

Supplementary Table S1 Exposures and change in characteristics of the 391 participants during the one-year intervention by study arm

Characteristics of participants	Vitamin D ₃			
	Placebo (n=96)	1,000 IU/d (n=96)	2,000 IU/d (n=99)	3,000 IU/d (n=100)
Change in weight (kg) (mean±SD)	0.6 ± 2.6	0.8 ± 2.5	0.4 ± 2.7	0.2 ± 3.2
Change in menopausal status (%)	1.0	3.1	0.0	0.0
Beginning of sex steroid hormone ^a use (%)	7.3	4.2	3.0	8.0
Discontinuation of hormonal contraceptives (%)	1.0	5.2	0.0	4.0
Breast biopsy (%)	2.1	4.2	4.0	3.0
Use of supplements with vitamin D ^b (%)	19.8	22.9	23.2	25.0
Mean supplemental vitamin D intake > 400 IU/d (%)	0.0	1.0	0.0	0.0
Change in dietary vitamin D intake ^c (IU/d) (mean±SD)	-25 ± 146	-22 ± 80	-30 ± 64	-26 ± 89
Use of supplements with calcium (%)	33.3	37.5	40.4	35.0
Mean supplemental calcium intake > 600 mg/d ^d (%)	0.0	1.0	0.0	0.0
Change in dietary calcium intake ^c (mg/d) (mean±SD)	-48 ± 515	-48 ± 327	-107 ± 261	-92 ± 378
Change in food energy intake ^e (kcal/d) (mean±SD)	-42 ± 458	-53 ± 444	-114 ± 392	-123 ± 382
Travels to southern latitude in November-April (%)	32.3	25.0	34.3	27.0
Use of tanning salons (%)	6.3	3.1	3.0	11.0
Minutes/week outdoors ^e (mean±SD)	346 ± 219	321 ± 149	348 ± 230	319 ± 185
Use of drugs that interfere with vitamin D absorption or metabolism ^f (%)	4.2	1.0	7.1	3.0
Use of drugs suspected of vitamin D interactions that may induce side effects ^g (%)	0.0	0.0	1.0	0.0
Use of antacids with aluminum or magnesium ^h (%)	7.3	4.2	4.0	4.0

^a Includes the following drugs (AHFS Pharmacologic-Therapeutic Classification number): contraceptives (68:12), estrogens (68:16.04) or progestins (68:32).

^b Outside the intervention.

^c Among the 371 women who completed the food frequency questionnaire at baseline and also at the end of the one-year intervention (placebo, n=92; 1,000 IU/d, n=92; 2,000 IU/d, n=94; 3,000 IU/d, n=93).

^d One woman had supplemental intake of calcium marginally > 600 mg/d due to regular use of a supplement containing 600 mg and occasional use of antacids with calcium; the intervention was not discontinued.

^e Between 10 a.m. and 4 p.m., in the last year.

^f Anticonvulsants, mineral oil.

^g Thiazide diuretics.

^h Women who used antacids with magnesium or aluminum made only occasional use of these products (< 3-4/day and ≤ 2 weeks).