

E

Literature Search Strategy

In order to review the most relevant scientific literature available, the committee and staff regularly conducted thorough searches of several online bibliographic data bases, including Medline, Science Direct, and WorldCat/First Search. General searches on vitamin D, calcium, and health outcomes were first conducted to identify primary literature. Using the results of the primary search, key search terms were developed and secondary searches were then conducted. Search terms were also chosen based on relevance to the report outline and topics included in the previous IOM report (IOM, 1997). Although initial searches were general, subsequent searches focused on retrieving studies that were not covered by the evidence-based reviews conducted by AHRQ-Ottawa (Cranney et al., 2007) and AHRQ-Tufts (Chung et al., 2009). Similar to the methodology used by the AHRQ reports searches were limited to English. As the study progressed, focused searches were conducted as needed and general searches were carried out to identify newly published articles. See Box E-1 for an example of how searches were conducted.

TABLE E-1 Sample Search History for Literature Published After AHRQ-Tufts

Number	Searches	Results
1	exp Vitamin D/	34296
2	(25-hydroxy vit D or plasma vit D or 25OHD or 25-OHD)	956
3	(25OHD3 or "25(OH)D3" or 25-OHD3 or "25-(OH)D3").tw.	1205
4	("25(OH)D" or "25-(OH)D" or "25-OH-D").tw.	1696
5	25-hydroxycholecalciferol.tw.	877
6	25-hydroxyergocalciferol.tw.	27
7	calcidiol.tw.	227
8	Calcifediol/	2443
9	(vit adj (d or d2 or d3)).mp.	244
10	Ergocalciferols/	2050
11	Ergocalciferol\$.tw.	322
12	Cholecalciferol/	4499
13	Cholecalciferol\$.tw.	1172
14	calciferol.tw.	363
15	or/1-14	35253
16	exp Calcium/	218026
17	exp Calcium Carbonate/ or exp Calcium Citrate/ or exp Calcium Phosphates/ or exp Calcium Malate/	24264
18	exp Calcium, Dietary/ Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) <1950 to Present> (7533) EBM Reviews—Cochrane Central Register of Controlled Trials <3rd Quarter 2009> (515) Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) <1950 to Present> (7533) EBM Reviews—Cochrane Central Register of Controlled Trials <3rd Quarter 2009> (515)	8048
19	calcium.tw.	250569
20	or/16-19	373131
21	15 or 20	392115
22	21 and (200905* or 200906* or 200907* or 200908*).ed.	3840
23	limit 22 to english language [Limit not valid in CCTR; records were retained]	3544
24	limit 23 to humans [Limit not valid in CCTR; records were retained]	1906

TABLE E-1 Continued

Number	Searches	Results
25	limit 24 to (addresses or bibliography or biography or comment or congresses or consensus development conference or consensus development conference, nih or dictionary or directory or duplicate publication or editorial or in vitro or interview or lectures or letter or news or newspaper article or "review") [Limit not valid in CCTR; records were retained]	443
26	24 not 25	1463
27	randomized controlled trial.pt.	537352
28	controlled clinical trial.pt.	156124
29	randomized controlled trials/	62621
30	Random Allocation/	85834
31	Double-blind Method/	187602
32	Single-Blind Method/	21457
33	clinical trial.pt.	729105
34	Clinical Trials.mp. or exp Clinical Trials/	268451
35	exp Clinical Trial/	587643
36	(clinic\$ adj25 trial\$).tw.	218792
37	((singl\$ or doubl\$ or trebl\$ or tripl\$) adj (mask\$ or blind\$)).tw.	214271
38	Placebos/	46395
39	placebo\$.tw.	225224
40	random\$.tw.	736338
41	trial\$.tw.	569938
42	(latin adj square).tw.	3500
43	Comparative Study.tw.	55680
44	exp Evaluation studies/	140739
45	Follow-Up Studies/	421249
46	Prospective Studies/	316292
47	(control\$ or prospectiv\$ or volunteer\$).tw.	2441089
48	Cross-Over Studies/ Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) <1950 to Present> (24638) EBM Reviews—Cochrane Central Register of Controlled Trials <3rd Quarter 2009> (18713) Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) <1950 to Present> (24638) EBM Reviews—Cochrane Central Register of Controlled Trials <3rd Quarter 2009> (18713)	43351

continued

TABLE E-1 Continued

Number	Searches	Results
49	or/27-48	3820192
50	49 and 26	551
51	21	392115
52	limit 51 to english language [Limit not valid in CCTR; records were retained]	351480
53	limit 52 to yr="2009—2010" Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) <1950 to Present> (8085) EBM Reviews—Cochrane Central Register of Controlled Trials <3rd Quarter 2009> (89) Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) <1950 to Present> (8085) EBM Reviews—Cochrane Central Register of Controlled Trials <3rd Quarter 2009> (89)	8174
54	limit 53 to humans [Limit not valid in CCTR; records were retained] Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) <1950 to Present> (2956) EBM Reviews—Cochrane Central Register of Controlled Trials <3rd Quarter 2009> (89) Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) <1950 to Present> (2956) EBM Reviews—Cochrane Central Register of Controlled Trials <3rd Quarter 2009> (89)	3045
55	remove duplicates from 54 Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) <1950 to Present> (2751) EBM Reviews—Cochrane Central Register of Controlled Trials <3rd Quarter 2009> (3) Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) <1950 to Present> (2751) EBM Reviews—Cochrane Central Register of Controlled Trials <3rd Quarter 2009> (3)	2754

REFERENCES

- Chung M., E. M. Balk, M. Brendel, S. Ip, J. Lau, J. Lee, A. Lichtenstein, K. Patel, G. Raman, A. Tatsioni, T. Terasawa and T. A. Trikalinos. 2009. Vitamin D and Calcium: A Systematic Review of Health Outcomes. Evidence Report No. 183. (Prepared by the Tufts Evidence-based Practice Center under Contract No. HHS 290-2007-10055-I.) AHRQ Publication No. 09-E015. Rockville, MD: Agency for Healthcare Research and Quality.
- Cranney A., T. Horsley, S. O'Donnell, H. A. Weiler, L. Puil, D. S. Ooi, S. A. Atkinson, L. M. Ward, D. Moher, D. A. Hanley, M. Fang, F. Yazdi, C. Garrity, M. Sampson, N. Barrowman, A. Tsertsvadze and V. Mamaladze. 2007. Effectiveness and Safety of Vitamin D in Relation to Bone Health. Evidence Report/Technology Assessment No. 158. (Prepared by the University of Ottawa Evidence-based Practice Center (UO-EPC) under Contract No. 290-02-0021.) AHRQ Publication No. 07-E013. Rockville, MD: Agency for Healthcare Research and Quality.
- IOM (Institute of Medicine). 1997. Dietary Reference Intakes for Calcium, Phosphorus, Magnesium, Vitamin D, and Fluoride. Washington, DC: National Academy Press.

