

Trees For Your Health!

Spending time in nature is great for us, both physically and mentally. If you haven't heard someone say that, you've most likely felt it. Much of the reasons spending time outside feels good come from trees. Yes, trees!

Trees and forests have been found to provide many health benefits to people here and around the world! Way back in 1982 (totally tubular!), the Japanese Ministry of Agriculture, Forestry and Fisheries even coined a term for it: shinrin-yoku. It means taking in the forest atmosphere or "forest bathing," and the ministry encourages people to visit forests frequently to relieve stress and improve health.

How does exposure to forests and trees help you feel better?

- boosts the immune system
- lowers blood pressure
- reduces stress
- improves mood
- increases ability to focus, even in children with ADHD
- accelerates recovery from surgery or illness
- increases energy level
- improves sleep

Want some more details? Okay, here's the science stuff:

Exposure to forests boosts our immune system. While we breathe in the fresh air, we breathe in phytoncides, airborne chemicals that plants give off to protect themselves from insects. Phytoncides have antibacterial and antifungal qualities which help plants fight disease. When people breathe in these chemicals, our bodies respond by increasing the number and activity of a type of white blood cell called natural killer cells or NK. These cells kill tumor- and virus-infected cells in our bodies. In one study, increased NK activity from a 3-day, 2-night forest bathing trip lasted for more than 30 days. Japanese researchers are currently exploring whether exposure to forests can help prevent certain kinds of cancer.

Spending time around trees and looking at trees reduces stress, lowers blood pressure and improves mood. Numerous studies show that both exercising in forests and simply sitting looking at trees reduce blood pressure as well as the stress-related hormones cortisol and adrenaline. Looking at pictures of trees has a similar, but less dramatic, effect. Studies examining the same activities in urban, unplanted areas showed no reduction of stress-related effects. Using the Profile of Mood States test, researchers found that forest bathing trips significantly decreased the scores for anxiety, depression, anger,

confusion and fatigue. And because stress inhibits the immune system, the stress-reduction benefits of forests are further magnified.

Green spaces in urban areas are just as important as rural forests. About 85% of the US population lives in suburban and urban areas and may not have access to traditional rural forests. That's O.K. Gardens, parks and street trees make up what is called an urban and community forest. These pockets of greenspace are vitally important because they are the sources of our daily access to trees.

Spending time in nature helps you focus. Our lives are busier than ever with jobs, school, and family life. Trying to focus on many activities or even a single thing for long periods of time can mentally drain us, a phenomenon called Directed Attention Fatigue. Spending time in nature, looking at plants, water, birds and other aspects of nature gives the cognitive portion of our brain a break, allowing us to focus better and renew our ability to be patient.

In children, attention fatigue causes an inability to pay attention and control impulses. The part of the brain affected by attention fatigue (right prefrontal cortex) is also involved in Attention-Deficit/Hyperactivity Disorder (ADHD). Studies show that children who spend time in natural outdoor environments have a reduction in attention fatigue and children diagnosed with ADHD show a reduction in related symptoms. Researchers are investigating the use of natural outdoor environments to supplement current approaches to managing ADHD. Such an approach has the advantages of being widely accessible, inexpensive and free of side effects.

Patients recover from surgery faster and better when they have a "green" view. Hospital patients may be stressed from a variety of factors, including pain, fear, and disruption of normal routine. Research found that patients with "green" views had shorter postoperative stays, took fewer painkillers, and had slightly fewer postsurgical complications compared to those who had no view or a view of a cement wall.