Reviewer's report

**Title:** Efficacy of vitamin D supplementation in depression in adults: a systematic review protocol

**Version:** 2  **Date:** 27 May 2013

**Reviewer:** Susanne Hempel

**Reviewer's report:**

This is a protocol for an interesting review. Please find below a couple of suggestions:

**Major Compulsory Revisions**

The data collection and analysis section outlines that observational studies will be integrated in a Bayesian analysis but the inclusion criteria are limited to RCTs. The selection of observational studies should also be determined in the protocol.

The inclusion or exclusion of cross-over RCTs should be specified in the protocol given the topic.

The protocol should specify how "at risk of depression" will be operationalized in the review.

The funding source and the role of the funder should be specified.

**Minor Essential Revisions**

I would suggest to use the PICOTS framework to outline the inclusion criteria. The inclusion criteria should outline whether studies given other vitamin supplements in addition to vitamin D are excluded or included.

The dimensions that will be used to assess the strength of evidence could be explained in more detail.

The assessment of publication bias should not be limited to visual inspection of the funnel plot.

**Discretionary Revisions**

It would be helpful for the reader to have more information about which intervention-specific details will be abstracted such as the type of vitamin D supplement used, including the chemical form, brand (if commercial), or ascertainment of purity.

In terms of participants, data on baseline serum vitamin D levels and the assay method, interim and final vitamin d serum levels, washout periods for antidepressants and other supplements are most likely important variables.

**Level of interest:** An article of importance 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.