

# **Preventing Low Back Pain**

By: Michael Last, MPT, CMTPT Orthopedic and Spine Therapy of Green Bay

Low back pain is one of the most disabling physical disorders facing Americans today. Each year, million of hours and dollars are spent *reactively* treating new occurrences and old recurrences of low back pain. It has been shown that 80% of Americans will eventually experience significant low back pain. Many times, the pain can be prevented with some *proactive* activity. Remember the saying, "An ounce of prevention is worth a pound of cure."

The most common findings with individuals complaining of low back pain (LBP) include: tight hamstring (back of the thigh) and hip flexor muscles (front of the hip), repetitive bending or twisting, and trying to perform more rigorous activity than usual. Simple exercises can help prevent the onset of LBP or recurrent episodes of previous pain.

### #1 Participate in a regular aerobic fitness program

This will improve overall health, help keep a lean frame and improve muscle tone. Meeting these criteria will allow general activity to be performed with greater ease and decrease back strain. Many different activities can be performed in this area, indoors or out, year-round. Talk with your physician before beginning any exercise program.

### #2 Maintain ideal body weight

Increased bodyweight creates more stress on the low back, as compressive forces and the forces needed to keep upright without falling forward are dramatically increased. Abdominal weight also tends to pull the back into excess lordosis, which is the normal forward curve in the lower back. Both conditions increase your risk of injury.

### #3 Stretch the hamstrings

This muscle group is in the back of the thigh, and when tight will cause overuse of the lower back. In some instances, they may also cause a loss of the normal lordosis in the low back.

### #4 Stretch the hip flexors

This muscle group runs from the upper front of the thigh and attaches directly to the lower spine. This is the most common muscle restriction that I have found in my practice, and it will lead to excessive wear and tear in the lower back over time, especially in the discs. Tight hip flexors will also inhibit, or make the strong gluteal muscles of the buttock work poorly. This predictably causes some type of LBP or hamstring pain.

### #5 Maintain your back-bending range of motion

One study has shown that the average person forward bends 2000-4000 times each day! This not only puts abnormal stress on the muscles of the back, but also the discs and ligaments which help to stabilize the spine. There are certain underlying conditions that can be made worse with performing back-bending exercises, so consult a qualified health care practitioner before starting these exercises.

## #6 Correct your posture

Posture is the one thing we have all been nagged about since childhood. Who knew that it was *actually going to cause pain?* Slouched posture, like repeated forward bending will put too much stress on the soft tissue of the back-ligaments, muscles, discs and tendons. When we get out of the positions that our body was set up to function in, we predispose it to tears, strains and other spinal problems.

### #7 Sleep on a good mattress

The position of your back while you are sleeping is, by definition, part of maintaining good posture. The ideal mattress is firm, but supportive. A mattress too firm will cause you to flatten out the normal curves in your back, while a mattress that is too soft will cause excessive bending in the areas where you carry the most weight. This generally includes the abdominal area in men and pelvic region in women.

### #8 Relax!

Stress, both physical and psychological, will increase muscular tension and can contribute to muscular overuse. Relaxation techniques, stretching and exercise will help with controlling psychological stress, anxiety, and muscular balance.

### **#9 Balance your muscles**

Muscle groups that are tighter on one side than the other will cause asymmetrical stress on the spine, pelvis or any other joint. This will lead to unequal wear and tear, as well as increased risk for producing spinal dysfunctions.

#### #10 Do not smoke

Some ingredients given off with primary or second-hand smoke attach much better to your blood cells than oxygen does. Oxygen is a necessary component of the healing process. If you have less oxygen available to injured areas (or healthy ones), you will heal slower. This can prolong the time taken for recovery and therefore increase pain and cost of recovery.

### In Summary...

The number one factor in preventing and treating LBP is lifestyle. At times, physical therapy or other interventions are required to help with medical treatment of LBP. However, you can take responsibility for your own health and the well-being of your back by being proactive.

Keywords: low back pain, back, pain, physical therapy, thigh, hamstring, hip, hip flexor, fitness, weight-loss, relaxation, mattress, how to choose a mattress, posture,