Reviewer's report

Title: Phosphate decreases urine calcium and increases calcium balance: A meta-analysis of the osteoporosis acid-ash diet hypothesis

Version: 1 Date: 22 April 2009

Reviewer: Connie Weaver

Reviewer's report:

This is an important contribution as the first meta analysis of calcium balance studies for evaluation of phosphate effects. It is a well written manuscript.

Minor essential revisions

1. Authors indicate their outcome measures are either indirect (p. 11) or surrogate (p. 14) measures of osteoporosis. Calcium metabolism should not be viewed as a healthy or disease state. Prolonged negative calcium balance will lead to bone loss but it is not necessarily a symptom of the disease, but is related to diet.

Discretionary revisions

2. p. 12 1st sentence Authors may wish to note that outcome measures for judging osteoporosis treatments are tougher than for other diseases which do allow markers (blood pressure, serum cholesterol etc.).

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.