



A Step in the Right Direction

The health benefits of hiking and trails

For years, studies comparing exercise to physical and mental health consistently found that regular exercise increases a person's overall health and results in a longer life. Why, then, does only 15 percent of the U.S. adult population engage in sufficient moderate physical activity?¹

Perhaps the answer is in how people perceive exercise. Beneficial exercise does not need to involve a long, painful and boring workout. A good workout can be a brisk 30-minute hike with the dog, or a slower one-hour hike through a local park. According to the American Heart Association, it's best to walk vigorously for 30 to 60 minutes three or four times per week. But even low- to moderate intensity walking can have both short- and long-term benefits.² These benefits are numerous, ranging from controlling obesity to preventing heart disease to improving the quality of air we breathe .

LOSING EXCESS POUNDS

Hiking is an excellent way to lose excess pounds and improve health. In December of 2001 the US surgeon general called the increased rate of obesity in the United States an *epidemic*. The report states that two-thirds of Americans are overweight or obese, and the number is increasing. In addition, thirteen percent of children are overweight. The report recommends that communities create safe sidewalks or walking trails to encourage physical activity.³ According to *Walking for Health*, people "won't find a better way to lose weight than walking." The results will be more permanent and pleasurable than any diet or weight loss scheme.⁴ When hiking a comfortable 2-MPH, a person weighing 150 pounds will burn 240 calories in one hour.⁵

PREVENTING HEART DISEASE

More than 2,600 Americans die from cardiovascular disease each day, which is an average of 1 death every 33 seconds.⁶ While heart disease is caused by more than just inactivity, the odds of avoiding this leading cause of death in America can be greatly improved by maintaining a regular walking routine. The results of 43 separate studies by Centers for Disease Control showed that by exercising, individuals significantly reduce their chances for heart problems, while those who do not exercise are twice as likely to have coronary heart disease.⁷

Hiking can also decrease cholesterol levels, a common cause of heart disease. More specifically, it increases high-density lipoprotein (HDL), considered to be the "good" cholesterol, which helps move bad cholesterol from the artery walls. A study comparing the cholesterol levels of mail carriers, who walked a few miles daily, to people engaged in no exercise, proved that walking leads to an increase in the "good" HDL. The study's results support hiking and walking as a method of stabilizing cholesterol levels.⁸

DECREASING HYPERTENSION (HIGH BLOOD PRESSURE)

Hypertension, more commonly known as high blood pressure, plagues millions of Americans. With modern developments, medication is the most common cure, but there are other, less costly options. Research has shown that regular exercise such as walking lowers systolic and diastolic blood pressure by a mean of 10 mmHg.⁹ More specifically, walking lowers plasma norepinephrine which correlates with blood pressure improvement.¹⁰

A study was conducted in which 19 sedentary men with mild hypertension were put through an aerobic exercise program, and after 10 weeks, their blood pressure dropped dramatically. The doctor conducting the study pointed out that the exercise was not overly strenuous. "People in our study exercised at levels well within their comfort zones. Their exercise consisted of either walking, cycling, jogging, or doing any combination of activities for approximately 30 minutes, four times a week"¹¹

IMPROVING AND MAINTAINING MENTAL HEALTH

Depression and stress are common medical problems in today's world. Thanks to research on the benefits of walking, however, many people who suffer from these ailments have found a simpler and much less expensive way to feel better: walking every day. Walking causes the release of calming brain chemicals called endorphins, which are natural tranquilizers. Also, walking releases adrenaline, produced by the body to cope with real or perceived danger. If the adrenaline isn't released from the body, it accumulates, causing muscle tension and feelings of anxiety.¹²

A study tested 36 walkers for anxiety, tension and blood pressure levels before, during, and after 40 minutes of walking. Results showed immediate decreases in tension and anxiety as well as blood pressure after walking, regardless of how fast or slow the participants walked.¹³

SLOWING THE AGING PROCESS

Research shows that what we once accepted as a natural part of growing older—a decline in physical activity and strength—does not have to accompany aging. An article in the April 2001 *American Journal of Public Health* identified the relationship between reduced mortality risk and moderate recreational activity. A study of two groups of 15 middle-aged men was conducted between 1969 and 1992, during which time one group exercised regularly, while the other group exercised for the first five years and then stopped. When researchers tested these men at the end of the 23 years, they found that the non-exercisers lost 41 percent of their aerobic power, while the exercisers lost only 13 percent.¹⁴ Aging doesn't decrease the body's ability to be physically active and healthy, but rather leading an inactive and unhealthy lifestyle accelerates the aging process!

PREVENTING OSTEOPOROSIS

Osteoporosis is a bone disease which effects mostly older women who lack sufficient amounts of calcium. This deficiency reduces bone density, increases the bone's porosity and brittleness, leading to a susceptibility to broken bones. Hiking and walking help reverse the negative effects of osteoporosis by increasing the bone density and slowing the rate of calcium loss, thus strengthening the bones and decreasing their susceptibility to break.

IMPROVING THE QUALITY OF THE AIR WE BREATHE

The mode of transportation we choose every day affects the health of millions. Transportation is the largest single source of air pollution in the United States. It causes nearly two-thirds of the carbon monoxide, a third of the nitrogen oxides, and a quarter of the hydrocarbons in our atmosphere. Air pollution contributes to lung disease, including respiratory tract infections, asthma, and lung cancer. Lung disease claims close to 335,000 lives in America every year and is the third-leading cause of death in the United States.¹⁵ Walking can replace short-distance motor-vehicle trips, which are the least fuel-efficient and generate the most pollution per mile traveled. A family that walks two miles a day instead of driving will, in one year, prevent 730 pounds of carbon dioxide from entering the atmosphere.¹⁶ What a difference this would make to your lungs!

PREVENTING AND CONTROLLING DIABETES

Diabetes, a common chronic metabolic disorder, changes the way a body breaks down and uses starches and sugars (glucose). Normally insulin, a hormone produced by the pancreas, helps store glucose in a form that later can be released for energy. In a diabetic, the pancreas either does not produce enough insulin or produces no insulin. Uncontrolled, diabetes can lead to blindness, kidney failure, heart disease, stroke, and nerve damage. According to the American Diabetes Association, diabetes is the seventh leading cause of death (sixth-leading cause of death by disease) in this country and there are 15.7 million people in the United States who have diabetes, that's 5.9% of the population.¹⁷

Regular exercise, including hiking, can help prevent diabetes and can protect the body from the degenerative effects of diabetes. For a person who has Type I (insulin-dependent) diabetes, walking can reduce the amount of insulin the person needs. A person with Type II (non-insulin dependent) diabetes can actually reverse the course of the diabetes through diet, exercise and weight loss.¹⁸

IMPROVING ARTHRITIS

Many people's response to arthritis pain is to stop or decrease the use of their joints. Unfortunately lack of movement can actually compound the problem. Once properly diagnosed and treated most people with arthritis can benefit from a regular exercise program. Recent research suggests that walking may be the best exercise.¹⁹ Walking helps strengthen muscles,

especially in the legs. People with arthritis in their knees or ankles benefit from stronger leg muscles, because they relieve some of the pain that may occur when bones rub against each other. In addition, the natural tranquilizing effect of walking helps decrease arthritic pain.

RELIEVING BACK PAIN

How often do you go home after a hard day at work and realize that your lower back feels stiff? If you're like most people, you probably notice this pain regularly. Almost everybody suffers from back pain at one time or another, whether caused from an injury or simply from sitting at a computer for too many hours. Walking prevents and cures the most common kinds of muscular backache, and even some kinds in which a disk problem has been identified.

The disappearance of or enormous decrease in back pain has been identified as the most common, clearly perceived health benefit reported by walkers.²⁰ Walking allows you to work out without subjecting your back to the repeated impact produced by jogging or aerobic dance and puts less strain on the lower spine.²¹ However, if you are plagued by back problems and are considering walking away the pain, be sure to consult your doctor first to make sure that your particular back problem won't be aggravated by walking.

HEALTHY HABITS FOR A HEALTHY LIFE

Another powerful reason to hike doesn't involve a specific disease or a single facet of life. Rather it is life. Each time you go outside and walk, as long as you stay within your capabilities, you will come home feeling better than you did when you left. Your body will feel better. Your head will feel clearer, and your stress level will have decreased. The result? You'll want to hike again! As you notice improvements in your body and state of mind, you may also want to start eating healthy foods. With each hike you will feel better, which will encourage you to continue your new healthy habits. Don't believe it? Go for a hike, and see what we mean!

¹ National Center for Health Statistics, *Healthy People in Healthy Communities*, U.S. Department of Health and Human Services, Washington D.C.: Government Printing Office, 2001.

² American Heart Association, *Walking for a Healthy Heart*, <http://www.americanheart.org>, 2001.

³ US Department of Health and Human Services, *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*, US DHHS, Public Health Service, Office of the Surgeon General, 2001.

⁴ American Heart Association, *Walking for a Healthy Heart*.

⁵ American Heart Association, *Fighting Heart Disease and Stroke, Physical Activity Calorie Use Chart*, <http://216.185.112.5/presenter.jhtml?identifier=756>, 1998.

⁶ American Heart Association, *Heart and Stroke Statistical Update*, http://216.185.112.5/downloadable/heart/4838_HSSTATS2001_1.0.pdf, 2001.

⁷ Burke, Edmund R, Ph.D., *Benefits of Bicycling and Walking to Health (for FHWA)*, Washington, DC, 1992, p 10.

⁸ *Ibid*, p 13.

⁹ Bove, Alfred A., *Active Control of Hypertension*, *The Physician and Sports Medicine*, Vol. 26, No. 4, <http://www.physsportsmed.com/issues/1998/04apr/bove.htm>, 1998.

¹⁰ *Ibid*.

¹¹ Bricklin and Spilner, p 84.

¹² *Ibid*, p 207.

¹³ *Ibid*, p 168.

¹⁴ *Ibid*, p 3.

¹⁵ American Lung Association, *Fact Sheet, Outdoor Air Pollution*, http://www.lungusa.org/air/outdoor_factsheet99.html, 2000.

¹⁶ Burke, p 4.

¹⁷ American Diabetes Association, *The Impact of Diabetes*, [http://www.diabetes.org/main/application/commercewf?origin=*.jsp&event=link\(B1_1\)](http://www.diabetes.org/main/application/commercewf?origin=*.jsp&event=link(B1_1)), 2001.

¹⁸ Bricklin and Spilner, p 38.

¹⁹ Bricklin and Spilner, p 8.

²⁰ *Ibid*, p 11.

²¹ Shiple, Brian, *Relieving Low-Back Pain with Exercise*, *The Physician and Sportsmedicine*, Vol. 25, No. 8, <http://www.physsportsmed.com/issues/1997/08aug/shiplepa.htm>, 1997.

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