

Meditation

Meditation is a safe and simple way to balance a person's physical, emotional, and mental states. It is easily learned and has been used as an aid in treating stress and pain management. It has also been employed as part of an overall treatment for other conditions, including hypertension and heart disease.

Meditation has been practiced for several thousand years. It is only during the past three decades that scientific study has focused on its clinical effects on health. During the 1960s, reports reached the West of yogis and meditation masters in India who could perform extraordinary feats of bodily control and altered states of consciousness. These reports captured the interest of Western researchers studying self-regulation and the possibility of voluntary control over the autonomic nervous system.¹ At the same time, new refinements in scientific instrumentation made it possible to duplicate and substantiate some of these reports at medical research institutes. Health care professionals who were often dissatisfied with the side effects of drug treatments for stress-related disorders embraced meditation as a valuable tool for stress reduction, and today both patients and physicians enjoy the health benefits of regular meditation practice.

What Is Meditation?

According to Joan Borysenko, Ph.D., a pioneer in the field of mind/body medicine, meditation can be broadly defined as any activity that keeps the attention pleasantly anchored in the present moment. When the mind is calm and focused in the present, it is neither reacting to memories from the past nor being preoccupied with plans for the future, two major sources of chronic stress known to impact health. "Meditation," says Dr. Borysenko, "helps to keep us from identifying with the 'movies of the mind.'"

Although there are numerous approaches to meditation, most techniques can be grouped into two basic approaches: concentrative meditation and mindfulness meditation. Concentrative meditation focuses the attention on the breath, an image, or a sound (*mantra*), in order to still the mind and allow a greater awareness and clarity to emerge. This form of meditation can be compared to the zoom lens of a camera that narrows its focus to a selected field.

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—Joan Borysenko, Ph.D.

A SIMPLE MEDITATION EXERCISE

The first step to practicing meditation is learning to breathe in a manner that facilitates a state of calmness and awareness. The following exercise is recommended as an effective method for achieving calmness by Jon Kabat-Zinn, Ph.D., founder and Director of the Stress Reduction Clinic at the University of Massachusetts Medical Center. Find a quiet place where you will not be disturbed and practice the following for several minutes each day:

Assume a comfortable posture lying on your back or sitting. If you are sitting, keep the spine straight and let your shoulders drop.

Close your eyes if it feels comfortable.

Bring your attention to your belly, feeling it rise or expand gently on the in-breath and fall or recede on the out-breath.

Keep the focus on your breathing, "being with" each in-breath.

Every time you notice that your mind has wandered off the breath, notice what it was that took you away and then gently bring your attention back to your belly and the feeling of the breath coming in and out.

If your mind wanders away from the breath, then your "job" is simply to bring it back to the breath every time, no matter what it has become preoccupied with.

Practice this exercise for fifteen minutes at a convenient time every day, whether you feel like it or not, for one week and see how it feels to incorporate a disciplined meditation practice into your life. Be aware of how it feels to spend time each day just being with your breath without having to do anything.

The simplest form of concentrative meditation is to sit quietly and focus the attention on the breath. The connection between the breath and one's state of mind is a basic principle of the practice of yoga and meditation. When a person is anxious, frightened, agitated, or distracted, the breath will tend to be shallow, rapid, and uneven. On the other hand, when the mind is calm, focused, and composed, the breath will tend to be slow, deep, and regular. Focusing the mind on the continuous rhythm of inhalation and exhalation provides a natural object of meditation. As the meditator focuses his or her awareness on the breath, the mind becomes absorbed in the rhythm of inhalation and exhalation, breathing slows and becomes deeper, and the mind becomes more tranquil and aware.

Mindfulness meditation, according to Dr. Borysenko, "involves opening the attention to become aware of the continuously passing parade of sensations and feelings, images, thoughts, sounds, smells, and so forth without becoming involved in thinking about them." The meditator sits quietly and simply witnesses whatever goes through the mind, not reacting or becoming involved with thoughts, memories, worries, or images. This helps the meditator gain a more calm, clear, and nonreactive state of mind. Mindfulness meditation can be likened to a wide-angle lens—a broad, sweeping awareness that takes in the entire field of perception.

How Meditation Works

Hans Selye, a pioneering Canadian stress researcher, describes two types of stress—negative stress and positive stress. The difference between the two depends upon whether or not the individual feels in control of the stress.² By allowing one to become more aware of one's reactions to stress, meditation can assist in providing the individual with an increased internal sense of control.

Studies have also shown that meditation [in particular research on Transcendental Meditation™ (TM), a popular form of meditation practiced in the West for the past thirty years], can bring about a healthy state of relaxation by causing a generalized reduction in multiple physiological and biochemical markers, such as decreased heart rate, decreased respiration rate, decreased plasma cortisol (a major stress



See Mind/Body Medicine.

hormone), decreased pulse rate, and increased EEG (electroencephalogram) alpha, a brain wave associated with relaxation.³ The first research on the physiology of meditation was conducted by R. Keith Wallace at U.C.L.A. Studying Transcendental Meditation, Wallace found that whereas the body gains a state of profound rest, the brain and mind become more alert, indicating a state of "restful alertness." Studies show that after TM, reactions are faster, creativity greater, and comprehension broader.

"Through meditation we can learn to access the relaxation response (the physiological response elicited by meditation) and to be aware of the mind and the way our attitudes produce stress," says Dr. Borysenko, former Co-director of Harvard's Mind/Body Clinic. "In addition, by quieting the mind, meditation can also put one in touch with the inner physician, allowing the body's own inner wisdom to be heard."

Conditions Benefited by Meditation

Patricia Norris, Ph.D., Director of the Biofeedback and Psychophysiology Clinic at the Menninger Foundation, reports: "In our practice at Menninger we use meditative techniques to enhance immune functioning in cancer, AIDS, and autoimmune patients. We also use meditation in conjunction with neuro-feedback to normalize brain rhythms and chemistry in alcohol and drug addiction, as well as other addictive conditions. Almost all of our patients use meditative techniques in learning self-regulation for disorders such as anxiety and hypertension, and for stress management. We consider meditation a recommended practice for anyone seeking high-level wellness."

In addition to the growing body of research literature on meditation, physicians, psychotherapists, and other professionals are increasingly adding meditative techniques to their practice. According to David Orme-Johnson, Ph.D., Dean of Research for Maharishi International University in Fairfield, Iowa, over six thousand physicians have begun the practice of Transcendental Meditation and regularly recommend the TM technique to their patients. Other physicians who advocate meditation include Dean Ornish, M.D., who recently demonstrated that heart disease can be reversed with a comprehensive program that includes meditation.⁴ Hugh Riordan, M.D., has made meditation a key element in the integrated health program at the International Institute for the Improvement of Human Functioning in Wichita, Kansas. Jon Kabat-Zinn, Ph.D., founder and Director of the Stress Reduction Clinic at the University of

TRANSCENDENTAL MEDITATION

Transcendental Meditation™ is a simple mental technique introduced by Maharishi Mahesh Yogi from the Vedic tradition of India. TM is easily learned, can be practiced for fifteen to twenty minutes, twice daily, and requires no change in lifestyle or belief. Since 1958, 4 million people have learned TM and over five hundred scientific studies have been conducted on it at over two hundred universities worldwide.⁵

Physiological research shows that during TM, the body gains a deeper state of relaxation than during ordinary rest.⁶ EEG (electroencephalogram) changes indicate a state of heightened awareness and coherence.⁷ Regular practice of TM has been found to produce a state of increased stability, adaptability, and integration during all phases of activity. Also, TM has been found to increase intelligence, creativity, and perceptual ability⁸ and to reduce high blood pressure and illness rates by more than 50 percent.⁹ Meta-analysis (research comparing large numbers of studies) have found that TM is one of the most effective techniques known for reducing drug and alcohol abuse,¹⁰ decreasing anxiety and increasing self-actualization.¹¹



Meditation is well-suited to self-care, and can become part of your personal health maintenance program.

Massachusetts Medical Center, has taught Buddhist meditation and yoga to thousands of patients, most of whom were referred by their physicians.

WALKING MEDITATION

According to Jon Kabat-Zinn, Ph.D., founder and Director of the Stress Reduction Clinic at the University of Massachusetts Medical Center, one simple way to bring awareness into your life is through walking meditation. "This brings your attention to the actual experience of walking as you are doing it, focusing on the sensations in your feet and legs, feeling your whole body moving," Dr. Kabat-Zinn explains. "You can also integrate awareness of your breathing with the experience."

To do this exercise, focus the attention on each foot as it contacts the ground. When the mind wanders away from the feet or legs, or the feeling of the body walking, refocus your attention. To deepen your concentration, don't look around, but keep your gaze in front of you.

"One thing that you find out when you have been practicing mindfulness for a while is that nothing is quite as simple as it appears," says Dr. Kabat-Zinn. "This is as true for walking as it is for anything else. For one thing, we carry our mind around with us when we walk, so we are usually absorbed in our own thoughts to one extent or another. We are hardly ever just walking, even when we are 'just going out for a walk'. Walking meditation involves intentionally attending to the experience of walking itself."

"Many well-known physicians," adds Dr. Norris, "such as Larry Dossey, M.D., Deepak Chopra, M.D., Bernie Siegel, M.D., and Norman Shealy, M.D., also use and advocate meditation for total well-being."

The benefits of an ongoing meditation practice can be classified into three categories: physiological, psychological, and spiritual.

Physiological Benefits

The Transcendental Meditation technique has proven to be a successful coping strategy in helping to deal with drug addiction,¹² a useful tool in psycho-neuro-immunology by helping to control the immune system,¹³ and an effective manager of stress and pain.

A strong link has also been established between the practice of TM and longevity.¹⁴ Only two factors have been scientifically determined to actually extend life: caloric restriction and lowering of the body's core temperature. Meditation has been shown to lower core body temperature.¹⁵

Stress Control: The term stress was first popularized in the 1950s, based on Dr. Selye's physiological studies of animals injured or placed under extreme conditions.

People now use the term to refer to any or all the various pressures experienced in life. These stressors can stem from work, family, illness, or environment and can contribute to such conditions as anxiety, hypertension, and heart disease. According to Dr. Kabat-Zinn, "How an individual sees things and how he or she handles them makes all the difference in terms of how much stress he or she experiences."

In one research project conducted by Dean Shapiro, Ph.D., of the University of California at Irvine, individuals reported self-regulation effects that long-term meditators (average four plus years) could identify as positive attributes from meditation. Those studied agreed that learning to control stress was an enormous benefit. Becoming more relaxed, learning to control negative thinking, and being able to handle situations with calmness and equanimity were other noted benefits.¹⁶

Pain Management: "Chronic pain can systematically erode the quality of life," says Dr. Kabat-Zinn. Although great strides are being made in traditional medicine to treat recurring pain, treatment is rarely as simple as prescribing medication or surgery.

In one study overseen by Dr. Kabat-Zinn, 72 percent of the patients with chronic pain conditions achieved at least a 33 percent reduction after



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participating in an eight-week period of mindful meditation, while 61 percent of the pain patients achieved at least a 50 percent reduction. Additionally, these people perceived their bodies as being 30 percent less problematic, suggesting an overall improvement in self-esteem and positive views regarding their bodies.¹⁷

Chronic Illness: Dr. Ainslie Meares, an Australian psychiatrist who uses meditation with cancer patients, studied seventy-three patients who had attended at least twenty sessions of intensive meditation, and wrote: "Nearly all such patients can expect significant reduction of anxiety and depression, together with much less discomfort and pain. There is reason to expect a 10 percent chance of quite remarkable slowing of the rate of growth of the tumor, and a 50 percent chance of greatly improved quality of life."¹⁸

Psychological Benefits

Meditation can help most people feel less anxious and more in control. The awareness that meditation brings can also be a source of personal insight and self-understanding. Drs. Benson and Borysenko note that even among patients with little psychological orientation, "approximately 20 percent [of these patients] with a wide range of psychophysiological disorders who joined stress reduction and relaxation programs involving mindfulness meditation became interested in psychotherapy for further expansion of self-understanding."¹⁹

Dr. Borysenko notes that "meditation may also lead to a breakdown of screen memories so that early childhood abuse episodes and other traumas suddenly flood the mind, making the patient temporarily more anxious until these traumas are healed. Many so-called meditation exercises are actually forms of imagery and visualization that are extraordinarily useful in healing old traumas, confronting death anxieties, finishing 'old business', learning to forgive, and enhancing self-esteem."

Spiritual Benefits

The longer an individual practices meditation, the greater the likelihood that his or her goals and efforts will shift toward personal and spiritual growth.²⁰ One practitioner in Dr. Shapiro's study noted, "I began meditating to decrease my stress and fear of public speaking. But as my practice deepens, not only do I have decreased heart rate, but I also am



See Hypertension. Stress.



The practice of meditation.



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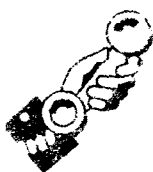
developing a more open heart—more sensitivity, greater compassion, and less negative judgment toward others.” Many individuals who initially learn meditation for its self-regulatory aspects find that as their practice deepens they are drawn more and more into the realm of the “spiritual.”

In her work with many cancer and AIDS patients, Dr. Borysenko has observed that many are most interested in meditation as a way of becoming more attuned to the spiritual dimension of life. She reports that many die “healed,” in a state of compassionate self-awareness and self-acceptance.

The Future of Meditation

Because meditation can be practiced in a hospital, home, office, or hospice environment, it is well suited for many individuals as a means of contributing to overall health.

With the increasing amount of negative emotional, work, and environmental, influences that people have little control over, it is important to set aside times to rejuvenate the body and the mind. According to Dr. Kabat-Zinn, “The more complicated the world gets and the more intrusive it becomes on our personal psychological space and privacy, the more important it will be to practice non-doing.”



Where to Find Help

Meditation instruction has been added to the curriculum of universities, continuing education services, recreational organizations, alternative health clinics, and some religious programs. Specific organizations that may be a helpful resource for meditation are:

Institute of Noetic Sciences
P.O. Box 909
Sausalito, California 94966
(415) 331-5650

A resource of meditation researchers and teachers. Excellent support organization for those interested in consciousness.

Institute of Transpersonal Psychology
P.O. Box 4437
Stanford, California 94305
(415) 327-2066

A source of information about meditation research, activities, and teachers.

Maharishi International University

1000 North 4th Street
Fairfield, Iowa 52556
(515) 472-5031

A Transcendental Meditation organization-sponsored school, and research facility. They will provide information about where to learn Transcendental Meditation.

Mind-Body Clinic
New Deaconess Hospital,
Harvard Medical School
185 Pilgrim Road
Cambridge, Massachusetts 02215
(617) 632-9530

A treatment program at a medical center where the relaxation response can be learned.

Mind/Body Health Sciences, Inc.
393 Dixon Road
Boulder, Colorado 80302
(303) 440-8460

This organization helps groups organize workshops and provides expert speakers on meditation and mind/body medicine. They also have a mail order selection of books on meditation and music on tape.

Stress Reduction Clinic
University of Massachusetts
Medical Center
55 Lake Avenue, North
Worcester, Massachusetts 01655
(508) 856-2656

An actual training program at a medical center to teach meditative-type awareness.



Recommended Reading

Beyond the Relaxation Response. Benson, Herbert; and Procter, William. New York: Putnam/Berkley, Inc., 1984.

Herbert Benson continues his studies in the field of meditation. In this book he discusses how everyone has the ability within to heal him-or herself. An excellent follow-up to his previous book, The Relaxation Response.

Full Catastrophe Living. Kabat-Zinn, Jon. New York: Delacorte Press, 1990.

An excellent description of the stress reduction and relaxation program at the University of Massachusetts Medical Center, a pioneering center using mindfulness training for addressing stress and pain. The technique is based on Buddhist mindfulness meditation, but is taught in a secular manner.

The Meditative Mind. Goleman, Daniel. Los Angeles: Jeremy P. Tarcher, Inc., 1988.

A very helpful book surveying the way in which meditation has been used in different religious traditions, both East and West.

Minding the Body, Mending the Mind. Borysenko, Joan. New York: Bantam Books, 1988.

A clear, lucid, thoughtful, and compassionate book discussing the author's work while director of the Mind/Body Clinic at Harvard Medical School.

The Neurophysiology of Enlightenment. Wallace, Robert Keith. Fairfield, IA: Maharishi International University Neuroscence Press, 1986.

Provides a good understanding of the mechanics of Transcendental Meditation, as well as scientific research carried out on Transcendental Meditation.

The Relaxation Response. Benson, Herbert. New York: Outlet Books, Inc., 1993.

Still a classic in the field, this book explains the relaxation response, a meditative technique derived from Transcendental Meditation, and its ability to relieve stress, anxiety, and stress-related illness.

Transcendental Meditation. Roth, Robert. New York: Donald I. Fine, Inc., 1988.

A simple, readable introduction to Transcendental Meditation.