

January 2009

Weight Training: Health Benefits for Every Age



Most of us know that regular exercise provides many benefits. However, as we age, we lose muscle mass, bone density and strength. Weight training, also called **resistance or strength training**, can substantially slow or reduce these effects of aging.

Weight training is any exercise where muscles work and contract against an object. Push-ups, lifting weights and

stretching with elastic bands are examples of resistance exercises.

Weight-training programs are based on what are called “reps” and “sets.” Repetitions, or reps, is the number of times you do an exercise. Sets is the number of cycles of reps. Beginners should start with weights that allow only 15 to 20 repetitions of a single exercise. After several weeks, when you can do these easily, slowly increase the amount of weight.

Increasing the amount of weight will increase strength, while staying at the same weight level will maintain that level of strength. The following tips can also help:

- **Stretch and warm up before beginning your weight program.**
- **Drink fluids between sets.**
- **A little soreness is to be expected, but stop if you feel pain.**
- **Don't work the same muscle groups on consecutive days.**
- **Rest 48 to 72 hours between workouts.** Studies show that muscles build strength and grow as they recover.

With weight training, the benefits are both immediate and ongoing. Muscles respond quickly, which provides great motivation for continuing to exercise. Healthy adults should perform weight training 2 to 3 times per week. In addition to **increasing strength**, weight training can **improve psychological well-being, improve sleep**, and **prevent osteoporosis, diabetes and obesity**, as well as **improve balance**.

Always check first with your doctor before beginning any weight-training program. Then talk with us to develop a program that will meet your goals, as well as teach you the proper form to avoid injury.

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Walking on a Sprained Ankle



If you have sprained an ankle, you may be puzzled when your doctor or physical therapist recommends walking on it. Although resting an injured ankle is wise immediately after an injury, the latest data suggest that you will benefit equally from walking on a properly supported ankle as soon as possible.

Successful recovery begins with immediate attention to the injury. Of course, you should see a doctor as soon as possible for proper evaluation of the injury. By acting quickly, you can reduce swelling and pain by using the P-R-I-C-E regimen.

- **P**rotection—Use an ankle brace, boot or supportive tape during the early postinjury days.
- **R**est—Get off of the foot as much as possible for the first 24 to 48 hours.
- **I**ce—Cool the inflammation and reduce swelling by applying ice packs or soaking your foot and ankle in cold water for 15 to 20 minutes, 3 to 5 times daily.
- **C**ompression—Use an ACE bandage or other supportive wrap to support the injured ligaments.
- **E**levation—Prop up your foot when you are seated, keeping it at or above the level of your hips.

Ankle sprains fall into 3 categories related to the severity of ligament damage and require different treatment and recovery times. A grade 1 sprain causes little damage to the ligaments, and although the ankle will be tender for a few days, you can walk on it after a short period of rest. At grade 2, there is some tearing of the tissues and a longer recovery time of up to 4 weeks. A grade 3 sprain involves bruising, swelling and the complete tear of ligaments; this level of injury may require surgery and 4 to 8 weeks of protection and rehabilitation before you return to full activity.

Starting ankle exercises the day following your injury with mild sprains and when the swelling subsides with severe sprains can increase the likelihood of a full recovery from an ankle sprain. We can design an exercise program to facilitate your safe return to full, normal activities while decreasing your likelihood of re-injury.

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Statin Drugs and Exercise



When cheaper statin drugs came on to the market several years ago, making cholesterol-reducing medication more accessible, some doctors worried that this would actually have an adverse effect on their patients' health. It is far easier to pop a pill than it is to exercise or commit to a healthier eating plan. But **exercise, along with being an important first step to reducing cholesterol, is a vital complementary protocol for those people who are taking statins,** according to the National Cholesterol Education Program.

Statins lower LDL ("bad") cholesterol levels by slowing the production of a cholesterol-producing enzyme in our bodies. However, getting your cholesterol on track is a 2-part process—not only do you want to lower the bad LDL levels but you also want to raise your "good" HDL cholesterol. While statin drugs do have a moderate impact on HDL, adding exercise can do more. Studies show that engaging in 30 minutes of aerobic exercise, 5 to 7 days a week, can increase HDL cholesterol by 5–10% in some people. In addition, changing your diet and engaging in 60 minutes of moderate to vigorous exercise daily can result in weight loss, which will further lower LDL and can even cause plaque in arteries to shrink.

One of the most worrisome side effects of statin drugs, however, is muscle weakness, which can lead to permanent muscle damage. People who exercise may notice muscle changes far quicker than those leading a sedentary lifestyle. Catching this side effect early on can prevent further damage.

While the ultimate goal of lowering cholesterol through statins is to prevent heart disease and stroke, **exercise can affect other factors that lead to heart disease, such as triglyceride levels, blood pressure, diabetes and obesity,** which statins cannot touch. If you must take statins, getting into better shape could lower your cholesterol enough to allow you to take less potent forms of the drug, thus minimizing side effects. See us for an exercise regimen to lower your cholesterol and keep you healthy.

January 2009

Is Rock Climbing Safe for Kids?



An activity that makes you feel good and improves physical fitness? Sounds like something parents and kids would equally love. But rock climbing can be dangerous, and the thought of your child hanging 50 feet above the ground is, understandably, daunting.

Nevertheless, rock climbing offers extensive benefits for kids. Besides releasing “happy” hormones called endorphins, which cause that feel-good feeling, it is a great aerobic exercise that burns more calories per hour than casual soccer or running. In addition, climbing develops **muscular endurance and strength, flexibility, self-discipline, confidence, spatial awareness, problem solving, trust** and **communication**.

Probably the easiest and safest way to get started in rock climbing is to take your child to an indoor climbing facility. Originally designed for experienced climbers who needed somewhere to practice in the off-season, indoor climbing courses have morphed into a thriving industry where kids—and adults—can acquire climbing skills in a safe, controlled environment. Experienced instructors can gauge your child’s physical prowess, skill level and motivation for the sport. They will also teach the basic techniques necessary to ensure safety.

Rock climbing is a vigorous and physically demanding activity. In addition to significant endurance, agility and flexibility, it requires strength in seldom-used muscles in the

- **forearms,**
- **hands and fingers,**
- **legs,**
- **back** and
- **core.**

Before your child begins, we can design a strengthening program that focuses on the musculature and skill set needed for rock climbing. In addition, we can create a series of warm-up exercises your child should perform before climbing to avoid injury.

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Night Splints and Foot Pain



Night splints are **removable foot and ankle braces** designed to treat plantar fasciitis by passively stretching the Achilles tendon and plantar fascia, a dense band of fibrous tissue that runs under the foot and supports the arch. The Achilles tendon attaches the calf muscle to the heel bone and puts tension on the plantar fascia. Over time, if this tension is too great, tiny tears develop in the plantar fascia, causing heel pain and tenderness. This condition is called **plantar fasciitis**.

Pain from plantar fasciitis usually is worse first thing in the morning because most people sleep with their plantar fascia in a flexed, or shortened, position. Night splints are designed to hold the ankle in a neutral position, with the Achilles tendon and plantar fascia lengthened. One type of splint is made of a **hard plastic shell and a soft inner layer** that allows the angle of flexion to be adjusted. Another type **fits over the front of the ankle and pulls the toes upward** to stretch the Achilles tendon and loosen the plantar fascia.

Night splints are most beneficial for people who have had heel pain for more than 12 months. They work best when combined with exercises that stretch the Achilles tendon and strengthen the foot muscles. We can show you some of these exercises to do at home. Even when the pain disappears, these exercises should be performed several times a week to prevent its return.

We may suggest other lifestyle changes, along with using night splints and exercise. These include

- **reducing the amount of time spent running, jogging or standing;**
- **replacing shoes that have lost their cushioning or support;**
- **using arch supports or orthotics;** and
- **maintaining a healthy weight.**

The longer you experience heel pain, the longer it will take to treat. Through a combination of lifestyle changes, exercise and night splints, however, most people can become pain-free.