

# **Back Pain**

Self-care for Spine and Disk Problems



# Movement Keeps Your Back Alive

To stay healthy, your back needs to keep moving. The right kinds of motion are good for your back and help keep it pain-free. But moving the wrong way can lead to back problems. The good news is that many people with back problems can find relief through self-care. Read on to learn the back basics you need to move safely each day.



#### When Back Pain Strikes

Sometimes it comes as the sharp pain of a sudden injury. At other times, back pain is a passing twinge or a constant ache. But in any case, back pain can limit your life. Back pain may occur if you keep moving in the wrong way. Or, it may develop if you move too little. No matter what causes it, you can help reduce and prevent back pain with self-care.

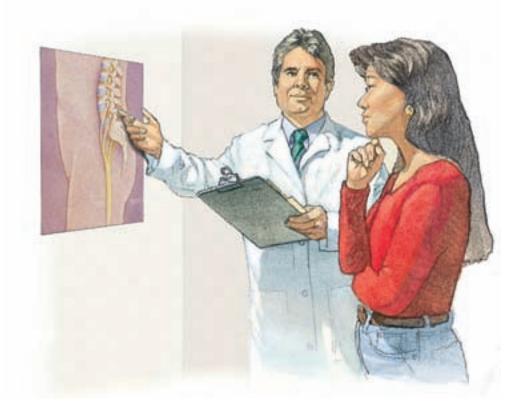


This product is not intended as a substitute for professional medical care. Only your doctor can diagnose and treat a medical problem.

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# A Team Approach to Treatment

After diagnosing your back problem, your doctor will prescribe a treatment plan that's right for you. Depending on your problem, your doctor may want you to work with a physical therapist. An expert in safe movement and exercise, a physical therapist can teach you easy techniques for self-care. By using these techniques as directed, you can improve your symptoms. Even in cases when surgery is needed, self-care is crucial to recovery.

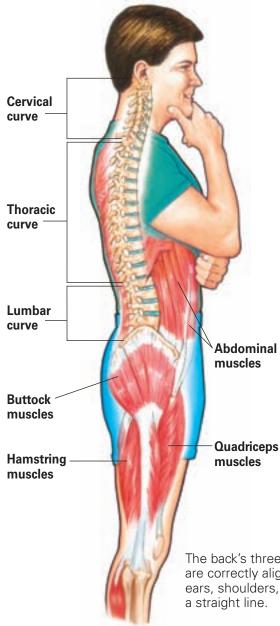


#### Self-Care Can Help

In many cases, self-care is all that's needed to treat your back problem. You may want to start by learning about the spine. Doing so can help you see how proper movement can protect your back. Then, by using good body mechanics and doing certain exercises daily, you'll be able to move more safely.

# Understanding a Healthy Spine

A healthy spine supports the body while letting it move freely. It does this with the help of three natural curves. Strong, flexible muscles help, too. They support the spine by keeping its curves properly aligned. The disks that cushion the bones of your spine also play a role in back health. When all these parts of the spine are healthy, the lumbar curve (lower back) can support most of the body's weight without pain.



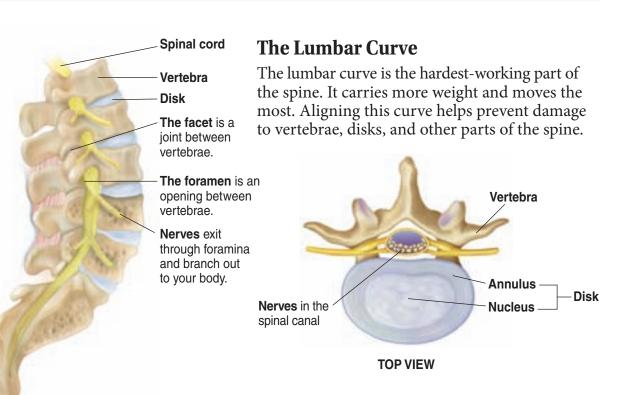
#### **Three Natural Curves**

The spine is made of bones (vertebrae) and pads of soft tissue (disks). These parts are arranged in three curves. When properly aligned, the curves keep your body balanced. They also support your body when you move. By distributing your weight throughout your spine, the curves make back injuries less likely.

#### Strong, Flexible Muscles

Strong, flexible back muscles help support the three curves of the spine. They do so by holding the vertebrae and disks in proper alignment. If the abdominal, hip, and leg muscles are also strong and flexible, they can reduce strain on the back.

The back's three natural curves are correctly aligned when the ears, shoulders, and hips are in



## **Cushioning Disks**

Disks are the soft pads of tissue between the vertebrae. The disks absorb shock caused by movement. Each disk has a spongy center (**nucleus**) and a tougher outer ring (**annulus**). Movement within the nucleus allows the vertebrae to rock back and forth on the disks. This provides the flexibility needed to bend and move. Disk size, shape, and flexibility change throughout the day.

#### Your disks change

While you sleep, the nucleus fills with fluid. This increases pressure in the disk.



Fluid stays in disk

**During the day,** movement pushes fluid in and out of the nucleus. This keeps the disk healthy.



Fluid moves in and out of disk

# How the Spine Becomes Unhealthy

An unhealthy spine often starts with bad habits. Poor movement patterns and posture problems are common causes of back pain. They can damage the spine or throw it out of alignment. Over time, bad habits can even cause disks to wear out early.

#### **Poor Posture Backfires**

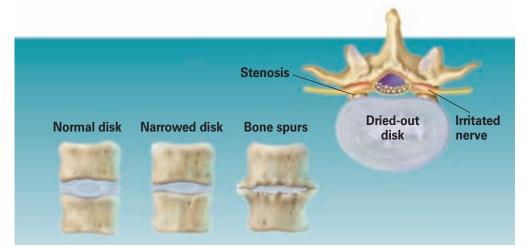
Sooner or later, poor posture can cause pain. Too much slouching puts pressure on the annulus. An excessive lumbar curve can overload and inflame the facets. As a result, the back muscles may tighten or spasm to "splint" and protect the spine. This adds to the pain you feel.



Slouching **(flexion)** puts pressure on the annulus.



An excessive lumbar curve **(extension)** harms the facets.

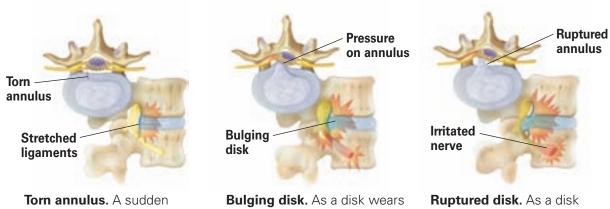


## How Disks Wear Out

Over time, normal aging often causes disks to wear out (**degenerate**). But poor movement and posture problems can speed up the process. As disks dry out and narrow, the vertebrae get closer together and become irritated. Bony outgrowths, or spurs, may form. This can narrow the foramen (a process called **stenosis**) and irritate nearby nerves.

#### **Common Spine and Disk Problems**

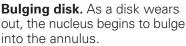
The most common back problems occur when disks tear, bulge, or rupture. In such cases, an injured disk can no longer cushion the vertebrae and absorb shock. As a result, the rest of your spine may also weaken. This can lead to pain, stiffness, and other symptoms.



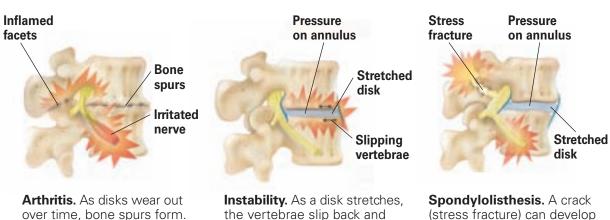
**Iorn annulus.** A sudden movement may cause a tiny tear in an annulus. Nearby ligaments may stretch.

These growths can irritate

nerves and inflame facets.



**Ruptured disk.** As a disk ruptures, its nucleus can squeeze out and irritate a nerve.



forth. This can put pressure on

the annulus.

(stress fracture) can develop in a vertebra. This may put pressure on the annulus, stretch the disk, and irritate nerves.

# **Diagnosing Your Back Problem**

A medical evaluation is needed to find the cause of your back problem. This can include a health history, an exam, and diagnostic tests. After diagnosis, a team approach to treatment often works best. Each team member—the doctor, the physical therapist, and you—plays a role in improving the health of your back.

#### **Your Health History**

Your health history helps the doctor evaluate your back pain and other medical problems. Your doctor is likely to ask about what symptoms you feel and when you notice them.

#### An Exam

To find the cause of your problem, your doctor may check your spine and posture in different positions. Your muscle flexibility and strength may be checked. The reflexes and sensation in your legs may also be tested.

#### **Diagnostic Tests**

To locate the source of your pain, you may have one or more tests. Imaging tests, such as x-rays, CTs, and MRIs, also help the doctor plan your treatment.



MRI of the lumbar spine with bulging disk

#### When to Call Your Doctor

Call your doctor right away if you have back pain and any of the following:

- Problems controlling your bladder or bowels
- Numbness near the genital or rectal area
- Extreme leg weakness, numbness, or constant leg pain
- Fever or chills

# Proper Posture: The Key to Safe Movement

Your spine bears your weight throughout the day. This is true whether you're sleeping, standing, or bending. Certain positions place more strain on your spine than others. But by maintaining proper posture in all positions, you can reduce the stress on your spine. This helps to prevent back pain and injury.



#### Check Your Standing Posture

To improve your standing posture, follow these steps:

- Breathe deeply.
- Relax your shoulders, hips, and knees.
- Think of the ears, shoulders, hips, and ankles as a series of dots. Now, adjust your body to connect the dots in a straight line.
- Tuck your buttocks in just a bit if you need to.

# Learning Safe Body Mechanics

If you sleep, sit, and move the right way, your weight is balanced throughout your spine. As a result, the risk of back injury is reduced. You may want to learn safe body mechanics a step at a time. Think about which movements cause your symptoms. Then learn the correct back basics for those movements first.

## Lying Down

- When lying on your side, bend your knees and place a pillow between them.
- If you lie on your back, put a pillow under your knees.
- If you lie on your stomach, place a pillow under your abdominal muscles.

# Standing

- Bend your knees slightly to take stress off your lower back.
- Wear shoes that support your feet. This helps keep your spine aligned.
- If you must stand for long periods, raise one foot slightly. Rest it on a low shelf or stool. Shift feet often.

## Sitting

- Sit in chairs that support your back. Keep your ears in line with your hips. If needed, support your lumbar curve with a rolled-up towel or lumbar roll.
- Your knees should be level with your hips. Your feet should be flat on the floor or on a footrest.



## **Bending and Lifting**

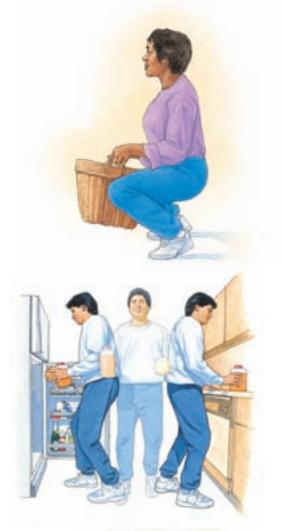
- Bend at your knees and hips instead of your waist. Do your best to keep your hips in line with your shoulders.
- Hold objects close to your body to limit strain on your back.
- Lift your body and the load at the same time. Let your leg muscles do most of the lifting.

# Turning

- Think of your upper body as one straight unit, from your shoulders to your buttocks.
- Turn with your feet, not your back or knees. Point your feet in the direction you want to go. Then step around and turn. Maintain your spine's three curves.

## Reaching

- Store common items between shoulder and hip level.
- Get close to the item. Use a stool or special reaching tool, if you need to.
- Tighten your abdominal muscles to support your back. Use the muscles in your arms and legs (not your back) to lift the item.





# Exercise for a Healthier Back

Your healthcare provider can create an exercise program to fit your needs. Do your exercises each day, or as often as directed. Try to repeat each exercise as often as instructed. Stop any exercise that causes pain. Then tell your doctor or physical therapist.

## **Neck Glide**

- Sit or stand up straight. Keep your chin level.
- Glide your head straight back. (You should feel as if you have a double chin.)

## **Pelvic Tilt**

- Lie down and bend both knees.
- Tighten your abdominal and buttock muscles. Tilt your hips slightly toward the ceiling until your lumbar curve flattens against the floor.

# **Hamstring Stretch**

- Lie on your back. Place a towel or your hands around your thigh, just above the knee. Tighten your abdominal muscles.
- Pull your leg toward your chest until you feel a stretch. Gently straighten your leg as much as you can.

# **Partial Sit-Up**

- Lie on your back with both knees bent and your feet flat on the floor. Fold your arms across your chest.
- Use your abdominal muscles to raise your body. Keep ears and shoulders aligned.
- Pause when your shoulder blades come off the floor. Relax back down.







# **Hip Stretch**

- Kneel with one foot in front of you. Tighten your abdominal muscles.
- Slowly shift your weight forward onto your front foot. You should feel a gentle stretch on the back hip.

## Wall Slide

- Stand with your back against a wall. Place your feet about 12 inches in front of you, shoulder-width apart. Tuck your buttocks until you feel comfortable.
- Slide down the wall into a half-sit. Be sure to keep your back against the wall. Your knees should not go beyond your toes.

#### **Press-Up**

- Lie on your stomach. Place your hands on the floor near the sides of your head.
- Straighten your arms and push your upper body off the floor. Be sure to keep your hips in contact with the floor.
- Slowly bend your elbows, allowing your upper body to relax down to the floor.

**Note:** Do press-ups only if your healthcare provider says that you should.

# Think Back Throughout the Day

Take care of your back throughout the day. You will have fewer back problems if you do. Try to warm up before you move. Shift positions often. Also do your best to form healthy habits.

#### Warm Up for the Day

Do a few slow, catlike stretches before starting your day. This simple warm-up can soften your disks, stretch your back muscles, and help prevent injuries.

## **Shift Positions Often**

At work and at home, change positions often. This helps keep your body from getting stiff. Stand up or lean back while you sit. If you can, get up and move every half-hour.

## Form Healthy Habits

• Keep a healthy weight. When you weigh too much, your back is under excess strain. But losing just a few extra pounds can help a lot.

- Try not to overeat. Learn about serving sizes. The size of a serving depends on the food and the food group. Many foods list serving sizes on the labels.
- Handle minor aches with cold and heat. Apply cold the first 24 to 48 hours. Use heat after that. Always place a cloth between your skin and the source of cold or heat.
- Take medications as directed. This helps keep pain under control. Always read labels, and call your doctor or pharmacist if you have any questions.

# Walk to Better Back Fitness

Walking is great for your back. It's as simple as taking a step out the door. And if you always wear good walking shoes, it's that much better for your back.

#### Walk Each Day

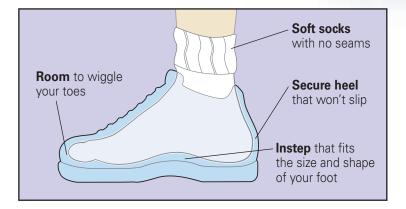
A daily walk keeps your back and thigh muscles stretched and strong. This gives your back better support. Be sure to walk with your spine's three curves aligned.

## **Getting Started**

Make it a goal to walk 20 to 30 minutes each day. A few hints for starting out are listed below.

- Start with a 5- to 10-minute walk. Then add a few more minutes each day.
- Take three 10-minute walks each day.
- Walk to visit a friend instead of talking on the phone.
- Walk around the entire store or mall before you shop.





#### Wear the Right Shoes

When you walk, wear a good pair of walking or jogging shoes. These shoes absorb shock when your foot hits the ground. This helps the disks cushion your spine.

# Moving Wisely, Moving Well

Your healthcare team can teach you the basics of back care and good movement. But from there, back fitness may be up to you. Learn to move wisely. Then stay on the move. Whether you're lifting, walking home from the store, or running around the block, the basics of safe movement help keep you on the go.

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