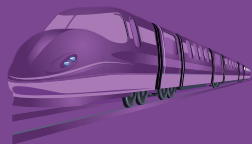


The Wellness Express™



Jump on the train to good health

Issue 4, May 2012

The Amazing Benefits of Meditation for Mind and Body

Presented by: Total Health Systems

According to the most recent available statistics, about 10 % percent of the general population has practiced meditation in the last 12 months and more health practitioners are recommending meditation to help with both physical and mental problems. In this issue of the Wellness Express, we will explore the areas where meditation can be of assistance and review the research that supports its benefits.

Even small amounts of meditating can produce significant neurological changes for the better. Research published in the journal *Psychological Science* looked at meditation's influence on brain wave activity. After only 7 hours of meditation instruction and practice, research participants showed an increase in brain wave activity in the left frontal region – which was linked to an increase in positive mood.¹

Other meditation research shows the brains of experienced meditators have more gyrification (folding of the cortex) than non-meditators. Larger amounts of cortex folding are believed to strengthen the brain and help process information more quickly.²

Let's look at some of other advantages of meditation.

Better Memory

Consistent meditation appears to enhance memory function. Thomas Jefferson University Hospital in Philadelphia conducted a study on meditation with 15 older adults suffering from memory impairment or Alzheimer's disease.

Some of the study participants engaged in 12 minutes of mantra-based meditation daily for eight weeks, while a control group listened to classical music for the same time period. When they examined brain scans of the two participant groups, the researchers discovered that the meditation group showed blood flow increases in several areas of the brain and these participants felt improved mood, less anxiety and had better memory recall.³



Exercise of the Week

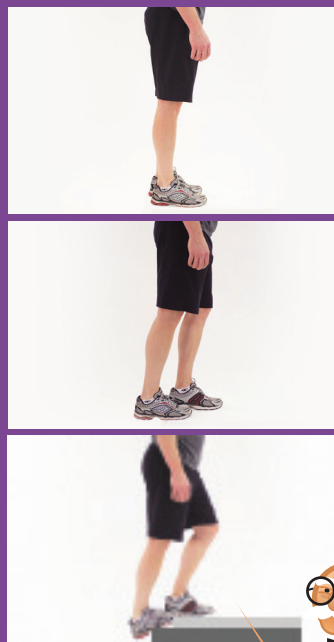
Calf Stretch, Variation 4

Difficulty: Easy

(Consult your chiropractor before doing this or any other exercise.)

Start: Standing on a stable box, or a step. Use handrails or a wall for balance.

Exercise: Place one foot behind you so heel of that foot extends past edge of box/step. Lean into back foot, allowing heel to drop below height of box/step. Keep knee straight to focus on gastrocnemius muscle, or bend knee to focus on soleus muscle. Hold for 30-60 seconds. Switch sides and repeat 2X per side.



Presented by: TotalHealthSystems.com

43740 Garfield Road, Clinton Township (586) 228-0270
28098 23 Mile Road, Chesterfield (586) 949-0123



Natural Pain Reliever

Several well-regarded studies over the last decade have supported the use of meditation for reducing pain.

One of the most recent studies appeared last year in the *Journal of Neuroscience*. Researchers enrolled 15 adults who had no previous meditation experience. Over the course of four 20-minute sessions, the participants were taught a meditation style called focused attention. Before and after the study, each participant's brain was scanned using a special type of magnetic resonance imaging. While they underwent the scans, the participants had a small heat producing device attached to their legs to invoke a minor pain response for 5 minutes.

When they reviewed the brain scans taken at the end of the study, the researchers found intriguing results. They said, "Meditation significantly reduced brain activity in the primary somatosensory cortex, an area that is crucially involved in creating the feeling of where and how intense a painful stimulus is."⁴ The study showed meditation produced a 40% reduction in pain in the test subjects, which rated higher than morphine - ranked at 25%.⁴

Depression is a frequent visitor to people who suffer from chronic pain. A UK study investigated how meditation might improve the quality of life for chronic pain sufferers. Using a laser device to induce a pain response in the test subjects, the study authors noted that experienced meditators reported feeling less anticipation about the impending pain.⁵

The researchers believe this occurs because meditators are more present focused and less concerned with negative events in the future. The emphasis on the present appears to also reduce the risk of depression.

Responsive Immune System

The journal *Psychosomatic Medicine* reported on how meditation might improve the response of the immune system. Researchers administered an influenza vaccine to a group of non-meditators and a group that had participated in 8 weeks of meditation practice.

Blood tests on the meditation group showed they had more antibodies after receiving the vaccine, and the levels remained consistent months after the study's completion. The study authors remarked in their research conclusion, "These findings demonstrate that a short program in mindfulness meditation produces demonstrable effects on brain and immune function. These findings suggest that meditation may change brain and immune function in positive ways and underscore the need for additional research."⁶

A Longer Life

Meditation's wide ranging benefits may deliver a longer life span. It reduces stress and the subsequent physical damage it can cause to the body and it slows aging by slashing levels of oxidation caused by cell harming free radicals. As well, meditation seems to enhance the effect of antioxidants to repair cellular damage and soothe inflammation, which is linked to numerous diseases like cancer.⁷

Quote to Inspire

"Meditation is the tongue of the soul and the language of our spirit."

Jeremy Taylor

References and sources:

1. Frontal Electroencephalographic Asymmetry Associated With Positive Emotion Is Produced by Very Brief Meditation Training - *Psychological Science*, October 2011 vol. 22 no. 10; 1277-1279.
2. The Unique Brain Anatomy of Meditation Practitioners: Alterations in Cortical Gyrification - *Frontiers in Human Neuroscience*, published online, 29 February 2012.
3. Effects of an 8-Week Meditation Program on Mood and Anxiety in Patients with Memory Loss - *The Journal of Alternative and Complementary Medicine*, Volume: 18 Issue 1: January 23, 2012.
4. Brain Mechanisms Supporting the Modulation of Pain by Mindfulness Meditation - *The Journal of Neuroscience*, 6 April 2011, 31(14): 5540-5548; doi: 10.1523/JNEUROSCI.5791-10.2011.
5. Meditation Experience Predicts Less Negative Appraisal of Pain: Electrophysiological Evidence for the Involvement of Anticipatory Neural Responses - *Pain*, 2010; DOI: 10.1016/j.pain.2010.04.017.
6. Alterations in Brain and Immune Function Produced by Mindfulness Meditation - *Psychosomatic Medicine*, 65:564-570 (2003).
7. Wasmer Andrews, Linda - 6 Other Reasons to Meditate - *Minding the Body*, *Psychology Today*, published online, July 8, 2010.

Editor & writer: David Coyne
Writer: Dr. Christian Guenette, DC
Design: Elena Zhukova
Graphics: Marie Camille Almiranez
Photos: Fred Goldstein
Production: Mike Talarico

Disclaimer: Information contained in The Wellness Express™ newsletter is for educational and general purposes only and is designed to assist you in making informed decisions about your health. Any information contained herein is not intended to substitute advice from your physician or other healthcare professional.