

Card for Humanity - Meditation

[Jacqui Fahey](#) & [Cheryl le Roux](#) | Educators

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“Meditation is like a gym in which you develop the powerful mental muscles of calm and insight.”

Ajahn Brahm

Meditation

Meditation can be an effective and grounding way for relieving stress whilst promoting self-awareness. There are many styles and techniques to suit and there is no right or wrong to it, it's a matter of trying out a few and seeing what works best for you. In this Card for Humanity, we explore a few of the basics, to refresh and inspire.

What is meditation?

Meditation is a conscious mental process that induces a set of integrated physiologic changes termed the relaxation response ([1]).

It is a mind and body practice that has a long history of use for increasing calm and physical relaxation, improving psychological balance, coping with illness and enhancing overall health and well-being ([2]).

Some have called it a form of mental exercise.

There are many types of meditation, but most styles have four elements in common ([1]):

- Choose a quiet location, keeping distractions to a minimum

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- Get yourself into a comfortable posture such as sitting, lying down or walking
- Have a focus of attention such as your breath, chosen word or set of words or an object
- Approach it with an open mindset, letting go of distractions, allowing them to pass without judgement

Latest research on meditation and the human body

- A meta-analysis of the effects of mindfulness meditation found that mindfulness meditation leads to increased telomerase activity in peripheral blood mononuclear cells ([3]).
- Researchers compared a group of 20 Zen meditation experts with 20 healthy matched comparison participants who had not previously meditated. Results showed that the expert meditators had significantly longer median telomere lengths as well as lower percentages of short telomere in their cells than the non-meditator comparison group ([4]).
- Harvard researchers found that patients who meditated over an 8 week period experienced a change in the expression of 172 genes that regulate inflammation, circadian rhythms and glucose metabolism. In turn, this was linked to a meaningful decrease in their blood pressure. The mind-body practices were found to elicit the relaxation response and were demonstrated to reduce blood pressure in essential hypertension and suggested that they may be an adjunct to antihypertensive drug therapy. Although the study did not include a comparison group of non-meditators, the authors considered it to be an important milestone ([5]).
- Another recent study with 42 participants found mindfulness-based meditation was shown to foster stress resilience and appears to help extinguish fearful associations. The researchers found that changes in the brain after mindfulness training were associated with enhanced ability to recall the safety memory, and thus respond in a more adaptive way ([6]). Future studies need to be done with clinical samples and using threatening stimuli relevant to their **anxiety** (e.g. spiders, cues that trigger panic or PTSD, etc.) to determine if similar changes in brain activation occur in these conditions. The study's senior author, Sara Lazar, Ph.D. (MGH Psychiatric Neuroimaging Research Program) noted, "Fear and anxiety have a habitual component to them—the **memory** of something that provoked fear in the past will trigger a habitual fear response when we are reminded of the event, even if there is no direct threat at the present. The data indicate that mindfulness can help us recognize that some fear reactions are disproportional to the threat, and thus reduces the fear response to those stimuli. Mindfulness can also enhance our ability to remember this new, less fearful reaction, and break the anxiety habit" ([7]).
- A 2017 systematic review and meta-analysis of 30 randomized controlled trials on the effects of mindfulness meditation for chronic pain found mindfulness meditation was associated with a small effect of improved pain symptoms compared with treatment as usual, passive controls and education/support groups. Statistically significant improvements were also found in depression, physical health-related quality of life and mental health-related quality of life. The quality of evidence was high for depression, moderate for mental health-related quality of life and low for physical health-related quality of life. More well-designed, rigorous, and large RCTs are required in order to build an evidence base that can

more decisively provide estimates of its effectiveness ([8]).

Examples of different styles of meditation

- Mindfulness meditation
- Spiritual meditation
- Qigong meditation
- Focused meditation
- Guided vs unguided meditation
- Movement meditation
- Mantra meditation
- Visualisation
- Transcendental meditation

Examples of meditation apps

- [Headspace](#)
- [Smiling Mind](#)
- [Calm](#)
- [buddhify](#)
- [Simple habit](#)
- [Sattva](#)
- [Ten percent happier](#)
- [Ensō | Meditation Timer & Bell](#)
- [Inscape app](#)
- [Waking Up app](#)

References

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