

WWW Library of Meditation

Online Readings

[Buddhist Meditation and Depth Psychology](#)

An essay on the Buddhist meditative path to liberation as viewed from the perspective of modern psychological theory by Douglas M. Burns

[Loving Kindness Meditation](#)

by Roger Walsh,MD

[The Peaceful Mind A conversation with the Dalai Lama](#) by T George Harris

[Benefits of Long-Term Meditation](#)

with Shinzen Young

Web Sites

[Mindfulness Meditation Practice](#)

Contains descriptions of mindfulness practice and links to several resources

[BeliefNet](#)

Many articles and talks by the Dali Lama and others on meditation and prayer

Meditation Discussion Forums

[Meditation In Psychotherapy Web Discussion Forum](#)

led by James Spira,PhD on the BehaviorNet site.

alt.meditation

alt.meditation.transcendental

Online Multimedia Resources

Some of these require the Real Player audio plug-in player or other plug-in for your browser.

[Lectures on meditation](#)

Joseph Goldstein, Robert Thurman, Sharon Salzberg and Jack Kornfield--Americans with extensive personal experience with meditation


[BuddhaNet Audio Library](#)

Includes Buddhist Chanting, Meditation Instruction, and Dharma Talks


[Zen](#)

a multi-media presentation of principles from Zen

More recent studies have looked at the neurochemistry of meditation. Meditation has been shown to increase serotonin production. [Serotonin](#) is an important neurotransmitter and neuropeptide that influences mood and behavior in many ways. Its importance is demonstrated by the recent explosion in use of fluvoxamine, a "selective serotonin re-uptake inhibitor" like Prozac, Paxil, and Zoloft, for treating depression-related emotional disorders. Low levels of serotonin have been linked to a variety of disorders. For example, conditions associated with low serotonin levels include: [depression](#), obesity, insomnia, narcolepsy, sleep apnea, migraine headaches, premenstrual syndrome, and fibromyalgia.

 <p>REQUIRED QUIZ EXERCISE 14: Prozac and Meditation</p> <p><input type="checkbox"/></p> <p>In what way is meditation related to Prozac? a) Prozac is an effortless meditation b) They both increase the available serotonin in the brain c) They both have significant negative side-effects d) Meditation is a cheaper version of Prozac</p> <p>Record your answer for later insertion into the Quiz.</p>	
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Meditation has also been associated with increased melatonin availability. Melatonin is also an important neurotransmitter and neuropeptide that influences mood and behavior. It is derived from serotonin. Melatonin has been linked to regulation of sleep, and early research indicates it may have anti-carcinogen and immune system enhancing effects.

 <p>REQUIRED QUIZ EXERCISE 15: Meditation and the Neurochemistry of Depression</p> <p><input type="checkbox"/></p> <p>How does meditation influence the neurochemistry of depression? a) Meditation increases available serotonin and melatonin to the brain b) Meditation increases the alpha state, and balances brain chemistry c) Meditation doesn't have a specific effect, so it can't directly influence anything d) Depression is due to excess serotonin which meditation reduces.</p> <p>Record your answer for later insertion into the Quiz.</p>	
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These early studies on the neurochemical effects of meditation on serotonin and melatonin, coupled with the established research on the neuroelectrical effects of meditation, indicate the profound and wide-ranging neurophysiological consequences that a regular practice of meditation may provide. They also hint at the neurophysiological basis for the numerous health benefits that are attributed to meditation, as well as the difficulty in attributing a specific causal chain to meditation as a treatment effect. Because of these numerous, system-wide influences, meditation may remain a captive of "non-specific effects" within experimental psychology, even as the neurosciences demonstrate the effectiveness and importance that a meditation practice offers for personal health.

IGL301 LESSON 9

See his pictures on:

[The Effect of Meditation on the Brain activity of Tibetan Meditators](#)

The parietal area of the brain is responsible for giving us a sense of our orientation in space and time. He hypothesized that blocking all sensory and cognitive input into this area during meditation results in the sense of no space and no time. When this part of the brain, which weaves sensory data into a feeling of where the self ends, is deprived of sensory input through the meditator's focus on inward concentration, it cannot do its job of finding the border between the self and the world. Dr. Newberg described how this affects consciousness:

The brain had no choice. It perceived the self to be endless, as one with all of creation. And this felt utterly real. The absorption of the self into something larger [is] not the result of emotional fabrication or wishful thinking. It springs from neurological events, as when the orientation area goes dark.


[Why God Won't Go Away : Brain Science and the Biology of Belief by Andrew Newberg M.D](#)

Neuroelectrical Effects

Early scientific studies on the neurophysiology of meditation focused on changes in brain wave (EEG) patterns, and differences in brain wave patterns between meditators and non-meditators. In summary, mediation was shown to

increase Alpha (8-13 Hz or cycles per second) production
increase Theta (4-7 Hz) production
increase high Beta (20-40 Hz) activity (with experienced meditators)


Alpha patterns are associated with calm and focused attention; Theta patterns are associated with reverie, imagery, and creativity; high Beta activity is associated with highly focused concentration. It was therefore argued that meditation contributed to a calm, creative, and focused pattern of brain activity which resulted in a person with these same qualities. Other early research indicated that meditation produced an increased hemispheric synchrony, which was correlated with creativity, and decreased habituation, which was claimed to indicate a "freshness of perception," although studies on these last two areas provided mixed results.


 <p>REQUIRED QUIZ EXERCISE 13: Alpha Brain States and Meditation</p> <p>□</p> <p>Which best describes the relation between alpha brain states and meditation? a) The alpha state is the best indicator of successful meditation b) Meditation harmonizes the alpha state, and balances the brain c) Alpha brain wave activity is increased by meditation practice d) The alpha state is the goal of meditation.</p> <p>Record your answer for later insertion into the Quiz.</p>	
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□

Neurochemical Effects

□

 <p>REQUIRED QUIZ EXERCISE 11: Religious Beliefs and Meditation</p> <p>□</p> <p>Benson found that religious beliefs: 1. tend to interfere with religious practice 2. are often strengthened by meditation 3. and meditation are incompatible 4. none of the above</p> <p>Record your answer for later insertion into the Quiz.</p>	
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 <p>REQUIRED QUIZ EXERCISE 12: Meditation and Psychotherapy</p> <p>□</p> <p>Meditation: 1. is contraindicated while in psychotherapy 2. a valuable adjunctive technique in psychotherapy 3. is an unethical intervention by current professional guidelines 4. none of the above</p> <p>Record your answer for later insertion into the Quiz.</p>	
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IGL301 LESSON 8 Neurological Research on Meditation

Neurophysiology of Meditation

Knowledge of the neurophysiology of meditation is changing rapidly. Recent advances in medical imaging, such as rCBF (regional Cerebral Blood Flow), real time MRI (Magnetic Resonance Imaging), MEG (magnetoencephalography), and improved EEG (electroencephalography) allow detailed studies that are reshaping our understanding of the effects of meditation on neural behavior. Already there are several basic effects that have been discovered through scientific research in the recent past which demonstrate the profound influence meditation has on neurophysiology.

Andrew Newberg, MD has been conducting high-tech investigations of the brains of meditating Buddhists and Franciscan nuns at prayer in order to illuminate the chain of neurological events that are triggered by intensely focused spiritual contemplation. In collaboration with the Departments of Neurology and Psychiatry at the University of Pennsylvania Medical Center, he had an advanced Tibetan Buddhist meditator engage in meditation while hooked up to an IV. When he approached the transcendent peak of his meditative state, he tugged on a string. Dr. Newberg was at the other end and when he felt the pull, he released a radioactive dye into the IV line. Then the mediator was whisked into a SPECT (single photon emission computed tomography) brain-imaging machine to determine which areas are active by measuring blood flow.

Dr. Newberg found that the front part of the brain, which is usually involved in focusing attention and concentration, is more active during meditation, but there was greatly decreased activity in the parietal lobe.

Spirituality Expands a Therapist's Horizons

Some groups, such as the Jehovah's Witnesses, have criticized even the secular forms of meditation:

Dr. Benson's formula is not neutral but religious; it derives from Eastern Religions, Mysticism and Gnosticism...Dr. Benson's formula is incompatible with Christianity, and dangerous.

[Jehovah's Witness Web Site](#)

Yet Buddhist practitioners emphasize, and Benson has actually found the opposite, namely that meditation often strengthens individuals religious beliefs.

Many Jewish rabbis and Catholic priests and nuns meditate--even regularly practicing Buddhist meditation--without changing their religious affiliation. Moreover, there are various kinds and styles of meditation that have developed with Buddhism. Some involve visualizing and invoking Buddhist deities (archetypal representations of the highest spiritual qualities within us), while others have virtually no Buddhist content. Buddhism is not intent upon converting anyone, and there is no conversion ceremony in Buddhism. Meditation, in short, is an excellent example of a spiritual practice that transcends "isms" and schisms. It's post-denominational and can deepen any religious quest. (In addition to Buddhist meditation, there are Jewish, Muslim, Hindu, Sikh, Jain, Christian, Taoist, and other forms of meditation, by the way.) Meditation helps awaken and enlighten us, grounding us more in the present moment, the holy now.

Surya Das, an American-born Tibetan lama, [I Sit, Therefore I Am...a Buddhist?](#)

And research has clearly established that meditation can be a valuable adjunctive technique in psychotherapy, pain management, and other situations where cultivating a relaxed body and calm mind would benefit an individual. It is still rare to see mind-body-spirit techniques being taught on psychiatric inpatient units, but there is growing support for interventions which actively utilize patients' religious and spiritual beliefs and values as part of therapy. This can range from using religious or spiritual practices in the treatment sessions (e.g., conducting a loving kindness meditation from Buddhist practice) to adoption of Christian imagery in cognitive behavioral interventions.



Meditation has become acceptably "mainstream" with many perceived benefits, which the therapist can use to motivate the patient to try the technique and develop a regular practice of meditating.

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In his review of meditation and psychotherapy, [Greg Bogart, Ph.D.](#) concludes that meditation has clinical applications beyond its well documented capacity to induce physiological relaxation and to alleviate stress, anxiety, and other physical symptoms:

Meditation brings about cognitive shifts that can be applied to behavioral self-observation and management, and to understanding limiting or self-destructive cognitive patterns.

Meditation may also permit deepened access to the unconscious. However, meditation by itself may not be an effective means of reflecting upon and giving meaning to the previously submerged material that may come to consciousness. Here the interpretive approaches developed by psychoanalytic, Jungian, and other psychodynamic theorists may prove more useful. Conversely, meditation techniques like Vipassana focus attention on the manner in which unconscious conflicts are being processed and recreated in the mind on a moment-to-moment basis. Thus, vipassana offers the possibility of not just understanding such conflicts conceptually, but of actually penetrating and gradually dismantling them through meditative insight.

An additional benefit has been observed by Herbert Benson, MD. Even using his spiritually sanitized version of meditation, he found one result that surprised him:

Not only did my research -- and that of my colleagues -- reveal that 25% of people feel more spiritual as the result of the Relaxation Response, but it showed that those same people have fewer medical symptoms than do those who reported no increase in spirituality. It became clear that a person's religious convictions or life philosophy enhanced the average effects of the Relaxation Response in three ways: (1) People who chose an appropriate focus, that which drew upon their deepest philosophic or religious convictions, were more apt to adhere to the Relaxation Response routine, looking forward to it and enjoying it; (2) affirmative beliefs of any kind brought forth remembered wellness, reviving top down, nerve cell firing patterns in the brain that were associated with wellness; (3) when present, faith in an eternal or life transcending force seemed to make the fullest use of remembered wellness because it is a supremely soothing belief, disconnecting unhealthy logic and worries.

[Examining the Faith Factor](#)

Others, such as Arthur Deikman, MD, have offered a contrary position and questioned the integration of spiritual practices such as meditation into psychotherapy:

Another question that arises frequently is whether techniques from the domain of spiritual practice should be introduced into the psychotherapy situation. My own view is that they should not - unless the psychotherapist is also qualified as a spiritual teacher. Although a variety of procedures such as meditation, chanting, and visualization can be used to provide calmness and relaxation, the mystical literature indicates that such benefits are secondary. The sages who invented these techniques emphasized that they should be used as part of an integrated, individualized teaching system requiring the supervision of a teacher whose own perceptual capacity has been developed and who thus knows how to prescribe them according to the specific spiritual needs of the student. To use such techniques for lesser purposes may decrease their effectiveness for spiritual development. Since locating a competent therapist can take some searching, and locating a competent spiritual teacher can take even more, locating someone who is adequately skilled in both is a difficult undertaking indeed. I do not regard myself as such a person, nor do I know of anyone else who is.

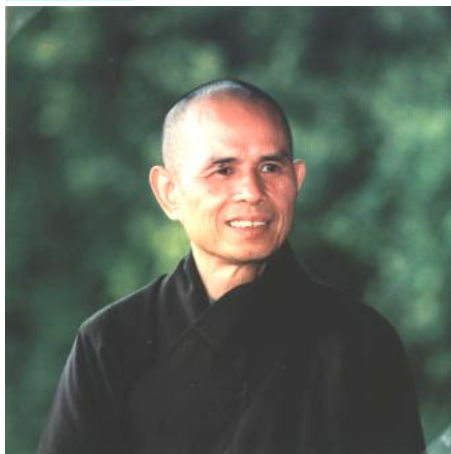
I have used meditation in my clinical work as a psychologist at Camarillo State Hospital, UCLA Neuropsychiatric Institute, and the San Francisco VA with serious conditions such as schizophrenia, depression, PTSD, and chronic pain. I have taught meditation to patients as a mind calming technique for over 20 years. As mentioned earlier, I developed a multimodal holistic health program for schizophrenic patients at a state psychiatric hospital which incorporated meditation without any adverse effects. ABSTRACT Lukoff D, Wallace CJ, Liberman RP, Burke K.

[A holistic program for chronic schizophrenic patients.](#) Schizophr Bull. 1986;12(2):274-82.

Actually what I used at Camarillo State Hospital with schizophrenic patients was music by [Steven Halpern, PhD](#), a who has researched and recorded non-melodic, non-rhythmic music that induces a relaxed state. I found that this music enabled patients to achieve a meditative sense of calm amidst voices and paranoid delusions that many were experiencing.



EXERCISE: Listen to audio files of meditative music from [Spectrum Suite](#) by Steven Halpern. Two brief excerpts are linked on this page about 2/3 of the way down.



I have also conducted [walking meditation](#) sessions with patients at the San Francisco VA Day Treatment Program where I worked as a psychologist for 14 years.

The practice is based on the work of Vietnamese Buddhist monk [Thich Nhat Hahn](#). The patients enjoyed walking in silence quite a bit and several asked to do this again.

□

I also have used a breath meditation on a CD by Andrew Weil, MD in groups at an outpatient VA clinic for patients with pain management and chronic illness issues. This meditation proved effective in helping many cope better with their medical conditions even though many also had diagnoses of PTSD as well. This simple meditation did not exacerbate dissociative symptoms (which a more intensive practice might run the risk of doing).

[The Art of Breathing](#)

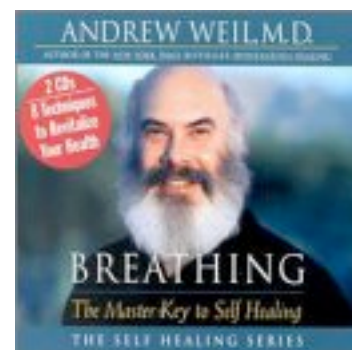
Substance Abuse

In mental health applications, meditation has been used both with and without its religious/spiritual heritage. For example, Transcendental Meditation (TM), which does draw upon its roots in Hinduism, has been used in the treatment of substance abuse, and the results have generally shown positive outcomes. A review of 24 studies concluded that TM simultaneously addressed several factors underlying substance abuse, and provided both immediate relief from distress (such as urges) and also long term improvements in well-being, self-esteem, personal empowerment, and other areas of psychophysiological health.



Gelderloos P, Walton KG, Orme-Johnson DW, Alexander CN. [Effectiveness of the Transcendental Meditation program in preventing and treating substance misuse: a review.](#) Int J Addict 1991 Mar; 26(3):293-325)

Psychotherapy



Similarly, meditation may be inadvisable in treating some personality disorders (DSM-IV cluster B - antisocial, borderline, histrionic, or narcissistic) which involve lack of empathy, as it could reinforce further preoccupation with the self that characterizes those disorders.

Use with Clinical Populations

However, an experienced therapist who has developed personal skills with meditation and other mind-body techniques can incorporate meditation into most treatment protocols, given appropriate attention to preparation of the patient. For example, the course author developed a multimodal holistic health program for schizophrenic patients at a state psychiatric hospital which incorporated meditation without any adverse effects.



Lukoff D, Wallace CJ, Liberman RP, Burke K. [A holistic program for chronic schizophrenic patients.](#) Schizophr Bull. 1986;12(2):274-82.

Since meditation can be a powerful tool for self-reflection, it can occasionally produce an opening to the inner dimensions of experience that could be overwhelming to psychologically fragile individuals. In addition, relaxation-induced anxiety, where an individual unaccustomed to deep relaxation that often accompanies meditation and finds the resulting physiological release and attention to internal sensations, perceptions, and images, to be a source of fearful anxiety-producing apprehension, can occur in meditation as well as in other relaxation techniques used in therapy.



REQUIRED QUIZ EXERCISE: 10 Relaxation-induced anxiety



According to the [Braith JA, McCullough JP, Bush JP Relaxation-induced anxiety in a subclinical sample of chronically anxious subjects.](#) study, relaxation-induced anxiety in chronically anxious subjects is 1. extremely rare. 2. best treated with meditation training 3. a risk with a substantial minority of patients.

Record your answer for later insertion into the Quiz.

Therefore, it is prudent to begin a meditation intervention slowly, allowing the patient to become comfortable with the sensations and thoughts that arise. It is also prudent to have some personal experience with meditation prior to utilizing it with a patient.

Besides the contra-indications and cautions mentioned above (i.e., those resulting from deficient reality testing, porous (fragile) ego boundaries, pathological deficiency in empathy, rigid self-control), there is no published scientific literature describing negative side effects of meditation.

IGL301 LESSON 7 Integrating Meditation into Therapy

Mental Disorders



QUEST EXERCISES 7 and 8: Meditation on PubMed



7. Go to the [PubMed](#) search page and conduct a search for meditation articles. Enter the keyword meditation into the box after Search for and then click on Go. You should get over 700 links citations to articles on meditation.

Record one article title as your answer for later insertion into the quiz.

8: Conduct a Boolean search for meditation articles on one of the health benefits described above by adding a term such as pain or anxiety. Enter meditation pain. You do not need to add and between the terms. PubMed will find all articles that address meditation for the treatment of pain.

Record one article title as your answer for later insertion into the Quiz.



The NCCAM and The National Library of Medicine (NLM) have partnered to create CAM on PubMed, a special subset of the NLM's free online Medline database. When you click on the CAM on PubMed logo, your literature search will automatically be limited to the CAM subset of PubMed.



QUEST EXERCISE 9: CAM on PubMed



Conduct a search for meditation research articles by clicking on the CAM on PubMed icon above and then entering the keyword meditation into the box after Search for and then click on Go. You should get over 700 citations to research articles on meditation.

Record one article title as your answer for later insertion into the Quiz.

IGL301 LESSON 6 Contraindications

Contraindications

There are conditions and situations when meditation is contra-indicated. A useful rule of thumb is that meditation should be used with caution whenever there are concerns regarding reality testing, ego boundaries, lack of empathy, or rigid over-control. For example, when treating a schizophrenic patient with active psychotic symptoms, it may be inadvisable to include meditation as a component of treatment, as reality testing may be impaired.

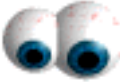

Walsh R, Roche L. [Precipitation of acute psychotic episodes by intensive meditation in individuals with a history of schizophrenia](#). Am J Psychiatry. 1979 Aug;136(8):1085-6

world. To make research information as accessible as possible, NLM has put the Medline electronic database online. The online version is called PubMed and is free to the public. Medline contains more than 11 million records dating back to 1963. Although the full text of each article is not in the database, approximately 60 percent of the citations contain author-generated abstracts or summaries of the articles. Currently, there are 25 main headings in MEDLINE under the term alternative medicine. Meditation is a MeSH (Medical Subject Heading) term listed under the heading relaxation techniques. Below are just a few examples of the hundreds of studies on meditation in clinical practice.

Miller JJ, Fletcher K, Kabat-Zinn J, [Three-year follow-up and clinical implications of a mindfulness meditation-based stress reduction intervention in the treatment of anxiety disorders](#). Gen Hosp Psychiatry 1995 May;17(3):192-200

Castillo-Richmond A, Schneider RH, Alexander CN, Cook R, Myers H, Nidich S, Haney C, Rainforth M, Salerno J. [Effects of stress reduction on carotid atherosclerosis in hypertensive African Americans](#). Stroke. 2000 Mar;31(3):568-73

Herron RE, Hillis SL. [The impact of the transcendental meditation program on government payments to physicians in Quebec: an update](#). Am J Health Promot. 2000 May-Jun;14(5):284-91

 <p>QUIZ EXERCISE 5: Follow-up of Patients Treated with Meditation</p> <p><input type="checkbox"/></p> <p>Long term follow up of patients treated for anxiety with meditation showed a) Little compliance or long term symptom reduction b) Good compliance but no long term symptom reduction c) Little compliance but long term symptom reduction d) Good compliance and long term symptom reduction.</p> <p>Record your answer for later insertion into the Quiz.</p> 	
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<p>QUIZ EXERCISE 6: Meditation in Treatment</p> <p><input type="checkbox"/></p> <p>Meditation has been used successfully to control the symptoms of all these disorders except: a) anxiety disorder b) pain disorder c) high blood pressure d) schizophrenia</p> <p>Record your answer for later insertion into the Quiz.</p>	
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Several forms of meditation have been divested of their spiritual and religious elements and explored as a way of reducing stress on both mind and body. Over 1000 research studies, most of them published in peer reviewed scientific journals, attest to a wide range of measurable improvements in human functioning and reduction in symptomatology as a result of meditative practices.

Studies have found that regular meditation is associated with reductions in health care use; increases in longevity and quality of life. In experimental studies, meditation has been found to reduce chronic pain; reduce anxiety; reduce high blood pressure; reduce serum cholesterol level; reduce substance abuse; increase intelligence related measures; reduce post traumatic stress syndrome in Vietnam veterans; and lower blood cortisol levels initially brought on by stress. Finding references for the summary statements below is one of the exercise below.

Stress

During the past 30 years, numerous studies have established that meditation is highly beneficial to health. Dr. Benson's research showed meditation

lowers oxygen consumption
decreases respiratory rate
increases blood flow
slows the heart rate
leads to a deep level of relaxation
decreases blood pressure in people who have normal or mildly elevated pressure
lowers levels of blood lactate (associated with anxiety)

Muscle Tension

Numerous studies have shown a decrease in muscle tension during meditation. In some studies, the decrease in muscle tension as a result of meditation even exceeded the impressive effects of biofeedback training.

Pain

Meditation has also been shown to aid in the alleviation of pain. Studies on chronic pain patients have been conducted by John Kabat-Zinn, Ph.D., the founder and Director of the Stress Reduction Clinic at the University of Massachusetts Medical Center, and Associate Professor of Medicine in the Division of Preventative and Behavioral Medicine at the University of Massachusetts Medical School. Kabat-Zinn and his program were featured on the American public television (PBS) series Healing and the Mind, with Bill Moyers. Dr. Kabat-Zinn's studies have demonstrated decreases in many kinds of pain in people who had been unresponsive to standard medical treatment. A large majority of the patients in Kabat-Zinn's studies who were taught to meditate improved, while control groups of similar patients showed no significant improvement. Various related studies have shown improvement in pain from muscle tension, headaches, dysmenorrhea, and other conditions.

Brainwaves and Brain Functioning

Studies have shown an increase in alpha wave rhythms, which are correlated with a state of relaxed alertness. In addition, studies have shown enhanced synchronization of alpha rhythms among four regions of the brain--right, left, front, and back. Some consider this to indicate increased coherence of brain-wave activity. There are also studies that meditation improves mind-body coordination, as indicated by enhanced visual sensitivity to light flashes, response to auditory stimuli, and ability to remember and discriminate musical tones.

Online Research Summaries

[Annotated Bibliography of Scientific research on TM](#)
[Meditation May Add Support During Cancer Treatment](#) WebMD article

Medline Research Abstracts

The [National Library of Medicine \(NLM\)](#) is the premier source of health science research information in the

The second technique is derived from the Concentration tradition, and is from [Beyond the Relaxation Response](#) by [Dr. Benson](#).

Step one: Pick a brief phrase or word that reflects your basic belief system. To get the maximum benefit out of the relaxation response, you should tailor it to your personal belief system.

Step two: Choose a comfortable position. ...sit in any comfortable position that won't disturb your thoughts.

Step three: Close your eyes.... naturally and easily. The act should be effortless.

Step four: Relax your muscles. Starting with your feet and progressing up to your calves, thighs, and abdomen, relax the various muscle groups in your body.

Step five: Become aware of your breathing, and start using your faith-rooted focus word. Breathe slowly and naturally, without forcing your rhythm... start repeating silently the word or phrase you have chosen...

Step six: Maintain a passive attitude.

Step seven: Continue for a set period of time. Practice the technique for ten or twenty minutes.... Keep a watch or a clock in plain sight, and sneak a peek now and then when you think about the time.... As you elicit the relaxation response by slowly going into it, you should return to your everyday state in a slow, gradual manner.

Step eight: Practice the technique twice daily.

Many people have learned meditation by following such simple instructions. But as Ram Das has pointed out,

Sometimes, the simplest things are not necessarily the easiest. Even for "veteran" meditators, it is often a challenge to deal with the incessant chatter in the mind, with all those thoughts that come to mind when you stop doing and start being. ([Be Here Now](#))

Both mindfulness and concentration meditation techniques are being used in clinical settings such as outpatient clinics and hospitals.



EXERCISE: Listen to this audio file of a 10 minute mindfulness meditation by Tara Brach, a psychologist and Insight Meditation teacher.

[A Moment of Calm](#)



REQUIRED QUIZ EXERCISE 4: Types of Meditation practice

Which of these is not a type of meditation practice: 1. Vipassana 2. Mindfulness 3. Concentration method 4. biofeedback.

Record your answer for later insertion into the Quiz.

IGL301 LESSON 5

Research on Meditation as a Treatment

Research on Health Benefits of Meditation



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[Chogyam Trungpa](#) was one of the first Tibetan Buddhists to bring meditation practices to the West. His view is that,

To sit in meditation and allow mental pictures, concepts, and emotions to arise, dwell, and then disappear leads to genuine insight into the background of our psychological makeup. In this way the world of thoughts and the world of action are brought together, and one's experience can be seen clearly, without

conceptual overlays.

Meditation In Action

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The search to understand the workings of the human mind is an age-old phenomenon. The practice of meditation provides an intuitive and simple, yet profound means of gaining some understanding by systematically observing our world and ourselves.

IGL301 LESSON 4 Treatment Description

Mindfulness Meditation

Two techniques drawn from Behavioral Medicine are presented below, representing the two primary forms of meditation. The first method is derived from the Vipassana (Mindfulness) tradition, and is described by John Kabat-Zinn, PhD, a psychologist who has written about mindfulness in everyday life in his book, [Wherever You Go, There You Are](#), from which this quote is taken.

Vipassana (Mindfulness): Try stopping, sitting down, and becoming aware of your breathing once in a while throughout the day. It can be for five minutes, or even five seconds. Let go into full acceptance of the present moment, including how you are feeling and what you perceive to be happening. For those moments, don't try to change anything at all, just breathe and let go. Breathe and let go. Die to having to have anything be different in this moment; in your mind and in your heart, give yourself permission to allow this moment to be exactly as it is, and allow yourself to be exactly as you are. Then, when you're ready, move in the direction your heart tells you to go, mindfully and with resolution.

Concentration Meditation

services. The study found that 1/3 of all people in treatment for a medical condition are also receiving an alternative therapy. For cancer patients and people with AIDS, the percentage is over 50%. Yet 72% concealed their use of alternative therapies from their physicians.



[Unconventional medicine in the United States. Prevalence, costs, and patterns of use. David Eisenberg, MD et al. N Engl J Med 1993 Jan 28;328\(4\):246-52](#)

The same researchers replicated their study in 1998 and found a statistically significant increase in use of alternative therapies from 33.8% in 1990 to 42.1% in 1997 ($P < .001$). Extrapolating their data, the authors further concluded that visits to alternative therapists exceeded the number of visits to physicians!



[Trends in Alternative Medicine Use in the United States, 1990-1997: Results of a Follow-up National Survey by David Eisenberg, MD et al. JAMA 1998 Nov 11; 280\(18\):1569-75](#)

□



REQUIRED QUIZ EXERCISE 3: NCCAM Definition of Mind-Body

□

According to the NCCAM, mind-body interventions employ a variety of techniques designed to facilitate the mind's capacity to affect: 1. brain waves 2. bodily function and symptoms 3. outcomes 4. ability to meditate

Record your answer for later insertion into the Quiz.

IGL301 LESSON 3 Practitioner's Description

□

While there are many forms of meditation, most meditation teachers acknowledge the underlying similarity of the techniques. Getting away from the incessant chatter of the thinking mind is a goal all meditation practices share:


I feel that all forms of traditional meditation which are time-tested are worthwhile. My experience is with TM, therefore I am best qualified to speak about TM . . . My experience is that it is effortless, easy, spontaneous. It allows the mind to simply transcend to its source. This does not mean I think Zen is not a good form of meditation, or that Vipassana is not. They are all authentic forms of meditation. That is why they have survived over thousands of years. From an interview with [Depok Chopra, MD](#)

training, and to disseminate information on complementary and alternative medicine to practitioners and the public. Renaming the OAM as the NCCAM empowers it to fund its research grants and other projects directly. As an office, its projects could only be funded through collaboration with other institutes or outside agencies. The NCCAM is now funding Centers of Research on Alternative Medicine, including ones at Harvard, Stanford, Columbia and UC Davis. Many have a specific focus such as addiction, HIV/AIDS, stroke, aging, and asthma. The use of Centers to facilitate research is a widely-employed strategy at NIH, which has established research centers in schizophrenia, rehabilitation, addiction, and many other health areas.

Over 50 different research projects are being conducted under NCCAM auspices. For a complete list of Research grants, go to [NCCAM-funded grants for Research on Alternative Medicine](#)

As a result of NCCAM funding and a renewed interest in the academic and research community (driven at least partially by patient demand and evidence of widespread usage by patients), research on alternative therapies is increasing.

NCCAM Definition

 The [NCCAM](#) considers meditation to be a Mind-Body Method. This category of CAM (Complimentary and Alternative Medicine) includes interventions that employ a variety of techniques designed to facilitate the mind's capacity to affect bodily function and symptoms. Only a subset of mind-body interventions are considered CAM . Some Mind-Body approaches are already considered part of conventional practice, such as those that have a well documented theoretical and empirical basis. For example, patient education and cognitive-behavioral approaches are now considered "mainstream."


However, the NCCAM considers that,

Meditation, certain uses of hypnosis, dance, music, and art therapy, and prayer and mental healing are categorized as complementary and alternative medicine.

[NCCAM Classifications](#)

Meditation, in its spiritually sanitized form, is further subcategorized as a Behavioral Medicine intervention.

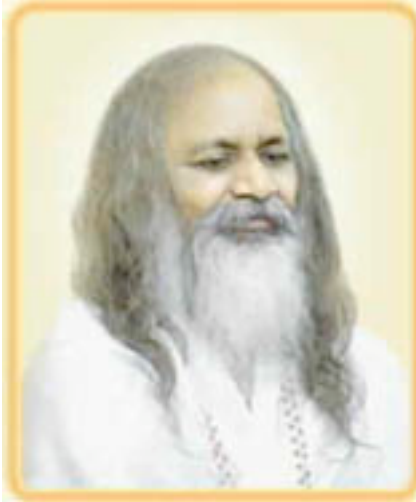
The National Institute of Health (NIH) has established five [Mind-Body Research Centers](#) to continue research on meditation and other mind-body interventions.

 <p>REQUIRED QUIZ EXERCISE 2: NCCAM Definition of Mind-Body</p> <p>□</p> <p>Meditation is classified by the NCCAM as a type of: 1. religious practice 2. self-regulation technique 3. mind-body technique 4. relaxation.</p> <p>Record your answer for later insertion into the Quiz.</p>	
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Use of CAM

In 1993, the New England Journal of Medicine published a study which was disseminated by many news

Transcendental Meditation



According to Dr. Benson, the relaxation response technique produces the same physiological changes as does Transcendental Meditation (TM), the method which has been most fully researched in scientific settings. Over 500 papers have been published in 108 scientific journals, authored by scientists at 211 research institutions and universities, in 23 countries. TM was brought to the Western world in the mid-twentieth century by Maharishi Mahesh Yogi, an Indian spiritual teacher. TM has been taught to hundreds of thousands of people, and is widely credited with being the first form of meditation to be practiced on a mass scale in the West. Some 4 million people have received training in TM. Herbert Benson's original research subjects were TM practitioners (they actually approached him with the idea of doing research on meditation), and his first studies were of TM practitioners. Dr. Benson used TM as the basis for his relaxation response method. Before Benson's pioneering research, meditation was still considered a religious practice, not appropriate for healthcare settings. Dr. Benson argues that medicine must incorporate self-care methods like prayer and meditation because it doesn't matter from a health point of view

whether God exists or not because there are clear health benefits to these practices.



REQUIRED QUIZ EXERCISE 1: Origins of Meditation Practices



The meditation techniques used as therapies originally derive from: 1) laboratory discoveries 2) Native American traditions 3) Asian spiritual practices 4) Christian practices.

Record your answer for later insertion into the Quiz.

IGL301 LESSON 2

National Center for Complementary & Alternative Medicine

Founding of the NCCAM



The U.S. government did not allocate any significant research funds to evaluate alternative therapies until the Office of Alternative Medicine (OAM) was established in 1992 (with a starting budget of only 2 million dollars). Its founding was due to pressure put on Congress by consumers who wanted better data on which to base their health decisions. In 1998, the underfunded OAM became the National Center for Complementary and Alternative Medicine (NCCAM) with a budget of 50 million dollars.

NIH has recognized that there are a lot of promising therapies that need to be tested in the most appropriate manner (not only in double-blind experimental trials). The Center's mission is to conduct and support basic and applied research and

There are two basic forms of meditation: Mindfulness Meditation and Concentration Meditation. Mindfulness is an outgrowth of a Buddhist tradition called vipassana, which focuses on the present moment. The mediator focuses his or her attention alertly but non judgmentally on all processes passing through the mind.



Take a tour of [A Day in the Life of Kauai Aadheenam](#), a Hindu monestary in Hawaii

□

Picture of meditators at Kauai Aadheenam monestary.



Concentration Meditation

This technique is used almost universally in religions and spiritual practices. The mediator focuses his or her attention on an internal or external object (e.g., sound, word, bodily sensations, etc.) while minimizing distractions and bring the wandering mind back to attention on the chosen object. Repetitive prayer is a commonly used form.

[Dr. Herbert Benson](#) is a pioneer in establishing the efficacy of meditation for health through his research at Harvard in the early 1970s. Dr. Benson's impeccable credentials and university affiliation, along with the world class quality of his work, led to publication of breakthrough articles on meditation in the Scientific American and the American Journal of Physiology. His book, [The Relaxation Response](#) topped the best seller lists in the mid-1970s, and is still widely read. Dr. Benson's studies showed that meditation acts as an antidote to stress. Under stress, the nervous system activates the "fight-or-flight" response. The activity of the sympathetic portion of the nervous system increases, causing an increased heart beat, increased respiratory rate, elevation of blood pressure, and increase in oxygen consumption. This fight-or-flight response has an important survival function. It helps an organism to run quickly to escape an attack or to fight off an attacker. But if activated repeatedly, as happens for many people in modern societies, the effects are harmful. Many researchers believe that the current epidemic of hypertension and heart disease in the Western world is a direct result.



Dr. Benson demonstrated that the effects of meditation are essentially the opposite of the fight-or-flight response. Meditation:

- Decreases the heart rate
- Decreases the respiratory rate
- Decreases blood pressure
- Decreases oxygen consumption
- Decreases muscle tension

Dr. Benson studied the health impact of a type of meditation involving the repetition of a word or phrase (called mantra meditation). He created a non religious version of the popular Transcendental Meditation technique with the sole goal of achieving the relaxation response that TM is known to trigger. Instead of using sanskrit or other religious words as is done in religious practices, he had patients use "neutral" words like one and even Coca Cola. This approach allows those who are not religious, or whose beliefs may appear to conflict with the teachings connected to a particular meditation system, to nonetheless participate fully in this health-promoting activity.

Lesson 2: National Center for Complementary & Alternative Medicine

30 minutes

Lesson 3: Practitioner's Description

30 minutes

Lesson 4: Treatment Description

30 minutes

Lesson 5: Research on Meditation as a Treatment

30 minutes

Lesson 6: Contraindications

30 minutes

Lesson 7: Integrating Meditation into Therapy

30 minutes

Lesson 8: Neurological Research on Meditation

30 minutes

Lesson 9: www Library of Meditation

15 minutes

Filling out Continuing Education Quiz and Quest Search Exercises, and Evaluation Forms

30 minutes

IGL301 LESSON 1

History of Meditation as a Clinical Intervention

Background

As the pictures above illustrate, meditation is both an ancient spiritual practice and a contemporary mind-body technique for relaxing the body and calming the mind. Most meditative techniques have come to the West from Asian religious practices, particularly India, China, and Japan, but similar techniques can be found in many cultures around the world. Until recently, the primary purpose of meditation has been religious, although its health benefits have long been recognized in these cultures where these methods originated.

In the West, however, the first view was that meditation induced a type of dissociative state or a type of catatonia. Thirty years ago, before Hebert Benson, MD's pioneering research described below, meditation was still considered a religious practice, not appropriate for healthcare settings. The first articles on the health benefits of meditation appeared in the [Journal of Transpersonal Psychology](#) in 1970. Meditation is the first mind-body intervention to be widely adopted in mainstream health care. Meditation is now widely taught at medical settings such as the VA clinics and Kaiser Permanente where it is prescribed as a technique for relaxing the body and calming mind.

Mindfulness Meditation

[Webquest.](#)

Approvals

California BBS and BRN CE are available. Internet Guided Learning is approved by the American Psychological Association to offer continuing education for psychologists. Internet Guided Learning maintains responsibility for the program. This page lists [CE availability](#) to check whether your state accepts APA CE.

Instructions for CE credit

To obtain CE credit, fill out the online CE Quiz Form.

Your certificate awarding 5 hours of CE will be emailed to you.

Help with the course

You can contact the instructor, Dr. David Lukoff, via [email](#) or by phone at 888.880.2870.

Software and equipment needed

You only need to have access to a computer with Internet service and a browser such as Netscape Navigator or Internet Explorer (which you must have to be reading this!)

Refund policy

A full refund is available for any reason until CE is awarded. Contact the instructor, Dr. David Lukoff, via [email](#) or by phone at 888.880.2870.

Difficulties

Can't get to a link

The server for that site may temporarily be experiencing problems. If a link doesn't work, skip it and come back to it later. The site will probably be back up. Occasionally a site used in this course may have been taken down. I do check on availability of the sites regularly. If you have persisting trouble accessing a site, please notify the instructor.

It takes a long time for website to appear

The World Wide Web has also been called the World Wide Wait. If you are using a slow speed modem (28k or less), or an older computer with a slow processor, web pages can take one or more minutes to appear. I have the late model Apple G4 Macintosh with a cable modem, and this combination brings up most web pages in a few seconds. But cable modems and DSL high speed lines typically cost \$40-50 per month, more than twice what most Internet Service Providers charge. Many universities and libraries provide high speed access. Web pages do come up sooner when they are re-visited because parts of the page are saved in a "cache" on your hard disk.

Course Outline and Suggested Times

Introduction to Course

15 minutes

Lesson 1: History of Meditation as a Clinical Intervention

30 minutes

IGL301

INTRODUCTION TO COURSE

□

□

• [Course Description](#) • [Course Objectives](#) • [Instructions for Taking This Course](#) • [Instructions for CE credit](#) • [Approvals](#) • [Help with the Course](#) • [Software and Equipment Needed](#) • [Refund Policy](#) • [Difficulties](#) • [Course Outline & Suggested Times](#)

Course Description

Meditation is an ancient technique used by many spiritual traditions to quiet the mind, calm the body, and engage the spirit. Thirty years of research has established its value for mental and physical health. This online course covers:

Research on Meditation as a Treatment
Different meditation techniques
Contra-indications and Side Effects
How meditation can be integrated into therapy
How to Find Online Resources
Neurological Research on Meditation

Course Objectives

At the end of this course, you will be able to:

- describe different meditation techniques and their clinical applications
- conduct searches on the Internet for research and clinical articles on meditation
- know conditions for which meditation is clinically beneficial
- know conditions for which meditation is contraindicated
- find web sites with client self-help resources on meditation

Instructions for Taking This Course

The lessons for this course are online through Blackboard. Most of the time you will be visiting sites on the World Wide Web, a part of the Internet. Thus you will need to have online access most of the time during the course. You can print them out for even easier reading offline, and then go back online to visit the links. None of the sites in this course charge for using their resources.

Course Links

Four types of links are used in the course.



The ones marked with the eyeballs are required for CE credit. Some are quiz items and some are quest search exercises which require finding a specific piece of information or type of resource. The [Webquest](#) is a popular method for teaching Internet skills based on the constructivist approach to learning by doing. Note that only 75% of the quest search exercises need to be completed so if you have difficulty locating one of the resources, just go on to the next link and quiz or quest item. The globe, speaker, and book represent different types of resources that are also part of the course. Look them over although they do not involve quiz or quest exercises.

The links that are underlined are there as references if you want to check them out, such as the link to