# Newsletter

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# **Basic Back**

Astrid Van Den Broek (Homemakers Magazine Sept. 2004)

Your mother was right: bad habits, such as slouching, can cause bad backs. But you can have a healthy and pain-free back forever. Here's how.

Your pencil drops on the floor and when you bend down to pick it up a bolt of pain shoots up your back. You're frozen in a 45-degree angle. How could picking up a pencil prompt such agony? It may seem sudden, but the condition that triggers the pain was most likely building up over time. That's because most of us take our backs for granted until something like this happens. We slouch on the couch, bend at our waists instead of our knees, sleep on our stomachs and engage in all sorts of other bad back behaviour.

Given our habits, it's not surprising that back pain is so common. According to an Environics Research Group poll, 64 per cent of Canadians have experienced back pain in the past 12 months. Close to 70 per cent of those surveyed described their pain as moderate to severe and women accounted for more than half of that group. Dr. Claire Bombardier, a professor of medicine, director of rheumatology at the University of Toronto and senior scientist with the Institute for Work & Health, adds that roughly 10 per cent of us suffer from back pain at any given time and that pain may get worse as we age.

So is it inevitable that we'll end up with back pain? No. In fact, back pain can be prevented. Regular exercise and good posture can go a long way toward ensuring we have strong, healthy backs into our 50s and beyond.

# **Common Pain Culprits**

Back pain is rarely caused by disease, explains Bombardier. "The majority of cases are brought on by how we move." Other factors include strains and disc injuries as well as pregnancy, when the curves of your spine are thrown out of line by the extra weight in front of you. In addition, relaxin, a hormone that loosens up your ligaments so you can give birth, forces the lower-back and pelvic muscles to work even harder to stabilize your back. But the real brunt of the pain starts after your baby is born, due to the weight gained during pregnancy and the repeated motion of lifting and carrying your little one while trying to do other tasks, such as reaching for items on a shelf, at the same time.

While pregnancy can set the stage for back pain, it certainly doesn't means you'll be saddled with problems for life. The most common pain culprit by far is daily wear-and-tear over time.

Typically, back pain is triggered by the culmination of incorrect movements during our day-to-day activities, such as gardening and housework, says Tia Toner, a physiotherapist at St. Mary's University clinic in Halifax. Standing or sitting for prolonged period of time (30-to 60-minute stretches) tires out our muscles and results in slouching. Bad lifting habits and awkward body movements, such as twisting your torso while your feet stay planted on the ground, can also cause back pain.

#### **Patterns of Pain**

Dr. Hamilton Hall, an orthopedic back surgeon, a professor in the department of surgery at the University of Toronto and medical director of CBI Health clinics in Toronto, outlines four predictable patterns of back pain in his book *Consultation with a Back Doctor* (McClelland & Stewart, 2003).

Back-dominant pain in the back, buttock, hip and groin area that worsens in forward-bending movements is the most common type. It can be a constant or intermittent pain and fortunately, is alleviated with exercise.

Back-dominant pain that is aggravated upon extension but never worsens with forward-bending movement can also be managed with proper exercise. It is always intermittent.

Constant leg-dominant pain is often referred to as sciatica, in which the pain is aggravated by moving your back. Hall does not recommend prolonged bed rest, but rather lying down in any position that reduces leg pain for 20 minutes every hour with your knees drawn up and pillows under your head and hips. If you are lying down on the floor, it's best to put your feet up on the seat of a chair. More than 80 per cent of back-pain patients get better within several weeks when they heed this advise.

Intermittent leg-dominant pain is brought on by everyday activities and typically affects the elderly. It is not a shooting pain but rather a feeling of fatigue and tiredness or achiness. Bending forward in a chair helps to prevent or alleviate it.

#### **Preventive Measures**

Hall says three out of four of us may suffer one of the four types of pain discomfort he describes over our lifetimes, and Debby To, a physiotherapist in Vancouver, says 60 per cent of us will also experience recurring pain. That's because we often slip back into old habits. Another reason for recurring pain is that once we are able to move again pain-free, we soon forget to care for our backs and use proper lifting techniques.

But if you get into the habit of practicing the following four preventive measures, you may not experience back pain at all-or ever again. Here's what to keep in mind.

Always bend your knees when lifting heavy objects. Greg Kawchuk, an assistant professor in the faculty of kinesiology at the University of Calgary, recommends "keeping a straight back like you're sliding your back down a wall, picking up the item and standing up like you're sliding back up that wall." If you're carrying a heavy box, hug it close to your chest (the farther away from your body it is, the heavier it feels) and use your leg muscles to lift. "and keep exercising," he adds. Activating your lower abdominal muscles, regular aerobic exercises, good posture and proper lifting techniques can lower your chances of having back pain by 50 per cent, says Toner.

Avoid standing or sitting in one position for too long. Take a break, move or stretch. For example, if you sit cross-legged while watching TV or reading, switch your legs often.

Avoid sleeping on your stomach. This will only exaggerate the small of your back. Sleep on your back or on your side with a pillow between your knees to keep your hips level.

## Stretch and Strengthen

You can also increase your odds of preventing back pain by staying active and following an exercise program to stretch and strengthen your muscles. "The stronger the muscles are, the better you get through the day without tiring them out," says Kawchuk. Stretching your spine improves your posture by elongating your back says Miranda Esmonde-White, a former ballerina and creator of the DVD's *Classical Stretch: Back Pain Relief* and *Classical Stretch: Full-Body Workout.* "But you also have to strengthen your back," she says. "If you just stretch without strengthening, you're like a gummy bear falling over. Strengthening your stomach and back pulls your spine free." The abdominal muscles prop up your lower back because along with the lower back muscles, they fashion a corset to embrace your back and spine. Here are four simple stretching and strengthening exercises to try.

Single knee to chest: Lying on your back with your knees bent, pull one knee toward your chest until you feel a comfortable stretch in your lower back and buttocks. Hold for 30 seconds. Repeat with opposite knee. Repeat two to three times per side.

*Prayer stretch:* Get down on your hands and knees. Lower your buttocks into a seated position over your heels while keeping your hands on the floor. You can shift your hands toward the right or left to target different areas of the back. Hold for 30 seconds. Repeat two to three times on each side.

*Pelvic tilt:* Lying on your back with your knees bent and your feet flat on the floor, contract your stomach so your back lowers onto the floor (place your hand next to the small of your back to feel). Hold each contraction for 10 seconds. Do three sets of five repetitions.

Lower abdominal exercise: Assume pelvic tilt position; lift one foot off the floor until the thigh is vertical. Then lift the other foot to the same position while holding the stomach tight and in and keeping the pelvic tilt position. Hold one leg in this position while touching the other foot to the floor and sliding the leg out so the knee and hip are straight; hold for 10 seconds. Then slide your leg back to the starting position. Keep your abdomen flat, and your pelvis and back still while moving your legs. Keep breathing. Do three sets of five repetitions.

# Your plan for pain management

What should you do if back pain does strike? "Ice the pain within the first 24 to 48 hours to reduce the swelling." Says Tia Toner, a Halifax physiotherapist. If you are really suffering lie on the floor with your feet on the couch. At bedtime, lie on your side with a pillow between your knees. If your pain does not subside or gets worse after 24 to 48 hours, consult a health-care professional.

If pain is manageable and you're able to stay upright, Miranda Esmonde-White, a former ballerina, recommends moving. "Staying still is the wrong thing to do." She says. Try to sway your spine to the side, or wiggle it. "By moving it gently, you're nourishing the affected area because the blood circulates," she adds. "Even a tiny stretch will get the blood going."

But if movement has you gritting your teeth, avoid it until your condition improves. You should feel an improvement with 24 to 48 hours with a full recovery in four weeks.

## Back-pain-proof your daily routine

Try these tips during everyday chores: Put one leg inside the trunk or on the fender when hauling bags out of the trunk to avoid reaching in and forcing your back to do all of the lifting.

Vacuuming: Use an upright style vacuum; don't use the kind that you hold like a hockey stick with one hand on the top and the other in the middle of the wand. Vacuum in short, controlled strokes.

Emptying the dishwasher: Place one hand on the counter to support yourself, or kneel on the floor with a straight back.

Chopping vegetables: If you are at a countertop, put one foot on a stool. This is a good practice for any task that demands periods of standing.

Making the bed: Use one hand for support when bent over, so your arm supports your back muscles, rather than counting on them to hold you at that angle.