

Vitamin G For Your Mind

By Melissa Abramovitz

Out and About: The Best Route Without a Doubt

Long ago, in a world far, far away, there were fewer TVs and no cell phones or video games. A tweet was a sound made by birds. Kids played outdoors after school and on weekends. Seriously?

Actually, that world wasn't so far away. It was Earth. Our planet was a lot different just a few decades ago. People spent more time outdoors. But today, video games and hundreds of TV channels often compete with walking in the park or planting a garden. Safety fears, pollution, and limited green spaces in cities also keep many people indoors.

Young people now spend about six hours a day in front of a TV or a computer and less than four minutes playing outdoors. That statistic comes from the U.S. Department of the Interior, an agency that manages many of the nation's parks. Not that technology is bad—but it is not healthy for the mind and the body when time spent using technology replaces outdoor time, says Dr. Daphne Miller, a family doctor who also teaches medicine at the University of California, San Francisco. Many health experts call the problem of kids not spending enough time outdoors “nature deficit disorder.”

The Need for Vitamin G

Scientific studies support the claims that a nature deficit can harm the mind and the body, and some health experts have started calling green time “vitamin G.” Kids who don't get outdoors much are more likely to have attention-deficit hyperactivity disorder (ADHD) and depression. They also tend to have trouble in school. Doctors believe that is because being outdoors stimulates the mind more than sitting around indoors. Even those who usually spend a lot of time outdoors notice a difference when they don't get green time. “If I don't get outside, I feel lazy and can't get momentum going to do anything like chores, homework, or just getting ready for school. I also feel pretty irritable and can get annoyed at any little thing that bugs me,” says Mollie P., 16, of Temecula, Calif., who enjoys hiking, swimming, and running.

Mollie's sister Madelyne P., 14, agrees. “I feel more tired when I don't get outdoors,” she says.

The U.S. government launched the America's Great Outdoors and Youth in the Great Outdoors programs to help make more outdoor spaces and activities safe and accessible to all. Those programs are encouraging people to try fun outdoor activities such as hiking and swimming at parks, beaches, forests, and farms. According to America's Great Outdoors, Americans report better health, greater happiness, and more quality family time when they get more green time. And that's not all.

Studies by Cornell University environmental psychologist Nancy Wells show that kids who have easy access to nature areas cope with stress better. They bounce back faster from moving to a new place, being bullied, and fighting with family members. Other research indicates that kids who move to places with more green space do better in school and that spending time outside helps improve symptoms for kids with depression and ADHD.

Teens don't usually go outdoors to cut stress or spend more time with plants and fresh air, however. "I like swimming and hiking because it's fun being outside in the sun with my family," says Madelyne.

James Blackburn, 18, of Fairburn, Ga., agrees. He's active with the National Wildlife Federation's Earth Tomorrow program. "It's fun and relaxing to be out in nature," he says. "I feel at peace and enjoy life when I'm outside."

How and Why?

Researchers believe the positive effects of green time stem partly from the physical activity in pastimes such as hiking or kayaking. Exercise produces brain chemicals, including norepinephrine and serotonin, that improve learning, mood, and sleep. It also enhances learning by boosting connections between nerve cells in areas of the brain that are important in learning and memory.

Nature is an infinite palette of design and color, sound and fragrance, and exploring it awakens the senses. Listening to a gurgling brook or smelling the fresh scent of pine trees is soothing. Following a rabbit to its burrow or touching different kinds of tree bark can fill you with respect for other living things. Observing brightly colored wildflowers, bugs, or birds can make you wonder what those colors are for. Many artists, writers, and philosophers have spoken about the power of nature to clear the mind and inspire creativity.

Some schools, such as the Walden Project in Vermont (inspired by the writings of 19th-century author Henry David Thoreau), hold classes outside for those reasons. Student Hannah Smith, 18, sees the benefits firsthand. "I

tend to be more alert and observant being outdoors so much. I notice little things more." Smith says she believes the outdoors helps her focus and helps her want to learn. Learning in a forest sparked her interest in art and photography too.

Getting Outdoors

Even doctors are helping give their patients a dose of vitamin G. Miller writes "park prescriptions" for her patients because, she says, "being outdoors is good for your health." She finds that when she gives patients prescriptions, they tend to stick with them. Her prescriptions tell people exactly where to go, how often, and how long to stay active.

The Earth Tomorrow program is another effort to increase young people's environmental awareness while also helping them lead healthier lives, says Blackburn. He has looked for endangered plants and animals, gone camping, cleaned up creeks, and planted urban gardens, among other projects. "We try to find innovative ways to be green. I think we all have a duty to make the Earth better for future generations, plus I feel good personally being close to nature," he says.

One nice thing about getting outdoors is that you don't have to participate in an organized program. It can be as simple as calling together your family for a picnic lunch. "Just getting outdoors is important," Mollie says. "I like to feel like I am doing something instead of sitting around."

Experts recommend at least one hour of outdoor activity daily, but any amount is better than none. Researchers at the University of Essex in England report that all it takes is five minutes or more of green time to improve mood and self-esteem. It's even easier now that spring is here. Get outside, and get your vitamin G!

Fun Ways to Increase Your Green Time

- If you have the space, plant and tend a vegetable garden.
- Suggest a family camping vacation.
- Visit www.americasgreatoutdoors.gov to find out about outdoor programs in your community.
- The National Wildlife Federation's Get Outside program (www.nwf.org/get-outside.aspx) suggests playing something it calls Hike & Seek—an activity pairing hiking with a scavenger hunt.
- Go to www.handsontheland.org to read about the Hands on the Land network and to find out how you can help scientists monitor the environment (water, soil, bugs, plants, and more).

Outdoor Learning at The Walden Project

The Walden Project in Vermont holds classes in a forest. Students study the usual school subjects, but teachers focus on guiding students rather than telling them to learn certain things. Students are encouraged to explore topics that interest them and invent projects related to those interests. Classes also take advantage of nearby natural areas: Instead of learning in a lab, students study plant biology in the woods, for instance. Students go on weekly field trips in the community, and many participate in internships with local businesses or organizations.

The program is based on the writings of the 19th-century author Henry David Thoreau, who spent two years living in a cabin at a place called Walden Pond in Massachusetts. In the book *Walden*, Thoreau described how living simply in nature cleared his mind and helped him see what was important.

Former Walden Project student Max Kinlund, now in college, agrees that being out in nature is good for the mind: "I think Thoreau's idea that creativity and mental health are increased in a natural setting is pretty spot-on. [Nature lets] people flourish in their own unique and creative way."

The project's students join for different reasons. Some were flunking out in traditional school. Others just wanted a change.

"I had never been a huge fan of traditional school, and I didn't really care about my education," says student Hannah Smith, 18. The Walden Project made a big difference. "Being outdoors automatically makes me happier and more focused. I take so much inspiration from nature. Now I care about my education, and I'm excited to learn," she says.



Bridgette Bartlett/Walden Project Alumnae

Time spent outdoors is a key part of the Walden Project.

Walden Project students are just as successful as students in regular local high schools. Kinlund says that sounds about right, based on his experience. "Walden probably gave me around the same academic tools that I would've gotten from public school but made me loads more prepared in the sense of feeling comfortable with myself and my personal expression."

Name: _____ Date: _____

1. According to the passage, when you go outdoors, what might happen?
 - A You feel more tired.
 - B You feel less happy.
 - C You will be healthier.
 - D You will have more stress.

2. Which of following activities would solve the problem of "nature deficit disorder"?
 - A playing a video game
 - B kayaking on a river
 - C having a picnic in your living room
 - D playing hide and seek in your house

3. Why would people be more likely to go outside if they have a "park prescription"?
 - A People may think of the outdoors as medicine that they need to be healthy.
 - B People may need to be paid money to spend more time outdoors instead of working.
 - C People may not know where to go if the doctor didn't tell them where the park is located.
 - D People may need a reminder to warm up their muscles before exercising outside.

4. Read the following sentences and answer the question below: "Kids who don't get outdoors much are more likely to have attention-deficit hyperactivity disorder (ADHD) and depression. They also tend to have trouble in school. Doctors believe that is because being outdoors stimulates the mind more than sitting around indoors."

What does stimulate mean?

- A to stop something from working
 - B to encourage something to happen
 - C to decrease something's energy
 - D to make something sleepy

5. The primary purpose of this passage is to
 - A convince the reader that they should participate in an organized program when they go outdoors
 - B persuade the reader that the Walden Project is better than traditional school
 - C show the reader that taking opportunities to go outside will help them
 - D inform the reader of the importance of playing outdoors

6. Why do kids play outside less than they did 30 years ago?

7. In paragraph 4 the author writes that doctors believe that being outdoors stimulates the mind more than sitting around indoors. Why might they think that?

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Kids that don't get outdoors are more likely to be depressed or have trouble in school _____ they should participate in a program like America's Great Outdoors.

- A yet
- B so
- C because
- D if

9. Answer the questions based on the sentence below.

In the 19th century, Henry David Thoreau spent two years living in a cabin at a place called Walden Pond in Massachusetts.

Who? Henry David Thoreau

(did) What? _____

When? _____

Where? _____

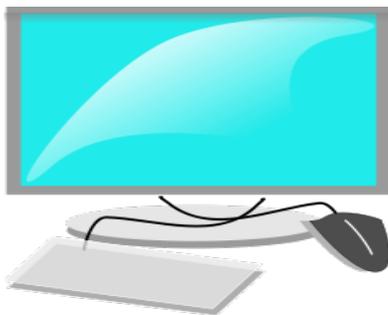
10. Read the vocabulary word and definition below and complete questions 10a, 10b, and 11.

Vocabulary Word: innovative (in · no · va · tive): new and creative.

10a. Read the five sentences below and underline the word innovative in each sentence.

1. Teachers thought the educational video game in which students played at working in a clinic was an innovative way to help students learn about health.
2. The new cell phone technology was considered innovative by customers because they were able to do many new things.
3. The musician used instruments to create an innovative sound. No one had ever heard anything like it!
4. The special effects in the action movie were considered innovative for the time, and all other action movies since then have included the same type of special effects.
5. The doctor wanted to try a promising and innovative approach to treating the patient's cancer, since traditional treatments would not work for that patient.

10b. Which object is very innovative?



11. Which object in your home do you think is the most innovative? Explain.
