

Back Pain Relief

Back pain, it's hard to live with but it's something everyone is likely to deal with at some point. Lower back pain is one of the top 10 reasons patients seek care from a family physician.¹ In fact, it's one of the most common medical problems, affecting 8 out of 10 people at some point during their lives.²

What causes lower back pain?

It's not often that just one event actually causes your lower back pain, although it may seem that way. More often than not it is a series of "micro injuries" (small falls, muscles pulls, overuse during activity). You probably don't even remember them happening but they add up over time.

It's All Connected

The muscles, tendons, ligaments, and joints in your body act as links in an interconnective chain, working together to allow you to accomplish basic motions like sitting, walking, and running. If any one of these links is injured or not functioning properly the entire chain suffers. At times a tight or sore muscle will recruit other muscles to pick up the slack so you may not realize pain right away, but these other muscles are not made to pick up the slack for very long and "chain reaction injuries" can occur.



Muscle Imbalances

Muscle imbalances occur when muscle strength and functioning along the interconnective chain is not equally efficient. A muscle may be shortened and tight, or weak and therefore is unable to "relax" or contract when needed. Or a muscle or group of muscles may become chronically "over stretched" and weak and are unable to contract when needed. This imbalance modifies body movement, putting strain on muscles, tendons, ligaments and joints. The end result is often lower back pain.

The High Cost of Back Pain

One third of all disability costs in the United States are due to low back disorders.³

Americans spend an estimated \$50 billion each year on diagnosing and treating low back pain each year.²

Back pain is a leading contributor to decreased productivity and missed work.

The World Health Organization (WHO) estimates that global prevalence of lower back pain could be as high as 42%.

Repetitive Motion

We've all heard of carpal tunnel syndrome, but your hands aren't the only body part that suffers when you sit at your computer all day or spend hours in a car. Any activity in which you perform a motion over and over again for extended periods of time puts stress on your body, increasing the chance of developing repetitive motion injuries (RMIs) – particularly in your back. We think of repetitive motion as doing a job over and over but individuals who sit at desks or those who stay in a seated (driver) or standing position (clerk or nurse) for extended periods of time are extremely likely to suffer from RMIs. Muscular pain is the most common symptom of RMIs, but you may also experience swelling, tightness/stiffness, tingling or numbness, and weakness.

While only your doctor can fully diagnose the cause of your low back pain, you can however identify muscle imbalances or repetitive motions that may be causing your pain. Avoiding these or putting a plan in place to negate them /remedy them is a good first step towards finding relief.

Preventing Pain Before It Begins

Since pain occurs *after* the imbalances arrive, not before, relying on pain as the only indicator that your interconnective chain may be imbalanced or overstressed could lead you to a life of back problems. While statistically it is likely that you will suffer from back pain at some point in your life, taking preventative measures may help reduce the severity of the strain and positively impact recovery time.



Keeping your posterior chain (calves, glutes, hamstrings and lower back) strong and flexible is one of the best things you can do to prevent back pain. Exercises that increase balance, flexibility and strength can decrease your risk of injuring your back, falling, or breaking bones.⁵

Long-Term Back Pain Relief

Any sufferer of back pain will tell you that their immediate objective is to reduce pain and restore mobility. While the natural tendency may be to rest, exercise may be the most effective way to speed recovery from low back pain. A Finnish study found that persons who continued their activities without bed rest following the onset of low back pain appeared to have better back flexibility than those who rested in bed for a week.⁶

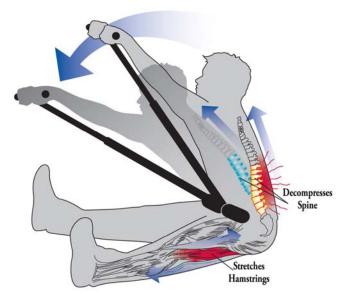
Exercise, including stretching and strengthening of the muscles along the posterior chain (calves, glutes, hamstrings and lower back) has been shown to benefit many lower back pain sufferers by restoring muscle balance, strength and flexibility. ^{5, 7}

- Strengthen your core: Not surprisingly, a person in good physical condition will generally reduce their risk of back injuries while the risk for those with weak core fitness is nearly doubled. Your core is made up of much more than your abs. So be sure to focus on the bigger picture. True core exercises work both your posterior chain and anterior chain (abdominal muscles) to increase your strength and flexibility.
- Increase flexibility: By stretching the muscles in the posterior chain and anterior chain, you can maximize your flexibility and drastically reduce your risk of muscle imbalance injury. Key muscles to target include the gluteus maximus, piriformis, the iliotibial (IT band) and hamstrings. Tight hamstrings can cause the hips and pelvis to rotate back flattening the lower back and causing back problems.
- Work on coordination and balance: Just walking regularly for exercise can help you maintain your coordination and balance. Performing balance exercises can also help to keep you steady on your feet and reduce the risk of micro injuries.
- Check the foundation: Your feet are designed to protect you against the shock your body feels when you take a step. Every time the heel of your foot hits the ground, a shock wave travels up through your body, all the way to your head. A healthy body will absorb this shock. But if your feet are not in their correct functioning position, more of this shock is allowed to move through the body to weaken other joints including the hips and spine. So be sure that your feet are healthy, that your arches are properly supported and your shoes are providing maximum shock absorption.

A Medically Proven Solution

Originally developed for use by physical therapists, the CoreStretch[™] was developed to provide the deepest, most effective way to stretch your posterior chain and restore muscle flexibility and interaction, thereby, increasing range of motion, reducing pain, preventing further injury, and speeding up recovery. In fact, studies have shown the CoreStretch to be an effective way to stretch the hamstrings and contribute to posterior chain flexibility.

Unlike conventional stretching methods that force the back to curve, the unique design of the CoreStretch decompresses the back, enabling a deeper, more effective stretch of the posterior muscle chain supporting your back, spine, and legs. The CoreStretch provides a stretch that both allows the tissues to relax and elongate developing the major muscle groups that make up the core. That's why in therapeutic environments the





CoreStretch is used to treat back, shoulder and hip pain, piriformis, fibromyalgia, sciatica, arthritis and osteoporosis.

Most people find that just a few minutes of stretching every day with the CoreStretch reduces the pain associated with RMIs and improves quality of lifeis a light-weight and portable stretching device that takes the guesswork out of stretching your back muscles and relieves the pain associated with RMIs

Comprehensive

The CoreStretch provides the same instant decompression and relief you get with inversion tables by creating a natural, safe traction that you can control but goes beyond the immediate relief to become part of a more comprehensive program that delivers long-term repair. The three-plane swivel enables up-and-down, side-to-side, and twisting motions for the entire posterior chain -- back, hips, hamstrings, shoulders and glutes. And with three levels of fitness and 10 sizing options, the CoreStretch provides the optimal stretching tool which can easily and effectively be used in seated, standing or floor positions.

Portable

Light-weight and collapsible, the CoreStretch can conveniently be taken to the office or job site to be used daily, even several times a day as a fast an effective way to break the repetition and combat RMIs.

- Bigos SJ, Bowyer OR, Braen GR, Brown K, Deyo R, Haldeman S, et al. Acute low back problems in adults. Clinical practice guideline no. 14 (AHCPR publication no. 95-0642). Rockville, Md.: U.S. Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research, December 1
- 2. NIH: National Institute of Arthritis and Musculoskeletal and Skin Diseases 1994.
- 3. Kuritzky L, Carpenter D. The primary care approach to low back pain. Prim Care Rep 1995; 1:29-38.
- 4. Mayo Foundation for Medical Education and Research (MFMER). Randy A. Shelerud, M.D.
- 5. Hayden JA, van Tulder MW, Malmivaara A, Koes BW: Exercise therapy for the treatment of non-specific low back pain. *Cochrane Database Syst Rev.* 2005;(3):CD000335.
- 6. NIH Publication No. 03-51 Prepared by: Office of Communications and Public Liaison National Institute of Neurological Disorders and Stroke National Institutes of Health, 2010
- 7. Consult your doctor before starting any exercise program. A fitness assessment may be necessary prior to choosing certain activities.