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Relief for your aching back

What worked for our readers

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Who to see

About 80 percent of the adults in the U.S. have been bothered by back pain at some point. The Consumer Reports Health Ratings Center recently surveyed more than 14,000 subscribers who experienced lower-back pain in the past year but never had back surgery. More than half said the pain severely limited their daily routine for a week or longer, and 88 percent said it recurred throughout the year.

Lower-back pain disrupts many aspects of life. In our survey, 46 percent said that it interfered with their sleep, 31 percent reported that it thwarted their efforts to maintain a healthy weight, and 24 percent said that it hampered their sex life.

Where to go for treatment

When back pain goes on and on, many people go to see a primary-care doctor. While this visit may help rule out any serious underlying disease, a surprising number of the lower-back-pain sufferers we surveyed said they were disappointed with what the doctor could do to help. Although many of our respondents who saw a primary-care doctor left dissatisfied, doctors can write prescriptions and give referrals for hands-on treatments that might be covered by health insurance.

Who helped the most?

The percentage of people highly (completely or very) satisfied with their back-pain treatments and advice varied by practitioner visited.

Professional			
Chiropractor	59%		
Physical therapist	55%		
Acupuncturist	53%		
Physician, specialist	44%		
Physician, primary-care doctor	34%		
Source: Consumer Reports Health Ratings Center			

Patients with lower-back pain are faced with a confusing list of options. Our survey respondents tried an average of five or six different treatments over the course of just a year. We asked them to rate a comprehensive list of remedies (available to subscribers) and had enough data to rate 23 treatments. We analyzed the medical evidence for each and came up with recommendations and cautions. Here are some highlights from our survey findings:

- Hands-on treatments were rated by lower-back-pain sufferers as very helpful. Survey respondents favored chiropractic treatments (58 percent), massage (48 percent), and physical therapy (46 percent)—another testament to the healing power of touch.
- Spinal injections were rated just below chiropractic treatments by those who took our survey. Fifty-one percent of the respondents found them to be very helpful, although the techniques their doctors used varied.
- Prescription medications, which one-third of our respondents said they took, were rated as beneficial by 45 percent of them. Almost 70 percent said they took an over-the-counter medication, but only 22 percent said the drugs were very helpful.
- Fifty-eight percent told us they wished they had done more exercising to strengthen their backs.
- Although lower-back pain is the fifth most common reason people go to a doctor, 35 percent of the people in our survey said they had
 never consulted a professional. Most of them had severely limiting pain for less than a week. Many of those with more prolonged pain who
 didn't see a health-care professional said it was because of cost concerns or because they did not think professional care could help.

Types of back pain

About one in four adults in the U.S. has had lower-back pain lasting an entire day in the last three months, which may explain why it has been rated the fifth most common reason people go to a doctor. Most often, no related structural cause of lower-back pain is identified.

Not all lower-back pain is alike, but it can be classified into subtypes in order to help doctors reach a diagnosis and determine treatment. In our survey of more than 14,000 people with such pain, we focused on the three most common types, excluding a small group who said the cause of lower-back pain was associated with vertebral infection, fracture, or cancer.

Nonspecific pain

About half of our survey respondents fell into the "nonspecific" category—meaning that the exact cause of lower-back pain was often difficult to determine from a physical exam or even diagnostic testing. However, it's most commonly due to muscle strain, muscle spasm, or ligament sprain, and may also arise from osteoarthritis or from a contained (nonslipped) disk that presses on a nerve. In our survey, almost half of the people with this type of pain said they had never consulted a professional about the problem.

You may fit this group if:

- · Your pain is confined to the back and does not radiate down the leg.
- You don't have leg numbness or weakness.
- · Your pain tends to feel worse if you bend or straighten the back.

Symptom chart

Description Includes muscle strain, muscle spasm, ligament sprain, osteoarthritis, joint irritation, contained (nonherniated) disk lesions, degenerative changes

Hallmark Usually limited to the lower back



Highly satisfied

Sensory/motor symptoms	Absence of numbness, tingling, weakness, or leg pain
	Primarily in the back, with no signs of a serious underlying condition
Pain worsens	With twisting, stretching, lying down, or forward or backward bending
Pain relieved	By lying in fetal position
Age	Can occur at any age, but generally in younger, more physically active people

First-person story: Nonspecific lower-back pain

"I'm embarrassed to admit I was crawling around on the floor in an awkward position doing some carpentry when my pain started," says Albert Doughty, 65, a retiree from Middlebury, Ind., who responded to our survey. Doughty first experienced low-back pain several years ago and says it comes back to haunt him about once a year. He says his pain is usually limited to his lower back and feels like a muscle strain. When it acts up he takes an over-the-counter pain medicine and avoids excessive activity. Doughty says he has never seen a professional because the pain goes away fairly quickly. He has managed over the years, he says, because he's generally more conscious of what he's doing; he can tell when his back is being strained.

Pinched nerve

Back pain associated with a pinched nerve, which doctors call radiculopathy, or nerve-root pain, is the second distinct group in our sample. People who suffer from this type of back pain tend to have more severe and persistent symptoms. If you are under 55 and have a pinched nerve, it most likely stems from pressure on a nerve root from a herniated (slipped) disk. You might feel:

- Sharp, dull aching, burning, or throbbing pain that radiates down a leg.
- · Numbness or weakness in certain parts of the lower body.
- · Worsening pain when bending forward or sitting, and with sneezing or coughing.

Symptom chart

Description	Pain from pressure on a nerve root from a herniated (slipped) disk, most commonly, or any other condition that compresses a nerve
Hallmark	Radiating pain usually in one leg (may be in both legs if disk herniation is central)
Sensory/motor symptoms	Can be accompanied by numbress, tingling, or weakness in parts of the leg and foot
Character of pain Pain worsens Pain relieved Age	Back and leg pain described as sharp, dull aching, burning, or throbbing With sneezing or coughing, bending forward or sitting By lying down or at times walking Men are most likely to develop symptoms in their 40s; women most often between ages 50 and 60

First-person story: Pinched nerve

"I was fine for a while, and then doing something minor, like bending over to pull up a sock, would bring pain shooting down my leg," says Diane McNamara, 53, of Warner Robins, Ga. Carrying a heavy space heater down a flight of stairs caused her to experience her first episode of lower-back pain more than 10 years ago. The sharp piercing pain started in the small of her back and radiated from her left buttock to her foot. At times she would experience tingling of the foot as well. An MRI showed disk disease, and her doctor was ready to discuss surgery.

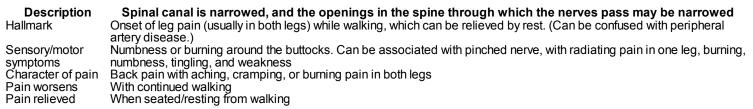
But McNamara eventually went to a physical therapist, who taught her stretching exercises. She says she has been doing much better and has not had the nerve pain for the past year and a half, but she occasionally experiences lower-back pain. McNamara also says that for the most part she's more careful these days and avoids lifting whenever possible. Her brother had two separate back operations, she says, and her sister's back surgery needed to be redone, so she'd much rather avoid surgery herself.

Spinal stenosis

Spinal stenosis, a narrowing of the spinal canal, may occur from arthritis, aging, a variety of inherited conditions, or injuries, among other causes. Symptoms typically appear slowly and get worse over time. Symptoms of spinal stenosis may be similar to those of a pinched nerve since the spine may press on a nerve root. You might be affected if you are age 60 or over and experience:

- · Leg pain that worsens with walking and can be relieved by rest.
- Aching, cramping, or burning, most likely in both legs.
- · Absence of pain when seated.

Symptom chart





Age

Most common in people age 60 or over

First-person story: Spinal stenosis

Charles Pittman, 79, of Vero Beach, Fla., developed a dull, aching pain in his upper legs about three years ago. When it didn't go away after a few months, he saw a local neurosurgeon, who ordered an MRI of his back and later diagnosed spinal stenosis, occurring as a result of age-related degeneration of the spine. An epidural steroid injection to the lower back gave Pittman "instantaneous, magical relief." Unfortunately, the results were temporary.

The neurosurgeon recommended exercise, which Pittman found to be quite helpful. He used a treadmill four days a week until this past summer, when he had to help his wife, who fractured her leg. When he tried to return to his exercise program six weeks later he found that his leg pain was worsened when walking on the treadmill.

Although surgery has been recommended, Pittman is waiting it out. He is still able to walk through the supermarket and the mall, and he plans to try a spinal decompression machine, which gently repositions the spine to promote the relief of pressure. He hopes the new treatment will work so that he won't have to have surgery.

What helps

Our treatment Ratings are based on reports from more than 14,000 ConsumerReports.org subscribers (therefore not representative of the general population) who experienced lower-back pain in the past 12 months and tried at least one of the listed treatments. (People in poor health or with back pain due to cancer, infection, or fracture were excluded.) There was a wide variation in the type, duration, treatment, and complexity of back pain reported. The sample included people with different diagnoses, such as muscle strain or spasm, degenerative disk disease, and herniated disk, as well those who had never received a diagnosis (more than 40 percent of the sample).

The mean percentage who said they were "helped a lot" by any one treatment was 32 percent. When comparing Ratings of treatments, keep in mind that differences of less than 5 percentage points are not significant. When our Health Ratings Center reviewed the combined medical and survey evidence with average treatment ratings, we agreed that treatments scoring 39 percent and above probably reflected real patient benefits compared with a placebo effect (when people feel better giving some treatment, any treatment, a try).

Treatments tried	helpe		Recommendations and cautions
Spinal manipulation/ chiropractic	a lot 58%	May be more effective in the short-term (less than six weeks) at reducing pain vs. sham (fake) therapy but no more effective at improving disability. For chronic back pain (lasting more than 12 weeks), spinal manipulation did not appear to be better thar general practitioner care, medication, physical	Both our survey respondents and the published clinical v, evidence suggest that spinal manipulation can be helpful for lower-back pain in the short-term. But some experts think that this treatment could make a herniated disk worse. Rare n cases of lumbar disk herniation (slipped disk) and cauda equina syndrome have been reported following spinal , manipulation therapy, and those risks appear to be higher during manipulation under anesthesia.
Spinal or joint/ligament injections	51	Research studies have looked at a variety of different injection locations and drugs. The quality o the evidence was insufficient to support this treatment recommendation.	Of all those who did try injections, just over half found them to f be helpful, although there is not enough clinical research to say that injections are beneficial. You might consider them if your symptoms continue after trying more conservative treatments.
Massage/touch therapy/active- release therapy	48	There is not enough research to be certain about th benefit of massage in treating lower-back pain. But it might be beneficial for patients with nonspecific subacute or chronic lower-back pain lasting four weeks or more.	eBased on survey results and relative safety, our experts recommend trying massage therapy.
Physical therapy	46	We found no medical evidence that evaluates the combined effectiveness of the individual treatments that make up physical therapy (massage, general exercise, traction, electrotherapy/TENS, heat therapy, and cold therapy).	Physical therapy was rated among the most helpful treatments by those surveyed. We recommend that you consider the helpfulness of individual treatment components when considering or receiving physical therapy.
Prescription medications	45	experts recommend that these drugs be used with a	rescription medications said that they were helpful, our caution and for a short duration with counsel from your doctor. Igs can decrease pain, they can also have significant side
		Narcotic pain medications may reduce chronic lower-back pain compared with a placebo. There is very little research about the use of opioids, such as codeine, morphine, and oxycodone, for acute lower back pain.	
		Nonsteroidal anti-inflammatory drugs (NSAIDS) ma be better than a placebo at improving pain in patients with lower-back pain without sciatica. But NSAIDs such as ibuprofen and naproxen may not be any better than simple analgesics such as acetaminophen and other drugs. There does not seem to be a specific type of NSAID that is clearly	y NSAIDs may cause gastrointestinal problems, and a particular group of NSAIDs called COX-2 inhibitors has been associated with serious cardiovascular events.

3/25/2014		Back Pain - Consum	er Reports
		more effective than others.	
		Muscle relaxants are effective for short-term relief in patients with acute and chronic lower-back pain, but the adverse effects require that they be used with caution.	Muscle relaxants may cause sedation.
		Antidepressants are associated with no clear and convincing evidence that they are effective in managing chronic lower-back pain.	Antidepressants may cause dry mouth and drowsiness, and in rare cases can cause suicidal thoughts.
		Anticonvulsants are widely used for chronic pain. They appear to improve chronic pain but do not seem to have any effect on acute pain.	Anticonvulsants may cause sleepiness, dizziness, and nausea.
General exercise (such as yoga)	44	Exercise therapy appears to be effective in decreasing pain and improving movement in mild, recurrent, or chronic lower-back pain.	Based on the evidence and our survey respondents, exercise therapy is recommended.
Posture/movement therapy	41	We did not find clinical research addressing the use of this treatment for back pain.	Based on the survey alone, posture/movement therapy may be worth a try.
Acupuncture/ acupressure	41	For acute lower-back pain, there is too little research to draw any firm conclusions. For chronic lower-back pain, acupuncture may be more effective for pain relief than no treatment. In general, studies have been of poor to moderate quality, so further research is needed.	Acupuncture may provide some short-term improvement.
Traction	39	There is insufficient research to determine if traction is beneficial in treating lower-back pain.	This treatment is relatively uncommon. Survey respondents who did try it found it helpful There is the possibility of adverse effects, such as increased pain or subsequent surgery.
Altered posture/body mechanics	35	We did not find clinical research addressing the use of this treatment for back pain.	Survey respondents did not find this treatment especially helpful.
Electrotherapy/ TENS	34	There is not enough research to say if electrotherapy/TENS is beneficial for lower-back pain.	Neither the evidence nor our survey respondents found this treatment to be especially helpful.
Special chair	32	We did not find clinical research addressing the use of this treatment for back pain.	Survey respondents did not find this treatment especially helpful.
Special pillow or mattress	30	For patients with chronic lower-back pain, firm mattresses may be less likely than medium-firm mattresses to lead to improvement.	Neither the evidence nor our survey respondents found this to be especially helpful.
Bed rest	29	This is less effective in reducing pain and improving an individual's ability to perform everyday activities than advice to stay active.	Our respondents and the medical evidence suggest that bed rest is not likely to be especially helpful. In most cases, staying active is recommended.
Diet/weight loss	29	There is insufficient research in this area. Some studies suggest that being overweight may increase the load on the spine, thereby raising the risk of disk degeneration and other structural causes of lower- back pain, but further research is needed.	Neither the evidence nor our survey respondents found this treatment to be especially helpful. But we do not know how successful our respondents were in actually losing weight.
Ice pack or other cold- therapy product	27	There is not enough evidence to say whether applying ice or cold therapy improves symptoms or movement for people with acute lower-back pain.	Neither the evidence nor our survey respondents found this treatment to be especially helpful.
Back belt or brace	26	There is not enough evidence to say if lumbar supports improve symptoms or functioning for people with acute or chronic lower-back pain.	Neither the evidence nor our survey respondents found this treatment to be especially helpful.
Shoe-related product	24	Strong evidence shows that insoles do not appear to prevent back pain, and their role in treating lower- back pain is uncertain.	Neither the evidence nor our survey respondents found this treatment to be especially helpful.
Heat-therapy product	23	Heat-wrap therapy may reduce pain and disability for patients with acute lower-back pain, but the relief has only been shown to occur for a short time and the effect is relatively small.	Despite the fact that the research shows some relief of acute back pain with heat, less than 25 percent of the respondents who tried heat therapy found it useful. It may be worth a try for acute lower-back pain since it is not likely to cause side effects.
Over-the-counter	22	See Prescription Medication/NSAIDs, above.	Although the evidence suggests that acetaminophen may
medication		There is fair evidence that acetaminophen (Tylenol and generic) is moderately effective in acute lower- back pain but only slightly effective for chronic lower- back pain.	help relieve acute lower-back pain, our survey respondents did not find over-the-counter medications especially helpful. We recommend trying acetaminophen as a first-line treatment because it is not likely to cause side effects.
Self-massage tool	16	We did not find clinical research addressing the use of this treatment for back pain.	Comparatively few survey respondents found this treatment helpful.

3/25/201	14
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Ointment	15	We did not find clinical research addressing the use of this treatment for back pain.	e Comparatively few survey respondents found this treatment helpful.
Dietary supplements/herb remedies	11 al	There is a suggestion of benefit from some herbal medicines, but there is no evidence that any of these substances are safe and effective for long-term use.	Neither the evidence nor our survey respondents found this treatment to be especially helpful.

Treatment Ratings should not be considered in the same manner as clinical studies, which evaluate specific medical treatments in defined populations by comparing randomly assigned experimental and control groups.

Medication

Most of the respondents in our survey said they used some type of medication for lower-back pain in the past 12 months. Prescription drugs were rated as more helpful than over-the-counter (OTC) medications. Of the one-third who said they tried at least one prescription medication for lower-back pain, 45 percent said the drugs helped a lot.

Over-the-counter pain relievers were used the most often by our respondents; almost 70 percent said they gave them a try. But only 22 percent said OTC drugs were very helpful.

Our experts recommend that prescription drugs be used with caution and for a short time. The evidence suggests that while many of them can ease pain, they can also have significant side effects. To our surprise, more than half of the people who tried prescription medication said they were given narcotics. Constipation is a very common side effect of narcotics, and straining to move bowels may worsen back pain

Because there is medical evidence that the over-the-counter medication acetaminophen (Tylenol and generic) is moderately effective for back pain and is relatively safe compared with other choices, our experts recommend it as a first-line treatment for lower-back pain.

Percentage who say they "helped a lot"

Prescription drug(s) taken in the past 12 months		
Narcotic and muscle relaxant	52	
Narcotic only	48	
NSAID, narcotic, and muscle relaxant	48	
NSAID and narcotic	47	
NSAID and muscle relaxant	44	
Muscle relaxant only	43	
NSAID only	40	
NSAID, narcotic, muscle relaxant, and antidepressant	40	
Source: Consumer Reports Health Ratings Center		

Muscle relaxants

Tried by 57 percent of the respondents who were given prescription medication, muscle relaxants are effective for short-term relief of symptoms in patients with acute and chronic lower-back pain. But the possible adverse effects, such as dizziness and sedation, require that they be used with caution. Unlike local treatments, such as heating pads, they affect the entire body. There are also concerns about dependency and withdrawal with some muscle relaxants, most notably carisoprodol (Soma, Vanadom, and generic), which is a controlled substance in some states.

NSAIDs

Tried by 55 percent of the respondents who were given prescription medication, nonsteroidal anti-inflammatory drugs such as ibuprofen (Motrin and generic) and naproxen (Naprosyn and generic) may be better than a placebo at improving pain and functioning in patients with lower-back pain. But NSAIDs may not be superior to simple analgesics, such as acetaminophen, and other drugs, and there doesn't seem to be a specific type of NSAID that is clearly more effective than others. It's important to take into account that all NSAIDs can cause gastrointestinal problems, and a particular group of NSAIDs called COX-2 inhibitors has been associated with serious cardiovascular events.

Narcotic pain medications

Tried by 53 percent of the respondents who were given prescription medication, narcotic pain medication is far from a proven solution for acute lower-back pain but may reduce chronic lower-back pain when compared with a placebo. Long-term use of narcotic pain medications, also known as opioids, such as codeine, morphine, or oxycodone, is probably not a good idea for treating lower-back pain, but the drugs may be needed for short-term relief if other treatments don't work. Remember that taking opioids can be risky. Clinical trials have shown that about half the people who take opioid pain relievers suffer from adverse reactions, including constipation, drowsiness, and respiratory depression. Opioid-induced bowel dysfunction is a rather common side effect and may include a variety of additional gastrointestinal symptoms, including reflux and heartburn, abdominal cramping, bloating, and spasms. Substance-use disorders—the overuse of these medications, getting drugs from more than one doctor, or providing pills to friends—affect about one-quarter of the people taking opioids for back pain, and emergency-room department reports of opioid overdose have risen sharply in recent years. Additional concerns include a paradoxical increase in pain sensitivity, reduced testosterone levels, and erectile dysfunction.

Anticonvulsants

Tried by 14 percent of the respondents who were given prescription medication, anticonvulsants such as gabapentin (Neurontin and generic) and pregabalin (Lyrica) are used widely for chronic pain, especially in back pain due to nerve involvement. They may improve chronic back pain but do not appear to have any effect on acute pain. Potential reactions include dizziness, nausea, and sleepiness.

Antidepressants

These drugs were tried by 14 percent of the respondents who were given prescription medication. There is no clear and convincing evidence that supports the use of antidepressants in managing chronic lower-back pain. Studies have found that selective serotonin reuptake inhibitors (SSRIs) such as fluoxetine (Prozac and generic) are not beneficial. Antidepressants may cause dry mouth, drowsiness, and rarely, suicidal thoughts, and the existing studies regarding their helpfulness in easing back pain are not conclusive.

Manual therapies

Three of the top six treatments rated as most helpful in our survey involved hands-on therapy. Spinal/chiropractic manipulation, massage therapy (including active-release therapy), or physical therapy were tried by about 47 percent of survey respondents. Spinal/chiropractic manipulation ranked higher than prescription medications for having "helped a lot."

The success of hands-on therapy may be a tribute to the healing power of touch. But it's also notable that practitioners in these fields focus on getting patients actively involved and motivated to make lifestyle changes.

Treatments for lower-back pain

Spinal manipulation/chiropractic	
Spinal or joint/ligament injections	
Massage therapy/touch/ART	
Physical therapy	
Prescription medicine	
General exercise (e.g., yoga)	
Source: Consumer Reports Health Ratings Center	er

Spinal manipulation

Chiropractors make up the largest group of alternative-medicine professionals who treat low-back pain. It's estimated that one in five American adults receives chiropractic care at some point. Practitioners use a variety of treatments with the goal of correcting alignment problems, but hands-on therapy—especially adjustment of the spine—is the hallmark of chiropractic care. Chiropractic adjustment (also referred to as spinal manipulation) involves the manual application of a controlled force to joints that have lost mobility. The most common technique consists of applying a quick, gentle thrust to the spine with the practitioner's hand to increase the range and quality of motion in the area being treated.

Chiropractic care has become increasingly popular with consumers. Twenty-nine percent of the more than 14,000 adults who responded to our survey said they had consulted a chiropractor, compared with 20 percent who sought care with a specialist such as a neurosurgeon or orthopedist. Moreover, readers ranked chiropractic treatments No. 1 in terms of helpfulness in the relief of lower-back pain.

Fifty-nine percent of those surveyed were completely satisfied or very satisfied with the care provided by their chiropractor, and roughly the same percentage said chiropractic treatments helped their back pain "a lot." Other surveys have also found high patient satisfaction with chiropractic care, perhaps in part because relationships with chiropractors tend to be long-standing, with a greater number of treatment visits than with medical practitioners.

Manipulative therapy of the lower back (lumbar region) is generally considered to be safe when provided by a trained practitioner. While there has been considerable debate in the medical community about the risk of neck manipulation causing vertebral artery dissection (a cause of stroke), no clear understanding of the association has yet emerged. Rare cases of lumbar disk herniation (slipped disk) and cauda equina syndrome have been reported following spinal manipulative therapy, but the risk is higher during manipulation under anesthesia.

For Albert McCann of Lakeland, Fla., consistent chiropractic care for the past 35 years has been the source of relief from lower-back pain. A petroleum transport engineer, McCann, 54, drives a semitrailer-truck and uses 20-foot-long hoses several times a day. He began to experience lower-back pain when he finished his training more than three decades ago and has been seeing the same chiropractor ever since.

Certain positions aggravate his condition, including twisting and turning to get a better view while driving his truck. The pain, which is generally limited to his lower back, became worse following a car accident five years ago. But he says his chiropractor has taught him how to stretch, apply ice, and pay better attention to his body. By following his advice and going in for treatment—including adjustments, electric stimulation, and the spinalator (roller-massage table)—every two to three weeks, he is able to keep his back pain to a minimum.

Massage and healing touch

Readers rated massage therapy among the top six treatments in our survey in terms of helpfulness. It involves soft-tissue manipulation using the hands or a manual device. Common types include acupressure (Shiatsu), Rolfing, Swedish massage, reflexology, myofascial release, and craniosacral therapy. The exact way it works is not known, but massage is thought to reduce pain through physical and mental relaxation.

Massage therapy, which is increasing in popularity, can be performed by licensed massage therapists, physical therapists, or chiropractors, all of whom are trained in the application of manual therapies. Some massage therapists use massage as their primary intervention, while others consider it to be an additional treatment. Perhaps because massage therapy is commonly used by physical therapists, a similar number of our survey sample indicated that they used this form of treatment—23 percent—as compared with those who had physical therapy.

For Jeff Williamsen, 59, back pain came on suddenly three years ago when he bent over to pick up something off the floor. The Columbus, Ohio, consultant and frequent business flyer said his back pain was so severe that he was unable to stand up straight. He tried massage therapy and it felt great, he said. It was more than just the benefit of the deep-tissue massage; the therapist gave him warm blankets and played soothing music, making the session such a relaxing experience that he stayed in the room resting for 20 minutes after she was done. "After massage therapy I didn't want to move. It was so relaxing," he said.

Physical therapy

Physical therapy is a more traditional back-pain treatment. Back pain is the reason for about half of all outpatient physical therapy visits. Twenty-three percent of our survey population received physical therapy, and they ranked it as one of the top six treatments in terms of helpfulness. Fifty-five percent of the respondents were completely or very satisfied with the care provided by their physical therapist, and 46 percent said physical therapy helped their pain "a lot."

Physical therapists use a variety of techniques to promote proper movement and function, including massage of muscles, traction, electrotherapy, ultrasound (high-frequency waves that produce heat), hot packs, and ice. Because there are so many different treatments used in physical therapy, the scientific literature about its effectiveness is limited. But recent reports suggest that its use is increasing.

"My back pain was unrelenting before physical therapy. I thought I was done for," said Charlene Mower, who had been caring for her bedridden mother in her Fayetteville, Ark., home. On July 4, 2006, while lifting her mother, Mower felt sudden pain radiating from her buttock down her leg. She had delivered three children and passed kidney stones, but this pain was far worse, she said. She had weakness and numbness affecting her right foot, and feared that she'd be crippled and unable to care for her



Albert McCann



Jeff Williamsen



Percent helped

58% 51% 48% 46% 45% 44%

mother. She said muscle relaxants and anti-inflammatory drugs did not make a dent in her pain. When she saw a neurosurgeon the following week, an MRI showed a herniated disk in her lower back.

The 51–year-old homemaker attributed her recovery to the physical therapy he suggested. Within a few weeks her back pain was gone. In addition to the therapist's hands-on treatment, Mower started a supervised exercise program, including the use of a machine that strengthened her back muscles. Her physical therapist taught her proper lifting and bending techniques, and she was treated with lumbar traction, which she found helped a great deal. Mower has now joined a gym, uses the treadmill and lifts weights three days a week, and goes to Jazzercise classes twice a week. For her, physical therapy made all the difference, both mentally and physically.

Exercise

When it comes to do-it-yourself health remedies, exercise was the top consumer-rated measure to help relieve back pain. In the Consumer Reports Health Ratings Center survey, 44 percent of the respondents who tried this lifestyle change said they found back exercises helped a lot. When focusing on regrets, a surprising 58 percent said they wished they had done more exercises to strengthen their back in the past year. That's more than twice the number who said they wished they had reduced or avoided activities that might have made the pain worse.

The importance of exercise is confirmed by clinical studies showing that it is effective in preventing lower-back pain and reducing disability in patients who have mild, recurrent, or chronic lower-back pain. But the usefulness of back exercises in people with acute lower-back pain is somewhat controversial.

There is no solid evidence supporting general vs. specific exercise, individualized vs. group programs, or supervised vs. home exercise. The types of recommended programs include water workout and walking, aerobic exercise, weight training, muscle endurance exercise, and stretching. There's no one-size-fits-all exercise solution because not all programs are equally effective for all back-pain sufferers.

It's critical to consider your own preferences when choosing an exercise program because doing so can improve motivation and outcome. *Consumer Reports* recommends that you see a physician before starting to exercise, especially if you have other health problems or are experiencing pain. Trained professionals, such as physical therapists, chiropractors, or certified strength and conditioning specialists, may be helpful in tailoring programs to patients.

Bottom line

Find an exercise program that works for you now to help avoid future regrets.

Weight-loss

Cindy Pickett developed lower-back pain at age 22 when she bent down, picked up two bricks for a bookcase she was building, and raced through the rain into her house. She immediately experienced severe pain shooting down her right leg, numbness in her right big toe, and a partial foot drop. Her doctor said she had two slipped disks. Over the years, back pain and other factors led to a 100-pound weight gain. Her back pain flared up every time she picked something up in the wrong way or twisted her spine.



Cindy Pickett

In June of 2008, the Flagstaff, Ariz., high-school Spanish teacher retired and made weight loss her fulltime job. Now age 59, she gets to the gym at 5:30 in the morning and swims for an hour five days a week, strength trains three days a week, and walks five days a week. Having failed many diets over the years, she finally found success with the South Beach Diet, which helped stop her carbohydrate cravings and made her feel less sleepy.

The combination of diet and exercise worked for Pickett; she reports that she has lost 30 pounds. "Since I lost weight, my back feels so much better. I stand differently and I walk differently, and I'm able to move more," she says. She also credits her back-pain relief to abdominal strengthening exercises, which have helped her get a flatter abdomen, reducing pressure on her lower back. As a bonus, she didn't have to take ibuprofen for pain all fall.

In medical studies, extra weight has been shown to increase the load on the spine, raising the risk of disk degeneration and other structural causes of lower- back pain. People who are obese may also have an increased lumbar curvature in the spine, which can cause lower-back pain. Compared with patients who are not overweight, obese patients are also more likely to have leg pain.

Losing weight may help with back-pain relief but it's not a panacea. In our survey, 24 percent of the respondents said they tried to lose weight to reduce back pain, but of those only 29 percent said weight loss helped a lot. Of course, it may be the case that some of those who tried to lose weight were not able to drop enough pounds to make a difference. While survey findings are not definitive about the effectiveness of weight loss, they clearly support the helpfulness of exercise.

Taken together, survey findings and medical evidence suggest that exercise and weight loss should be part of any back-pain treatment plan.

Osteopathic medicine

A doctor of osteopathic medicine (D.O.) can treat lower-back pain with hands-on care. Respondents to our Health Ratings Center Survey who had lower-back pain ranked those hands-on therapies we asked about (spinal manipulation, physical therapy, massage) as very helpful.

Osteopaths are educated and licensed to perform all aspects of standard medical care, plus are trained in osteopathic medicine, which emphasizes how the musculoskeletal system, particularly the spine, affects the entire body. They diagnose and treat certain conditions, including lower-back pain, by manipulating joints with techniques such as stretching, gentle pressure, and resistance.

According to the American Osteopathic Association, there are almost 57,000 osteopaths in active practice. This is a rapidly growing segment of health-care professionals in the U.S., with four new osteopathic medical schools established since 2003 and osteopathic medical school enrollment increasing 8.5 percent in 2008.

Osteopathic manipulative treatment (OMT) significantly reduces lower-back pain, according to a review of six trials comparing OMT to a control treatment in the August 2005 issue of BMC Musculoskeletal Disorders. There is a clear need for more empirical data to investigate how OMT works, and to determine if the therapy's benefits are long-lasting.

3/25/2014

Back Pain - Consumer Reports

Because the overwhelming majority of studies of spinal manipulation involve chiropractors and physical therapists, Consumer Reports did not specifically inquire about OMT or osteopaths in our survey. However, we do recognize that this is another manual therapy that is available to those who suffer from lower-back pain. Our expert consultant on the back-pain survey, James N. Weinstein, D.O., M.S, director of the Dartmouth Institute for Health Policy and Clinical Practice, was trained as an osteopath.

One patient's story

Larry Taylor, 55, an airline pilot from Olympia, Wash., began suffering from lower-back pain when he was 28 and flying cargo planes in the Philippines. The pain worsened in his 30s and 40s, eventually shooting down his left leg as well. Nights were particularly difficult, though sleeping on his back with a pillow under his knees helped. He moved around a lot with the Air Force, trying different doctors and chiropractors without much success. When Taylor became a commercial pilot, a colleague recommended that he seek treatment from an osteopathic doctor. After an evaluation, the osteopath performed various manipulations, which caused Larry to feel three pops. "I felt fantastic," he said. "He fixed me in one visit." Pain-free for 10 years, he now recommends osteopaths highly.



Hip/knee replacement (2006)

Surgery

Your doctor may suggest that you see a surgeon if your back pain is unrelenting and no form of treatment seems to work, or if serious neurological deficits set in, such as foot drop, an inability to raise the front part of the foot due to a weakness or even paralysis of the muscles.

The information provided by surgeons was a key aspect of decision-making for the people we surveyed as they contemplated back surgery. Nine in 10 patients told us they relied on information from their surgeon "a lot" before agreeing to an operation, according to a survey of almost 1,000 **ConsumerReports.org** subscribers who said they had a lower-back operation in the last five years.

But how consistent are the recommendations of back surgeons? The evidence shows they can vary widely by the individual surgeon, the type of operation proposed, and the extent of counseling provided before surgery.

In our survey, 60 percent of the back-surgery respondents said they were completely or very satisfied with the results of their surgery. In comparison, 82 percent of the people who had hip or knee replacement surgery in our 2006 survey said they were completely or very satisfied with the results.

	Back surger	v (2008)
Completely satisfied	34%	54%
Very satisfied	26	28
Fairly well satisfied	20	9
Somewhat dissatisfied	11	5
Very dissatisfied	4	1
Completely dissatisfied	5	2

Source: Consumer Reports Health Ratings Center But satisfaction levels varied according to the diagnosis given and the type of back surgery. Those with a diagnosis of degenerative disk disease (arthritic changes or osteoarthritis of the spine) were far less likely to be highly satisfied with surgery (54 percent) than those who were told they had a herniated disk (73 percent) or spinal stenosis (71 percent). Those who underwent discectomies were significantly more satisfied (69 percent) than those who underwent spinal fusions (56 percent). Those who said back surgery was strongly recommended by

their doctor were the least satisfied, and those who broached the idea of surgery themselves were the most satisfied. Alfonso Sanchez, 38, a state senatorial aide from Sacramento, Calif., was highly satisfied with his lumbar discectomy. His back pain turned excruciating when he went canvassing in the hills of San Francisco last June. When his doctor diagnosed herniated disks, he tried everything from acupuncture to physical therapy and chiropractic treatments, but nothing seemed to work. He decided to undergo a microdiscectomy in

August. "The moment I woke up from surgery I realized that my pain was gone," he said. He recovered quickly, and his doctor let him go back to work after three months. He is now back to riding his bicycle to work and tending his garden. But not everyone does so well. More than 50 percent of the respondents reported at least one problem. The most common was finding that

But not everyone does so well. More than 50 percent of the respondents reported at least one problem. The most common was finding that recovery was lengthier and more debilitating than they had expected. Indeed, 16 percent of the back-surgery respondents said their back pain did not improve, and half of them said it became worse after surgery. Overall, 20 percent said they were dissatisfied with the outcome.

Other findings from our back-surgery survey:

- The single most expressed regret (offered by 1 in 10 respondents) was that they didn't receive enough postsurgery rehabilitation.
- More than 25 percent of the respondents said they had not been informed about the risks of surgery, such as nerve injury, bleeding, and infection, and 33 percent said their doctors did not discuss the consequences of not having surgery.
- Thirty-eight percent of respondents reported having had one or more previous back surgeries; over half of the spinal-fusion patients
 reported a previous back operation.
- Compared with more than 14,000 subscribers with lower-back pain who did not have surgery, those who had surgery described their back pain before surgery as much more impairing in terms of activities such as sleep (79 percent compared with 47 percent), mobility (95 percent vs. 66 percent), and sex life (60 percent vs. 24 percent).
- In addition, 95 percent of those who had surgery described having back pain with neurological symptoms—such as weakness, numbness, or pain radiating down a leg—as opposed to those who did not have surgery and reported back pain alone.

3/25/2014

Back Pain - Consumer Reports

- The amount of time individuals spent living with pain before surgery varied widely. Ten percent had surgery for back pain that had been present for less than three months, while more than 25 percent of the sample had lived with pain for more than six years before having surgery.
- The most common surgery type was spinal fusion (25 percent), followed by lumbar discectomy (20 percent), laminectomy (16 percent), and laminotomy (15 percent). About a third of all surgeries required some type of hardware or device, such as a screw or artificial disk.
- Having conversations with professionals other than doctors or surgeons (i.e., chiropractors and physical therapists) was related to being
 more highly satisfied with the outcome.

Considering surgery? Question to ask.

We talked with James N. Weinstein, D.O., M.S., director of the Dartmouth Institute for Health Policy and Clinical Practice. He is also chairman of the department of orthopaedics at the Dartmouth Medical School and the Dartmouth-Hitchcock Medical Center.



How long should I wait before considering surgery? Many common back problems–even those that cause severe pain–will resolve themselves over time. Patients without associated symptoms in their legs should generally wait a minimum of 6 to 12 weeks. If there is no improvement, and pain is severe and disabling, spinal surgery is an option to consider provided you have been properly evaluated by a surgeon and clearly understand the risks and benefits of the proposed treatment options.

What questions should I ask my surgeon? Ask if he is board certified, how many back surgeries he did last year, and if the results are available. See why he recommends surgery, and what bad things might happen as a result. Finally, ask if you can talk with a patient who had a similar procedure about a year ago.

What if the surgeon won't answer my questions? Get a second and even a third opinion. Good surgeons welcome a second opinion. Patients can also use tools like the Dartmouth Atlas to compare rates of surgeries across regions and see if the "surgical signature" of their area makes them a high-rate region.

Why are you more likely to get back surgery in some cities than others? Your chance of having a back operation varies largely by where you live. The rate of spinal surgery in the U.S. has skyrocketed over the past two decades and is higher than anywhere else in the world. The related expenditures are staggering. In 2003 Medicare spent more than \$1 billion on lumbar fusions alone.

If one surgeon recommends fusion and another simple disectomy, how do you know which is right for me? When it comes to spinal surgery, less is more. Most patients in my practice come in for a second or third opinion, and I rarely recommend a fusion. If a fusion is a consideration it requires a lengthy discussion of risks—including longer hospitalization and blood transfusion—and an understanding of the rehabilitation involved. Patients need to know that they do have a choice, and their preferences and values matter.

What about minimially invasive techiques and other new technologies? There are many new technologies available, and they are confusing to patients and their families. Knowing your doctor's experience and his or her results using these technologies is important. Patients should also ask if their doctor is involved in any way with the companies that produce equipment used for surgeries. This is not always an indicator of a conflict of interest, but a good surgeon will willingly disclose any involvement, however slight.

What about artificial disks? The evidence for multiple-level disk replacement is less than adequate. The evidence for artificial disk replacement for back pain is still evolving. Patients should be cautious about new technologies generally. Because they are available elsewhere doesn't mean they are necessarily better, or that they are safe and effective.

How long does it take to recover? Twelve weeks seems to be the magic number (in order to avoid recurrence), but it really depends on the patient's job. A heavy laborer will require 12 weeks or more, but some sedentary workers return to work after a week or two.

Why back pain is hard to treat

An interview with Scott Haldeman, M.D., Ph.D., D.C. First trained as a chiropractor, Haldeman received a Ph.D. in neurophysiology and then went to medical school and became a practicing neurologist. He is a clinical professor in the department of neurology at the University of California at Irvine and co-editor of the January/February 2008 issue of The Spine Journal. He is also a former president of the North American Spine Society.

Why do people with lower-back pain have so much trouble figuring out what to do?

First, everyone seems to be selling some kind of gimmick, treatment, or pill, but there is no magical cure. Second, there is no medical subspecialty that focuses on general spine care. As a result, every subspecialty has learned its one or two treatment techniques. You have multiple professionals who think they have the one answer. Finally, we don't have a good standard of care for lower-back pain. Everybody has different preferences. Where one person may respond well to acupuncture, another may do better with analgesics.



How do you sort through the options?

Navigating the selection of available, advertised, and commonly used treatment options without an informed guide is like shopping in a foreign supermarket without being able to read the product labels. There are more than 60 medications currently being offered to back-pain patients. There are well over 100 different manual techniques in chiropractic, physical therapy, osteopathy, and massage therapy. More than

20 different exercise programs exist. There are more than 9 educational and psychological therapies and more than 20 different injection therapies. In addition, there are a variety of minimally invasive interventions offered as an alternative to surgery, and many surgical approaches. Finally, there are a large number of lifestyle products such as braces and beds, and a constantly changing variety of complementary and alternative medical approaches.

Where's the right place for someone with lower-back pain to start?

The first step is to go to a noninvasive practitioner, such as a family physician working with a physical therapist or a chiropractor. The first thing that a doctor will do is rule out dangerous conditions such as infections or cancer, then figure out if you have "back pain alone" or "back pain plus." If you have lower-back pain alone, which is by far the case in the majority of people, you have a series of options. These include exercise, education, anti-inflammatory medications or mild analgesics, manipulation, manual therapy, mobilization, and possibly acupuncture. If you have acute "low-back pain plus," meaning you have nerve involvement or severe pain to the point where you can't get out of bed, you may require more intensive evaluation and treatment.

Why are chiropractors so popular?

They spend more time with you. People feel better when they go to chiropractors because manipulation or adjustments that are offered do provide relief. It's also worth noting that chiropractors tend to be nice people who take time with patients. Finally, they're relatively inexpensive.

Why is lower-back pain so difficult to treat?

For one thing, there is no single structural cause of lower-back pain. It's a multifactorial condition with physical, psychological, genetic, social, and general health components. Lower-back pain is worse in people who smoke, those who do certain types of physical activity, and in people with psychological distress.

What medications work best?

No one medication works better than any other, and with all medications, you have to weigh potential side effects. Most guidelines suggest acetaminophen (Tylenol and generic) as the first choice. It has a low complication rate and provides reasonable analgesia. The next-line medications are the nonsteroidal anti-inflammatory drugs (NSAIDs), such ibuprofen (Advil, Motrin IB, and generic), naproxen (Aleve and generic), and aspirin. Long-term use of opioids (codeine, morphine, or oxycodone) is probably not a good idea for treating lower-back pain, but the drugs may be needed for short-term pain relief if other treatments don't work.

I have chronic lower-back pain and degenerative changes. When my back flares up I generally take naproxen, and go either for massage or chiropractic treatment. I also try to go to the gym regularly. Studies that have been carried out suggest that no one exercise stands out as better than any other, but the amount of time you spend exercising is probably the most important factor, and it's recommended to increase it gradually and within your level of tolerance. A combination of cardiovascular exercise together with strengthening and mobilization exercises appears to be particularly important. I try to go to the gym at least three days a week and do one hour of cardio work, and alternate 15 minutes of abdominal/trunk exercises with 15 minutes of weights.

Behind our survey

How can other people's experiences with medical treatments help me?

Consumer Reports surveys of patients' experiences provide "real life" accounts of thousands of people. They reveal what it's like to live with a health condition and what strategies might make it better or worse. The questions are designed to allow us to describe the process of trying and discarding treatments that people go through until (hopefully) a successful treatment strategy is found.

How do Consumer Reports surveys compare with clinical studies?

Clinical studies usually include objective diagnostic measures–a blood test, a biopsy–combined with a physical exam to assess whether a treatment is effective. Clinical studies may also follow patients over time. *Consumer Reports* surveys are based on reports of people's experiences at one point in time.

Clinical studies may be randomized controlled trials, considered the "gold standard" in medical research. They permit comparison between relatively similar samples randomly assigned to treatment alternatives. It is the most definitive method we have for determining whether a treatment really works. But there are inherent limitations that may include small sample sizes, inadequate length of the study, and high dropout rates, as well as potential biases due to the source of funding for the trial. The more precise a clinical trial, the less it may apply to lots of people.

Randomized controlled trials usually have selection criteria that exclude individuals with multiple conditions or more complicated symptoms. Participants are those who are willing and able to be in a research study, which makes them different from a "typical" patient. A real strength of this *Consumer Reports* survey on back pain is that it includes a wide range of individuals with varying causes of pain, types of pain, and timing of treatments. The respondents to the back-pain survey were all **ConsumerReports.org** subscribers.

How should I use Consumer Reports survey data to make my own treatment decisions?

Treatment decisions are complex. Think of a treatment decision as a three-legged stool: The first leg is the clinical evidence, the second is the doctor's expertise, and the third is the patient's values and preferences. Doctors need to integrate the evidence, their clinical expertise, and their years of experience treating patients, and you in particular, into their treatment recommendations. But at the same time, they should be receptive to questions about what the research shows, and responsive to your values and preferences.

Consumer Reports survey data can help you: (1) think through your values and preferences; (2) provide some information when clinical evidence is uncertain or lacking, and (3) engage your doctor with questions about various back pain treatment options and the order in which to try them.

Is this survey representative of the general population?

This back-pain treatment survey is based on a sample of **ConsumerReports.org**subscribers and therefore is not nationally representative. For example, in light of subscribers' relatively high education levels, socioeconomic status, and greater inclination to do research, they may have had easier access to doctors and more resources for learning about back-pain treatment options than others in the U.S. population. Respondents were also primarily white, which limits the ability to generalize about other ethnic groups. Nonetheless, the survey results may provide you with some ideas to discuss with your doctor.

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