

# 11 Scientifically Proven Reasons You Should Go Outside

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With spring finally here after a long and brutal winter, we highly recommend spending some time outside.

Nature offers one of the most reliable boosts to your mental and physical well-being. Here are just a few potential benefits:

## **1. Improved short-term memory**

In one study, University of Michigan students were given a brief memory test, then divided into two groups.

One group took a walk around an arboretum, and the other half took a walk down a city street. When the participants returned and did the test again, those who had walked among trees did almost [20% percent better](#) than the first time. The ones who had taken in city sights instead did not consistently improve.

Another similar study on depressed individuals also found that walks in

nature boosted working memory much more than walks in urban environments.

Source: [\*Psychological Science, 2008\*](#); [\*Journal of Affective Disorders, 2013\*](#)

## **2. Restored mental energy**

You know that feeling where your brain seems to be sputtering to a halt? Researchers call that "mental fatigue."

One thing that can help get your mind back into gear is exposing it to restorative environments, which, research has found, generally means the great outdoors. One study found that people's mental energy bounced back even when they just looked at pictures of nature. (Pictures of city scenes had no such effect.)

Studies have also found that natural beauty can [elicit feelings of awe](#), which is one of the surest ways to experience a mental boost.

Source: [\*Journal of Environmental Psychology, 1995\*](#); [\*Journal of Environmental Psychology, 2005\*](#); [\*Psychological Science, 2012\*](#)

## **3. Stress relief**

Tensed and stressed? Head for the trees. One study found that students sent into the forest for two nights had lower levels of cortisol — a hormone often used as a marker for stress — than those who spent that time in the city.

In another study, researchers found a decrease in both heart rate and levels of cortisol in subjects in the forest when compared to those in the city. "Stressful states can be relieved by forest therapy," they concluded.

Among office workers, even the view of nature out a window is associated with lower stress and higher job satisfaction.

Source: [\*Scandinavian Journal of Forest Research, 2007\*](#); [\*Environmental\*](#)

[Health and Preventative Medicine, 2010; Japanese Journal of Hygiene, 2011; Biomedical and Environmental Sciences, 2012](#)

## **4. Reduced inflammation**

Inflammation is a natural process the body uses to respond to threats like damage (e.g., a stubbed toe) and pathogens (e.g., exposure to the flu). But when inflammation goes into overdrive, it's associated in varying degrees with a wide range of ills including autoimmune disorders, inflammatory bowel disease, depression, and cancer. Spending time in nature may be one way to help keep it in check.

In one study, students who spent time in the forest had lower levels of inflammation than those who spent time in the city. In another, elderly patients who had been sent on a weeklong trip into the forest showed reduced signs of inflammation as well as some indications that the woodsy jaunt had a positive effect on their hypertension.

*Source: [Biomedical and Environmental Sciences, 2012; Journal of Cardiology, 2012](#)*

## **5. Better vision**

At least in children, a fairly large body of research has found that outdoor activity may have a protective effect on the eyes, reducing the risk of developing nearsightedness (myopia).

"Increasing time spent outdoors may be a simple strategy by which to reduce the risk of developing myopia and its progression in children and adolescents," a 2012 review concluded.

An Australian study that followed almost 2,000 schoolchildren for two years found that more time spent outdoors was associated with a lower prevalence of myopia among 12-year-olds. The same association was not found for those who spent a lot of time playing sports indoors, suggesting the connection was

about more than physical activity.

In Taiwan, researchers studied two nearby schools where myopia was equally common. They told one school to encourage outdoor activity during recess and monitored the other as a control. After one year, the rate of myopia in the control school was 17.65%; in the "play outside" school, it was just 8.41%.

Source: [\*Ophthalmology, 2008\*](#); [\*Ophthalmology, 2012\*](#); [\*Ophthalmology, 2013\*](#)

## **6. Improved concentration**

We know the natural environment is "restorative," and one thing that a walk outside can restore is your waning attention. In one early study, researchers worked to deplete participants' ability to focus. Then some took a walk in nature, some took a walk through the city, and the rest just relaxed. When they returned, the nature group scored the best on a proofreading task. Other studies have found similar results — even seeing a natural scene through a window can help.

The attentional effect of nature is so strong it might help kids with ADHD, who have been found to concentrate better after just 20 minutes in a park. "'Doses of nature' might serve as a safe, inexpensive, widely accessible new tool ... for managing ADHD symptoms," researchers wrote.

Source: [\*Environment & Behavior, 1991\*](#); [\*Journal of Environmental Psychology, 1995 \(2\)\*](#); [\*Journal of Attention Disorders, 2008\*](#)

## **7. Sharper thinking and creativity**

"Imagine a therapy that had no known side effects, was readily available, and could improve your cognitive functioning at zero cost." That's the dramatic opening to a 2008 paper describing the promise of so-called "nature therapy" — or, as a non-academic might call it, "time outside."

When college students were asked to repeat sequences of numbers back to the

researchers, they were much more accurate after a walk in nature. This finding built on previous research that showed how nature can restore attention and memory.

Another study found that people immersed in nature for four days — significantly more time than a lunchtime walk in the park — boosted their performance on a creative problem-solving test by 50%. While the research suggests the possibility of a positive relationship between creative thinking and the outdoors, it wasn't enough to determine whether the effects were due to "increased exposure to nature, decreased exposure to technology, or other factors."

Source: [\*Psychological Science, 2008\*](#); [\*PLOS ONE, 2012\*](#)

## **8. Possible anti-cancer effects**

Research on this connection is still in its earliest phases, but preliminary studies have suggested that spending time in nature — in forests, in particular — may stimulate the production of anti-cancer proteins. The boosted levels of these proteins may last up to seven days after a relaxing trip into the woods.

Studies in Japan have also found that areas with greater forest coverage have lower mortality rates from a wide variety of cancers, even after controlling for smoking habits and socioeconomic status. While there are too many confounding factors to come to a concrete conclusion about what this might mean, it's [a promising area for future research](#).

Source: [\*International Journal of Immunopathology and Pharmacology, 2007\*](#); [\*International Journal of Immunopathology and Pharmacology, 2008\*](#); [\*Journal of Biological Regulators and Homeostatic Agents, 2008\*](#); [\*The Open Public Health Journal, 2008\*](#)

## **9. Immune system boost**

The cellular activity that is associated with a forest's possible anti-cancer

effects is also indicative of a general boost to the immune system you rely on to fight off less serious ills, like colds, flus, and other infections.

A 2010 review of research related to this effect noted that "all of these findings strongly suggest that forest environments have beneficial effects on human immune function," but acknowledged that more research on the relationship is needed.

*Source: [Environmental Health and Preventative Medicine, 2010](#)*

## **10. Improved mental health**

Anxiety, depression, and other mental health issues may all be eased by some time in the great outdoors — especially when that's combined with exercise. This is to be expected, as both greenery and exercise are known to reduce stress.

One study found that walks in the forest were specifically associated with decreased levels of anxiety and bad moods, and another found that outdoor walks could be "useful clinically as a supplement to existing treatments" for major depressive disorder.

"Every green environment improved both self-esteem and mood," found an analysis of 10 earlier studies about so-called "green exercise," and "the mentally ill had one of the greatest self-esteem improvements." The presence of water made the positive effects even stronger.

*Source: [Environmental Science and Technology, 2010](#); [Evidence-Based Complementary and Alternative Medicine, 2012](#); [Journal of Affective Disorders, 2013](#)*

## **11. Reduced risk of early death**

The health effects of green space are wide-ranging, and studies that can't prove cause-and-effect still show strong associations between access to nature

and longer, healthier lives.

"The percentage of green space in people's living environment has a positive association with the perceived general health of residents," concluded a Dutch study of 250,782 people.

Nearby green space was even more important to health in urban environments, the researchers found. In fact, they wrote, "our analyses show that health differences in residents of urban and rural municipalities are to a large extent explained by the amount of green space."

A follow-up study by the same research team relied on mortality assessed by physicians and found that a wide variety of diseases were less prevalent among people who lived in close proximity to green space. Other studies have made a direct link between time spent in forests and other measures of overall health.

Why the connection? Researchers pointed to "recovery from stress and attention fatigue, encouragement of physical activity, facilitation of social contact and better air quality" as well as nature's positive effect on mental health, which would boost overall health and longevity as well.

*Source: [Journal of Epidemiology and Community Health, 2006](#); [Journal of Epidemiology and Community Health, 2009](#); [Biomedical and Environmental Sciences, 2012](#)*