

# Mind-Body Medicine Practices in Complementary and Alternative Medicine



## Yesterday

- The concept that the mind is important in health and illness dates back to ancient times. In the West, the notion that mind and body were separate began during the Renaissance and Enlightenment eras. Increasing numbers of scientific and technological discoveries furthered this split and led to an emphasis on disease-based models, pathological changes, and external cures. The role of mind and belief in health and illness began to re-enter Western health care in the 20th century, led by discoveries about pain control via the placebo effect and effects of stress on health.
- Mind-body medicine focuses on:
  - The interactions among the brain, the rest of the body, the mind, and behavior
  - The ways in which emotional, mental, social, spiritual, experiential, and behavioral factors can directly affect health.
- The National Center for Complementary and Alternative Medicine (NCCAM) is the component of the NIH that studies complementary and alternative medicine (CAM). Within CAM, some examples of mind-body medicine practices are meditation, hypnosis, tai chi, and yoga.

## Today

- The 2007 National Health Interview Survey found that 19.2% of American adults and 4.3% of children aged 17 and younger had used at least one CAM mind-body therapy in the year prior to the survey.
- Pain was the most common reason for CAM use in this survey.
- Many studies document that psychological stress is linked to a variety of health problems, such as increased heart disease, compromised immune system functioning, and premature cellular and cognitive aging. Some evidence suggests that mind-body therapies could reduce psychological stress.

- Recent results from NIH-funded studies on CAM mind-body therapies include:
  - Pain sufferers often seek relief through CAM therapies, including mind-body modalities. A review of the evidence on various mind-body therapies to help treat certain neurological diseases involving pain found some evidence for positive effects from some therapies-- including biofeedback for migraine headache, yoga for fatigue from multiple sclerosis, and relaxation therapy as a part of comprehensive programs to help control epileptic seizures.
  - In a study of 60 breast cancer survivors, women who used hypnosis reduced the number and severity of hot flashes and also reported improvements in mood and sleep.
  - A small preliminary trial suggests that Zen meditation may be a strategy to help prevent and/or reduce the cognitive decline of normal aging.
  - A study of 63 people with rheumatoid arthritis found that Mindfulness Based Stress Reduction helped to improve quality of life and reduce psychological distress.
  - A study of 298 college students found that Transcendental Meditation helped students reduce stress and improve coping strategies.
  - In a study of 50 women, regular practice of yoga benefited mood and physiological response to stress.
  - People with fibromyalgia may benefit from practicing tai chi according to a study in 66 people. Study participants who practiced tai chi had a significantly greater decrease in total score on the Fibromyalgia Impact Questionnaire. In addition, the tai chi group demonstrated greater improvement in sleep quality, mood, and quality of life.
  - Tai chi may also be a safe alternative to conventional exercise for maintaining bone mineral density in postmenopausal women, thus helping to prevent or slow osteoporosis,

increase musculoskeletal strength, and improve balance.

## Tomorrow

- A research collaborative is examining how patient expectations and other factors in patient-provider interactions may produce biological effects that play a role in health outcomes. Results from this research will inform how health care providers relate to their patients, and will also help to explain the biological mechanisms underlying mind-body medicine.
- Obesity and metabolic syndrome are increasingly common conditions that increase risk for diabetes and cardiovascular disease. An experimental program that combines mindfulness meditation, “mindful eating,” and diet/exercise may help to control these conditions. Researchers are testing whether the program improves hormonal responses to stress and aids weight control.
- A study of loving-kindness/compassion meditation and mindfulness meditation is looking at effects on the brain/body—especially regulation of emotions. Can meditation train the mind to change the brain? Findings may have applications for conditions linked with emotions and stress, such as recurrent depression.

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**National Center for Complementary and Alternative Medicine (NCCAM) website: <http://nccam.nih.gov/>**