

## **SCIENCE:**

### **Key Findings on the Effects of Meditation**

*"For decades, researchers at the National Institutes of Health, the University of Massachusetts, and the Mind/Body Medical Institute at Harvard University have sought to document how meditation enhances the qualities companies need in their human capital: sharpened intuition, steely concentration, and plummeting stress levels. What's different today is groundbreaking research showing that when people meditate, they alter the biochemistry of their brains. The evolution of powerful mind-monitoring technologies such as MRIs and EEGs has also enabled scientists to scan the minds of meditators on a microscopic scale, revealing fascinating insights about the plasticity of the mind and meditation's ability to sculpt it."*

**Michelle Conlin, Meditation: New research shows that it changes the brain in ways that alleviate stress, Business Week online: The Executive Life, Fitness, August 30, 2004.**

### **Studies have shown that Mindfulness Meditation is effective in:**

#### **Reducing Stress**

- It improves the ability to address work-related stress due to increasing demands and job insecurity as well as family and personal financial pressures. It also helps them avoid lower productivity and stress-related illness.
- Meditation produced significant results in reducing stress in the high-stress work environment at the biotechnology company Promega, according to a study published in the 2003 Journal of Psychosomatic Medicine by the University of Wisconsin. The results suggest that with proper training the emotion set point can shift and mindfulness can help people learn to monitor their moods and thoughts and drop those that might spin them toward distress.
- Dr. Richard Davidson, neuroscientist, hypothesized that it may strengthen an array of neurons in the left prefrontal cortex that inhibits the messages from the amygdala that drive disturbing emotions. This region is active during sensations of happiness and positive emotion, the researchers reported.

#### **Reducing Health Risks**

- Men with coronary artery disease were able to improve their heart rate, blood pressure and work performance by meditating 20 minutes twice daily for six to eight months. (1996 study reported in the American Journal of Cardiology.)
- Cigna Insurance hired researcher, Jon Kabat-Zinn to study how meditation may be able to reduce costs for everything from chronic fatigue to irritable bowel syndrome. (Business Week, April 30, 2004)
- Dr. Davidson also reported a boost to meditation practitioners' immune systems. Journal of Psychosomatic Medicine, February, 2003
- Scientists at UCLA believe they have discovered the first neural evidence for why

“Mindfulness” — the ability to live in the present moment, without distraction — seems to produce a variety of health benefits. (The Science of Mindfulness Meditation, By: Psych Central Senior News Editor June 22, 2007)

To learn more about the science of Mindfulness Meditation please visit these suggested links below:

Meditation gives brain a charge: Washington Post:  
[\(http://www.washingtonpost.com/wp-dyn/articles/A43006-2005Jan2.html\)](http://www.washingtonpost.com/wp-dyn/articles/A43006-2005Jan2.html)

University Of Wisconsin Study Reports Sustained Changes In Brain And Immune Function After Meditation: Science Daily  
[\(http://www.sciencedaily.com/releases/2003/02/030204074125.htm\)](http://www.sciencedaily.com/releases/2003/02/030204074125.htm)

Alterations in Brain and Immune Function Produced by Mindfulness Meditation: Study by Richard J. Davidson, Jon Kabat-Zinn, et al  
[\(http://psyphz.psych.wisc.edu/web/pubs/2003/alterations\\_by\\_mindfulness.pdf\)](http://psyphz.psych.wisc.edu/web/pubs/2003/alterations_by_mindfulness.pdf)

## **HISTORY:**

To learn more about the history of Mindfulness Meditation please visit these suggested links below:

The Monk in the Lab: Tenzin Gyatso  
[\(http://query.nytimes.com/gst/fullpage.html?res=9D03E1DC143DF935A15757C0A9659C8B63\)](http://query.nytimes.com/gst/fullpage.html?res=9D03E1DC143DF935A15757C0A9659C8B63)