FOREST THERAPY

Reset the Stress Button
Forest bathing seems to significantly mitigate the root cause of a multitude of ailments: stress. Excess stress can play a role in headaches, high blood pressure, heart problems, diabetes, skin conditions, asthma, and arthritis, among many other ailments.

Forest bathing catalyses increased parasympathetic nervous system activity which prompts rest, conserves energy, and slows down the heart rate while increasing intestinal and gland activity. Lower cortisol concentrations are also a signal that the body's stress-response system is being triggered less. When this system is triggered, cortisol and other stress hormones are released into the body. Overexposure to these chemicals in response to chronic stress can increase the risk of anxiety, depression, heart disease, weight gain, and memory and concentration impairment.

The average concentration of salivary cortisol, a stress hormone, in people who gazed on forest scenery for 20 minutes was 13.4 percent lower than that of people in urban settings.

Leisurely forest walks, compared with urban walks, show a 12.4 percent decrease in the stress hormone cortisol, a seven percent decrease in sympathetic nerve activity, a 1.4 percent decrease in blood pressure, and a 5.8 percent decrease in heart rate. Physical activity in the from of a 40 minute walk in the forest was associated with improved mood and feelings of health and robustness.

Levels of the stress hormone cortisol decreased in test subjects after a walk in the forest, when compared with a control group of subjects who engaged in walks within a laboratory setting.

Boost Immune Functioning
Stress hormones can compromise immune defense; in particular, the activities of frontline defenders, such as antiviral natural killer cells, are suppressed by stress hormones. Since forest bathing can lower stress hormone production and elevate mood states, it's not surprising that it also influences markers of immune system strength.

In a 2007 study, men taking two hour walks in the woods over a two day period exhibited a 50% increase in levels of natural killer cells—the body's disease fighting agents.

While more research is needed, some preliminary research is even suggesting possible anti-cancer benefits such as Dr. Li's 2008 study of 13 female nurses on a three-day trip, in which the trip produced anti-cancer proteins and benefits lasting more than 7 days after the trip. Dr. Li and the scientific community continue to research this exciting potential.

Phytoncides: How the Trees Heal

Improvements in immune functioning were associated with lower urinary stress hormones while in nature. None of this was observed during or after the comparison city trips. As mentioned, the reduction in stress is almost certainly at play in the improvement of immune defenses. However, the natural chemicals secreted by evergreen trees, collectively known as phytoncide, have also been associated with improvements in the activity of our frontline immune defenders. Li has measured the amount of phytoncide in the air during the studies and correlated the content to improvements in immune functioning.

This is an interesting finding in the context of the century-old reports on the success of the so-called forest cure in tuberculosis treatment. In the mid- to late 1800s, physicians Peter Detweiler and Hermann Brehmer set up sanatoriums in Germany's pine forests, as did Edward Trudeau in the Adirondack forests of New York. All reported the benefit of the forest air; indeed, contrary to expectations, the results seemed to be magnified when the forest air trapped moisture. There was speculation among the physicians of the time that pine trees secreted a healing balm into the air, and in yet another twist of the shinrin-yoku studies, the existence of an unseen airborne healer is being revealed.

Kick-Start Your Creativity

Time in nature improves our mental performance and creativity. One study of a group of Outward Bound participants found they performed 50 percent better on creative problem-solving tasks after three days of wilderness backpacking. Researcher David Strayer says this occurs when we've been immersed in nature long enough. Source

We believe that the techniques of Forest Therapy taught by the Association of Nature and Forest Therapy Guides and Programs can produce similar effects in 3 hours.

Feel Better, Feel Good, Feel Wonderful

Time in forests seems to significantly improve mood in countless studies replicated in a variety of cultures. Many studies have compared the psychological effects of urban walking vs. nature walking and have found that nature walks tend to correlate with greater mood improvements.