

## Self-care & Non-invasive Treatment Options

There are many options for self-care and non-invasive treatment of back pain. The following information comprises some of those treatments that you and your doctor may decide would benefit you alone or in combination with other treatments, medications, or self-care strategies.

### Cold or Heat Therapy to Relieve Pain and Muscle Tension

Cold and hot compresses may help reduce pain and inflammation and allow greater mobility for some individuals.<sup>1</sup> "Some studies show that heat is an effective approach for acute nonspecific back pain."<sup>2</sup> "Heat therapy increases blood circulation, which can aid healing of damaged tissues. Heat also allows tissues to stretch more easily, resulting in less stiffness, greater flexibility, and less pain."<sup>2</sup> "To use heat therapy, take a warm bath or use warm packs, a heating pad, or a heat lamp for pain relief. Be careful not to burn your skin with extreme heat."<sup>2</sup>

"Cold or ice applied to your back can reduce inflammation and swelling by constricting blood vessels. The cold acts to slow nerve impulses and make it less likely that your muscles will contract, in this way reducing pain."<sup>2</sup> "To use cold packs, wrap an ice pack or a bag of frozen vegetables in a piece of cloth. Hold it on the sore area for about 15 minutes several times a day. To avoid frost bite, don't place ice directly on your skin."<sup>2</sup>

You can use a combination of the two methods (heat and cold) if you find this type of therapy provides more relief.<sup>2</sup>

Note: Cold and heat therapy can provide some relief for acute low back pain, but "there isn't scientific evidence at this time to prove that cold and heat are effective treatments for chronic low back pain."<sup>2</sup> Still, cold and heat therapy likely won't cause harm and may be helpful for some chronic low back pain sufferers.<sup>2</sup>



### Pain Medications to Relieve Your Discomfort until Inflammation Subsides and the Body Heals Itself

Effective pain relief may involve a combination of prescription drugs and over-the-counter remedies.<sup>1</sup> These may include over-the-counter and/or prescription forms of pain relievers and anti-inflammatory medicines,<sup>1</sup> including aspirin, naproxen sodium (Aleve), and ibuprofen (Advil, Motrin IB, others). Topical counterirritant creams or sprays could include products such as Bengay, Icy Hot, and capsaicin (Zostrix), which stimulate the sensory receptors of heat or cold to counter or cover up pain (some may also contain salicylates to reduce inflammation). Low doses of anticonvulsants (used in people with back pain in conjunction with leg pain) and antidepressants (used to increase levels of the neurotransmitter serotonin, which is associated with pain control) may also be used. In select cases, narcotic medications (opioids) may be prescribed to treat low back pain, but severe side effects may result; the benefits and drawbacks should be seriously discussed with your doctor.<sup>2</sup>

### Exercise (with or without Physical Therapy)

Although it may seem counterintuitive to get active and exercise rather than rest when you have back pain, "physical activity plays a strong role in recovering from back pain and particularly in helping to prevent future pain and loss of function."<sup>2</sup> Bed rest is recommended for only one to two days at most; prolonged rest can make back pain worse and decrease function. Individuals should resume activities as soon as possible.<sup>1</sup> In fact, "exercise may be the most effective way to speed recovery from low back pain and help strengthen back and abdominal muscles."<sup>1</sup> Exercise doesn't appear to increase the risk for future injuries and may help prevent back pain at work and elsewhere.<sup>2</sup> "Improving the strength, endurance, and function of your back helps minimize the chance of recurrence of back pain."<sup>2</sup>

“Benefits of a physical activity program may include:

- pain reduction,
- strengthening of weak muscles,
- stretching of contracted muscles,
- decreasing mechanical stress on your back,
- improving your fitness to prevent injury,
- stabilizing your back,
- improving your posture,
- improving your mobility,
- decreasing the rate and severity of recurring back pain, and
- allowing quicker recovery from future flares of back pain.”<sup>2</sup>

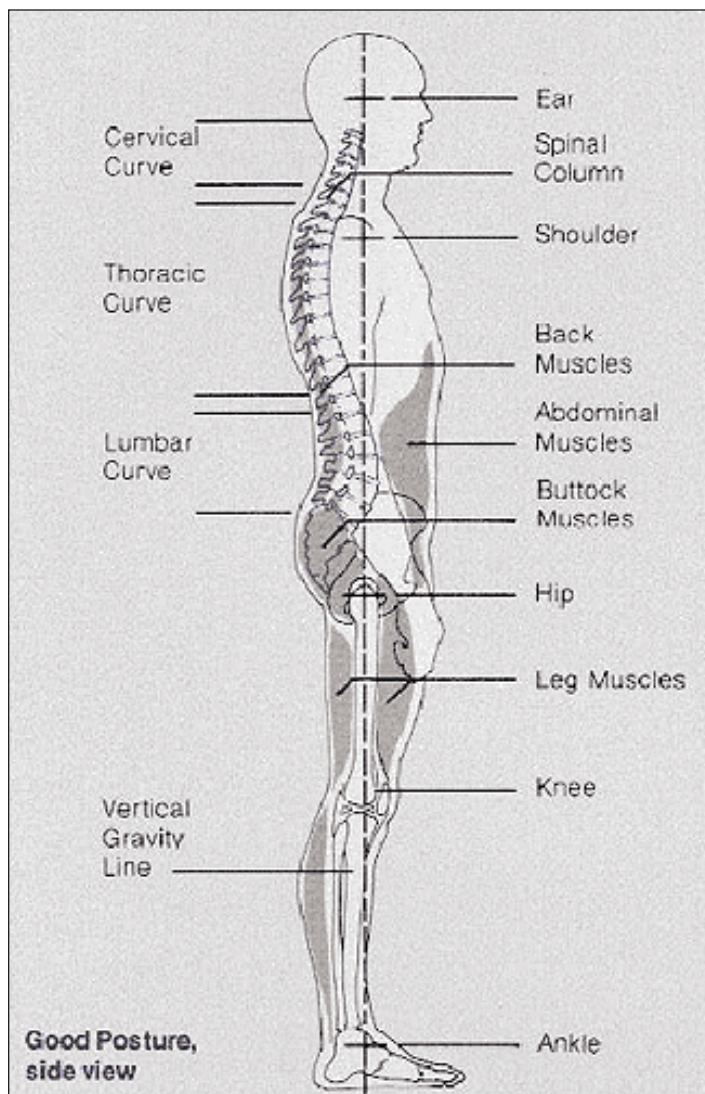
“Physical activity can include one or many among a wide range of exercises that you do in the presence of a physical therapist, or exercises that you do on your own at home. An exercise program can include any or all of the following components: flexing, stretching, endurance training, strength building, and aerobic. Supervised programs that include stretching and strengthening exercises, which don’t specifically target the back, are more beneficial in relieving chronic low back pain and improving function. Your doctor or physical therapist can tailor an exercise program to meet your individual needs. There is no one-size-fits-all approach. Exercise programs are individualized because people have different levels of pain and differing injuries that caused the pain initially.”<sup>2</sup> To prevent back pain, you may want to incorporate some [back exercises](#) that increase strength and flexibility into your physical activity routine. Consult your doctor about the best exercises for you.

## Using Good Body Mechanics

Part of a comprehensive physical activity program includes using good body mechanics to improve your posture and decrease mechanical stress on your back.<sup>2</sup> Whether you are doing heavy lifting, sitting at a desk, standing at a counter or cash register, or doing household chores, concentrating on good body mechanics can help prevent back pain.

“Good posture is important because it helps your body function at top speed. It promotes movement efficiency and endurance and contributes to an overall feeling of well-being.

Good posture is also good prevention. If you have poor posture, your bones are not properly aligned,



**Source:** American Physical Therapy Association (2009). The secret of good posture [on-line]. Retrieved April 22, 2009. From [http://www.apta.org/AM/Images/APTA\\_IMAGES/ContentImages/ptandbody/Posture/Posture.pdf](http://www.apta.org/AM/Images/APTA_IMAGES/ContentImages/ptandbody/Posture/Posture.pdf).

and your muscles, joints, and ligaments take more strain than nature intended. Faulty posture may cause you fatigue, muscular strain, and, in later stages, pain. Many individuals with chronic back pain can trace their problems to years of faulty postural habits. In addition, poor posture can affect the position and function of your vital organs, particularly those in the abdominal region.”<sup>3</sup>

You can [check your posture](#) and improve or maintain it by learning [correct sitting and standing positions](#). You can also do [exercises to maintain or strengthen the lower abdominal muscles](#), which are so important for good posture, and use some [practical postural tips](#) at work and home to prevent or reduce back pain and maintain good posture.

## Intermittent Use of a Back Brace to Support the Spine

“The rationale behind braces is that they may support your abdomen and take some of the load off your lower back, they may restrict motion, and they may improve posture.”<sup>2</sup> Only intermittent use for just a few hours a day is recommended, however, since extended or constant use can lead to atrophy (wasting away) of some of the muscles that support the spine.<sup>2</sup>

## Electrical Stimulation

“Transcutaneous electrical nerve stimulation (TENS) delivers a tiny electrical current to key points on a nerve pathway. The current, delivered through electrodes taped to your skin, isn’t painful or harmful. It’s not known exactly how TENS works, but it may stimulate the release of pain-inhibiting molecules (endorphins) or block pain fibers that carry pain impulses. However, it’s unclear whether those who benefit from TENS achieve relief by some direct effect on their nervous system or from the belief that they will benefit from the therapy (the so-called placebo effect). Some people with chronic pain use TENS to help them function with less discomfort. But several studies have concluded that TENS has not been proved effective in relieving chronic low back pain.”<sup>2</sup>

## Spinal Manipulation

In this treatment, the health practitioner uses his or her hands to apply leverage and force to the joints in the back and a series of exercises to adjust spinal structures and restore back mobility. These techniques are commonly performed by chiropractors, physical therapists, physical therapists, and osteopathic doctors.<sup>2,4</sup>

## Cognitive Behavior Therapy

This type of therapy involves talking through and identifying unhealthy, negative beliefs and behaviors and replacing them with healthy, positive ones. “It’s based on the idea that your own thoughts determine how you behave. Even if an unwanted situation hasn’t changed, you can change the way you think and behave in a positive way. The therapy may have a role in the case of chronic low back pain for which no specific physical cause is evident....Cognitive behavior therapy has been shown to be effective in relieving pain and improving function as one component of back care.”<sup>2</sup>

### Sources:

1. National Institute of Neurological Disorders and Stroke (2009). NINDS back pain information page [on-line]. Retrieved April 22, 2009. From <http://www.ninds.nih.gov/disorders/backpain/backpain.htm>.
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