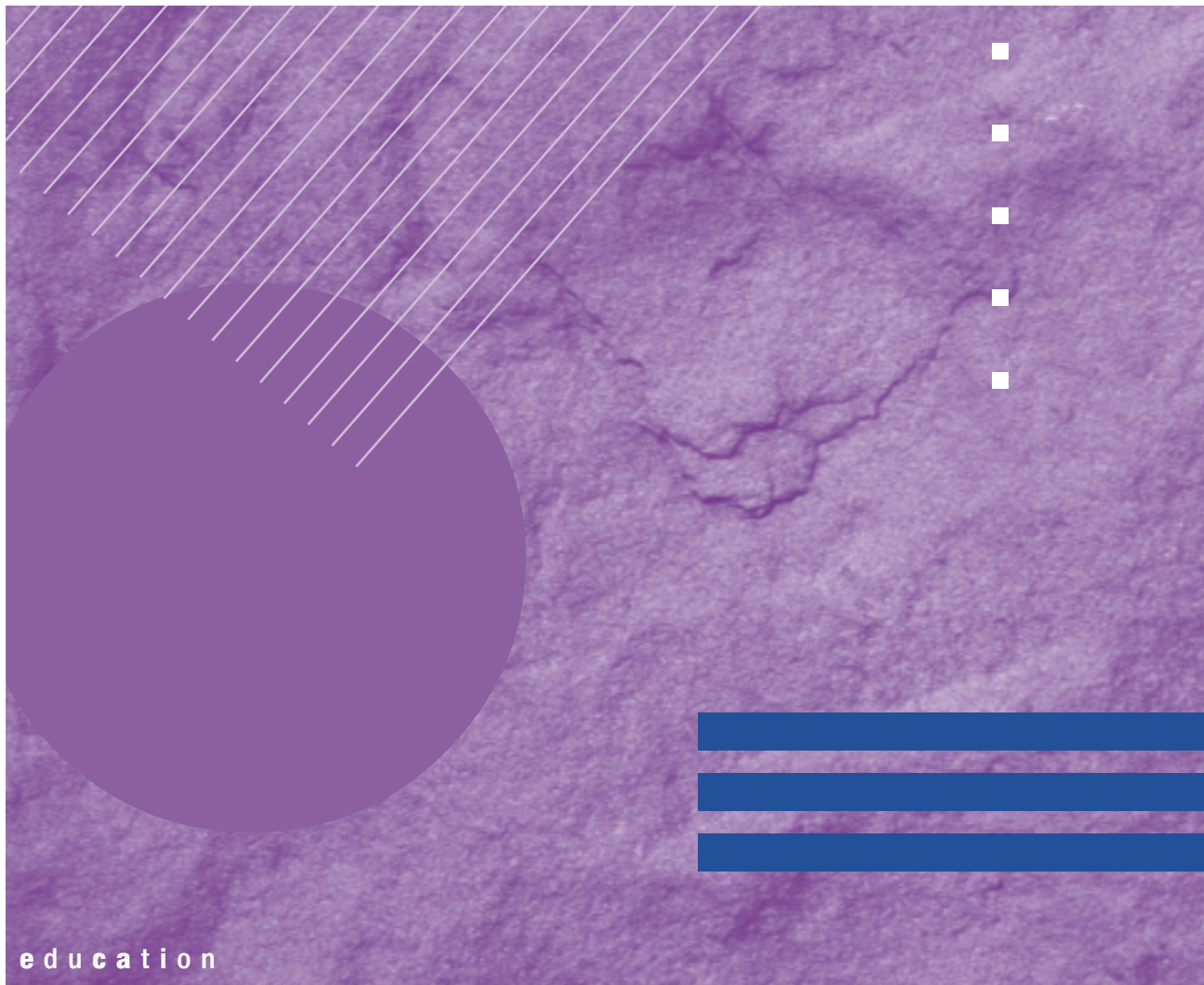


# *The Care of Your Back*



patient education



# *Introduction*

Back pain affects people of all ages, sex, and socioeconomic status. Statistics show that four out of every five adults (80 percent) have or will experience back pain. The good news is that back pain is usually not due to any serious disease or injury of your back. The causes of back pain are many and may include any of the following:

- Poor posture
- Improper body mechanics
- Muscle strain
- Ligament sprain
- Muscle weakness
- Life style choices such as smoking, excessive body weight, diminished physical fitness or excessive physical or mental stress
- Joint and disk disease

This booklet contains information that will help you protect your back against injury while engaging in activities of daily living. It contains information about the causes of low back pain, posture, proper body mechanics, exercise and energy-saving techniques.

# Dealing with Back Pain

If you experience back pain, keep the following facts in mind:

- Most people with back pain do not have any significant damage in their spine.
- Back pain is usually not due to any serious disease.
- Most back pain is temporary and lasts only a short while.
- If you regularly experience back pain, you may have good days and bad days with regard to your pain. This is normal.
- The use of cold packs for five to ten minutes at a time may help relieve pain, as may hot packs or a hot bath or shower.
- If your back pain is severe, you may need to reduce some activities or even lie down for a day or two, but resting for more than a day or two usually does not help and may do more harm than good.
- Your back is designed for movement. The sooner you return to your normal activities, the sooner your back will feel better.
- Pain medications can provide temporary relief for acute back pain, but it is important to adjust your activities so that you stay active without overdoing. Speak to a member of your healthcare team about pain medications that are right for you.
- People who are physically fit generally experience less back pain and recover faster than those who are less active.
- Your physician can help you manage back pain if it occurs, but it is your back and it is up to you to take care of it!

## **When to see a physician**

If you have back pain that gets worse over several weeks, or if you cannot participate in the activities of daily living due to severe back pain, you should see your physician.

Additionally, if you have back pain accompanied by any of the following symptoms, you should see your physician:

- Difficulty passing or controlling urine
- Numbness in your back or genitals
- Numbness, tingling or weakness in your legs
- Loss of balance

# Anatomy

Before beginning any program for managing low back pain it is helpful to take a look at what is beneath it all — how the bones, muscles, ligaments and nerves of your back work together to support you.

## The spine

The spine, or vertebral column (figure 1), is made up of bones called vertebrae.

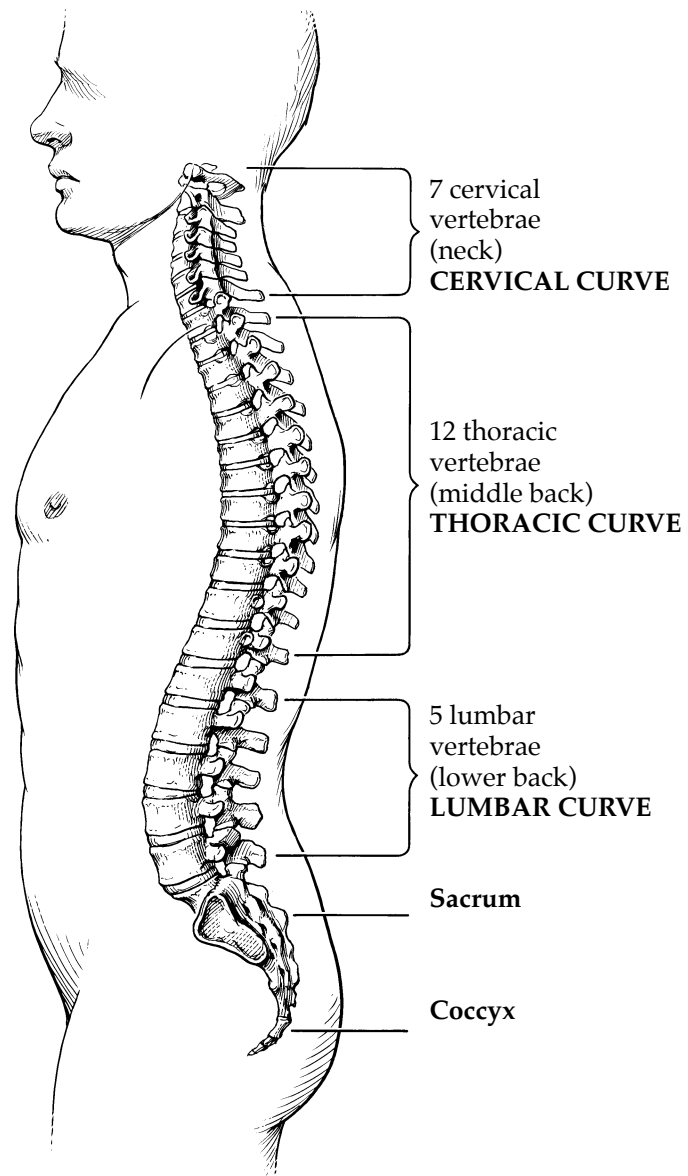


Figure 1. The spine

The normal adult spine consists of:

- Seven neck or cervical vertebrae
- Twelve middle back or thoracic vertebrae
- Five low back or lumbar vertebrae, which bear the majority of body weight

- Five fused vertebrae, which form the sacrum
- Three fused vertebrae, which form the coccyx or tail bone

The spine has three normal curves:

- Inward curve at the neck (cervical)
- Outward curve at the mid-back (thoracic)
- Inward curve at the low-back (lumbar)

The spine has three major functions:

- It supports healthy sitting and standing postures.
- It protects the spinal cord, which is an extension of the brain's nervous tissue.
- It serves as a place where muscles and ligaments attach to permit motion and support the trunk.

## Mobility

Although there is only a small amount of movement between any two adjoining vertebrae, there is a great deal of flexibility in the vertebral column as a whole. A good comparison would be to picture the range of motion of a large, heavy spring. There is little movement between any two coils, but as a whole the spring is very flexible.

## Muscles and ligaments

Muscles and ligaments provide support and give stability to the spine.

- Ligaments are strong, rope-like bands of tissue that help to connect the vertebrae to each other and prevent excessive movement of the spine (figure 2).
- Strong, balanced abdominal and back muscles help to maintain an upright position, produce movement and furnish power and stability for lifting (figure 3).

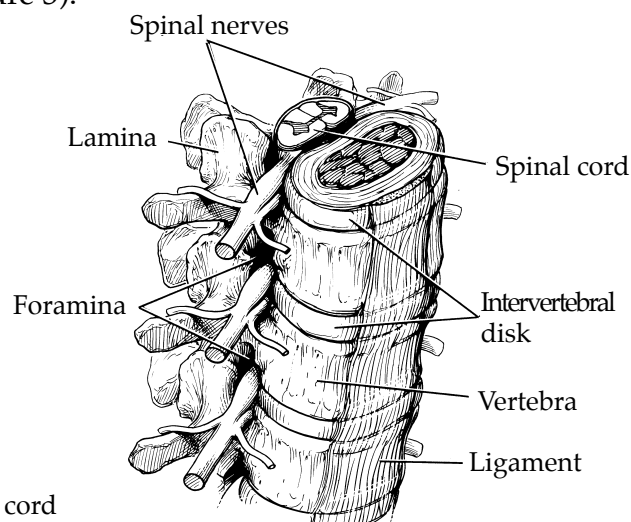


Figure 2. The spinal cord

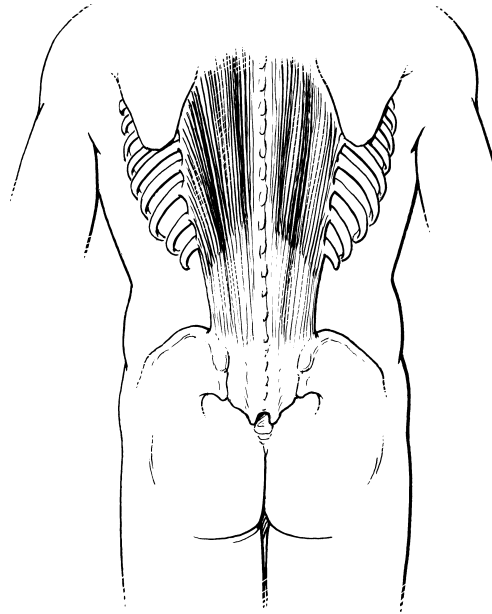


Figure 3. Muscles

### **The spinal cord**

The spinal cord, part of the central nervous system, extends from the base of the skull to the lower back. Two nerves (called spinal nerves) are sent out at each vertebral level (figure 2). In the upper lumbar part of the back where the spinal cord ends, a group of nerves (called the cauda equina) continue down the spinal canal.

There are 31 pairs of spinal nerves. Each pair of nerves exits from openings (foramina) between the vertebrae on each side of the body. One nerve leads to the right, the other to the left. These nerves carry messages to and from the various parts of the body.

### **The disks**

Disks lie between the vertebrae (figure 2). They cushion and absorb shocks to prevent the vertebrae from hitting one another as we move about. Disks are made of a tough fibrous material that has a jelly-like center, which allows movement between the vertebrae. This is necessary for the spine to bend. Although back pain is often blamed on protruded, herniated, or ruptured disks, these conditions are rare.

# Posture

Good posture uses a minimal amount of effort to balance the body and results in a minimal amount of strain on your joints, ligaments and muscles as you sit, stand and move about.

The term “neutral spine” describes a healthy posture – the spine is properly balanced in the position of greatest comfort and stability. Maintaining neutral spine alignment prevents excessive motion and helps cushion the spine from stress and strain. Learning how to maintain a healthy posture helps you move safely during activities of daily living.

Everyone has a unique neutral spine position. Any changes from the neutral spine position can stress or pull muscles, and can lead to increased muscular contraction. Constant muscle contraction causes pain, and pain causes more postural imbalance. This leads to a vicious cycle. Maintaining a healthy posture may help relax the muscles of the spine and break that pain cycle.

## **Standing posture**

When standing with a neutral spine (figure 4), your head is balanced over your shoulders and pelvis. This position is maintained by your neck, abdominal and back muscles as you move about. Uncontrolled movements away from the neutral position place excessive stress on your spine and may cause injury.





Components of standing with a neutral spine:

Head held with chin tucked in.

Chest held high with shoulders and arms relaxed.

Stomach muscles held firm.

Knees straight but not locked.

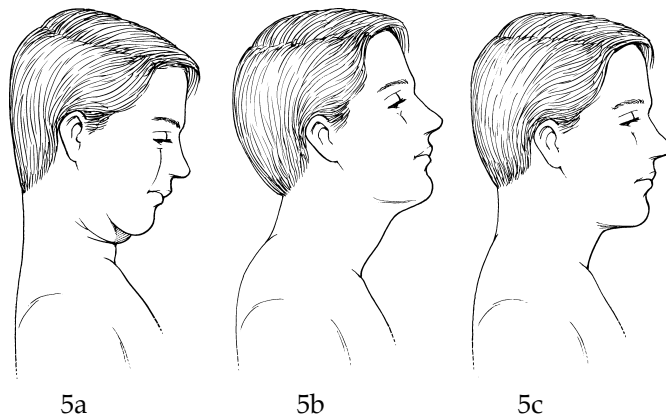
Feet parallel.

Figure 4. Standing posture

There are two exercises that can help you find your neutral spine position and help you maintain a healthy standing posture:

### 1. Head and neck neutral spine

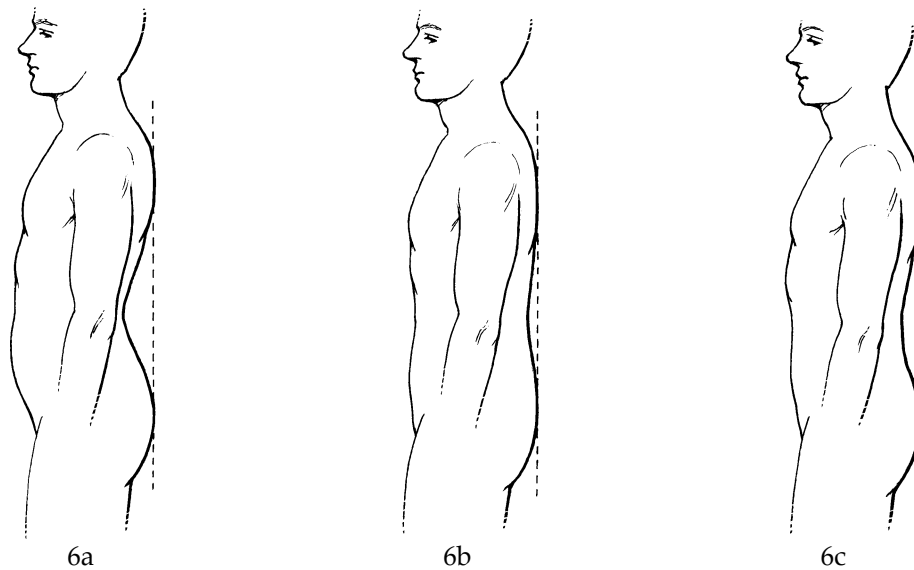
- While standing, tuck your chin down slightly and pull your head back and up as if to flatten your neck against a wall (figure 5a).
- Looking straight ahead, jut your chin forward as if you were moving your neck away from the wall (figure 5b).
- Slowly repeat these movements five times to learn the range of comfortable movement of your neck.
- After the last repetition, allow your head to find a comfortable position between the two movements (figure 5c).
- This is the healthy posture position for your head and neck.



Figures 5a, 5b, & 5c. Finding your head and neck neutral spine position

### 2. Lower back neutral spine

- While standing, arch your lower back (figure 6a).
- Tighten your abdominal muscles as if to flatten your lower back against a wall (figure 6b).
- Slowly repeat these movements five times to learn the range of comfortable motion of your lower spine.
- On the last repetition, instead of flattening your lower back, slowly move from the arched position to find a relaxed, balanced, comfortable position for your spine (figure 6c).
- This is the healthy posture position for your lower back.



Figures 6a, 6b, & 6c. Finding your lower back neutral spine position

You can maintain a healthy posture for your head, neck and lower back as you move about by making slight adjustments of your neck or abdominal muscles. You can help prevent or manage back pain by maintaining a neutral spine position.

Practice finding your healthy posture positions during your daily activities.

### *The wall test*

After finding your neutral spine position use the wall test to help you to develop and maintain a healthy posture while standing (figure 7):

- Stand against a wall with your heels approximately 2 to 4 inches away from the wall.
- Stand with your head, shoulder blades and buttocks against the wall.
- Reach back with one of your hands and place your palm flat against the wall.
- Slide your hand behind the small of your back.
- There is typically one hand's thickness of space between the small of your back and the wall.
- If there is more than one hand's thickness of space between the small of your back and the wall, tighten your abdominal muscles and gently push your back against your hand.
- If there is too little space, arch your back just enough so your hand fits comfortably behind you.

- When you find the right amount of space in the small of your back that feels relaxed and comfortable, practice arching and flattening until you find your neutral spine position.
- Repeat the movement 5 times.
- After the last repetition, instead of flattening your lower back, slowly move from the arched position to find a relaxed, balanced, comfortable position for your spine.
- Maintain this position as your position of healthy posture.
- Practice maintaining healthy posture during your daily activities.

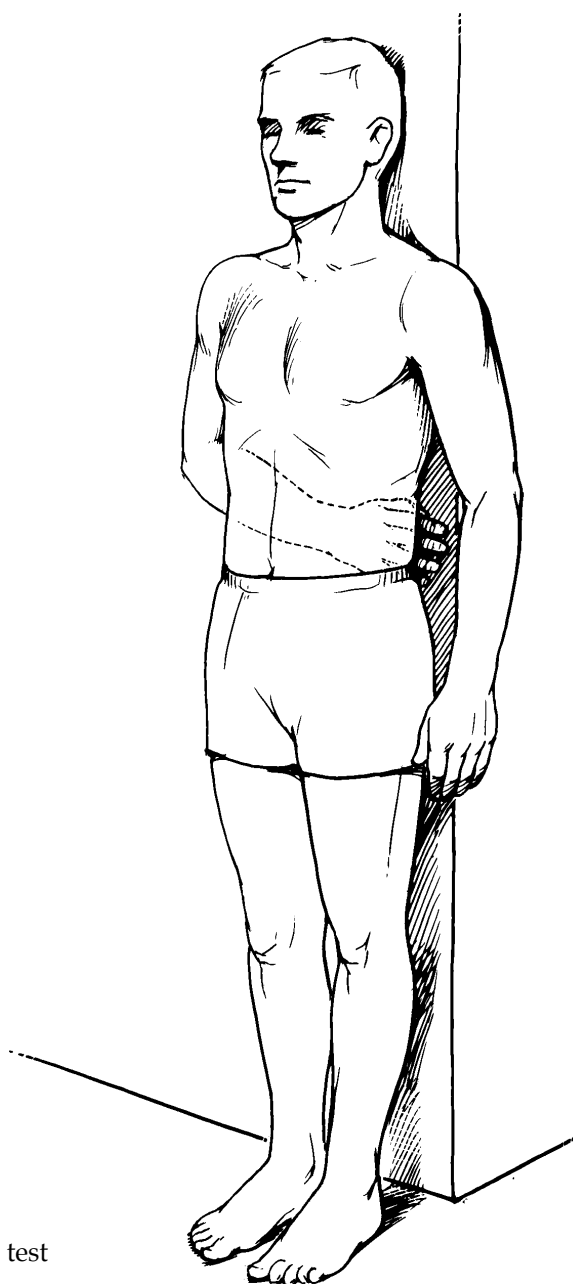


Figure 7. The wall test

**Sitting posture**

When sitting with a neutral spine (figure 8) your feet are flat on the floor, your knees and hips are bent at a right angle (the rule of “90’s”), and your low back curve is supported by the chair or by a lumbar support such as a rolled towel or cushion.

- For most people, the height of the chair should allow both feet to rest flat on the floor, while the knees are at the same level as the pelvis.
- If you are not comfortable with this position, adjust the height of your chair or place a foot support under your feet to find the best position for you.
- Choose a sitting surface that provides support of your lower back (lumbar region).
- Ideally, your chair should have a back rest located to fit in the small of your back. If one is not available, a rolled towel can be used.

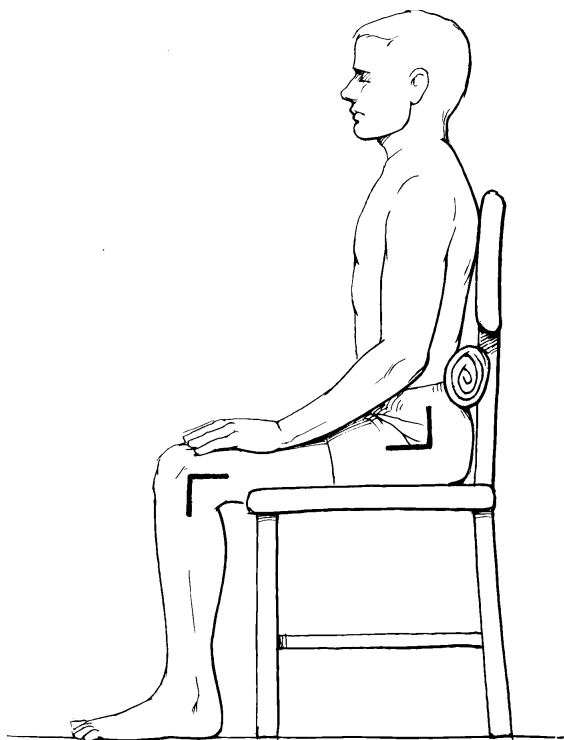
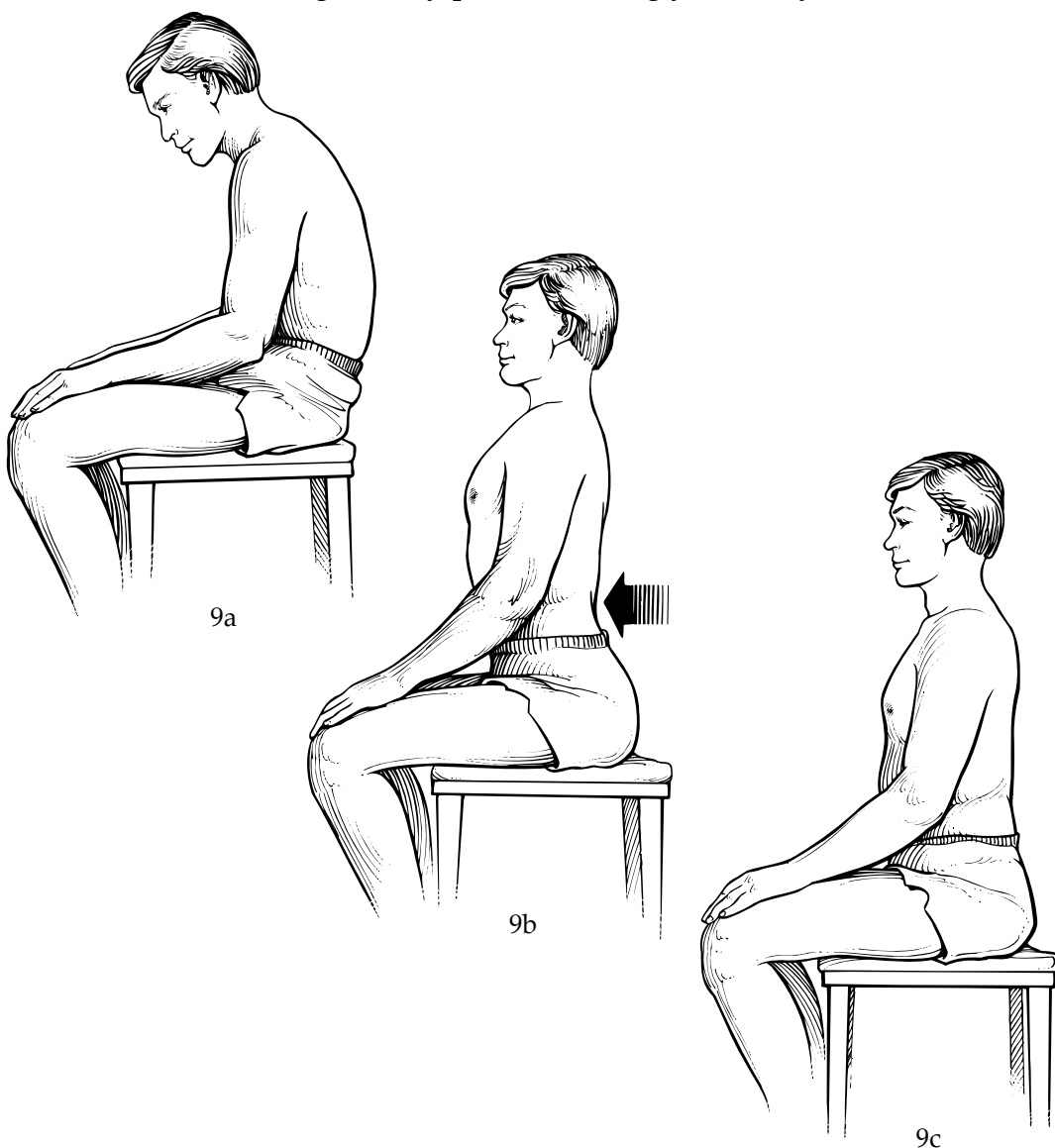


Figure 8. Sitting posture

You can develop and maintain a healthy posture while sitting by finding your neutral spine position. To find this position practice the following exercise (figure 9):

- Slouch while sitting in your chair by allowing your head to come forward and rounding out your upper back (figure 9a).
- Sit up straight, arching the small of your back (figure 9b).
- Repeat these movements 5 times.
- After the last repetition, instead of slouching, slowly move from the arched position to find a relaxed, balanced, comfortable position for your spine (figure 9c).
- This is your position of neutral spine or healthy posture while sitting.
- Practice maintaining healthy posture during your daily activities.



Figures 9a, b, c. Finding your sitting neutral spine position

### *Maintaining proper sitting posture at a computer or desk*

When working at a computer or desk (figure 10), it is important to sit with balanced posture, maintaining the same spinal curves as when sitting in a neutral spine position (page 11).



Figure 10

To develop a balanced sitting posture, practice the following:

- Stretch the top of your head toward the ceiling.
- Tuck your chin in slightly.
- Keep your upper back and neck comfortably straight.
- Keep your shoulders relaxed, not elevated, rounded or pulled backward.
- Maintain your low back curve (adjust your chair's lumbar support).
- Adjust your seat so that it does not press into the backs of your knees (allow 2 to 3 finger widths between chair and back of knees).
- Rest feet comfortably on the floor or on a foot rest.
- Distribute weight evenly over back of thighs.
- Keep knees about level with hips.

The purpose of a balanced posture while sitting at a desk is to keep your neck, shoulder and upper back muscles relaxed. Developing a healthy posture requires practice. The basic skills can be learned quickly, but you may need to practice and use balanced posture regularly for months or even years for your posture to become balanced, relaxed and automatic.

*Other considerations while sitting at a computer or desk*

Special considerations need to be taken when working at a computer or desk for extended periods of time

- Maintaining a neutral spine position in your upper and lower back may help prevent headache, muscle tension and repetitive strain.
- Your chair should be adjusted to provide the optimum support for your arms, legs and spine.
- The keyboard should be adjusted to the appropriate level and tilt for optimum hand and wrist function.
- The computer monitor should be at a position to allow you to view the monitor screen and work material without a lot of excessive head movement and eye strain (figure 10).
- If you work for long periods of time, it is important to maintain a balance between activity and inactivity. Static positions can cause joints to stiffen and muscles to ache because of inactivity even when a healthy posture position is maintained.
- Change positions frequently. Do not stay in the same position for longer than 20 to 30 minutes without a break.
- Take short breaks to stretch and relax overworked muscles. Before resuming your work, take time to gently stretch your hands, wrists and elbows.
- In addition, gently move your head, neck and shoulders through their ranges of motion.

## **Maintaining healthy posture during activities**

*Sitting down and standing up*

Maintain a healthy posture when sitting down or standing up (figure 11). Use your arms to help you move from a sitting to a standing position or vice versa.

- To sit down, move backward until the back of your legs touch the edge of the chair or surface you will be sitting on.
- Place one foot forward and use your abdominal muscles to maintain your healthy posture.
- Lean forward and lower yourself to the edge of the chair.
- Bend at the hips and knees as you sit down.
- Once you are seated on the edge of the chair, slide back into the chair.
- When you are going to stand up, slide to the edge of the chair.
- Place your feet close to the chair with one foot slightly forward.
- Use your abdominal muscles to stabilize your spine.
- Lean forward over your feet as you stand.
- To stand up from a low chair, use your arms to help you rise by pushing against the arms or seat of the chair.



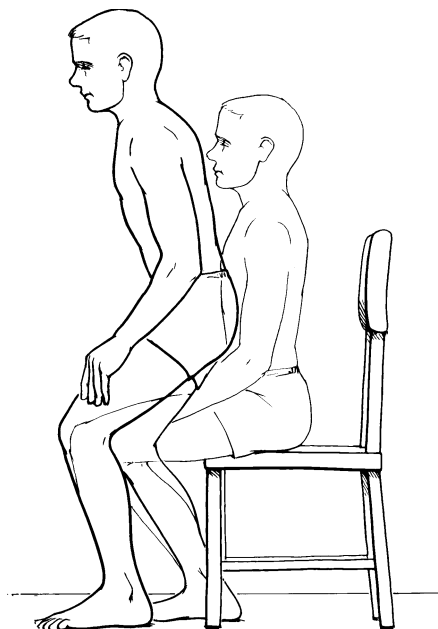


Figure 11

***Lying down***

When lying down from a sitting position be sure to maintain a healthy posture.

- Start by sitting on the bed so that your head will *hit the pillow* when you lie down (figure 12a).
- Using your arms for support, slowly lower yourself onto the bed while bringing your legs up to a side-lying position (figure 12b and c). This allows you to maintain your neutral spine while changing positions.
- When sitting up from a lying position, first roll to your side with your knees bent. Then slide your feet over the edge of the bed as you use your arms to push your body up to a sitting position.

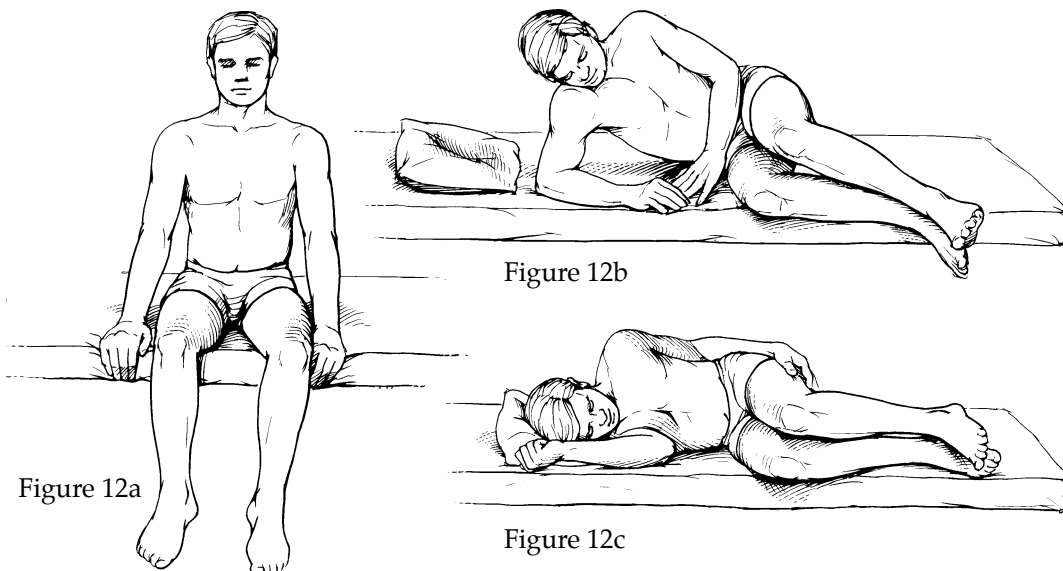


Figure 12a

Figure 12b

Figure 12c

Maintain your position of healthy posture while lying down.

- When lying flat on your back, place a small pillow under your knees or thighs to help maintain the normal curve of your lower back (figure 13).
- A small rolled towel may be placed under the small of your back for additional support.
- When lying on your abdomen, place a pillow under your pelvis and lower abdomen (figure 14).
- When lying on your side, bend your knees and place a pillow between them (figure 15). A small rolled towel may be placed under your waist to help maintain your normal spinal curves.



Figure 13



Figure 14

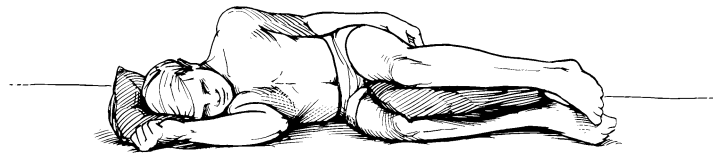


Figure 15

### *Reaching*

When reaching for objects, be certain to get as close to the object as possible to avoid over-extending your arms and trunk (figure 16). Position yourself to prevent arching and twisting of your back.

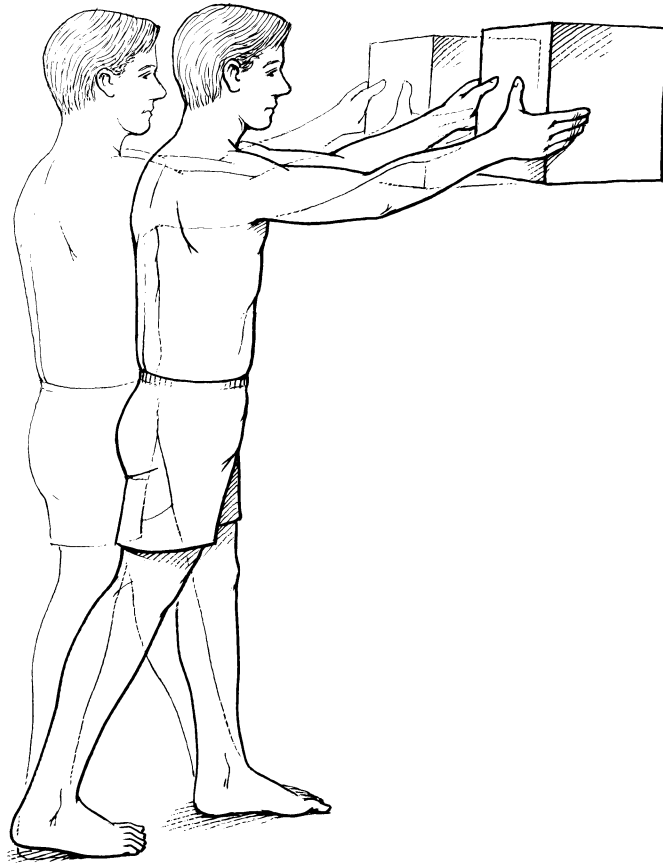


Figure 16

When working with objects above the level of your chest it is best to stand on a stool to get closer to the object.

Keep these other important factors in mind when reaching for an object:

- Keep your knees slightly bent.
- Place one foot forward and as close to the object as possible.
- Find your neutral spine position and maintain it during the activity.
- Grasp the object with both hands while keeping the elbows slightly bent and slowly pull it to the edge of the shelf by shifting your body weight onto the back foot.
- Lift the object off the shelf using both arms, if possible.
- Keep it as close to your body as possible.
- Slowly lower the object to waist level.

### *Kneeling*

Maintain a healthy spine position while you are kneeling down and getting up. Keep your feet 8-12 inches apart (figure 17). Place one foot forward. Shift your weight to the balls of your feet, and lower your body down to one knee by bending at the hips and knees. Bring your arms forward to help maintain balance if needed.

To progress to full kneeling, lower yourself until both knees are on the floor and then sit back on your heels.

Reverse the process to return to a standing position.

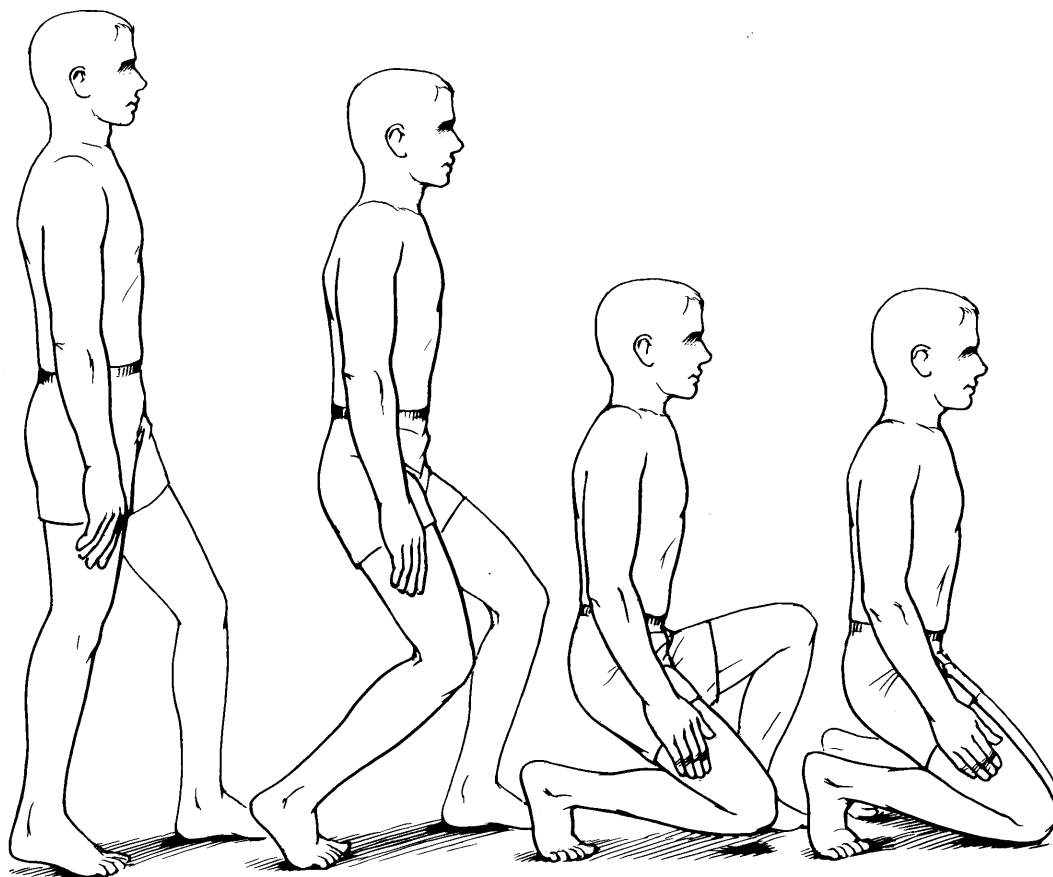


Figure 17

### *Lifting*

Before lifting, plan ahead:

- Clear a space to place the object.
- Check the weight of the object.
- If it is too heavy, get assistance.
- Choose the correct method of lifting.

### Kneeling method

- Stand as close as possible to the object you are going to lift (figure 18a).
- Find a neutral spine position and maintain it during the activity.
- Keep your feet 8-12 inches apart.
- Place one foot forward.
- Keep your weight on the balls of your feet.
- Lower your body down to one knee by bending at the hips and knees.
- Lift the object from between the legs and hold it close to your body.
- If the object is heavy, you may first lift it to rest it on your bent knee (figure 18b).
- Use your leg muscles to rise from the floor (figure 18c).
- **Do not twist** your body while lifting or carrying the object—turn by pivoting on your feet.
- Use this method for lifting and carrying small children.

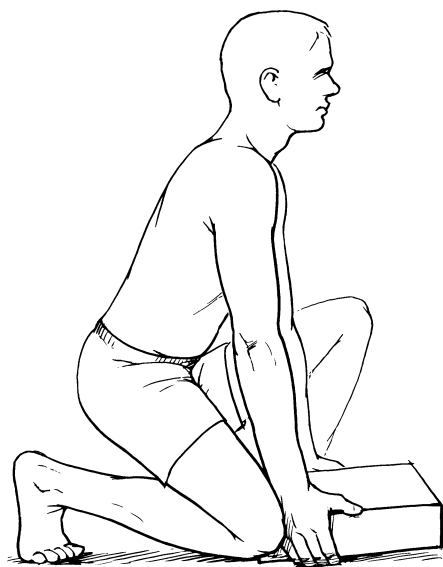


Figure 18a

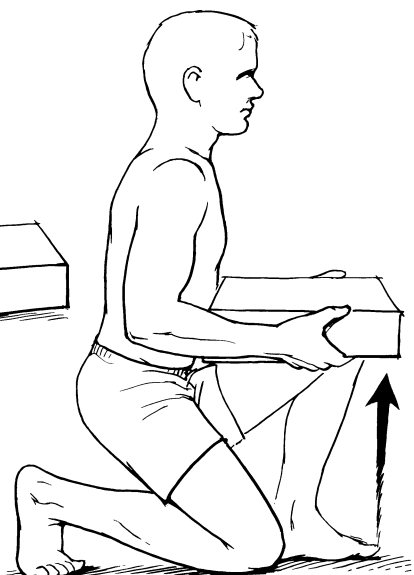


Figure 18b

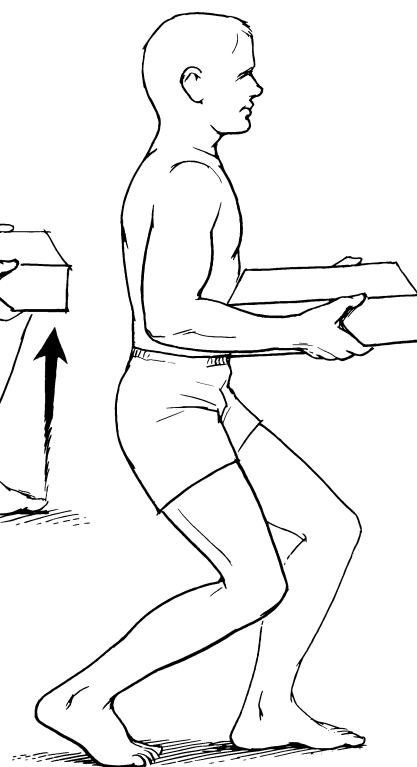


Figure 18c

**Squatting method**

Follow the same procedure as with kneeling but squat rather than kneel (figure 19). Lift the object from between your legs, holding it close to your body.

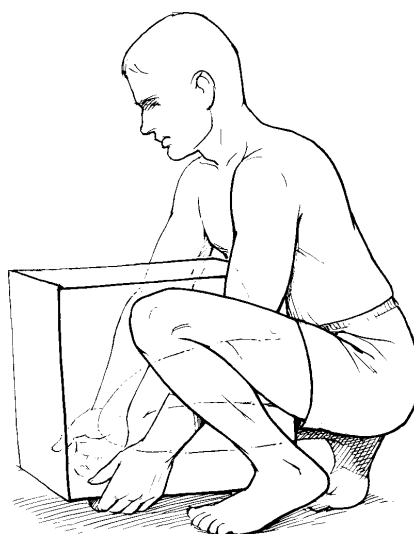


Figure 19

**Golfer's lift**

Use the golfer's lift when picking up light objects. Stand on one leg. Bend forward at the waist, maintaining your neutral spine position, and extend your other leg out behind you for balance. Reach down with the arm opposite your extended leg to pick up the object (figure 20). Hold on to the back of a chair or other support for added balance.

As you return to a standing position, bring your extended leg down while maintaining your neutral spine position.

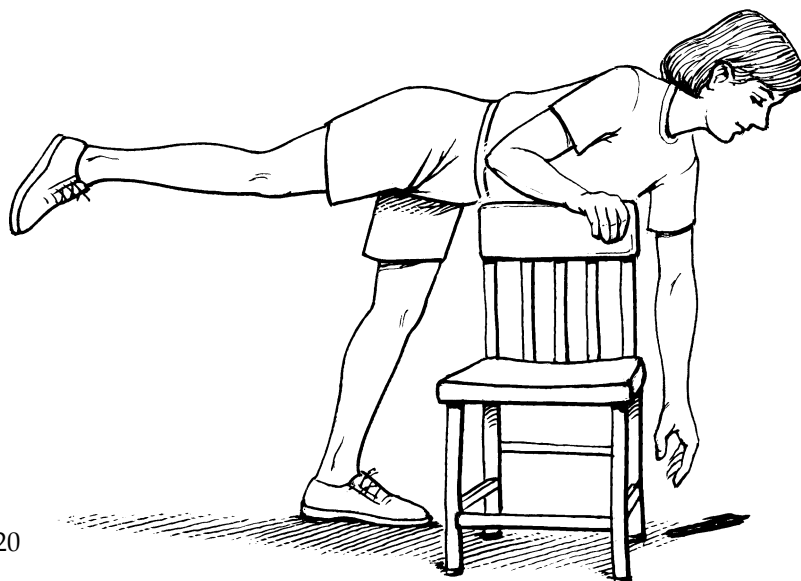


Figure 20

***Pushing***

When pushing an object, bend your knees so your arms are level with the object. Keep your elbows slightly bent. Lean toward the object while maintaining a neutral spine position. Push the object in front of you using your leg muscles (figure 21).

***Pulling***

When you have to pull an object, bend your knees so your arms are level with the object. Keep your elbows slightly bent. Lean away from the object while maintaining your neutral spine position. Pull the object by using your body weight and leg muscles (figure 22).

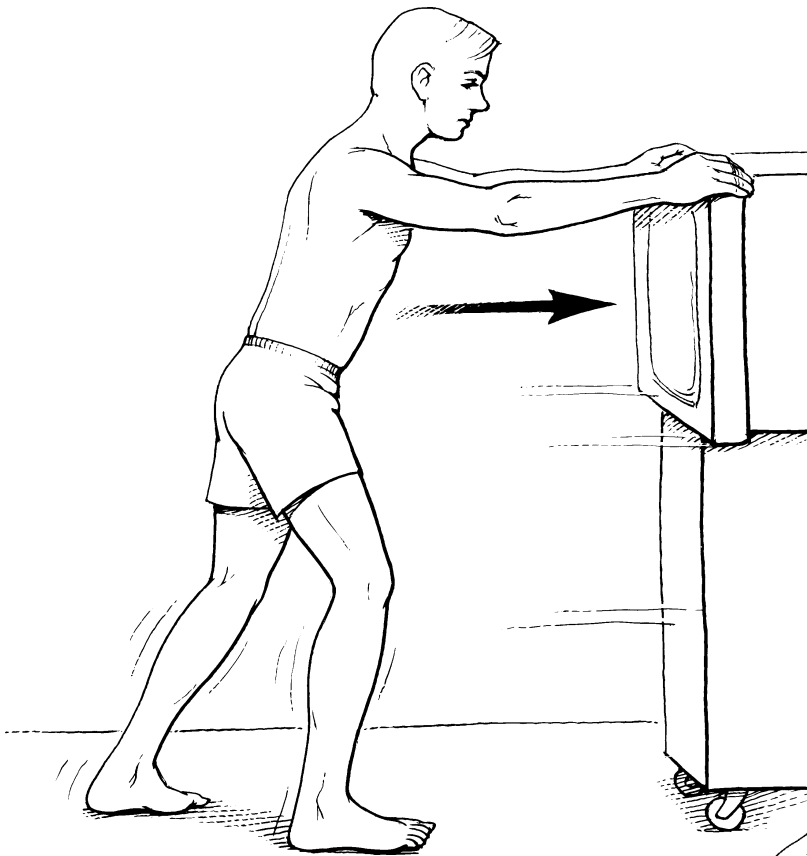


Figure 21

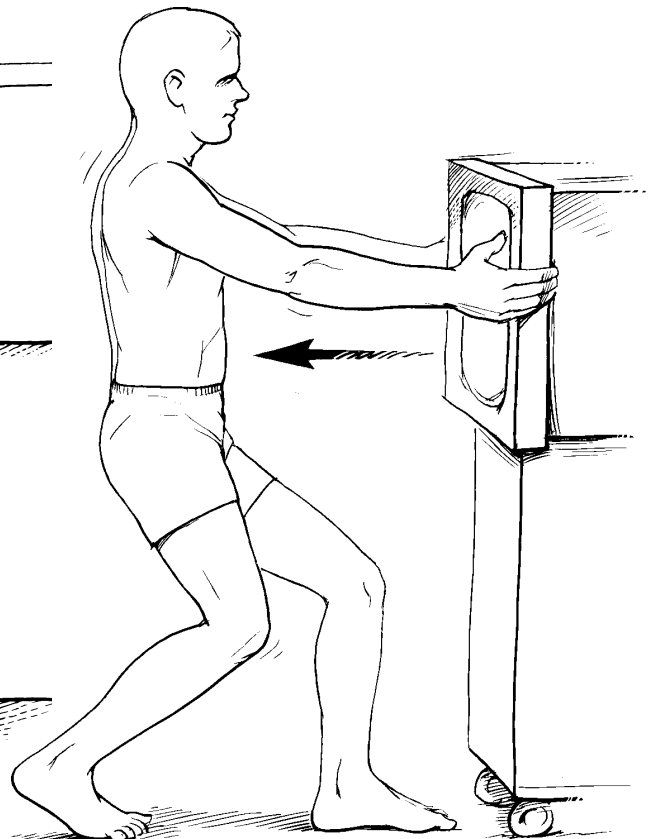


Figure 22

**Several reminders about pushing or pulling objects**

- If possible, push rather than pull.
- You may place heavy objects on casters.
- If the object is too large or heavy, seek help.

# Back Care Guidelines

The following suggestions will help you save energy and reduce stress on your back. By paying careful attention to the manner in which you perform activities, you will be able to do most daily activities without causing back pain. Identify your work tolerance level and follow these suggestions to help you work to capacity without overdoing.

**Maintain a healthy posture (your neutral spine position) during all activities.**

**When you are performing any activity for a prolonged period of time, change your position frequently to help decrease the stress on your back**

- Shift your weight from foot-to-foot.
- Stand if you have been sitting, or sit if you have been standing.

**Plan ahead — a day or a week in advance if possible:**

- Evaluate the work to be done and follow a plan to eliminate unnecessary steps.
- Spread heavy and light tasks throughout the day and week.
- Break up heavy tasks with occasional rest periods.
- Use break times to really relax. Get your mind and body off work.
- Avoid rushing. It often leads to more work and more accidents.

**Organize work areas for jobs that are done frequently:**

- Use energy-saving storage techniques such as lazy susans, vertical shelving, pegboards and pull-out shelving.
- Eliminate unnecessary or rarely used items or items that are in the way.
- Store items where they are most frequently used (for example: detergents in laundry area).

**Use correct work heights.**

Table heights should be adjusted to approximately two inches below your elbows. Arms should be at your sides and your elbows bent to 90 degrees when you determine the best table height for you. The work surface may be slightly higher for activities that require fine detail.

**Sit rather than stand for tasks that take a long time (such as writing, peeling vegetables, washing dishes, standing at a workbench or ironing):**

- Sitting reduces energy expenditure.
- Alternate sitting and standing when working on a project.



**When you must stand for a period of time, rest one foot on an elevated surface (for example, place one foot on a low stool, or open a cupboard door or drawer and rest one foot).**

Shift your weight and change positions if you stand or sit for any length of time.

**Avoid unnecessary bending, twisting and reaching:**

- Store frequently used and heavy items between shoulder and knee level.
- Stand on a step stool to reach into high storage areas.
- Use long-handled tools (mop, rake, broom, vacuum, etc.)

**Avoid unnecessarily carrying heavy objects:**

- Slide heavy objects rather than lift them.
- Use a cart, hand-truck or moving dolly.
- Plan carefully before lifting heavy objects.
- Get help when needed.

**When carrying objects:**

- Use both hands when possible.
- Hold objects close to your body.
- If you must carry something with one hand, alternate hands.

# Protecting Your Back During Activities of Daily Living

## Long-handled work tools

### *General principles*

- Maintain a balanced, healthy posture (your neutral spine position).
- Use a rocking motion while working with long-handled tools. Shift body weight onto the lead foot when making a forward stroke of a long-handled tool. Shift weight to the rear foot when making a backward stroke.
- Move your arms and legs rather than your back.
- Use long smooth strokes rather than short, choppy motions.
- Use a pivoting motion when turning or reaching. Avoid twisting and overreaching.
- Complete work in the area nearest you, then move to the next area.
- Change hand positions while using the tool (shift the hand on top to the bottom and vice versa).
- Select or adjust a long-handled tool to match your reach. The tool size is correct if you can maintain correct standing posture while using it (figure 23).

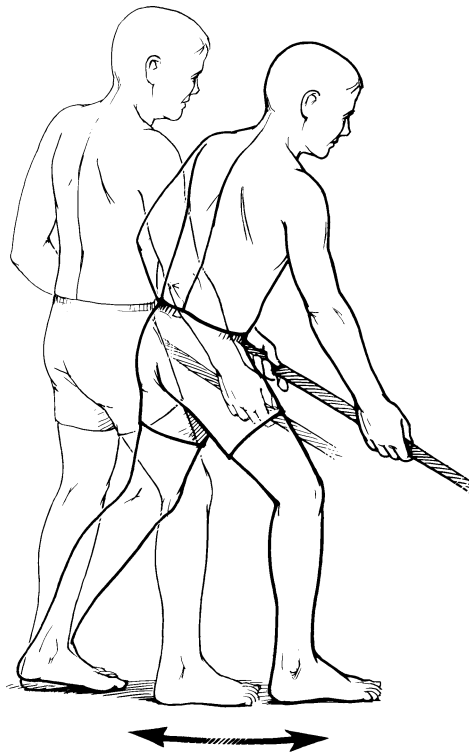


Figure 23

### *Vacuum cleaning*

- Upright vacuums require less stooping. Lighter-weight and self-propelled vacuums are less strenuous to use than some models. Tank-type vacuums are easier to maneuver around furniture and can help you reach into tight places.
- Casters can be used under furniture to make large or heavy pieces easier to move.

- Carpet sweepers or electric brooms require less of your energy and can be used in between vacuuming and on stairs.

### *Mopping floors*

- Floors may need to be cleaned more often with long-handled mops, but it is less energy consuming than working on your hands and knees.
- Fill the pail half-full to help avoid heavy lifting.
- Hard-to-reach corners may be cleaned by squatting or kneeling, using good body mechanics.
- Use casters or a dolly to move the mop pail.
- If necessary, use an electric broom between floor moppings.

### *Sweeping or raking leaves*

- Use the rocking motion described for long-handled tools.
- Hold the tool close to your body and avoid bending.
- Use a lightweight broom or rake.

### *Shoveling*

- Use the rocking motion described for long-handled tools.
- Hold the tool close to your body and avoid bending.
- Use a lightweight shovel.
- Shovel several small loads rather than one large one.
- Lift and turn your body using a pivoting motion with each shovel load. Avoid twisting.
- When shoveling snow, push snow to the edge of the walk or driveway before lifting the shovel.

## **Climbing stairs**

- Maintain a healthy balanced posture (your neutral spine position).
- Use railings for balance and support.
- If necessary, take one step at a time.

## **Bed changing**

- Position your bed so that three sides are away from the wall to give yourself room to squat or kneel while changing bedding.
- When you squat or kneel, maintain a healthy balanced posture. You may find it easier to kneel on the floor or to sit in a chair.
- To put on fitted sheets, tuck in one corner, then the diagonal corner, then a third. At the last corner, kneel close to the bed, pull the sheet firmly over the corner and **without lifting the mattress**, tuck the sheet in with your open hand.
- Pillowcases: Avoid holding the pillow under your chin. Sit down and turn the pillowcase inside out. Lay the pillow lengthwise on your

outstretched arm or in your lap. Grasp the closed end of the pillowcase and the end of the pillow in the same hand. With your free hand, pull the pillowcase right side out over the pillow and your arm.

- Daily bed making: Straighten the sheets before you get out of bed. Then, make the bed completely on one side before doing the other.

## **Ironing**

- Adjust the ironing board to the correct height for use while sitting or standing (correct work height is described on page 22), and place a clothes rack nearby.
- If you iron while standing, alternate resting one foot on a stool.

## **Cleaning**

- Bathtub: To avoid unnecessary expenditure of energy, clean the tub before you get out. If you clean from outside the tub, kneel close to the side and use a long-handled brush to reach the far side.
- Floors: Use long-handled mops and step-saving products for washing and waxing. If you must kneel, use the correct method and maintain a balanced posture. You may squat to wipe up a spill.

## **Laundry**

- Do laundry on a regular basis to avoid having heavy loads accumulate.
- Use a laundry chute if possible.
- Place a table of correct work height near the washer for sorting and folding clothes.
- Use a laundry basket on wheels.
- Squat or kneel correctly to use a front-loading washer or dryer.
- If possible, put a front-loading washer or dryer on blocks to avoid unnecessary bending.
- Place soap, bleach, etc., close by and at a convenient height.

## **Shopping**

- Be aware of the amount of weight you can carry comfortably.
- Divide up packages, pack bags half-full and make extra trips as necessary.
- Use carts and parcel pick-up or delivery services. Choose high-rise carts over deep carts when available.

## **Gardening**

Use long-handled tools as much as possible. For weeding, planting and similar activities use kneeling techniques (see page 18) or a hands-and-knees position. You can also sit on the ground with your weight partially supported on one arm and your hips and knees gently flexed. Maintain a balanced posture and avoid twisting and jerking motions.

### **Lawn care**

- If possible, use a self-propelled lawn mower and steer it along.
- When using a push mower, use the strength of your leg muscles to push and avoid jerky motions.
- Mow across inclines rather than up and down.
- Edging: when possible, use long-handled electric- or battery-powered grass edgers.

### **Snow blowing**

- If possible, use a self-propelled snow blower and steer it along.
- When pushing a snow blower, use the strength of your leg muscles to push and avoid jerky motions.
- Snow blow across inclines rather than up and down.
- Use the principles of pushing and pulling (see page 21) to guide and turn the snow blower.

### **Loading or unloading items from the trunk or back of your vehicle**

- When placing items into or lifting them out of your vehicle, you may place a foot or knee onto the bumper or a foot in the trunk for balance and support. Lift the item while maintaining healthy spinal curves (figure 24).
- Store items in the trunk close to the bumper so it will be easier for you to lift them out correctly.
- Lift objects in two steps: first, lift an object to rest on the car frame, then lift it from the car frame to carry it.
- Use one arm to brace yourself if you need to reach something deep inside the trunk.

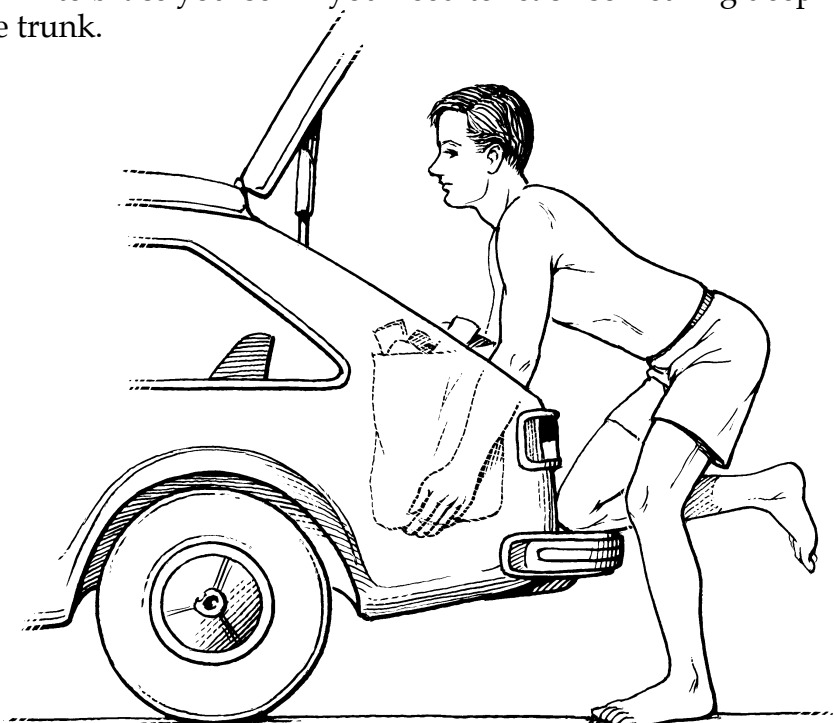


Figure 24

# *Activities That Help You Care for Your Back*

Healthy posture and good body mechanics, combined with stress management, relaxation techniques, regular exercise and weight management are essential to back care. If you would like more information about stress management and relaxation techniques or exercise and weight management programs, please speak with your healthcare provider.

## **Stress management and relaxation**

The following techniques may help to relieve muscle strain and tension resulting from prolonged sitting or standing:

- Find frequent periods to relax during your day. Even short breaks can help you relax.
- When taking a break, relax your shoulders and neck, and allow your arms to relax and dangle at your sides.
- Frequently change your work position by adjusting the height of your chair, raising or lowering your work surface, or standing.
- Become aware of muscle tightness. Only by recognizing a slight feeling of muscular tension can you appreciate the feeling of relaxation.
- Take frequent breaks when taking a long trip. If you are driving, plan regular rest breaks. If you are a passenger, take advantage of stops to get up and move about. On a plane or train, get up occasionally to stretch and move about.

The following are ways to practice relaxation. Relaxation exercises can help relieve stress and tension, which may decrease back pain. All of these movements should be done gently while maintaining a balanced posture.

- Shrug your shoulders. Relax.
- Tuck in your chin. Relax.
- Close your eyes tightly. Relax.
- Wrinkle your forehead by raising your eyebrows. Relax.
- Clench your jaws together. Relax.
- Make a fist. Squeeze. Relax.
- Move your wrists slowly in a circle, first clockwise, then counterclockwise. Relax.
- Stretch your arms up, to the sides and behind you. Relax.
- Stand up and bend forward. Straighten up. Relax.
- Stand and bend to the left. Straighten up and relax. Bend to the right. Straighten up and relax.

**Exercise and weight management**

Regular exercise helps you maintain overall fitness and maintain or achieve a weight that is healthy for you. Exercises that work your muscles, especially those using weights or resistance, help build and maintain strong bones and muscles. Stretching exercises increase your flexibility and your overall fitness level. Exercises such as walking, swimming or bicycling help improve endurance. Exercise may also help you relax and increase your sense of mental well-being.

Exercise may reduce stress, which can increase tension and cause muscle spasms, making muscles painful. People who practice stress reduction techniques and exercise regularly have less back pain and recover from pain and injury more quickly.

Exercise can be one of the best ways to cope with back pain. However, if you have severe pain, you may need to do less or rest for a day or two, but prolonged rest decreases fitness, weakens your bones and muscles, and increases stiffness. This can make back pain feel worse, making it even harder to get moving again.

Check with your physician or physical therapist to see what exercise is appropriate for you.

If you haven't exercised in a long time, it may be difficult to start exercising again. When you first start an exercise routine, your muscles may ache. This type of pain is usually temporary. If you have questions about pain when you exercise, discuss them with your healthcare provider.

## *Conclusion*

Care of your back is a part of maintaining good health. Maintain a healthy posture to help you move safely during activities of daily living. Pay attention to the manner in which you perform activities and maintain a neutral spine position to protect your spine from stress and strain. Make exercise a regular part of your daily routine to improve muscle tone, achieve or maintain a healthy weight and prevent back pain.

Although most adults will experience back pain, it is rarely due to serious disease or injury and usually gets better in a matter of days with no medical treatment.











200 First Street SW  
Rochester, Minnesota 55905  
**[www.mayoclinic.org](http://www.mayoclinic.org)**

MC1677rev0999