

July 2009

## Keeping Cool During Exercise



**M**any of us relish the intense, energizing feeling that comes with exercise, but we fail to think about the dangers of overheating, particularly during high-intensity exercises. While it is normal and natural for body temperature to rise when we work out, exercise requires basic attention to safety and good practice.

Overheating—also known as **hyperthermia**, **heat exhaustion** or **heat stroke**—is most likely to occur during very strenuous exercise or when a person exercises in extremely hot weather. Symptoms of hyperthermia, such as **headache**, **nausea**, **exhaustion** and **dizziness**, can range from mild to severe.

A person with heat exhaustion might also run a temperature above 103° F, even though he or she may describe feeling cold. If this occurs, seek immediate medical attention because the condition is life threatening. For milder forms of overheating, taking a cool bath, sponge bath or shower; resting in a cool area; and drinking sufficient fluids can bring down the person's body temperature and get him or her back to feeling normal.

The following precautions can help avoid heat problems during exercise:

- **wear lightweight clothing**, especially if it is hot and humid outside;
- **avoid running or other forms of intense exercise under full sun**, particularly during midday hours;
- **exercise in the cooler evening hours**;
- **take regular breaks and drink plenty of fluids**;
- **avoid caffeinated and alcoholic drinks**;
- **drink an electrolyte beverage**; and
- **do not push yourself too hard.**

Of course, your best defense against heat-related illness is prevention. Talk to us about an exercise routine that will keep you hydrated and cool while still allowing you to reach your health goals.

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## How to Get the Most from Strength-training Exercises



**B**eginning a strength-training program can be confusing. Once you have figured out how many pounds of weight to use in your exercise, you must decide how many different exercises to do, how many repetitions of each exercise set is best and how many sets to perform each time.

Of course, the number of pounds of weight you will use in each exercise should be carefully considered. If your goal is pure

**muscular strength**, start with a weight you can lift about eight times (not more), rest for a couple of minutes, then lift eight more times. On the other hand, if your goal is **muscular endurance**, pick a weight you can manage for about 12 to 15 repetitions per set.

After you do one set of repetitions, the muscles you are working should feel thoroughly tired. After a few sessions, if you feel you can do at least several more reps with no problem, it is time to increase the weight you lift.

The number of sets and repetitions you perform is equally important. For a beginner, the general recommendation is to do two sets of about 10 exercises, with eight to 10 repetitions of each exercise per set, two to three times a week. **The goal is to safely work all the major muscle groups in your arms, legs and trunk, including the shoulders, biceps, triceps, back muscles, abdominals, quadriceps, hamstrings and calves.** In addition, a good beginner's program usually includes work with both machines and free weights.

To gain the most strength, the order in which you perform the exercises is important, too. Usually, you will exercise the larger muscle groups before the smaller ones.

No matter what your fitness goals or initial fitness level, we will be happy to design a structured strength-training program to meet your individual needs. Thus, you will get the most benefits from your exercise regimen.

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## Physical Therapy Following a Femoral Fracture



**P**hysical therapy can help with most fractures, but it is especially important if you have suffered a fracture of the femur, which runs from the hip to the knee. This incredibly strong bone typically requires significant force or direct trauma to break.

A femoral fracture often requires surgery to place the bones back into position. Nonsurgical treatment usually involves holding the pieces together, so that the bone can properly heal.

Depending on your unique situation, your doctor may use

- a metal plate with screws,
- a rod through the bone or
- metal pins and a frame.

Healing, however, does not simply entail removal of the surgically implanted aids and a resumption of your normal activities. **A well-designed program of physical therapy can ensure a slow, safe and successful process of rehabilitation.** A failure to heal properly can worsen the condition and delay your mobility.

Once your doctor has given approval, you can begin range-of-motion and strengthening exercises to improve conditioning of the entire area. Stretching exercises will help restore and maintain fluidity and motion. You will perform some exercises with our assistance while others can be performed at home.

We can develop a realistic and manageable rehabilitation program for you. We will also let you know when it is safe to return to sports and similar intense activities. Gradually, you will experience a successful recovery from surgery for your femoral fracture.

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## Spinal Rehabilitation After Laminectomy



**L**aminectomy is surgery typically performed to remove pressure on spinal nerve roots, pressure that tends to cause numbness or pain in the back or legs. The underlying causes of such nerve compression can be **age-related changes to the spine, a ruptured disc, scar tissue or disc wear and tear.**

Regardless of the causes, if you undergo a laminectomy, you will typically start physical therapy within six weeks after your surgery. Full recovery can be attained in approximately four months.

On your first visit, we will use ice packs and electrical treatments to reduce pain and inflammation, along with soothing massage and other techniques to relieve muscle spasms and ease pain. Eventually, we will decide when it is safe and helpful to add more active techniques and treatments. These will include

- **cardiovascular exercises, particularly walking or low-impact exercises such as swimming, that enhance heart health;**
- **exercises that achieve improved control over the muscles that support and stabilize your lower back;**
- **exercises that use your own body mechanics to improve movement and perform activities more comfortably;** and
- **techniques that teach you how to lift items safely.**

In addition, you will acquire new habits for better mobility so that you can perform simple, everyday activities safely and proactively to prevent further injury. Depending on your career, you may have to make some adjustments to keep your back free from strain. We will show you how to perform exercises at home that will further improve your recovery after a laminectomy.

We will be happy to develop a physical therapy rehabilitation program that will complement your lifestyle, ensure that you heal successfully, and get you back to enjoying your life—healthy and pain free.

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## Treating Chronic Ankle Instability



**C**hronic ankle instability (CAI) is an uncomfortable condition in which the outer (lateral) side of your ankle feels like it might “give way” when you walk, move or even stand. If, in fact, it does “give way” with a turn or sprain, the result is lingering tenderness, discomfort and swelling. Overall, about 10% of people who suffer a sprained ankle will end up with CAI.

**Without treatment, CAI will remain and worsen, because each new sprain increases the likelihood of future sprains.** Additional ankle problems, such as arthritis, can also result from the joint’s destabilization.

A root cause of CAI is the **abnormal lengthening of one or both ligaments** on the ankle’s outer side, usually **caused by an initial ankle sprain that did not heal completely.** Athletes or ballet dancers, who use their ankles strenuously in their work, tend to have stretched ligaments and are more likely to develop CAI after a sprain.

Fortunately, in many cases physical therapy can effectively treat CAI. We can prescribe

- **exercises to strengthen specific ankle muscles to provide some of the stability the ligament once did;**
- **balance and range-of-motion exercises to lessen the feeling that your ankle is about to “give way”;** and
- **taping your ankle or wearing an ankle brace for exterior support to lessen the chance of future sprains occurring and make you feel more secure and comfortable.**

If a comprehensive physical therapy plan cannot counter CAI, surgical options to repair or replace the stretched ligament(s) are usually quite successful. But remember that physical therapy is always part of the postsurgery recuperation.

No matter what treatment you receive for your CAI, we can create a regimen of exercises to make your ankle feel more stable and relieve pain and tenderness. Thus, you will feel more comfortable when you resume your normal daily activities.