



the new way to beat back pain

Surprising
info on
what causes
the ache—
and how
to make it
stop.

BY STACEY COLINO

We're all running around like crazy these days—cramming errands into already hectic schedules, coping with job stress, and picking up young children (literally!)—so our backs have a pretty heavy burden to bear. It's no wonder lower-back pain is the second most common reason (after colds) that people under 45 see a doctor. In fact, 90 percent of Americans experience backaches at some point, usually starting between their 20s and their 40s, says Todd J. Albert,

M.D., professor and vice chairman of the department of orthopaedic surgery at Thomas Jefferson University Medical College and a director of reconstructive spine surgery at the Rothman Institute in Philadelphia.

Fortunately, you don't have to put up with a back that's always hurting. The vast majority of recurrent backaches get better *without* surgery or other serious treatments. Here we've identified some unexpected causes of back pain and ways to find fast relief:

CULPRIT #1 Smoking

A recent study at the University of Pittsburgh found that smokers report more severe as well as longer-lasting backaches than nonsmokers do. Why? One explanation is that "nicotine constricts blood vessels, reducing the availability of nutrients and oxygen to the disks in the back," says Jeffrey Gross, chief of rehabilitation medicine at Beth Israel Medical Center in (continued)



Most backaches occur in the lower back, near the base of the spine.

New York. Research has found that this nutrient deprivation can accelerate disk degeneration, causing back pain.

THE FIX: Kick those butts now. Support groups, nicotine patches, gums, inhalers, and nasal sprays all can make breaking the habit a little easier. Ask your doctor which strategy is right for you, or go to the Center for Disease Control's website, at cdc.gov/tobacco/how2quit.htm, for advice.

CULPRIT #2 Being out of shape

If your ab and back muscles are weak, your spine may not be getting the support it needs, making it more susceptible to injury, notes Nayan Patel, a physician specializing in physical medicine and rehabilitation at the Texas Back Institute in Plano.

THE FIX: Make exercise a priority. Walking and riding a stationary bike are good activities for strengthening the back because they're low- or no-impact, meaning that you won't risk injury. So are stretching and strengthening the muscles in the abdomen, hips, and back (see "Smart Back-Saving Moves," page 60).

CULPRIT #3 A worn-out mattress

A poor mattress makes your body form a C—an unnatural curve that shifts

your spine out of its normal alignment, leading to wrenched muscles. And that's true whether you're lying on your back, side, or stomach.

THE FIX: Inspect your mattress for frayed edges, worn fabric, sagging in the middle, and other signs of wear and tear. If you see any of these, consider replacing it. When shopping for a new mattress, look for a firm one with a soft covering that cushions the contours of your body and provides gentle support. Says Patel: "You want one that's not too soft or too firm, something that conforms to your body. It should maintain even support and pressure across the shoulders, hips, and legs."

CULPRIT #4 Carrying around extra pounds

That additional weight places added stress on your back muscles. "Your center of gravity—where the motion of our entire body is centered—is located right around your lower back. If you're carrying any extra pounds, that delivers a lot more force on the spine," Patel explains. This makes the muscles work harder to perform everyday activities. If the back muscles can't handle all the lifting, your disks and spine feel the strain.

THE FIX: Slim down by cutting 250 calories from your daily diet and

THE RIGHT WAYS TO FIND RELIEF

For when your back is out of whack, below are several measures that can ease the pain while you heal. If you don't feel better within two weeks of self-treatment, or if the pain worsens, see your doctor.

● **ICE AND HEAT:** Apply ice for the first 48 hours after a back injury to calm muscle spasms and reduce inflammation, physician Patel advises. After that, use a heating pad for 15 minutes every few hours until it feels better; the heat will encourage the flow of blood to the injured area, facilitating the healing process.

● **MEDICATIONS:** Nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen and naproxen, are often recommended to relieve inflammation and pain. Newer prescription NSAIDs, such as Vioxx and Celebrex, offer a stronger anti-inflammatory with less stomach upset. Your doctor may prescribe a muscle relaxant (such as Soma) or narcotic painkiller (e.g., Vicodin), but know that these can be quite sedating and addictive, so they're not recommended for long periods (see "My Doctor Got Me Hooked on Drugs," page 152).

● **"TINGLY" CREAMS:** Heating and cooling creams work by counterirritation, explains Gross of Beth Israel Medical Center: "The nervous system is so busy feeling the hot or cool sensation that pain signals don't pass as easily to the brain," he says.

● **MASSAGE:** A trained professional kneading and applying pressure to the muscles of the back can decrease muscle spasms and stimulate the release of pain-relieving endorphins. Not only does this relieve pain in the moment, but it also helps heal a back injury. Rather than go to a spa for a massage, ask your doctor for a recommendation.

EXPERTS WHO CAN HELP

● **Chiropractors:** Though they're not M.D.'s, they can help reduce the pain and suffering associated with backaches. "Their manipulation of the spine releases pressure in the back, which seems to relax the surrounding muscles and soft tissue," Patel notes.

● **Osteopathic doctors:** Because these physicians are trained to understand anatomy and movement, they can manipulate the spine, as chiropractors do, but also adjust muscles that are in spasm to facilitate healing.

● **Physical therapists:** They aren't doctors, but their training in joint motion, muscle strength, and posture allows them to recommend exercises for your back and show you how to perform everyday activities properly.

● **Orthopaedic surgeons:** As doctors who specialize in the muscular and skeletal systems, they can diagnose your back problem and then recommend a course of therapy, which may involve medication, exercise, or possibly surgery.

burning an additional 250 calories through exercise. A brisk 45-minute walk during your lunch hour will help you lose one to two pounds a week, says John Foreyt, Ph.D., director of the Behavioral Medicine Research Center at Baylor College of Medicine in Houston, Texas. For smart calorie-cutting advice, go to efit.com.

CULPRIT #5 Lifting objects or your kids incorrectly

Most of us tend to bend at the waist rather than squat when lifting—a big mistake. That's because bending at the

waist requires you to lift weight using your back muscles instead of your leg and stomach muscles, which are stronger, explains Winifred D. Bragg, a physician specializing in physical medicine and rehabilitation with Orthopaedic Associates of Virginia.

And a word of caution for moms: Wearing a baby carrier in the front can cause back pain by throwing your spine out of its natural alignment. As soon as your child is old enough, use a back carrier to decrease the strain.

THE FIX: When picking up a child or heavy object from the floor, squat and bring the object close to your body, tighten your stomach, and lift with your leg muscles. To protect your back when you lift your toddler, make sure he's facing you with his arms around your upper body and his legs around your waist; resting him on your hip places too much pressure on your back.

CULPRIT #6 High heels

They may be stylish, but they often cause back pain, Bragg says: "High heels—especially those with a thin heel or higher than two inches—thrust the body forward and throw the spine out of alignment, putting greater strain on the ligaments, lower-back muscles, and disks in the back."

THE FIX: For all-day wear, stick with shoes that have a wide heel base and a heel no more than two inches high, Bragg says. Ditch shoes that cause you to walk with a pronounced arch to your back, make your feet wobble, or alter your natural gait noticeably. If you must wear sky-high heels, save them for a night out, not a day at the office. □

Smart Back-Saving Moves

These exercises support your back by strengthening the lower-back muscles, hip flexors, and abs, says Joseph Guettler, an orthopaedic surgeon at William Beaumont Hospital in Royal Oak, Michigan.

PELVIC TILT: Lie on the floor with your knees bent at a 90-degree angle and your feet flat on the floor; gently tilt your pelvis forward by tightening your abs, and press your back into the floor. (The lower half of your butt will come off the floor.) Hold for three seconds, then release. Start with one set of ten repetitions and work up to 20.

KNEE TO CHEST: Lie on your back with your legs flat on the floor, then pull both knees to your chest with your hands until you feel a stretch in your lower back. Hold for five seconds, then release. Do ten repetitions. Next, repeat the same move, bringing one leg at a time to your chest (while the other leg remains straight on the floor), doing a total of ten reps with each leg, gradually working up to 20 each.

CRUNCHES: Lie on your back with your knees bent at a 90-degree angle and your feet flat on the floor. Fold your arms across your chest and curl your pelvis up slightly to flatten your back while raising your head and shoulders off the floor. Pause for a moment, then return to the starting position. Do ten reps and work up to 30 as this move becomes easier.

LEG LIFTS: Lie on your back with your left knee bent at a 90-degree angle and your right leg fully extended. With your hands flat on the floor at your sides, tighten your stomach muscles and slowly raise your right leg eight inches off the floor. Hold this position for five seconds, then lower your leg. Repeat with the other leg. Do ten reps on each side, gradually working up to 30.

BACK PAIN 911:
WHEN YOU
MUST SEE AN
M.D.

IS IT MORE THAN AN ACHE?

Most episodes of back pain will resolve on their own with appropriate treatment at home (see "The Right Ways to Find Relief," page 58). But if you experience any of the symptoms below along with back pain, get checked out by your primary-care doctor ASAP; you may be suffering from a serious medical problem, such as an infection, a nerve injury, or, in rare cases, a tumor, says Jeffrey Gross of Beth Israel Medical Center:

- ✓ A fever or gynecological symptoms, such as mid-cycle bleeding
- ✓ Numbness, tingling, or weakness in the legs
- ✓ Bowel or bladder problems—bleeding, burning, or loss of control
- ✓ Pain that radiates from the lower back through the buttocks and into the legs

Also see a doctor for:

- ✓ Back pain that persists or worsens over several weeks
- ✓ Back pain that results from a trauma, such as a car accident