

## Mindfulness training improves health and quality of life for adults



*Mindfulness-Based Stress Reduction helps adults improve their mental and somatic health and quality of life*

### What is the aim of this review?

This review summarizes all studies that compare the effect of a MBSR program to a control group intervention, in which the participants had been randomly allocated to be in either the MBSR group or a control group. The review summarizes the results in two categories. First, where the effect of the MBSR program was compared to an inactive group (either a wait list group or one receiving ordinary care also received by the MBSR group). Second, where MBSR was compared with an alternative active group intervention.

**Mindfulness-Based Stress Reduction (MBSR) is used to improve health, quality of life and social functioning. MBSR has a positive effect on mental health outcomes measured right after the intervention and at follow up. It also improves personal development, quality of life, and self-reported mindfulness.**

### What is this review about?

Stress and stress-related mental health problems are major causes of illness and disability. Mindfulness Based Stress Reduction is a group-based health promotion intervention to improve health and the way people deal with stress and life's challenges. The core ingredient is mindfulness training through physical and mental exercises practiced daily for eight weeks. The mindful non-judgmental attitude of being present with what arises is practiced in the formal exercises and in everyday situations. This review assesses the effect of MBSR programs on outcome measures of mental and physical health, quality of life and social functioning in adults.

### What studies are included?

The review summarizes 101 randomized controlled trials with a total of 8,135 participants from USA, Europe, Asia and Australia. Twenty-two trials included persons with mild or moderate psychological problems, 47 targeted people with various somatic conditions and 32 of the studies recruited people from the general population. Seventy-two studies compared MBSR to an inactive control group, while 37 compared MBSR to an active control intervention. Seven studies compared MBSR to both. Ninety-six studies contributed data to the meta-analyses, with data from 7,647 participants.

### Is mindfulness effective?

MBSR has a moderately large effect on outcome measures of mental health, somatic health, and



### How up-to-date is this review?

The review authors searched for studies up to November 2015. This Campbell Systematic Review was published in October 2017.

### What is the Campbell Collaboration?

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### About this summary

This summary was prepared by Michael de Vibe, Arild Bjørndal, Sabina Fattah, Gunvor M Dyrdal, Even Halland, and Emily E Tanner-Smith based on their Campbell Systematic Review 2017:11 [Mindfulness based stress reduction \(MBSR\) for improving health, quality of life and social functioning in adults; a systematic review and meta-analysis](#) (DOI 10.4073/csr.2017:11). The summary was designed and proofread by Tanya Kristiansen (Campbell Collaboration). Financial support from the American Institutes for Research for the production of this summary is gratefully acknowledged.



quality of life including social function at post-intervention when compared to an inactive control. If 100 people go through the MBSR program, 21 more people will have a favourable mental health outcome compared to if they had been put on a wait-list or gotten only the usual treatment.

These results may be inflated by underreporting of negative trials and moderate heterogeneity (indicating differences between the trials).

MBSR has a small but significant effect on improving mental health at post-intervention compared to other active treatments. MBSR has the same effect as other active interventions on somatic health, and quality of life (including social function). There was no underreporting of negative trials, and heterogeneity (differences between trials) were small for mental health, moderate for quality of life and large for somatic health.

The effects were similar across all target groups and were generally maintained at follow-up (1–34 months). The effects were largely independent of gender and study sample. The effects seemed also largely independent of duration and compliance with the MBSR intervention. No studies report results regarding side-effects or costs.

Effects were strongly correlated to the effects on measures of mindfulness, indicating that the effects may be related to the increase in self-reported mindfulness.

Two thirds of the included studies showed a considerable risk of bias, which was higher among studies with inactive than active control groups. Studies of higher quality reported lower effects than studies with low quality. The overall quality of the evidence was moderate, indicating moderate confidence in the reported effect sizes. Further research may change the estimate of effect.

### What do the findings of this review mean?

Based on this review it is reasonable to consider MBSR a moderately well-documented method for helping adults improve their health and cope better with the challenges and stress that life brings. New research should improve the way the trials are conducted addressing the pitfalls in research on mind-body interventions.