Evaluation of existing systematic reviews

| **Author Year**  **Journal/Source** | **Intervention or Exposure** | **Outcome** | **Study Design Included** | **Healthy Population at Baseline?\*** | **Only Included Ca +- Vit D Interventions?†**  **Reported Baseline Dietary Ca Intake With Dietary Assessment Methods?‡** | **Clear Reporting of Comparison and Control Group?** | **Clear Reporting of Outcome Definitions?** | **Clear Reporting of Study Designs (Need Separate Reporting if Two or More Different Designs Are Included)?** | **Comments**§ |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Included in Current Report** | | | | | | | | | |
| Wang, 2012  Circulation Cardiovascular Quality and Outcomes [23149428] | Vitamin D (serum 25(OH)D) | Cardiovascular disease risk | Prospective | Yes and no | Not relevant | Yes | Yes | Yes | Many studies included in current or original report |
| Autier, 2012  J Clin Endocrinol Metab  [22701014] | Vitamin D [+/-Calcium] | Serum 25(OH)D concentration | RCTs | Yes | Yes | Yes | Yes | Yes | Included a small number of studies of im administration |
| Included in Original Report | | | | | | | | | |
| Autier 2007  Arch Intern Med  [17846391]\*\* | Vitamin D [+/- Calcium] | All cause mortality | RCTs | Yes | Yes | Yes | Yes | Yes | One additional study found |
| Avenell 2008  Cochrane Database of Systematic Reviews  [16034849]§§ | Vitamin D [+/- Calcium] | All cause mortality | RCTs | Yes | Yes | Yes | Yes | Yes | All relevant studies included in Autier 2007– Conclusions are same as Autier 2007. |
| Allender 1996  Ann Intern Med | Ca supplement | Blood pressure | RCT | Yes (subgroup analysis) | Yes | Yes | Yes | Yes | 26 of 64 potential RCTs |
| Cappuccio 1995  AJE | Ca intake | Blood pressure | Observ-ational,  including cross-sectional | Unclear | No | NA (regressions) | Yes | No | REJECT  Includes XS |
| Dickinson 2008  Cochrane | Ca supplement | Blood pressure | RCT | No  All with HTN | Yes | Yes | Yes | Yes | Revision of 2006 SR  15/64 potential RCTs |
| Griffith 1999  AJH | Ca supplement | Blood pressure | RCT | Yes & No  HTN & NTN combined  See comment | Yes | Yes | Yes | Yes | Update of Bucher 1996 [2263]  Subgp analysis HTN vs NTN in Bucher only  42/64 potential RCTs |
| van Mierlo 2006  J Hum Hypert | Ca supplement | Blood pressure | RCT | Yes  Subgroup of HTN & NTN | Yes | Yes | Yes | Yes | 40/64 potential RCTs |
| Trumbo 2007  Nutr Rev | Ca supplement | Blood pressure, HTN, Pregnancy-induced HTN | All | Yes  Subgroup of HTN & NTN | Yes (interv)  No (observ) | No | No | No | REJECT  Qualitative only  Count of sig studies only  Unclear if SR. |
| Bergsma-Kadijk 1996  Epidemiology | Ca intake | cancer and polyp | Cohort and Case-control | nd (probably healthy population) | nd on dietary assessment method | nd on Ca intake (only RR/OR between lowest and highest categories reported) | nd | nd on the definition of case-control study | Reject |
| Weigarten 2008  Cochrane Database of Systematic Reviews | Ca supplement (>1200 mg/d) | cancer and polyp | RCT | yes (pts with prior adenoma) | yes | yes | yes | yes | Accept |
| Davies 2006  J Natl Cancer Inst | Nutritional RCTs, including Ca supplement | Cancer, recurrence of preinvasive lesions | RCT | No (both pts with cancer and preinvasive lesions) | nd | no | no | yes | Part of a larger SR of both diet and physical activity on outcome among patients with cancer or preinvasive lesions |
| Bergel  2007  BMC Pediatrics | maternal calcium intake | offspring BP | RCTs & cohort | y (RCT) | no  yes | yes | yes | no | Data from 2 RCTs may be useful. Reject |
| Carroli 1994  Brit J Obstet Gynecol | Ca supplement | Preeclampsia | RCT | Yes | Yes | Yes | Yes | Yes | Covered by latest Cochrane SR |
| Hofmeyer 2003  S African J | Ca Supplement | Preeclampsia | RCT | Yes | Yes | Yes | Yes | Yes | Covered by latest Cochrane SR |
| Hofmeyer 2007  S African J | Ca Supplement | Preeclampsia  (and summary of the outcomes mentioned above) | RCT | Yes | Yes | Yes | Yes | Yes | Covered by latest Cochrane SR |
| Hoffmeyr 2006  Cochrane Database of Systematic Reviews | Ca supplement | Preeclampsia, pregnancy induced hypertension with and without  proteinuria, maternal death or  serious morbidity, other maternal outcomes, stillbirth, neonatal mortality  or morbidity, preterm birth, small  gestational age, and other outcomes for  the child | RCT | Yes | Yes | Yes | Yes | Yes | Eligible review |
| Bucher 1996  JAMA | Ca supplement | Preeclampsia, pregnancy-induced hypertension | RCT | Yes | Yes | Yes | Yes | Yes | Covered by latest Cochrane SR |
| Gao  2005  NCI | calcium intake or dairy product | prostate cancer | prospective cohort | yes (assumed from study design) | yes | yes | yes | yes |  |
| Shaukat 2005  Am J Gastroenterol | Ca supplement | recurrent polyp | RCT | yes (pts with prior adenoma) | no (1/3 included Ca+Vit A/C/E+selenium) | yes | yes? “recurrence of adenoma” | yes? “RCT” | Reject |
| Barr 2003  J Nutr | Increased dairy product or calcium intake (from supplements) | Weight | RCTs | Yes “healthy” | Yes (separate studies of increased dairy product and those of calcium supplements) | yes | yes | yes | No meta-analysis. Included children and adults |
| Trowman 2006  Br J Nutr | Calcium supplements or increased provision of dairy products | Weight | RCTs | Yes (excluded populations with severe co-morbidities, such as renal problems or cancer) | Yes (Separate meta-analyses for calcium supplement and increased provision of dairy products) | yes | yes | yes | May need to redo the meta-analyses to separate out energy restriction diet studies. This SR included adults only. |
| Winzenberg  2007  Obesity | calcium supplementa-tion food or chemical | weight | RCTs | yes | yes | yes | yes | yes | 2º analysis of RCT of calcium on bone density outcome |
| Lanou 2008  Nutr Rev | Calcium or dairy supplementa-tion with or without energy restriction | Weight, body fat | RCTs | nd | yes | no | yes | yes | Included both dairy and calcium supplementation RCTs. No individual study characteristics reported |

\*Either included only healthy population at baseline or SR had separate analyses for population with diseases and without diseases

†For SR of interventional studies

‡For SR of observational studies

§Please comment on issues such as update of previous SRs or specific reasons for using or not using the SR, other than not fulfilling the screening criteria.

\*\*We excluded a study on patients with congestive heart failure in our reanalysis of data from this systematic review

§§Examined only trials on falls prevention