0.85-1.17)	1	1.17 (1.00-1.37)	1.10 (0.94-1.29)	<42.3; 42.3-70; 70.1-91; 91.1-117.0; >117 serve/m
Vertebral fracture									
Domiciano (F) 2014[70]	77/449	Nil	2	471 (809)	415 (287)				No fracture; fracture
Domiciano (M) 2014[70]	34/258	Nil	2	403 (320)	344 (226)				No fracture; fracture
Feart 2013[66]	43/1482	Nil	2	1.53 (0.79-2.95)	1				<17.6; 17.6+ serve/w
Forearm fracture									
Feart 2013[66]	73/1482	Inverse	2	2.03 (1.22-3.39)	1				<17.6; 17.6+ serve/w

[a] Number of participants with fracture

[b] Hazard ratio or Relative Risk (95% confidence interval) or mean (SD) units/d

Nil: no association between dairy intake and risk of fracture. Inverse: higher dairy intake is associated with decreased risk of fracture or lower dairy intake is associated with higher risk of fracture.

Abbreviations- SD standard deviation. M- male, F- female. serve- serving, w- week, m- month

Table F: Association between intake of calcium supplements and risk of fracture in cohort studies

Study	Fracture[a]/ Participants (n)	Association	Groups (n)	Group 1 Risk or daily intake of calcium supplements[b]	Group 2 Risk or daily intake of calcium supplements[b]	Group 3 Risk	Group 4 Risk	Group 5 Risk	Cutpoints between each group (mg/d)[c] or unit for pooled risk
All fractures									
Cumming 1997[28]	1950/9704	Positive	2	1	1.1 (1.0-1.2)				Never used; current calcium use
Dargent-Molina 2008[54]	2408/36217	Inverse	2	1	0.83 (0.72-0.96)				No calcium use; calcium use
Thomas-John 2009[59]	41/257	Nil	2	1	1.7 (0.8-3.8)				No calcium use; calcium use
Prentice 2013[67]	NS/29502	Nil	2	1	0.99 (0.91-1.07)				No calcium use; calcium use
Prentice 2013[67]	NS/39037	Positive	2	1	1.07 (1.01-1.14)				No CaD use; CaD use
Samieri 2013[68]	155/1482	Nil	2	1	2.2 (0.5-3.3)				No calcium use; calcium use
Hip fracture									
Munger 1999[33]	44/32050	Nil	2	323 (488)	365 (725)				No fracture; fracture
Cumming 1997[28]	332/9704	Positive	2	1	1.5 (1.1-2.0)				Never used; current calcium use
Feskanich 2003[40]	603/72337	Nil	2	1	1.01 (0.84-1.23)				No calcium use; current calcium use
Koh (F) 2009[57]	692/35241	Positive	2	1	1.43 (1.01-2.01)				No calcium use; calcium use
Koh (M) 2009[57]	276/27913	Nil	2	1	0.84 (0.35-2.05)				No calcium use; calcium use
Prentice 2013[67]	NS/29502	Nil	2	1	0.82 (0.59-1.14)				No calcium use; calcium use
Prentice 2013[67]	NS/39037	Nil	2	1	0.88 (0.70-1.11)				No CaD use; CaD use
Paganini-Hill (F) 1991[25]	332/8600	Nil	3	1	1.45 (0.92-2.30)	1.27 (0.79-2.05)			1; 500
Paganini-Hill (M) 1991[57]	86/5049	Nil	3	1	1.16 (0.49-2.78)	1.11 (0.36-3.41)			1; 500
Owusu 1997[31]	56/43063	Nil	5	1	0.60 (0.20-1.75)	1.36 (0.53-3.52)	1.44 (0.54-3.83)	1.19 (0.45-3.17)	300; 375; 460; 605
Vertebral fracture									
Riggs 1982[22]	107/72	Inverse	2	1	0.50 (0.33-0.76)				No calcium use; calcium use
Cumming 1997[28]	389/9704	Positive	2	1	1.4 (1.1-1.9)				Never used; current calcium use

Study	Fracture[a]/ Participants (n)	Association	Groups (n)	Group 1 Risk or daily intake of calcium supplements[b]	Group 2 Risk or daily intake of calcium supplements[b]	Group 3 Risk	Group 4 Risk	Group 5 Risk	Cutpoints between each group (mg/d)[c] or unit for pooled risk
Forearm fracture									
Cumming 1997[28]	467/9704	Nil	2	1	1.2 (0.9-1.5)				Never used; current calcium use
Owusu 1997[31]	201/43063	Nil	5	1	0.93 (0.59-1.49)	0.86 (0.52-1.43)	1.21 (0.73-2.00)	0.76 (0.44-1.28)	300; 375; 460; 605

[a] Number of participants with fracture except for Riggs 1982 which is number of vertebral fractures.

[b] Hazard ratio or Relative Risk (95% confidence interval) or mean (SD) mg/d.

[c] For example, cutpoints of 300; 375; and 460 and 605 indicate 5 groups <300; 300-374; 375-459; 460-605; >605 mg/d

Nil- no association between supplemental calcium intake and risk of fracture. Inverse: higher supplemental calcium intake is associated with decreased risk of fracture or lower supplemental calcium intake is associated with higher risk of fracture. Positive: higher supplemental calcium intake is associated with increased risk of fracture.

Abbreviations- SD standard deviation. M- male, F- female. CaD- co-administered calcium and vitamin D; NS- not stated