

## Meditation

### What Is It?

Throughout human history, different forms of meditation have been developed in many cultures worldwide, often in association with religious traditions. Meditation's broad scope makes defining and studying it challenging, because there are so many different types, with different styles, techniques, and goals. Some forms of meditation focus on mindful awareness. Others focus in different directions.

The word meditation derives from the Latin word “meditari” which means to engage in contemplation or reflection; the term is closely related to the word “measure,” as in doing things according to proper measure. In modern health care, it typically refers to a practice in which the mind is trained to maintain focused attention for various reasons, including to cultivate positive states of mind or to increase concentration and focus. As one description put it, “through the active and intentional shaping of our brains (neuroplasticity), we can shape well-being.”<sup>1</sup> There are meditations to foster awareness, and there are also meditations to enhance compassion and loving-kindness.

From the perspective of many contemplative traditions, meditation may be defined as spiritual practices intended to bring about enlightenment, self-actualization, or transcendence.<sup>1</sup> From the perspective of neuroscience, meditation is frequently defined by researchers as one or more techniques for training attention, concentration, and/or awareness of how one's own mind works, with the intent of enhancing self-regulation in some way.<sup>2</sup> Depending on their scientific background, spiritual or religious perspectives, and personal experience, people will resonate with different definitions, and it is important for meditation instructors (and clinical team members who discuss meditation with others) to be respectful of this.

Herbert Benson, who introduced the concept of the relaxation response, focused on the mental and physical effects of different forms of meditation, noting that many of them have certain features in common, in terms of their effect on the body.<sup>3</sup> They enlist a quiet environment, and many forms encourage people to settle down their bodies. People are encouraged to simply watch—but not get caught up in—distracting thoughts, and often they are encouraged to focus their attention on one specific thing, like a word (a *mantram*) or the breath. Of course, while appreciating these points of commonality, it is important to recognize that the variety and richness of different ways to meditate is born of thousands of years of human experience from around the world. As you discuss meditation as an option, remember that it is not simply a therapy, or a “one size fits all” approach to care. Different people will gravitate toward different approaches, and often, after meditation training, people tend to explore how it might fit into their overall worldview and, if relevant for them, their perspectives on spirituality and religion.

Meditation approaches have been classified in various ways. For example, practices may be based on one or more of the following overarching approaches<sup>3</sup>:

- Focused attention. The goal is to enhance concentration. Techniques use a single focus. Examples include breathing meditations, mantra meditation, and candle gazing.
- Open monitoring. Rather than one focus of concentration, these approaches encourage people to pay attention more broadly, noting what is happening with their thoughts, images, emotions, sensations, etc. Vipassana meditation, which informed the development of Mindfulness Based Stress Reduction (MBSR), is an example.
- Non-dual. These approaches attempt to remove the distinction between self and other, to move into a more unified understanding of experience. These are taught, especially in Eastern traditions, to reduce attachments.
- Loving-kindness and compassion. These approaches move focus to well-being, often using mental imagery techniques. They focus on manipulating thoughts and emotions. A growing body of research supports their use.<sup>4</sup>

## How It Works

An entire multidisciplinary field has arisen in the past few decades related to the scientific study of various types of meditation. Research in contemplative neuroscience, which often involves the use of measurement devices to study the brain (and occasionally other parts of the body) when a person is meditating, has been taking us in new directions with our understanding of the brain and its function. Various techniques can be used to alter brain activity in different areas.

## How to Use It

In developing a practice, here are some important considerations:

1. Type of meditation. Remember that meditation is not always the stereotypical sitting on a cushion chanting; there are many options. The more familiar a team member is with different types of meditation, the more effective they will be at discussing options. Try different meditations yourself so you can speak from experience. Ask meditation teachers for guidance.
2. Whether or not to take a class. It can help for beginners to start out in a group environment.
3. Frequency (once a week, three times a week, daily)
4. How long? Many people start with a few minutes and build up. MBSR courses encourage people to meditate for 45 minutes six days a week

Several types of meditation commonly used are listed here:

**Mindfulness-Based Stress Reduction (MBSR)** is one of the most common meditation-based training approaches used in U.S. health care settings.<sup>5,6</sup> Jon Kabat-Zinn, who developed the course based on Buddhist meditation practices for the purpose of providing a secular experience for people in a hospital setting, introduced MBSR in the 1980s as an 8-week course that introduces learners to a number of different methods for cultivating mindful awareness, including seated meditation, movement approaches (hatha yoga), compassion meditation, and eating meditation, among others. It is taught in over 200 medical centers nationwide.

**Mindfulness-Based Cognitive Therapy (MBCT)** is an adaptation of the MBSR. It features cognitive therapy-based exercises linking thinking and its result impact on feelings. It has been found to be beneficial for depression.<sup>7-9</sup>

**iRest® Yoga Nidra.** “iRest” is short for Integrative Restoration. This practice was developed specifically for a military/Veteran population in the early 2000s,<sup>10</sup> based on the ancient practice of Yoga Nidra. It consists of a ten-step protocol for “meditative self-inquiry.”<sup>11</sup> iRest Yoga Nidra is used regularly as part of weekly care at Walter Reed. Research indicates it is helpful with a variety of conditions, including depression, anxiety, quality of life, insomnia, pain, traumatic brain injury sequelae, low self-esteem, and overall patient satisfaction.<sup>12</sup>

**Transcendental Meditation® (TM)** reduces blood pressure<sup>13,14</sup> as well as anxiety and stress.<sup>15</sup> It decreases need for anxiety and PTSD medications in active military personnel.<sup>16</sup> In fMRI studies, it has been found to increase blood flow to attentional system of the brain and decrease flow to arousal areas.<sup>17,18</sup>

**Mantram Meditation (MM)** was brought to the United States from India by Eknath Easwaran. A word, sound, or phrase is chanted repeatedly as a way to redirect thoughts, enhance concentration, and improve emotion. (If the person thinks the word/sound/phrase rather than speaking it aloud, it is called a “mantra” instead.) Mantram repetition elicits the relaxation response and helps with PTSD, insomnia, anxiety, and depression.<sup>19,20</sup> It also improves pain and quality of life.<sup>21</sup> Research indicates MM may work on certain areas of the brain differently from other forms of meditation, because of the use of language it requires.<sup>3</sup>

## When to Use It

The number of studies of meditation has been increasing rapidly in recent years. In general, it is clear that meditation has great potential to be beneficial for many health concerns, and more research is needed because the quality of some of the research to date is varied.

Recent meta-analyses and reviews have noted the following about meditation:

- Many of the benefits seen in the research to date are related to psychological health and functioning.<sup>22</sup> Meditation reduces stress and improves capacity to cope with any number of chronic disorders. Anxiety and depression benefit, for example, as does chronic pain.<sup>23,24</sup> PTSD does as well.<sup>20</sup> Suicidal ideation decreases in Veterans.<sup>25</sup>
- Physical aspects of illnesses that are strongly influenced by emotions are also significantly affected.<sup>26</sup> Sleep and chronic pain both benefit,<sup>27-29</sup> as do blood pressure, fatigue, and quality of life after stroke.<sup>30</sup> Meditation seems, in general, to enhance resilience to stress.<sup>31</sup>
- The American Heart Association noted that “studies of meditation suggest a possible benefit on cardiovascular risk” (though quality and quantity of data are limited).<sup>32</sup>
- Meditation, at least in part because it regulates the stress response, suppresses chronic inflammation, alters immune system function and favorably influences the gut microbiome.<sup>33,34</sup> It lengthens telomeres, which correlates to reduced morbidity and mortality.<sup>35</sup>

- It has been calculated, based on study data, that having people over 60 do TM regularly “...could avert nearly 200,000 stroke cases and 50,000 stroke-related deaths over the course of 15 years.”<sup>36</sup>
- TM drops blood pressure and average of 4/2 mm Hg, which is comparable to other lifestyle interventions.<sup>13</sup>
- Going on meditation retreats also has benefit, including on depression, anxiety, stress, and quality of life.<sup>37</sup>

## What to Watch Out for (Harms)

Meditation tends to be safe overall. If someone has severe mental illness, they might be best served by training in a group environment with a well-trained instructor. Hallucinations can make meditation a challenge. It should be used carefully in people with significant trauma histories, psychosis, or hallucinations.

## Tips From Your Integrative Health Colleagues

Keep in mind that meditation is not, in itself, intended to be a therapy for a specific health issue or issues. Rather, it is an overall approach to living and being in the world, and it can potentially be useful for everyone. Again, tailor the type of meditation used to the person. Some people prefer to be active, and tai chi and yoga are often referred to as movement-based meditations. Other activities can be meditative as well, but playing a sport, gardening, or other activities that involve focusing on the activity are not strictly types of meditation, based on the more specific sense of the term.

Research continues to confirm that even eight weeks of meditation training will lead to significant changes in brain function.<sup>6</sup>

Certification in meditation instruction is offered through a number of institutions, including the Oasis Institute Center for Mindfulness, and the University of Massachusetts Medical School. See the resources list at the end of this document.

## Resources

### Other Websites

- [Dharma.org](https://www.dharma.org/resources/audio/): <https://www.dharma.org/resources/audio/>
  - A huge selection of exercises.
- [Dartmouth College Student Wellness Center](https://www.dharma.org/resources/audio/): <https://www.dharma.org/resources/audio/>
  - Offers a variety of short guided meditation exercises, as well as others for relaxation and Guided Imagery.
- [Foundation for Active Compassion](https://foundationforactivecompassion.org/media/): <https://foundationforactivecompassion.org/media/>
- [Free Mindfulness](http://www.freemindfulness.org/download): <http://www.freemindfulness.org/download>
  - A site where several instructors have donated recordings.
- [Oasis Institute](https://www.oasisnet.org/): <https://www.oasisnet.org/>

- [UCLA Mindful Awareness Research Center](https://www.uclahealth.org/marc/body.cfm?id=22&iirf_redirect=1):  
[https://www.uclahealth.org/marc/body.cfm?id=22&iirf\\_redirect=1](https://www.uclahealth.org/marc/body.cfm?id=22&iirf_redirect=1)
  - Has several short meditations, including several in Spanish.
- [University of California San Diego Center for Mindfulness](https://mbpti.org/): <https://mbpti.org/>
  - Some somewhat longer guided meditations.
- [University of Massachusetts Center for Mindfulness in Medicine, Health Care, and Society](https://www.umassmemorialhealthcare.org/umass-memorial-center-mindfulness): <https://www.umassmemorialhealthcare.org/umass-memorial-center-mindfulness>

## Books

- *Altered Traits: Science Reveals How Meditation Changes Your Mind, Brain, and Body*, Daniel Goleman (2017)
- *Conscious Breathing: Breathwork for Health, Stress Release, and Personal Mastery*, Gay Hendricks (1995)
- *How to Meditate: A Guide to Self-Discovery*, Lawrence Le Shan (1998)
- *Teaching Meditation to Children*, David Fontana (2007)
- *The Meditator's Atlas: A Roadmap of the Inner World*, Matthew Flickstein (2007)
- *The Miracle of Mindfulness: An Introduction to the Practice of Meditation*, Thich Nhat Hahn (1999)
- *The Relaxation Response*, Herbert Benson (2000)
- Books by Cheri Huber (focus on various aspects of Meditation)
  - *Perils and Pitfalls of Practice: Responses to Questions about Meditation*
  - *The Fear Book*
  - *The Depression Book*
  - *When You're Falling, Dive*

## CD's

- *Body Scan: Managing Pain, Illness and Stress with Guided Mindfulness Meditation*, 2nd edition, Vidyamala Burch (2008).
- *Guided Mindfulness Meditation* (3-part series), Jon Kabat-Zinn, (2004)
- *Mindfulness Meditation for Pain Relief: Guided Practices for Reclaiming Your Body and Your Life*, Jon Kabat-Zinn (2010)
- *Living Without Stress or Fear: Essential Teachings on the True Source of Happiness*, Thich Nhat Hahn (2009)
- *Road Sage: Mindfulness Techniques for Drivers*. Sylvia Boorstein. Audiobook CD. (2006).

## Apps and Monitoring Software

- **10% Happier**. Meditation for Fidgety Skeptics. Focused on those who are not sure they want to meditate. Free version and premium version that has videos.
- **Aura**. Has daily meditations, nature sounds, stories, music, and coaching.
- **Breethe**. Variety of meditations, inspirational talks, and lectures.
- **Buddhify**. 200+ meditations for different indications. One-time purchase fee; in-app purchases also available.
- **Calm**. Has multiple meditations and progress trackers.

- **Ensō.** For those with more experience. Has timers that can be set at different intervals to keep you alert.
- **Harmony Hypnosis Meditation.** Self-hypnosis and meditation resources. Different messages for each ear come through your earphones (dual vocal delivery).
- **Headspace.** Hundreds of guided meditations. Monthly fee after trial.
- **Inscape.** Meditations, music, and breathing exercises suggested based on your goals.
- **Insight timer.** Has a variety of guided meditations and a tracker.
- **Meditation and Relaxation Pro.** Simple and effective guides that allow you to choose a focus or goal.
- **Sattva.** Built around meditation traditions from India.
- **Simple Habit.** 5-minute meditations from an array of teachers. Has coaching, stories, and motivational guides as well.
- **Smiling Mind.** Created by a psychologist, tailors meditations to age; includes programs for group use. Free.
- **Stop, Think, and Breathe.** You check in with your current feelings, and meditations are suggested accordingly. Multiple free activities; also has a premium membership option.
- **The Mindfulness App.** Offers a 5-day guided practice and introduction to mindfulness, personalized options, and daily reminder settings.

## AUTHOR(S)

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