

# Back Pain

Back pain is an all-too-familiar problem that can range from a dull, constant ache to a sudden, sharp pain that leaves you incapacitated. It can come on suddenly from an accident, a fall, or lifting something too heavy, or it can develop slowly, perhaps as the result of age-related changes to the spine. Regardless of how it happens or how it feels, you know it when you have it. And chances are, if you don't have it now, you will eventually.

## Non-operative Treatments

**Hot or cold:** Hot packs, can be soothing to chronically sore, stiff backs. Heat dilates the blood vessels, improving the supply of oxygen that the blood takes to the back and reducing muscle spasms. Heat also alters the sensation of pain.

Cold may reduce inflammation in acute pain by decreasing the size of blood vessels and the flow of blood to the area. Although cold may feel painful against the skin, it numbs deep pain. Applying heat or cold may relieve pain, but it does not cure the cause of chronic or acute back pain.

**Exercise:** Although exercise is usually not advisable for acute back pain, proper exercise can help ease chronic pain and perhaps reduce its risk of returning. The following four types of exercise are important to general physical fitness and may be helpful for certain specific causes of back pain:

**Flexion:** The purposes of flexion exercises, which are exercises in which you bend forward, are to 1) widen the spaces between the vertebrae, thereby reducing pressure on the nerves; 2) stretch muscles of the back and hips; and 3) strengthen abdominal and

buttock muscles. Many doctors think that strengthening the muscles of the abdomen will reduce the load on the spine.

One word of caution: If your back pain is caused by a herniated disc, check with your doctor before performing flexion exercises because they may increase pressure within the discs, making the problem worse.

**Extension:** With extension exercises, you bend backward. They may minimize radiating pain, which is pain you can feel in other parts of the body besides where it originates. Examples of extension exercises are leg lifting while lying prone and raising the trunk while lying prone. The theory behind these exercises is that they open up the spinal canal in places and develop muscles that support the spine and reduce pressure in the disks.

**Stretching:** The goal of stretching exercises, as their name suggests, is to stretch and improve the range of motion of muscles and other soft tissues of the back. This can reduce back stiffness and improve range of motion.

**Aerobic:** Aerobic exercise is the type that gets your heart pumping faster and keeps your heart rate elevated for a while. For fitness, it is important to get at least 30 minutes of aerobic (also called cardiovascular) exercise three times a week. Aerobic exercises work the large muscles of the body and include brisk walking, jogging, and swimming.

For back problems, you should avoid exercise that requires twisting or vigorous forward flexion, such as aerobic dancing and rowing, because these actions may raise pressure in the discs and actually do more harm than good. In addition, avoid high-impact activities if you have disc disease.

If back pain or your fitness level makes it impossible to exercise 30 minutes at a time, try three 10-minute sessions to start with and work up to your goal. But first, speak with your doctor, chiropractor or physical therapist about the safest aerobic exercise for you.

**Manipulation:** Spinal manipulation refers to procedures in which professionals use their hands to mobilize, adjust, massage or stimulate the spine or surrounding tissues. This type of therapy is performed by a chiropractor and osteopath.

**Transcutaneous Electrical Nerve Stimulation (TENS):** TENS involves wearing a small box that directs mild electrical impulses to nerves over the painful area. The theory is that stimulating the nervous system can modify the perception of pain. Early studies of TENS suggested it could elevate the levels of endorphins, the body's natural pain-numbing chemicals.