

## THIS WINTER, GET OUTSIDE



Winter is no time to surrender to indoor living. While extreme cold and heavy snowfall can make the decision to stay indoors non-negotiable on certain days, there's every reason to avoid mentally cordoning off entire times of year from outdoor activity. There is now plenty of evidence that regular outdoor activity, apart from simply "being natural" and "feeling right," offers tangible health benefits. It's well known that certain conditions like seasonal affective disorder (SAD) or vitamin D deficiency are very real, but science is moving beyond even these strong arguments for outside environments to point out a variety of ways that a simple dose of the great outdoors can improve your health. What's more, there is presently a national movement occurring to take the outdoors by storm, and to encourage our children and give them every opportunity to do so.

Winter-onset SAD remains a strong reason to seek outside time in the colder months. If you are prone to SAD, it can sap your energy and makes you feel moody. It can lead to depression, anxiety and hopelessness. Social withdrawal and oversleeping are two of its major symptoms. Others have difficulty concentrating and retaining information.

The specific cause of SAD remains unknown, but it is likely that your body's natural chemical makeup—which ultimately controls your circadian rhythm—matters greatly. It's thought that the reduced level of sunlight in fall and winter disrupts your body's internal clock, which lets you know when you should sleep or be awake. This disruption of your circadian rhythm may lead to feelings of depression. The change in season can disrupt the balance of the natural hormone melatonin, which influences sleep patterns and mood. Reduced sunlight can also cause a drop in serotonin, which of course plays a pivotal role in mood regulation as well.

Consequently, an often deployed recommendation from health care professionals is hardly surprising: Make your environment sunnier and brighter. Open blinds, add skylights and trim tree branches that block sunlight. Sit closer to bright windows while at home or in the office. Consider lightbox therapy.

Or: Get outside. Take a long walk, eat lunch at a nearby park, or simply sit on a bench and soak up the sun. Even on cold or cloudy days, outdoor light can help,

especially if you spend some time outside within two hours of getting up in the morning. The other early recommendation to start you on the way out of SAD is regular exercise. Physical exercise raises serotonin levels, decreases the presence of certain stress hormones, increases oxygen to the brain and other organs, helps relieve anxiety, and increases self esteem, all of which can lift your mood. Spending time outdoors is the perfect way to make your environment sunnier and brighter while also increasing your physical activity. It is a one-two punch that is also completely free of charge.

Sunlight hitting the skin begins the process of creating the biologically active form of vitamin D. The sunshine vitamin stands out among others as a disease-fighting vitamin. Epidemiologic studies suggest it protects us from stroke, heart attack, cancer, bone loss and Type 2 diabetes. The good news is that you'll get the great majority of the vitamin D you need if you go outside a few times a week and expose your arms and legs for 10 to 15 minutes. Limited sun exposure on short runs or walks and liberal use of sunscreen when you are out for extended periods should do the trick. Also keep in mind that people aged 65 and over generate only a quarter as much vitamin D as people in their 20s, and on average African Americans manufacture about half as much as white Americans.

Beyond depression, heart disease, cancer, osteoporosis and diabetes, among the correlated outcomes of what has been termed the indoor epidemic are also hypertension, asthma, fatty liver disease, attention deficit disorder and even myopia.

And certainly this social disorder compounds the national obesity problem. Indoor living is associated with being sedentary, particularly for children. Children aged 8 to 18 today spend more time than ever using electronic media indoors—the Kaiser Family Foundation estimates an astonishing seven and a half hours daily—and this almost always means while *sitting*. At the same time, 30% of kindergarten classrooms have eliminated recess to make more room for academics. We are fostering, or at least abetting, an unfamiliarity with the natural environment in our young people that is unprecedented in all of human history.

In contrast to indoor living, time outdoors is associated with activity. British researchers used GPS devices and accelerometers to track the activity of 1,000 children, finding that children were *more than doubly active* when they were outside.

Furthermore, researchers at the University of Essex in England are advancing the notion that exercising in the presence of nature has added benefit, particularly for mental health. Their investigations into "green exercise" dovetails with research showing benefits from living in proximity to green, open spaces. In 2010 the scientists reported results from a meta-analysis of their own studies that showed just five minutes of green exercise resulted in improvements in self-esteem and mood.

Among other benefits, the National Wildlife Federation (NWF) also cites findings that outdoor play raises scores on standardized tests and improves students' critical-thinking skills. Does concentration and focus actually improve? A study published in 2008 found that children with ADHD scored higher on a test of concentration after a walk through a park than after a walk through a residential neighborhood or downtown area. Other ADHD studies have also suggested that outdoor exercise could have positive effects on the condition.

And there is evidence that outdoor exposure might help you heal faster. University of Pittsburgh researchers reported in 2005 that spinal surgery patients experienced less pain and stress and took fewer pain medications during their recoveries if they were exposed to natural light. An older study showed that a view of trees out the window had a positive effect on patient recovery, as opposed to subjects with a window view of a brick wall.

An outdoor movement is just what's called for to improve our collective health in a number of simple, cost effective ways. A consortium of physicians, health insurers, naturalists and government agencies have banded together to do just that: help more people of all ages and economic strata engage in health-enhancing physical activity in parks and other natural environments.

This grassroots movement now has support in Washington. This year President Obama started the America's Great Outdoors Initiative, which aims not just to counter sedentary lifestyles but also to reacquaint Americans with the farms, ranches, rivers, forests, parks, fishing holes and beaches that provide opportunities for people to stay active and healthy. Michelle Obama has also initiated Let's Move Outside, a program that is part of her Let's Move campaign. Doctors around the country are beginning to realize that prescribing the great outdoors has benefits beyond getting people to exercise. A number of doctors now provide patients with maps, guidelines and programs of gradually increased activity based on their abilities.

The previously mentioned NWF has established the Be Out There public education campaign to foster a daily "green hour" during which every child could enjoy 60 minutes of unstructured play and interaction with the natural world. They offer specific suggestions for schools and families to counter the drain of "indoor childhood" ([www.nwf.org](http://www.nwf.org)). The campaign's mission "is to return to the nation's children what they don't even know they've lost."

The National Park Service, too, is helping doctors create "medical miles" in their local communities, such as the one established on a section of the Arkansas River Trail. In Sante Fe, the Centers for Disease Control and Prevention helped set up Prescription Trails, a program that gives physicians trail guides to distribute to help fight diabetes in that area.

According to one government estimate, the average American spends 90% of his or her life indoors, and as we get older we become even more inclined not to venture out. When we do, there are the inevitable precautions: check the air quality first, watch out for ticks, mosquitoes and other biting creatures. It's well-meaning but it also reinforces indoor ways. Spending time outside has real health benefits, and the "greening" of exercise looks promising for even more. None of the studies on green exercise in the England-based meta-analysis were randomized controlled trials. To be sure, the intuitive appeal of green exercise is its strength, not the methodological rigor of the research supporting it. It's hard to imagine how a stroll in a pretty park wouldn't make us feel better than a walk in a drab setting.

But that's just the point. After all, what *about* that "being natural" and "feeling right"? Think of the last time you were at a frozen pond in winter, a public swimming pool in summer, or a playing field in a park in the spring—that sound you hear is the laughter of children who have set their PlayStation controllers down at last.

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