

How to Lift, Move, & Carry Things Safely



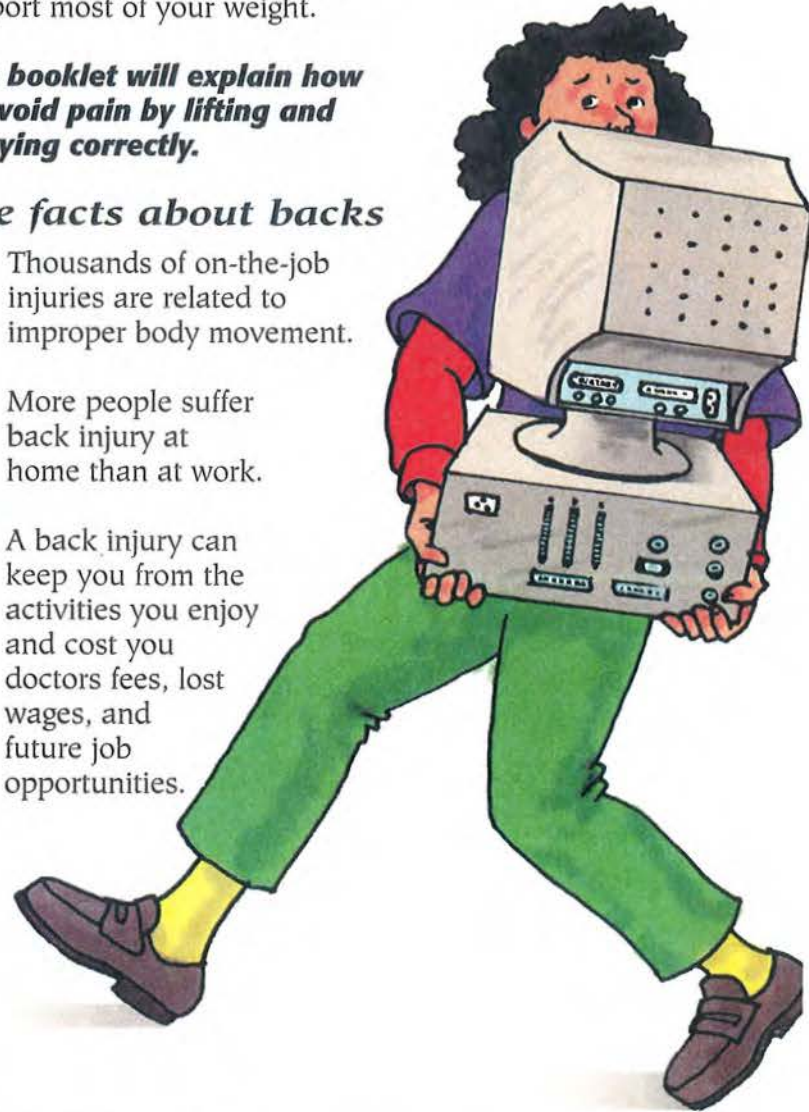
Make the Right Moves When Lifting and Carrying

Your back is at work 24 hours a day. It has to hold up your entire body and support most of your weight.

This booklet will explain how to avoid pain by lifting and carrying correctly.

The facts about backs

- ◆ Thousands of on-the-job injuries are related to improper body movement.
- ◆ More people suffer back injury at home than at work.
- ◆ A back injury can keep you from the activities you enjoy and cost you doctors fees, lost wages, and future job opportunities.

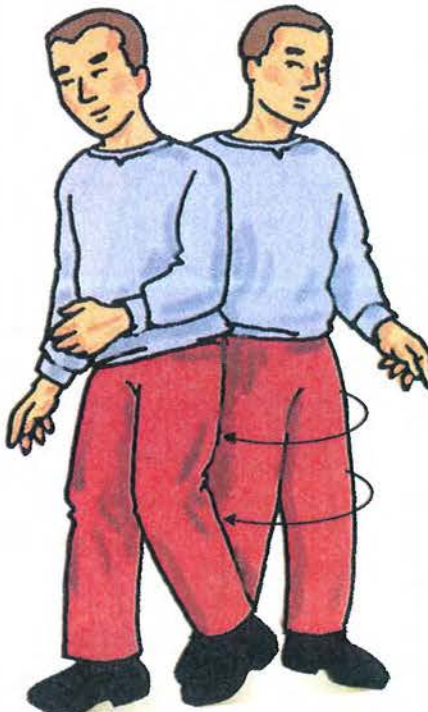


Your Back in Action

Your back takes part in almost every move you make.

Your back helps you:

- ◆ Reach
- ◆ Stand up
- ◆ Bend over
- ◆ Sit down
- ◆ Lift loads
- ◆ Move objects
- ◆ Turn



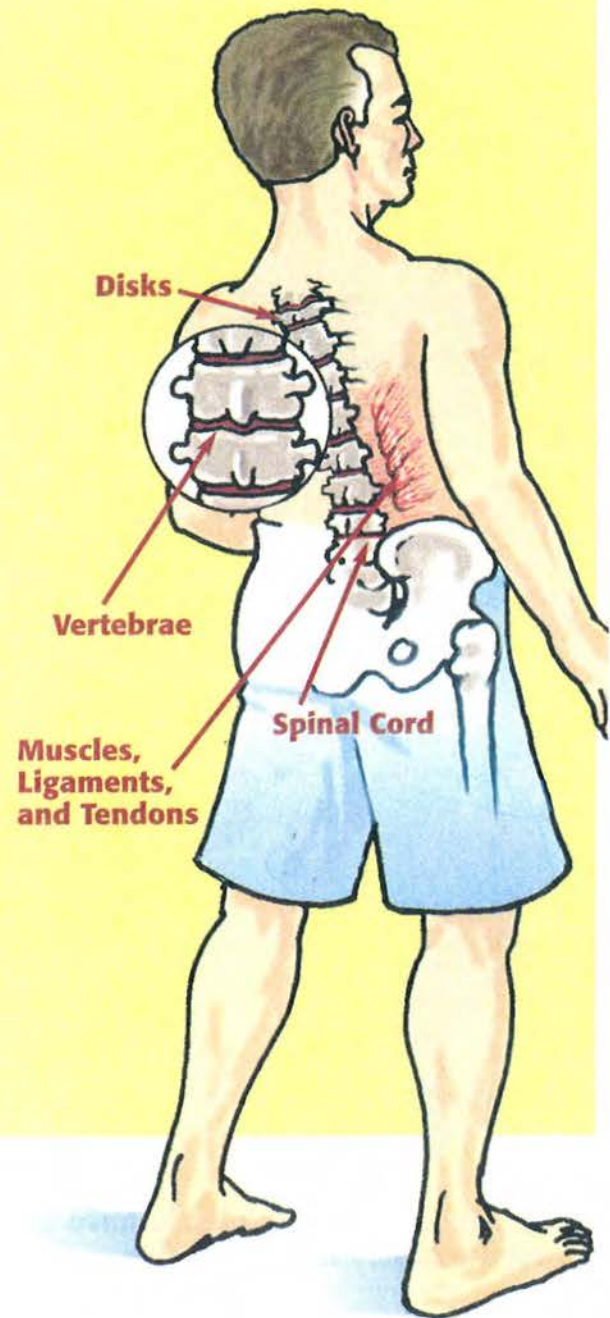
Because of the big job backs have to do, they're more prone to injury than any other part of the body.

Know Your Back's Supportin

Your back is a complex assembly of parts.

The **spine**, or backbone consists of 33 bones called **vertebrae** in a column of three natural curves. The backbone provides physical strength and also protects the **spinal cord**.

Gel-filled pads called **disks** separate and cushion the vertebrae. Broad, flat **muscles** attach to the spine. **Ligaments** and **tendons** help keep everything together.



Cast

Injury to any of these can cause pain and limit your movement. The most common injuries are:

Strain—overused or over-stretched muscles.

Sprain—when sudden movements tear ligaments.

Herniated disk—due to strain or age, a disk can leak fluid and lose its cushioning ability. This can also put pressure on nerves or joints.

Most back injuries come from a combination of problems, including:

- ◆ Improper lifting, carrying, or moving techniques
- ◆ Weak back and abdominal muscles
- ◆ Excess weight and potbellies
- ◆ Poor physical conditioning and flexibility
- ◆ Poor sitting and standing posture.



YOU CAN PREVENT MOST BACK INJURIES BY:

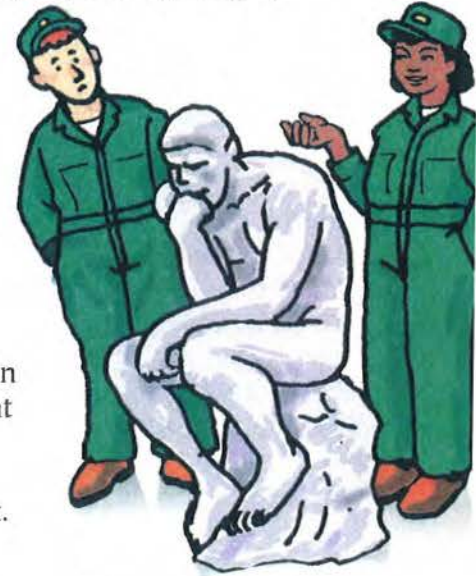
- ◆ Improving your strength and fitness
- ◆ Learning the proper “body mechanics” for posture, lifting, moving, and carrying.

Stay Out of Traction— Have a Plan of Action

A moment's preparation can prevent pain and injury. Know how you'll lift and carry before you pick anything up.

Examine the object and make sure:

- ◆ The weight is stable and won't shift
- ◆ There are no sharp edges or points sticking out
- ◆ You have the right number of people based on the size, shape, and weight of the load
- ◆ You can clearly see over it.



Know the route you'll follow:

- ◆ Choose the easiest route—not necessarily the shortest
- ◆ Have a clear path—move any objects you may trip over or bump into
- ◆ Look for places where you can stop and rest
- ◆ Make sure you have a clear unloading zone.



To Lift and Move Safely, You Need Good Body Mechanics

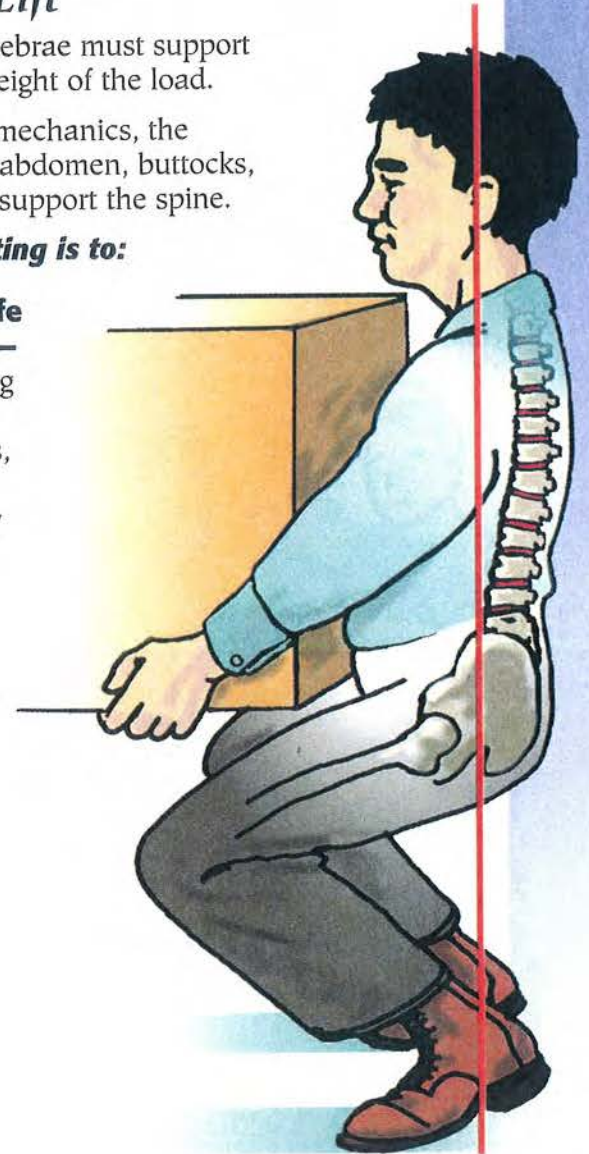
Anatomy of a Lift

When you lift, the vertebrae must support your weight and the weight of the load.

By using proper body mechanics, the muscles in your back, abdomen, buttocks, and thighs all work to support the spine.

The secret to safe lifting is to:

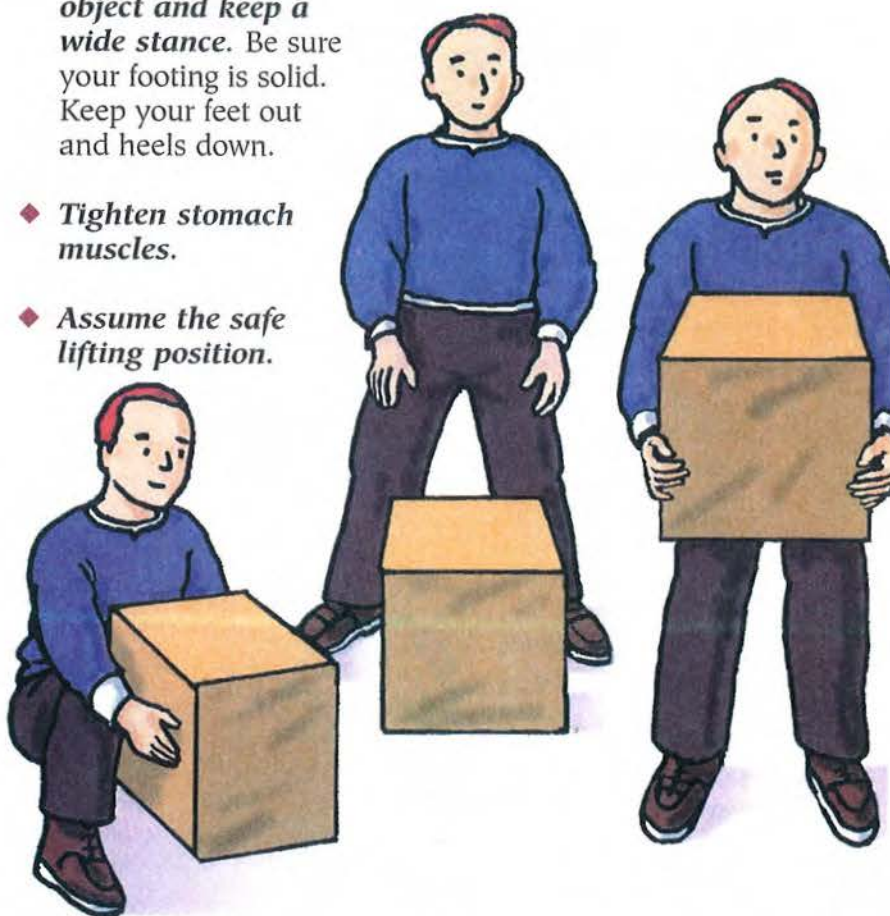
- 1. Assume the safe lifting position—**squat by bending at the hips and knees. Your ears, shoulders, and hips form nearly a straight line. Keep your feet shoulder-width apart and your feet turned out.
- 2. Maintain your back's natural curves—**do not bend your back.
- 3. Let your legs do the lifting.**



How to Lift and Carry Safely

Lifting below the waist

- ◆ **Stand close to the object and keep a wide stance.** Be sure your footing is solid. Keep your feet out and heels down.
- ◆ **Tighten stomach muscles.**
- ◆ **Assume the safe lifting position.**



- ◆ **Pull the load close to your body.** This reduces pressure on your back. Grasp the object firmly.
- ◆ **Let your legs, not your back, power the lift.** Maintain the natural curves of your spine and rise up from the squatting position using your legs. Do not bend over at the neck, shoulders, or waist.

Carrying

Make sure you can see where you are going. Move slowly, with small steps.

DON'T TWIST!

Move your feet to turn.



Unloading

Face the spot you have chosen and lower the load slowly by using your legs, not your back:

- ◆ ***Bend your knees*** and lower your body with the load. Keep your back straight—do not bend over with the load.
- ◆ ***Keep your fingers away*** from the bottom and place the load down on the surface. If placing on an elevated surface, lower the load to the edge, then slide it back.



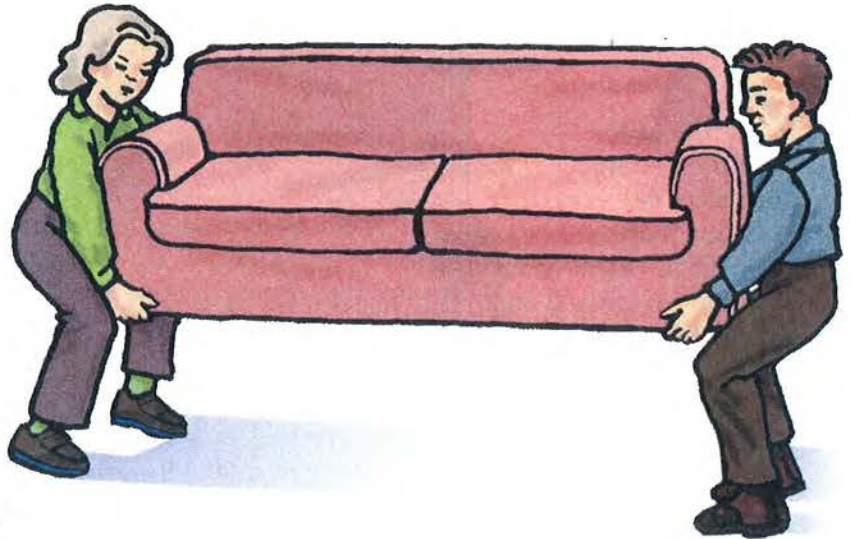
Reaching overhead:

- 1. Use a step stool or ladder.** It's unsafe to stand on tiptoe, stacked objects, or chairs. Never reach above your shoulders.
- 2. Slide the load close to your body.** Be sure to keep solid footing and a firm grasp.
- 3. Let your arms and legs do all the work.** As with any lift, always be sure you can handle the load safely and have a place to set the load down.



Oversized or heavy loads:

- 1. Work as a team—use a two-person lift.**
- 2. Designate one person to direct the lift.**
- 3. Lift at the same time.**
- 4. Keep the load level when carrying.**
- 5. Move smoothly together and unload at the same time.**



Long Objects

- ◆ Carry lumber, pipe, and other long objects over the shoulder
- ◆ Be careful the ends don't hit anyone or anything.



Bags & Sacks

- ◆ Assume the safe lifting position.
- ◆ Grasp load at opposite top and bottom corners.
- ◆ Power your body up with your legs and use your arms to raise the load to rest on your hip.
- ◆ Fully stand and move the load to rest on your shoulder.



REMEMBER

to move your feet to turn and *don't twist at the waist.*

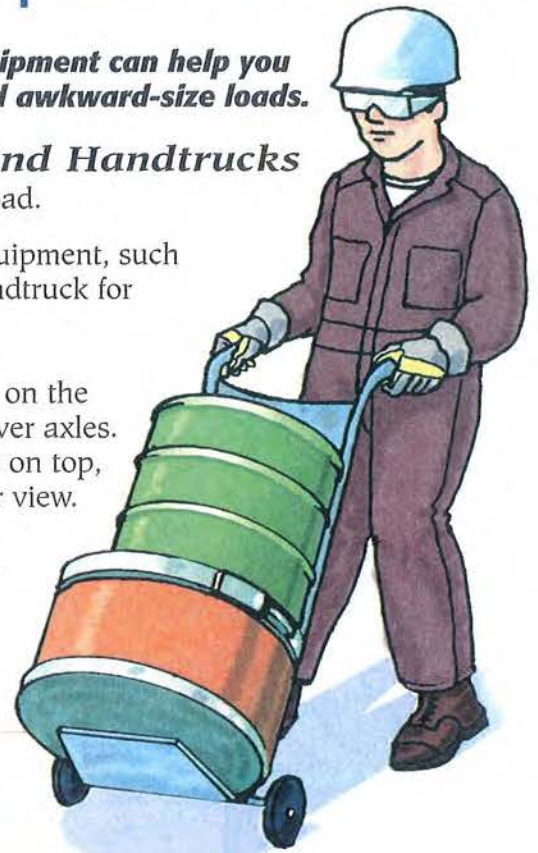
Special Equipment Can Ease the

Material handling equipment can help you safely move heavy and awkward-size loads.

Dollies, Carts, and Handtrucks

put wheels under your load.

- ◆ Choose the right equipment, such as a curved bed handtruck for drums or barrels.
- ◆ Place heavy objects on the bottom, with load over axles. Stack lighter objects on top, but don't block your view.
- ◆ Secure bulky, loose, or delicate objects.

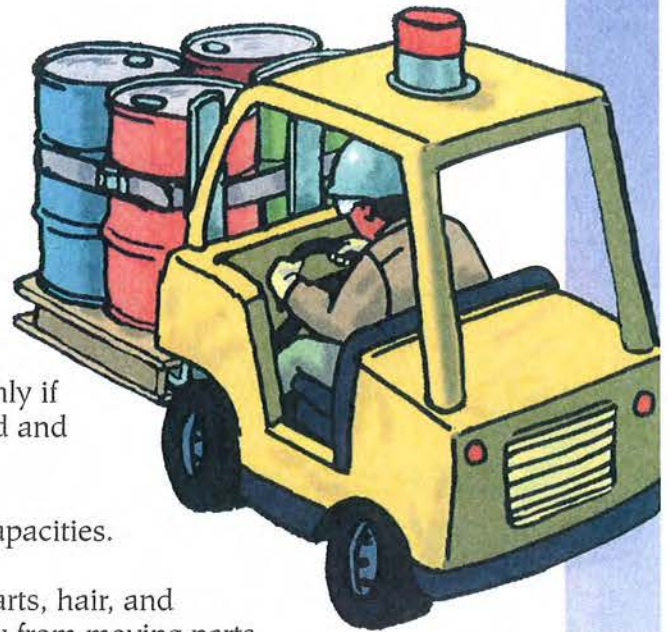


- ◆ Push the load forward with legs and upper body. Maintain a firm grip with buttocks out, back in its natural curves, and knees bent. Hand position should be between upper thigh and chest position when pushing.
- ◆ Avoid pulling the load, which adds more strain than pushing.

Burden

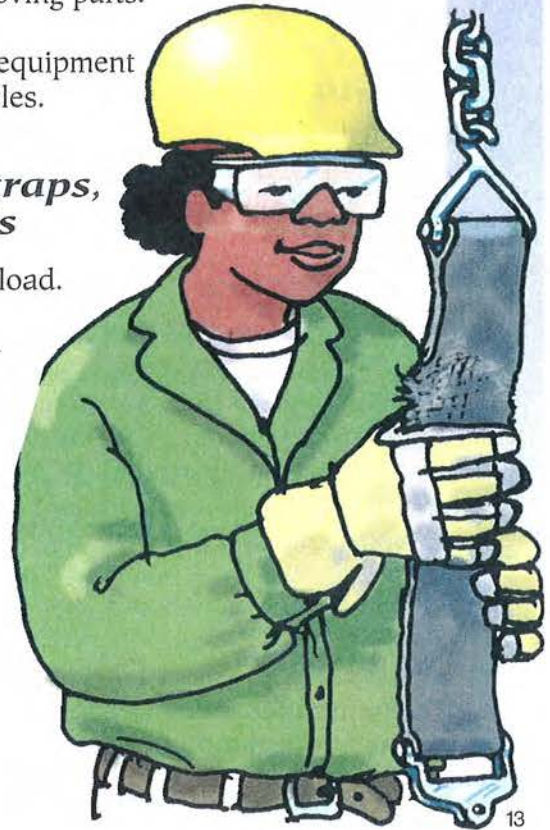
Powered Equipment

- ◆ Use powered equipment only if you're trained and authorized.
- ◆ Know load capacities.
- ◆ Keep body parts, hair, and clothing away from moving parts.
- ◆ Don't ride on moving equipment or take riders on vehicles.



Ropes, Chains, Straps, Hooks, and Hoists

- ◆ Match strength to the load.
- ◆ Inspect before using—look for kinks, knots, twists, frays, or sharp edges.
- ◆ Wear required protective clothing and equipment to protect your eyes, feet, head, and hands.



Keep Your Back Healthy

Preventing back injuries also takes strong back, stomach, and leg muscles. *Here are a few exercises that take just minutes a day:*

The Not-Quite-a-Sit-up, Sit-up

While on your back, reach toward your knees with outstretched hands until your shoulders lift off the floor. Don't anchor your feet—that increases strain on your back. Hold for 5 seconds. Slowly drop back to the floor.

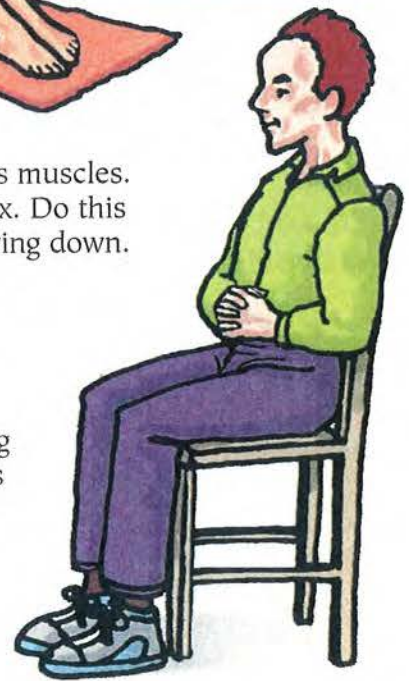


The Gut Sucker

Slowly tighten stomach and buttocks muscles. Hold for 5 seconds, then slowly relax. Do this anytime while sitting, standing, or lying down.

Good Posture

Sit up straight with your feet flat on the floor and knees bent at a 90 degree angle. If sitting or standing for prolonged periods, shift positions and get up and walk around. When standing, align your head straight with your back and hips.



WALKING

Thirty minutes a day strengthens muscles and can help you reach or maintain a healthy weight for your back.

Safe Lifting Reminders

Post this checklist where you'll see it often.

DO:

- ☐ Plan your lift
- ☐ Keep a shoulder-width stance
- ☐ Squat—bend the knees
- ☐ Tighten stomach muscles
- ☐ Maintain your back's natural curves
- ☐ Lift with your legs
- ☐ Minimize the weight you must lift
- ☐ Get help and make use of special handling equipment
- ☐ Exercise and limit stress on your back

Avoid These Back Breakers

DON'T:

- ☐ Bend at the waist or lift with your back
- ☐ Twist while lifting or carrying
- ☐ Try to lift more than you can handle
- ☐ Reach over your shoulders for a load
- ☐ Try to recover a falling load
- ☐ Pull any load

Test Your Lifting, Moving, & Carrying Safety Knowledge

QUIZ

Directions: Circle **T** if the statement is true, or **F** if the statement is false.

- T F** 1. Because of the big job backs have to do, they're more prone to injury than any other part of the body.
- T F** 2. Your backbone is one long bone that runs the length of your back.
- T F** 3. The most common back injuries are sprains, strains, and herniated disks.
- T F** 4. Improving your strength and fitness is one way to prevent injury.
- T F** 5. Using good "body mechanics" means getting surgery for back pain.
- T F** 6. The safe lifting position requires you to squat by bending at the knees and maintaining your back's natural curves.
- T F** 7. Always power your lift with your legs and never twist your body.
- T F** 8. You should always make sure your load is as heavy as possible, not get help or use special equipment, and take the longest route, so that you can make yourself stronger.
- T F** 9. It's OK to reach for objects over your head as long as you wear a hard hat.
- T F** 10. Preventing back injuries takes strong back, stomach, and leg muscles.

Name _____

Signature _____ Date _____

For the correct answers, turn this page upside down.

Answers: 2, 5, 8, 9 are false. 2. Your backbone is made up of 33 vertebrae connected by facet joints. 5. Good body mechanics means using your body in the correct way when lifting. 8. Always make the load as light as possible, get help and use the proper equipment, and choose the shortest and easiest route. 9. Use a step stool, ladder, or platform so you don't have to reach over your head.

