

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 on 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.”[1] 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.[1] 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.[2] 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.[3] 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 invited 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:[3]

Meditation

- 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.[4]

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 (in VA, they are often mental health professionals) for guidance.
2. Whether or not to take a class. It can help for beginners to start out in a group environment.
3. Frequency (depends on the individual's goals—could be once a week, three times a week, daily). Many people have the goal of meditating daily or near daily.
4. How long? Many people start with a few minutes and build up. MBSR courses encourage people to meditate for approximately 45 minutes six days a week;

however, meditation length differs depending on the individual and type of practice. One study suggested that 13 minutes minimum daily meditation could decrease negative mood, enhance attention, working memory and recognition memory as well as decreased anxiety scores with 8 weeks of practice (but not at 4 weeks).[5]

5. Several different types of meditation commonly used in VA 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.[6,7] 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, and it is widely taught in the VA.

Mindfulness-Based Cognitive Therapy (MBCT) is an adaptation of MBSR. It features cognitive therapy-based exercises linking thinking and its resulting impact on emotions with mindful awareness. It has been found to be beneficial for depression and rumination.[8-11] MBCT has also been found to help Veterans with PTSD, diabetes, tinnitus, anxiety, IBS, and weight loss.[12-17]

Mindful Self-Compassion (MSC): MSC builds upon MBSR and focuses on extending care, kindness, empathy and acceptance towards self and others. MSC has been found to have significant benefits for well-being. Individuals who are more self-compassionate tend to have greater happiness, life satisfaction and motivation, better relationships and less social isolation, greater physical health and less anxiety and depression.[18-23] MSC has also strengthened resilience needed to cope with stressful life events such as divorce, health crises and academic failure.[24-26] Mindful Self-Compassion has been studied in Veterans and found to be helpful in reducing PTSD symptoms associated with combat trauma.[27] A pilot study found that Veteran engagement with MSC was high, and completers of the training demonstrated small to medium effect size increases in self-compassion, happiness, and social role satisfaction, and decreases in depression, anxiety, fatigue, and pain interference. Those veterans taking pain medication also reported a significant decrease in use.[28] For health care professions, cultivating self-compassion is associated with less burnout, “compassion” fatigue and more satisfaction with care-giving role.[29,30]

iRest® Yoga Nidra. “iRest” is short for Integrative Restoration. This practice was developed specifically for a military/Veteran population in the early 2000s, based on the ancient practice of Yoga Nidra.[31] It includes a ten-step protocol for “meditative self-inquiry.”[32] iRest Yoga Nidra is used regularly as part of weekly care at Walter Reed, and has been adopted in a number of VA medical centers too. 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.[33]

Transcendental Meditation® (TM) reduces blood pressure as well as anxiety and stress.[34-36] It decreases need for anxiety and PTSD medications in active military personnel.[37] In fMRI studies, it has been found to increase blood flow to attentional system of the brain and decrease flow to arousal areas.[38,39]

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.[40,41] It also improves pain and quality of life.[42] 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.[3,43]

Several MM trainings for VA staff are available on the VA’s Talent Management System (TMS).

WHEN TO USE IT

The number of studies of meditation has been increasing rapidly in recent years. The VA HSR&D’s Evidence-Based Synthesis Program created an evidence map of mindfulness to offer a quick overview of the state of the research up through early 2014.[44] 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.

The following results, primarily from meta-analyses and reviews, have noted the following about meditation:

- Benefits seen in the research to date are frequently related to psychological health and functioning.[45] Meditation reduces stress and improves capacity to cope with any number of chronic disorders. Anxiety, depression and PTSD are improved for example, as is chronic pain.[46-48] In a Veteran population, these were reduced along with suicidal ideation.[48]
- Physical aspects of illnesses that are strongly influenced by emotions are also significantly affected.[49] Sleep and headache both benefit as well as improving physical function, pain intensity and quality of life in chronic low back pain.[50-56] Blood pressure, fatigue, and quality of life are improved following a stroke.[57] Mindfulness-based interventions (MBI) reduced psychological distress, fatigue and anxiety in cancer.[58-60] Meditation seems, in general, to enhance resilience to stress.[61]
- The American Heart Association noted that “studies of meditation suggest a possible benefit on cardiovascular risk” with a 2021 meta-analysis supporting that MBI’s have a positive influence on coping with psychological risk factors and improving physiological fitness.[62,63]

Meditation

- Meditation, at least in part because it regulates the stress response, suppresses chronic inflammation, alters immune system function and favorably influences the gut microbiome.[64,65] It lengthens telomeres, which correlate to reduced morbidity and mortality.[66] Overall, meditation practice leads to decreased physiological markers of stress in a range of populations.[67]
- Significant behavior change has been noted when Mindfulness-based interventions (MBI) are studied for weight loss and obesity-related eating behaviors. MBI's were noted to be moderately effective for weight loss and largely effective in decreasing obesity-related eating behaviors.[68]
- 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." [69]
- The VA has done pioneering research focusing on MM, which has shown promise for a number of conditions. Military veterans, who report high rates of psychiatric and physical health symptoms, were a focus of a 2020 meta-analysis and systematic review. One conclusion was that MBIs may improve psychological symptoms and quality of life/functioning in veterans.[48,70]
- TM drops blood pressure and average of 4/2 mm Hg, which is comparable to other lifestyle interventions.[34,35]
- Going on meditation retreats also has benefit, including on depression, anxiety, stress, and quality of life.[71]
- Web-based mindfulness interventions have been shown to be helpful as well for decreasing stress, improving quality of life and lowering anxiety.[72,73]
- Smartphone apps that include acceptance and/or mindfulness components have also been beneficial resulting in significantly higher levels of acceptance/mindfulness and significantly lower levels of psychological distress.[74]
- MBSR and other MBIs show that it can impact and help reduce burnout in healthcare professionals.[75,76]

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 WHOLE HEALTH COLLEAGUES

Meditation

Keep in mind that meditation is not 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. Research continues to confirm that even eight weeks of meditation training will lead to significant changes in brain function.[6] 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, such as chanting or walking meditation. However, 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.

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

RESOURCES

VA WHOLE HEALTH WEBSITE AND RELATED RESOURCES

- [Whole Health Veteran Handouts](https://www.va.gov/WHOLEHEALTH/veteran-handouts/index.asp): <https://www.va.gov/WHOLEHEALTH/veteran-handouts/index.asp>
 - Seated Meditation
 - Mantram Meditation
 - Tai Chi and Qi Gong for Whole Health
 - Yoga and Whole Health
 - Compassion Practice
 - Mindful Awareness Practice in Daily Living
 - Mindful Eating
- [Guided Meditation Audio Files](https://www.va.gov/WHOLEHEALTH/veteran-resources/guided-meditation-audio-files.asp): <https://www.va.gov/WHOLEHEALTH/veteran-resources/guided-meditation-audio-files.asp>
 - Introduction to Meditation with Dr. Serpa (5 minutes)
 - Paced Breathing (7 minutes)
 - Mental Muscle Relaxation (5 minutes)
 - Mini Mental Vacation (7 ½ minutes)
 - Introduction to Meditation with Dr. Greg Sherpa (5 minutes)
 - Grounding Meditation (5 minutes)
 - Mindfulness of Breathing Meditation (10 minutes)
 - Mindfulness of Sounds Meditation (10 minutes)
 - Compassionate Breathing Meditation (10 minutes)
 - Loving Kindness Meditation (10 minutes)
 - Body Scan Meditation (15 minutes)
 - Body Scan with Loving Kindness Phrases (15 minutes)
 - Intro on Mindfulness and Using the Personal Health Inventory (16 minutes)
 - For VA Clinicians by Dr. Gaudet (8 minutes)

Meditation

- [STAR Well-Kit](https://www.warrelatedillness.va.gov/education/STAR/): <https://www.warrelatedillness.va.gov/education/STAR/>
 - Resources from the War-Related Injury and Illness Study Center. Materials related to Meditation include Richard Miller’s “Guided Meditation” and James Gordon’s “Soft Belly Breathing”.
 - Ben King, a Veteran, also describes his experience with breathing exercises.
 - Patrick Crehan - Mindfulness Meditation (where another Veteran describes his experience).
- VA CALM Program. This training course for mindfulness instructors is offered through the Office of Patient-Centered Care & Cultural Transformation.

WHOLE HEALTH LIBRARY

- [Mindfulness Meditation for Chronic Low Back Pain](https://www.va.gov/WHOLEHEALTHLIBRARY/docs/Mindfulness-Meditation-for-Chronic-Low-Back-Pain.pdf): <https://www.va.gov/WHOLEHEALTHLIBRARY/docs/Mindfulness-Meditation-for-Chronic-Low-Back-Pain.pdf>
- [Yoga](https://www.va.gov/WHOLEHEALTHLIBRARY/docs/Yoga.pdf): <https://www.va.gov/WHOLEHEALTHLIBRARY/docs/Yoga.pdf>
- [Tai Chi and Qi Gong](https://www.va.gov/WHOLEHEALTHLIBRARY/docs/Tai-Chi-and-Qi-Gong.pdf): <https://www.va.gov/WHOLEHEALTHLIBRARY/docs/Tai-Chi-and-Qi-Gong.pdf>
- [Mindful Awareness](https://www.va.gov/WHOLEHEALTHLIBRARY/overviews/mindful-awareness.asp): <https://www.va.gov/WHOLEHEALTHLIBRARY/overviews/mindful-awareness.asp>

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.
- [Warriors at Ease](http://www.warriorsatease.com/): <http://www.warriorsatease.com/>
 - Focuses on bringing yoga and meditation to military communities around the world. For free resources, just need to sign up for the newsletter.

Meditation

- [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
 - Has several short meditations, including several in Spanish. Need to download the UCLA app to utilize.
- [University of California San Diego Center for Mindfulness](https://cih.ucsd.edu): <https://cih.ucsd.edu>
 - Some somewhat longer guided meditations including some in Spanish.
- [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>. Four and eight week online MBSR courses, MBCT courses, Mindfulness for managing Pain. Some series are in Spanish. Each course requires sign up and tuition.
- [University of Wisconsin, Family Medicine Mindfulness Meditation Podcast Series](https://www.fammed.wisc.edu/mindfulness-meditation-podcast-series/): <https://www.fammed.wisc.edu/mindfulness-meditation-podcast-series/>. 14 mindfulness recordings from 3 to 30 minutes plus related mindfulness recordings.
- [Mindful Self-Compassion](https://self-compassion.org): <https://self-compassion.org>
 - Has several free self-compassion meditations.

BOOKS

- *Altered Traits: Science Reveals How Meditation Changes Your Mind, Brain, and Body*, Daniel Goleman (2017)
- *How To Meditate: A Practical Guide to Making Friends With Your Mind*, Pema Chodrun (2013)
- *The Science of Meditation: How to Change Your Brain, Mind and Body*, Richard Goleman and Daniel Davidson (2018)
- *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)
- *Meditation: A Simple Eight-Point Program*, Eknath Easwaren (1978)
- *The Relaxation Response*, Herbert Benson (2000)
- Books by Cheri Huber (focus on various aspects of Meditation) such as
 - *Perils and Pitfalls of Practice: Responses to Questions about Meditation*

Meditation

- *Nothing Happens Next: Responses to Questions about Meditation*
- *Transform Your Life: A year of Awareness Practice*

AUDIO RECORDINGS

- 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.
- **Breathe.** 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.** Meditation timer and bells that can be set at different intervals to keep you alert (for those with more experience).
- **Headspace.** Hundreds of guided meditations. Monthly fee after trial.
- **Inscape.** Meditations, music, and breathing exercises suggested based on your goals (for ages 13 and up).
- **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. Generally considered more advanced.
- **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 (suitable for children). 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 from a variety of well-known meditation teachers, as well as personalized options and daily reminder settings.
- **Healthy Minds Program.** Well-rated and free meditation and mindfulness app.

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Meditation

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