

WHAT'S REALLY MAKING  
**your back hurt**  
WE DEBUNK TOP MYTHS SO YOU CAN FEEL BETTER FAST.



BY MAURA KELLY PHOTOGRAPHY BY DARREN SOH

**T**his morning, you probably didn't think twice about slinging a work tote over your shoulder or picking your sneakers up off the floor. But there may come a time when one of those simple motions will trigger a backache bad enough to cause you to call in sick, see a doctor or, at the very least, take a few painkillers. According to The Back Society, a local association of chiropractors and health professionals, 80 per cent of all Singapore adults will suffer back pain at some time. But with a few simple changes, you can prevent yourself from becoming a statistic. The trick, says Dr Douglas Chang, chief of physical medicine and rehabilitation at the University of California, San Diego Medical Centre, is separating the misconceptions from the facts. "A lot of the advice that's floating around out there is unhelpful or, in some cases, even harmful," he says. We asked Dr Chang and other experts to set the record straight on how to best prevent – and heal – aches and pains.

## ■ myth #1

### **Lifting heavy objects will strain your back**

Most injuries are caused not by what you pick up, but how you do it. The proper form: Squat, keeping your back straight. Grab the object, bring it close to your body, then stand. Your thigh and butt muscles should do the lifting.

Just grabbing a pen off the floor? Be careful: Twisting the wrong way can harm your back. "One of the worst moves is bending over to the side while staying seated with your feet planted on the floor," says Dr Rahul Shah, an orthopaedic spine surgeon in Winter Park, Florida. "Twisting your back in two directions at once may strain the discs that cushion your spinal vertebrae." This repetitive trauma builds up over the years and can weaken your spine. "If your back is already vulnerable," says Dr Shah, "the wrong movement could easily trigger an injury."

## ■ myth #2

### **Sitting up straight keeps your spine in line**

While your mum was right to stop you from hunching, holding yourself too erectly isn't as good

for your back as you think. "It puts a lot of stress on your discs, especially when you do it for long periods of time," says Santhosh Thomas, a doctor of osteopathic medicine and medical director of the Cleveland Clinic's Center for Spine Health in Ohio. In fact, researchers at Woodend Hospital in Scotland found that people who sat at a 90-degree angle strained their spines more than those who reclined at 135 degrees.

"A few times a day, adjust your posture," recommends Dr Shah: "Lean back in your chair with your feet on the ground. Make sure there's a slight curve in your lower back." This way, you'll distribute your body weight more evenly, as your shoulders and upper back muscles will take some of the pressure off your spine. If you often find yourself slouching at your desk at the end of the workday, consider using a cushion to support your lower back and keep your spine in alignment.

What may be even more important than sitting correctly is taking frequent breaks from your desk throughout the day, says Dr Chang. To boost circulation in your back muscles and lessen fatigue, stand up every half an hour to take a five-minute stroll, or stretch every hour. Do some of your work standing up to give your spine a reprieve. "Take a phone call on your feet," says Dr Chang, "or place a report on top of a waist-high filing cabinet so you can stand and read it."

“MOST BACK INJURIES ARE CAUSED NOT BY WHAT YOU PICK UP, BUT HOW YOU DO IT.”

## ■ myth #3

### **Most exercise are hard on your back**

Researchers from Samsung Medical Centre in Korea have found that working out at least three times a week can actually reduce your risk of developing chronic back pain by 43 per cent. "Exercise strengthens your back muscles and increases blood flow to the discs, helping them withstand daily strain," explains Dr Chang.

Hitting the gym regularly also keeps your waistline in check, which has a huge payoff for your back: A study in the journal *Spine* revealed that overweight people were nearly three times as likely to go to the hospital with a back injury than those at a healthy weight. "Even as little as an extra 2.3kg or 4.5kg can put stress on your spine,

“WHEN WORK PRESSURE RISES, PROTECT YOUR BACK BY WORKING AT LEAST HALF AN HOUR OF RELAXATION INTO EACH DAY.”

increasing your risk of injury,” says Dr Chang. Opt for low-impact aerobic exercise – such as walking, swimming, or using the elliptical machine – to strengthen your back without putting excess pressure on your discs or joints.

Still, it’s important not to do too much. Overexerting yourself – by lifting too-heavy weights or stretching past the point of comfort – is a surefire way to injure your back, says Dr Chang. There are a few things you can do to protect yourself while working out: First, warm up with at least 15 minutes of light cardio, to increase blood flow to the back muscles. Next, observe your form in the mirror when lifting weights. Your back should always be straight, whether you’re working your biceps or your legs. Finally, avoid overstretching or bouncing. “Those movements jar the spine and muscles,” says Dr Shah.

#### ■ myth #4 Back pain is always caused by an injury

Between juggling a major work deadline and planning your sister’s bridal shower, taking a time-out may seem like a luxury. But when it comes to caring for your back, it’s essential. According to a study in the *Journal of Advanced Nursing*, women who feel overwhelmed at home or at work are more than twice as likely as their calmer counterparts to have lower back pain. “Mental stress causes the smallest units of the muscle, the fibres, to tighten,” says Ulf Lundberg, a professor of biological psychology at Sweden’s Stockholm University. Over time, clenched muscle fibres wear down, upping the

risk for injury. And to make matters worse, your body’s natural response — an increase in muscle tension — can aggravate existing back problems.

So the next time you feel the pressure rising, make a point to work at least half an hour of relaxation into your day, no matter how frenzied you feel. A hot bath or shower is one of the best ways to decompress: Heat can relax your back muscle fibres. To boost the benefits even more, use lavender-scented bath beads

or soap: In a Japanese study, people who sniffed the calming scent had lower levels of the stress hormone cortisol. Your back already in knots? “Getting a massage will loosen your muscles and calm your mind,” says Prof Lundberg.

#### ■ myth #5 Alternative treatments don't work

“About 60 per cent of my patients come seeking treatment for their back pain”, says Wu Yue, traditional Chinese medicine physician at Raffles Hospital, who treats the problem with a combination of acupuncture and a special form of tui na. And for good reason: Studies suggest these treatments may be more effective than conventional physical therapy and medications in some cases. In fact, in a recent German study, half of the lower-back



#### \* when to see a doctor

Most cases of back pain go away on their own in a few days. But if yours lasts more than a week, see a physician. Most of the time, the diagnosis will be muscle or ligament strain, which heals without treatment. But in about one in 10,000 cases, the culprit is a herniated disc (when the discs between spinal vertebrae bulge or burst open). If a damaged disc presses on the sciatic nerve, which runs from your lower back down your leg, it can cause sciatica.

Years ago, doctors automatically referred people with herniated discs or sciatica to surgeons, but recent research reveals that going under the knife may be unnecessary. A study in the *Journal of the American Medical Association* found that, while surgery helped patients feel better faster, their improvement after two years was similar to those who received less invasive treatments, such as physical therapy. “Surgery should really be a last resort,” says Dr Shah.

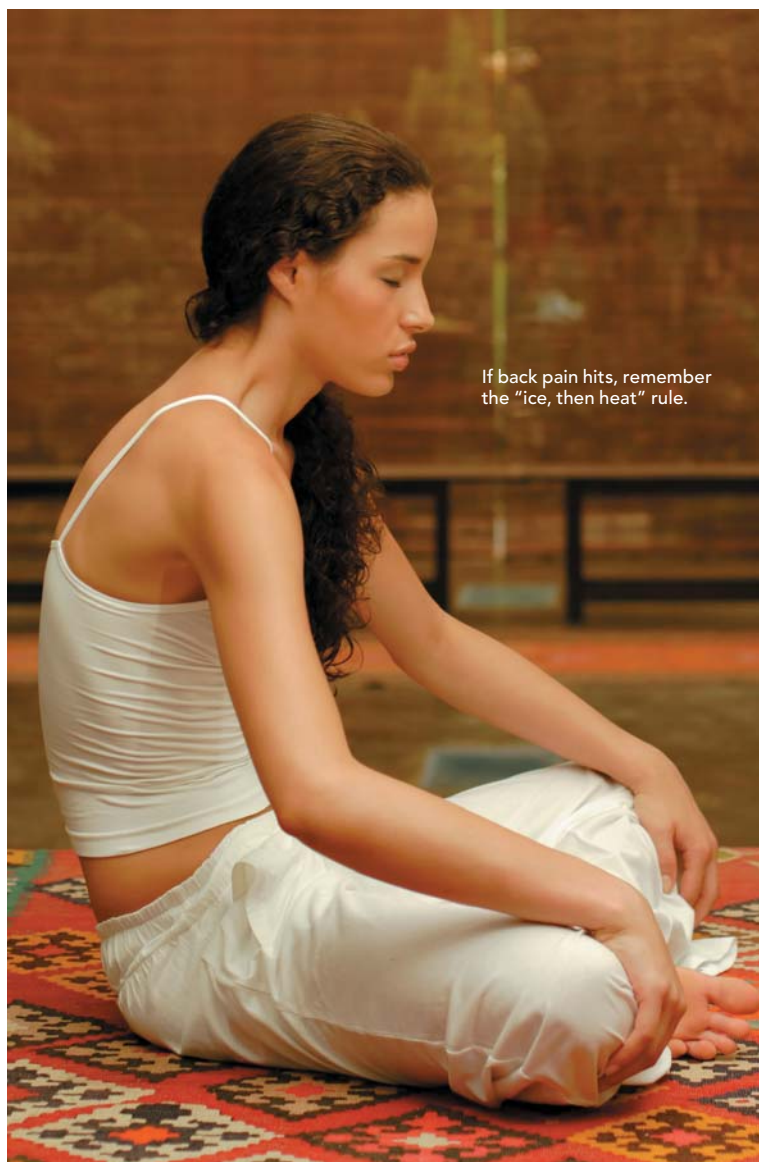
patients who received two weekly acupuncture sessions over six months reported a significant reduction in pain. Thin needles may stimulate the release of pain-relieving brain chemicals, say experts. Find a licensed practitioner from the Traditional Chinese Medicine Practitioners Board ([tcmpb.gov.sg/tcm](http://tcmpb.gov.sg/tcm)).

Research also shows that seeing a chiropractor may help you feel better faster. These practitioners believe back pain is caused by dislocations in the vertebrae. During an “adjustment”, a gentle force is applied to your spine to stretch your joints and realign them. To find a licensed chiropractor near you, consult the Singapore Chiropractic Association ([chiropractic.org.sg](http://chiropractic.org.sg)).

## ■ myth #6

### A super-firm mattress is best for your back

Actually, it might be the source of your pain. Trying to find a back-friendly bed is like playing Goldilocks: A too-soft mattress doesn't offer enough support, while a rock-hard one can increase pressure on the spine. A study in the journal *The Lancet* found that those who snoozed on a medium-firm mattress experienced less back pain – and popped fewer pain relievers – than those who slept on a harder one. Can't afford a brand-new bed? Consider buying a pad, such as those from Dunlopillo (from \$250; Dunlopillo Suites), to cushion an extra-firm mattress.



If back pain hits, remember the “ice, then heat” rule.

## \* what to do when pain strikes

ACT FAST AND YOU CAN KEEP A TWINGE FROM BECOMING AN ALL-OUT BACKACHE.

### ICE, THEN HEAT

“When you first experience back pain, apply an ice pack to reduce the inflammation caused by muscle tension,” says Dr Chang. After two days, switch to a heating pad: A study from Johns Hopkins University in Baltimore found that wearing a heated back wrap, like those from Osim (\$24; Osim stores), for eight hours a day for three days reduced the intensity of back pain by 60 per cent.

### POP A PAINKILLER

Over-the-counter anti-inflammatories, like ibuprofen (Advil) or naproxen (Aleve), can relieve the pain and stiffness caused by a back injury. But don't take them for more than 10 days in a row: Long-term use may harm your gastrointestinal tract, and even raise your risk of stomach ulcers.

### GET MOVING

Resting for more than a few days will slow your recovery. “Your back muscles weaken, which could exacerbate your pain – or cause a more serious problem,” says Dr Shah. So, even if it's uncomfortable, you should return to your routine ASAP.