**Background:** The incidence of depression is increasing in Sweden and the rest of the world, and the reason for this is not fully understood. Recent research indicates that the gut flora may have an impact on the gut-brain axis and through it an impact on mental health, including the risk of depression. Probiotics is one factor that affects the gut flora.

**Objective:** This systematic review aims to investigate the scientific evidence for how probiotics affect the risk for developing depression, according to self-assessment scales.

**Search strategy:** Systematic literature searches were made in the databases PubMed and Scopus. Search terms were. “probiotics”, “depression”, “anxiety”, “bifidobacterium” and “lactobacillus”.

**Selection criteria:** Healthy adults >18 years, probiotics given as a single intervention with placebo as control, risk of depression as outcome measure, the risk of depression was assessed using a validated self-assessment scale, randomized controlled trials and studies published in English or Swedish.

**Data collection and analysis:** The quality of the studies was examined using a ‘template for quality of randomized trials’ by the Swedish agency for health technology assessment (SBU). The strength of the evidence was assessed using the template ‘basis for the weight of evidence according to GRADE’ from the University of Gothenburg, Sahlgrenska Academy.

**Main results:** Six studies from around the world were included. All studies were RCTs with an intervention time between three and eight weeks. A total of 403 healthy adults, both men and women were included in the study population. The probiotics used were of different species in varying concentrations. Results were analyzed from eight self-assessment scales. Six of these showed no significant difference between the intervention group and the control group regarding the risk of depression. Two of the self-assessment scales showed that the intervention group improved significantly compared to the control group.

**Conclusions:** An overall assessment of the studies show that there is moderate (+++) evidence that probiotics do not reduce the risk of depression, according to self-assessment scales, in healthy adults. Since probiotics does not seem to reduce the risk of depression, there is no reason to recommend supplements to prevent depression.

**Keywords:** probiotics, depression, risk of depression, self-assessment scales