

# MOVE4NATURE



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## CHAPTER 1

# Why Should We Hike

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We are living in a global crisis of both the environment and mental health. Young people across the world are experiencing the highest rates of anxiety and depression ever seen. Alongside this, we are facing a climate crisis, where nature is being destroyed and neglected in ways never seen before, with disastrous consequences.

Climate anxiety is on the rise, as many young people feel anxious about the environment but also feel unable to take tangible action to protect it.

## How can we tackle both of these crises together?

By helping young people feel more connected to the natural world and create opportunities for meaningful climate action, we can promote good mental wellbeing and help young people to feel like they are having a positive impact.



## Mental health benefits

Getting active outdoors is good for our BRAIN and our BODIES. It helps us to feel re-energised, happier, and improves our health ([Mind, 2023](#)).

### Did you know?

Just 20 minutes spent in nature can lead to a 13.4% drop in cortisol, your body's primary stress hormone ([Journal of Physiological Anthropology](#)).



A Stanford study found that walking in nature can decrease blood flow to your subgenual prefrontal cortex — the area of the brain often linked to mental illness. Participants who walk in nature saw a decrease in negative thoughts and improvements in cognitive function. Hiking releases endorphins, which are 'feel-good' hormones that can offset depression.

### Question:

An hour of walking in nature can improve your memory and attention span by up to:

- A) 5%
- B) 10%
- C) 20%

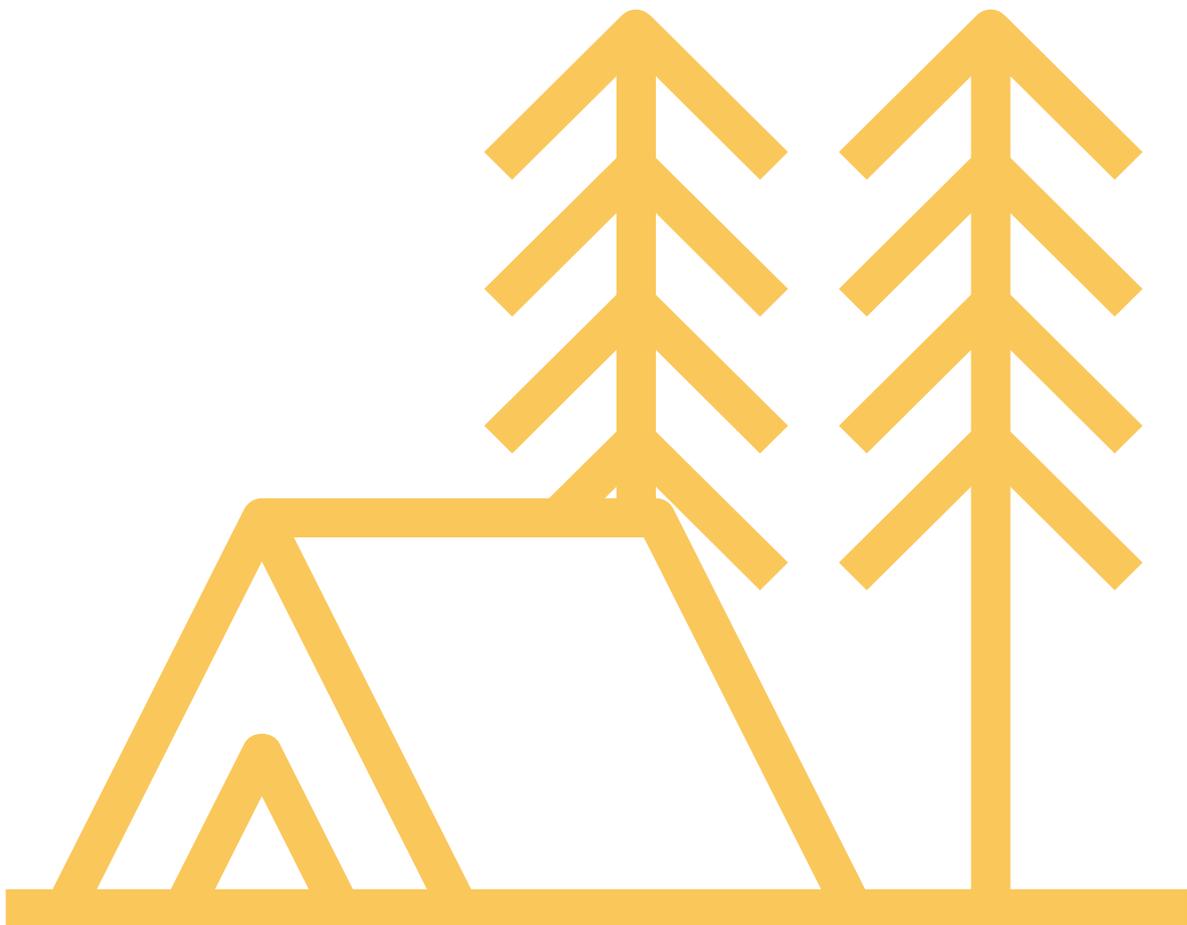


A [University of Michigan study](#) found that those who had been on a walk in nature scored 20% better than their original memory test whilst the urban control group saw no consistent increase. Hiking is a type of exercise that stimulates neurogenesis, which means the growth of new neurons, hence why it can improve memory!

Nature can also help children overcome challenging behavioural problems. Green outdoor settings appear to reduce children's Attention deficit hyperactivity disorder (ADHD) symptoms across a wide range of age, gender and income groups, community types, geographical regions and diagnoses ([Miles, 2022](#)).

**Q: True or False? Hiking can increase creativity.**

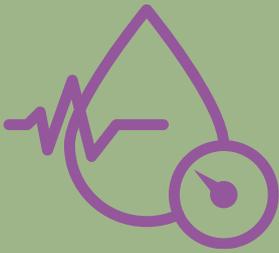
A: True! When we're out hiking, we are separated from technology and the constant noise of urban environments. These distractions can often overwhelm our cognitive abilities. However, hiking in nature allows us to slow down, restore our attention, and think differently about situations; it promotes creativity!



# Physical health benefits

Hiking is a cardiovascular activity, which means that it benefits your heart. The more hilly your hike, the harder your heart will work, and the more healthy it becomes ([Ace Fitness](#)).

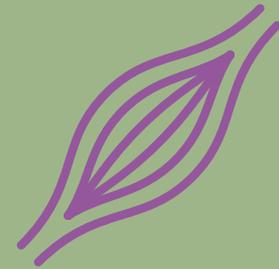
**Hiking has also been proved to:**



Improve blood pressure and blood sugar levels



Reduces the threat of heart disease, diabetes and strokes for those at high-risk



Increases muscular strength, core stability and enhances balance



Enhance immune system functioning

Source: Mitten et al., 2018).



## Social benefits

Psychologists have found that humans have a primitive need for close relationships and inclusion in community life ([Psychology Today, 2016](#)). When this need for social connection is not met, it can take a serious toll on our brains and bodies. For example, it can cause high blood pressure, disrupts sleep and erodes our learning and memory abilities.



In children, loneliness can lead to a multitude of issues, including higher rates of school drop outs in children who do not feel socially connected to their peers ([Psychology Today, 2016](#)).

By empowering young people to get outdoors and hike with friends/family, they can spend quality time building relationships and it will promote feelings of being socially connected. In the heavily digitalised society we live in today, it's easy to lack real, in-person connections, and hiking provides a brilliant way to combat this.

### How much time do you need to spend outdoors to feel the benefits?

A study by the University of Exeter found that just two hours per week of outdoor time is enough to see a marked increase in health and wellbeing.

This time doesn't have to be in one go, as long as the cumulative outdoors time adds up to two hours. So, you could spend 20 minutes a day in your local park or you could wait and go on a long walk at the weekend. The resulting benefits will be the same, either way. (from Bill Bailey on the joys of being in nature - CPRE)

# Inclusion & Accessibility in the Outdoors

Whilst nature and hiking is technically open for people of all genders, ethnicities and abilities to enjoy, this isn't always the case. There are many barriers to engaging in hiking and the outdoors more generally, which has resulted in this space becoming dominated typically by the white, mid- to high- socioeconomic status community.

## **Barriers to the outdoors include:**

- The high cost of outdoor kit/clothing
- Transport expenses and not having access to a car/personal vehicle
- Lack of confidence in personal skills (women and girls are more likely to experience this)
- Racial issues meaning that People of Colour feel stigmatised in this white-dominated space
- The outdoors being inaccessible for those with physical disabilities

It's important that we, as educators, are aware of these barriers and find ways to empower young people and communities to overcome these barriers. This will mean that everyone is able to enjoy the mental, physical and social benefits that hiking offers us.

## **Summary**

In this chapter, we've talked about how time spent in nature positively impacts our mental and physical health, across all ages and demographics. Now, let's explore how hiking impacts the environment and learn more about the effects of pollution.

Watch the videos



## Confidence gap in outdoor sports



[Watch the video](#)

## Sources

1. How can nature benefit my mental health? Mind, 2023. [How nature benefits mental health - Mind](#)
  2. Walking in nature. Physiomed, 2023. <https://www.physiomed.ca/walking-in-nature/#:~:text=Participants%20who%20walk%20in%20nature%20saw%20a%20decrease,drop%20in%20cortisol%2C%20your%20body%E2%80%99s%20primary%20stress%20hormone.>
  3. The cognitive benefits of interacting with nature. Berman, Jonides and Kaplan, 2008. [The cognitive benefits of interacting with nature - PubMed \(nih.gov\)](#)
  4. Nature is a human right. Miles, 2022.
  5. Benefits of Hiking: Physical, mental and beyond. Kates, 2020. [Benefits of Hiking: Physical, Mental and Beyond \(acefitness.org\)](#)
  6. Hiking: A low cost, accessible intervention to promote health benefits. Mitten et al., 2018). [Hiking: A Low-Cost, Accessible Intervention to Promote Health Benefits - Denise Mitten, Jillisa R. Overholt, Francis I. Haynes, Chiara C. D'Amore, Janet C. Ady, 2018 \(sagepub.com\)](#)
  7. The Dangers of Loneliness. Psychology Today. Marano, 2003. [The Dangers of Loneliness | Psychology Today](#)
- Bill Bailey on the joys of being in nature. Bailey, 2020. [Bill Bailey on the joys of being in nature - CPRE](#)

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