

## **How Nature Supports Our Wellbeing: The Science Behind Why We Feel Better Outdoors**

Nature has long been associated with feelings of calm, happiness, and restoration. Whether it is walking through a woodland, sitting beside a lake, gardening, or simply spending time in a local park, many people instinctively feel better after connecting with the natural world. Modern scientific research now provides strong evidence that this feeling is not imaginary. Exposure to nature can have measurable benefits for our mental health, physical health, cognitive functioning, and overall wellbeing.



### **Humanity's Connection with Nature**

Scientists have proposed that humans have an innate connection to nature because we evolved within natural environments for thousands of years. This idea, known as the Biophilia Hypothesis, suggests that people are naturally drawn to natural settings and may experience psychological benefits when surrounded by them. Research also supports the Attention Restoration Theory, which proposes that nature helps restore mental energy depleted by the demands of modern life.

Modern environments often require sustained concentration, exposure to noise, screens, traffic, and information overload. Natural settings provide a gentler form of attention that allows the brain to recover from mental fatigue.

### **Nature Reduces Stress**

One of the most consistently observed benefits of nature is its ability to reduce stress. When people spend time in green spaces, the body's stress response appears to decrease. Researchers have found lower levels of cortisol, the body's primary stress hormone, following exposure to natural environments.

A study highlighted by Harvard Health found that spending just 20 to 30 minutes in nature was associated with significant reductions in cortisol levels. Importantly, participants did not need to engage in vigorous activity; simply sitting or walking in a natural setting was enough to produce benefits.

The World Health Organization has also recognised that green spaces can promote psychological relaxation and stress relief, highlighting their importance for public health.

### **Nature Improves Mental Health**

Research increasingly shows that access to green spaces is linked with better mental health outcomes. Individuals living near parks, gardens, woodland areas, and other green environments tend to report lower levels of anxiety, depression, and psychological distress, while experiencing higher levels of wellbeing and life satisfaction.

A review published in the International Journal of Environmental Research and Public Health found evidence that nature exposure is associated with improved mental health, reduced depression and anxiety symptoms, and better cognitive functioning.

Similarly, a World Health Organization review concluded that there is an overall positive relationship between exposure to green and blue spaces and mental health outcomes. Green spaces include parks, forests, and gardens, while blue spaces refer to environments such as rivers, lakes, and coastlines.



## **Nature Improves Attention and Concentration**

Many people notice that they can think more clearly after spending time outdoors. Science supports this observation. Natural environments appear to restore attention and improve cognitive performance, particularly after periods of intense mental effort.

Researchers believe that natural settings reduce mental fatigue by allowing the brain's attention systems to recover. This can be particularly beneficial for children, students, and workers who spend long periods engaged in concentrated tasks. Some studies have found improvements in memory, focus, and problem-solving ability following exposure to natural environments.

## **Nature Encourages Physical Activity**

Green spaces provide opportunities for walking, cycling, running, and recreational activities. As a result, people who have access to natural environments often engage in higher levels of physical activity. Physical activity itself is associated with numerous health benefits, including improved cardiovascular health, better mood, reduced stress, and lower risk of chronic disease.

Recent research using wearable activity trackers found that greater accessibility to parks and green spaces was associated with increased daily step counts, providing evidence that nature can directly encourage healthier lifestyles.

## **Nature Supports Heart Health**

Scientific evidence suggests that spending time in natural environments may contribute to improved cardiovascular health. Exposure to green spaces has been associated with lower blood pressure, reduced heart rate, and lower risk of cardiovascular disease. These effects are likely due to a combination of reduced stress, increased physical activity, improved air quality, and enhanced opportunities for relaxation.

Harvard researchers have also highlighted links between green space exposure and lower blood pressure alongside reductions in the risk of chronic disease.

## **Nature Improves Sleep**

Adequate sleep is essential for physical and mental health, and nature may play an important role in helping people sleep better. Research indicates that exposure to natural environments is associated with improved sleep quality and healthier sleep patterns.

Several factors may explain this relationship. Natural environments encourage physical activity, reduce stress, and expose individuals to natural daylight, which helps regulate the body's circadian rhythm or internal body clock.

## **Nature Strengthens Social Connections**

Parks, community gardens, nature reserves, and recreational green spaces provide opportunities for people to meet, interact, and participate in shared activities. Social connectedness is a major predictor of wellbeing, and access to green spaces can strengthen relationships within communities.

The World Health Organization notes that green spaces support social interaction and cohesion, both of which contribute positively to mental and physical health.

## **How Much Nature Do We Need?**

Researchers have attempted to identify how much time in nature is needed to experience measurable benefits. A large study published in Scientific Reports found that people who spent at least 120 minutes per week in natural environments were significantly more likely to report good health and high wellbeing compared with those who spent little or no time in nature. Importantly, these two hours could be spread across the week in any way that suited the individual.

Even shorter periods appear beneficial. Research discussed by Harvard Health suggests that spending just 20 to 30 minutes outdoors can reduce stress levels.

Scientific evidence increasingly demonstrates that nature is far more than a pleasant backdrop to daily life. Exposure to green and blue spaces can reduce stress, improve mental health, enhance concentration, support cardiovascular health, encourage physical activity, improve sleep, and strengthen social connections. These benefits are supported by a growing body of research from organisations such as the World Health Organization, Harvard University, and numerous peer-reviewed scientific studies.

In an age where many people spend much of their time indoors and connected to technology, regularly engaging with nature may be one of the most accessible and effective ways to improve wellbeing. Whether it involves a walk in the park, gardening, exploring a woodland trail, or simply sitting outside and appreciating the natural world, spending time in nature represents a simple yet powerful investment in our health and happiness.