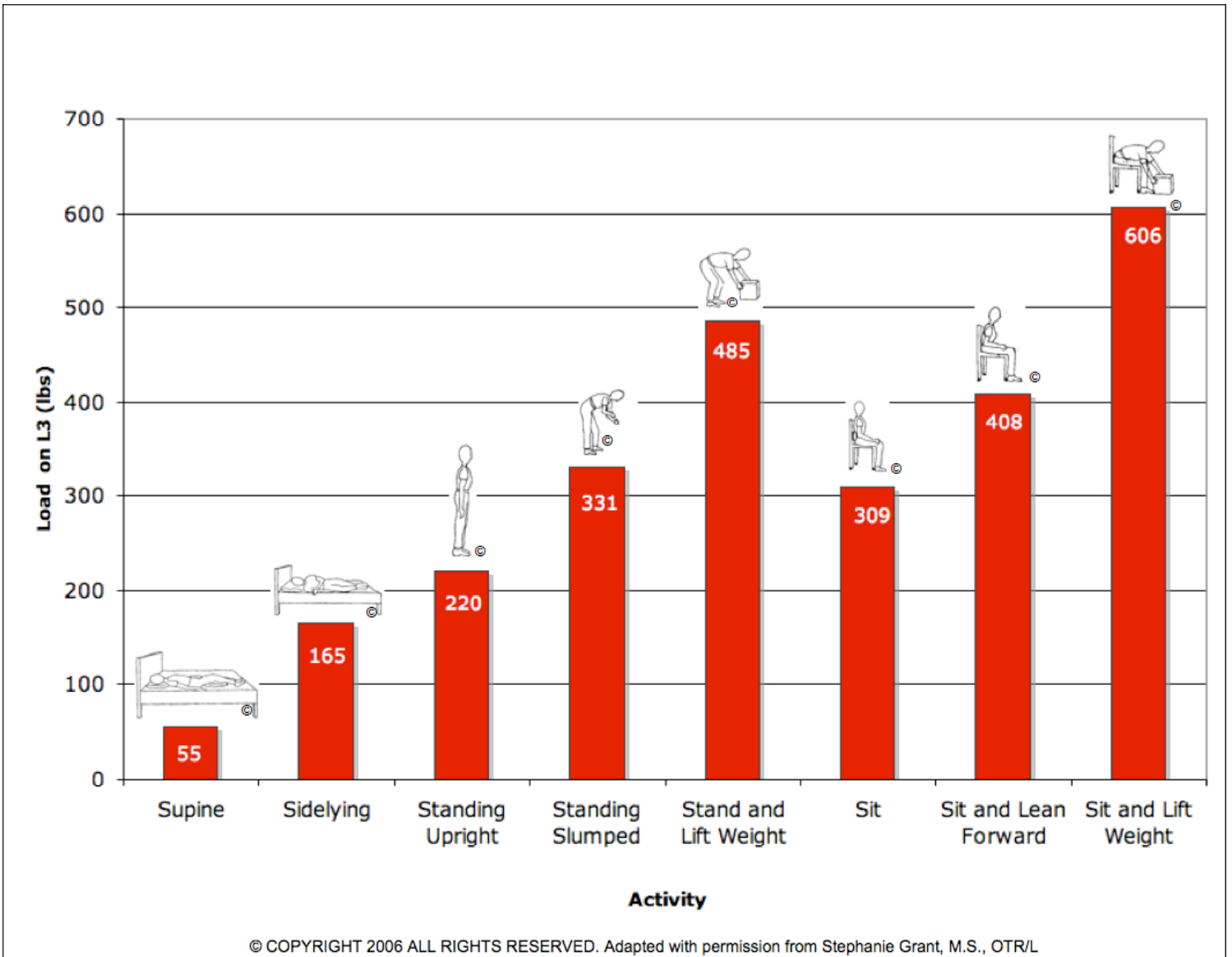


A Reference Guide for Bone Safety[©]

Contents

Spine Pressure	3
General Principles of Safe Motion	4
Valued Activities	5
Self-Care	5
Home /Yard/Work Management	7
Leisure	12

Spine Pressure Graph



Pressure on your spine increases when bending and lifting. You should remember that when you sit and bend, this creates the most amount of pressure on your spine.

General Principles of Safe Motion

SPINE

UNSAFE MOTION FOR THE SPINE

1. Minimize bending at the lower back (lumbar spine)
2. Minimize bending at the upper back (thoracic spine)
3. Minimize twisting the back
4. Minimize raising up on toes when reaching overhead
5. Limit lifting to not >10 lbs with osteoporosis or >25 lbs with osteopenia

SAFE STRATEGIES FOR THE SPINE

1. Safe alternatives involving adaptive equipment/ activity modification
 - A. Using a reacher or grabber
 - B. Long-handled devices (shoe horn, sponge, dressing stick, long handled dustpan, use of an electric broom)
 - C. Modifying activity levels (height of shelves, countertops, closet shelves and hanging rods)
2. Safe movement patterns alternatives include:
 - A. Full squatting;
 - B. Partial squatting
 - C. Kneeling
 - D. Golfer's reach
 - E. Anterior pelvic tilt

HIP

SAFE STRATEGIES FOR THE HIP

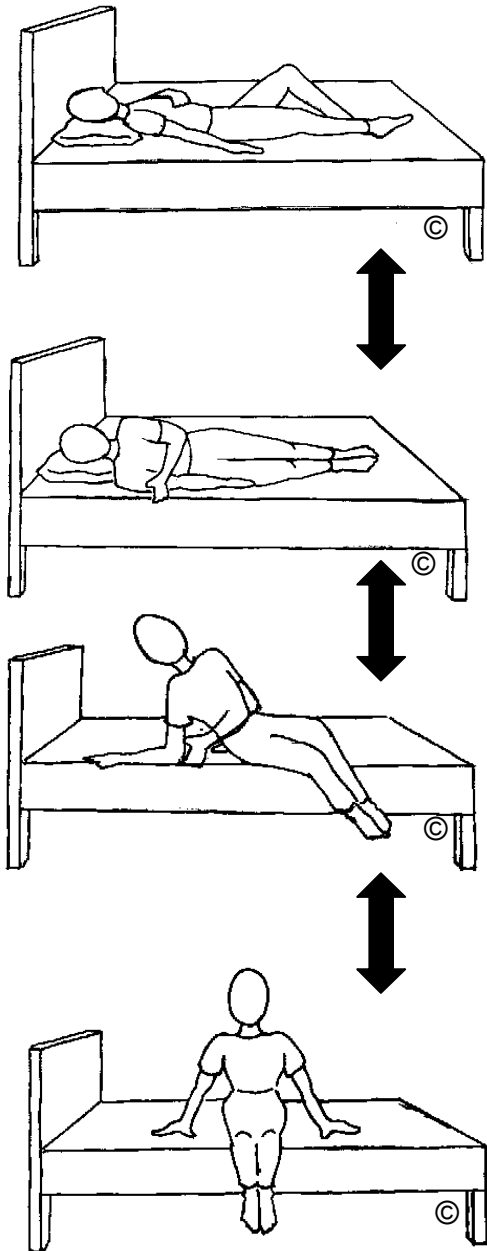
1. Get treatment for any balance dysfunction – even mild changes
2. Consider hip protectors:
 - A. At all times for osteoporotic hip
 - B. For high fall risk activities for osteopenic hip
3. Fall prevention strategies
4. Utilize weight bearing activity for continued bone building

Valued Activities

Self-Care Activity

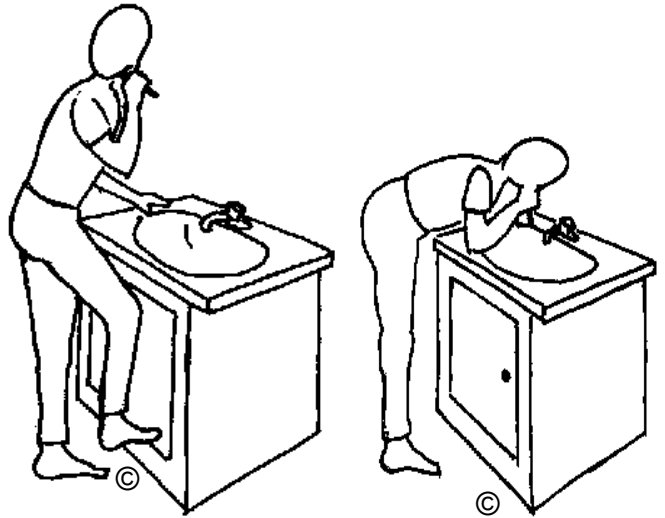
Getting In/Out of Bed

Rollover onto your side (like a log), facing the edge of the bed, pull your knees up toward you slightly, bring your upper arm over your body and then push up with the elbow of the underside arm.



Brushing Teeth

The ordinary act of brushing your teeth can involve bending over too much. Instead, either stand with one foot inside the under-cabinet of the sink, or use a golfer's reach when leaning over the sink.

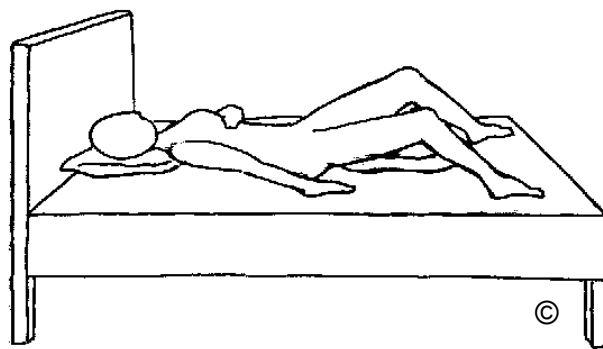


Dressing

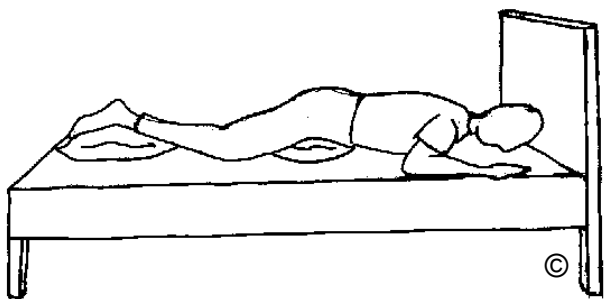
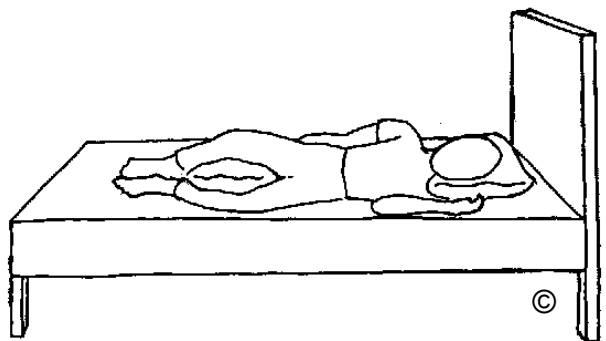
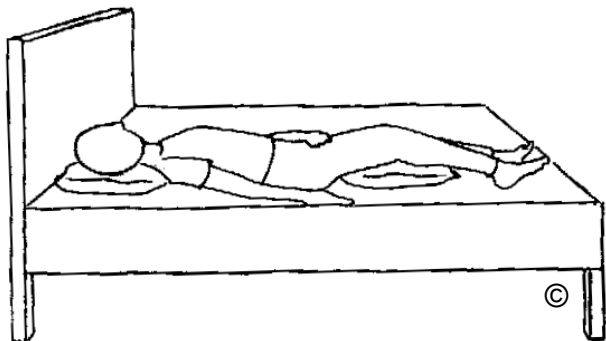
Some important things to remember here include: not bending over to your feet when standing or when seated. This includes, reaching forward to tie your shoes or put on socks. Instead, bring your foot up onto your opposite ankle and put on your shoe or sock from there. If you don't have the mobility in your hip, use adaptive equipment like a sockaid, reacher, dressing stick or long-handled shoehorn.

Physically Intimate

Relationship – This is often a difficult topic to talk to your physician or therapist about. The important things to know here generally apply to women and include: minimize knee-to-chest positions, keep hips more extended to reduce excessive flexing at the spine. If you have had a pelvic fracture, woman-on top positions will reduce excessive pressure to the pelvis.



Resting/Sleeping



Sleeping is critical to bone health. Your position of sleep can harm or help your posture greatly. Sleep can influence your pain level and it can affect regeneration of tissue in your body. Back sleeping is the best position for reducing pressure on your spine, then sidelying. If you must sleep on your stomach (which is really quite discouraged by many therapists) then position pillows under your hips and ankle and use NO pillow under your head,

Bathing/Showering

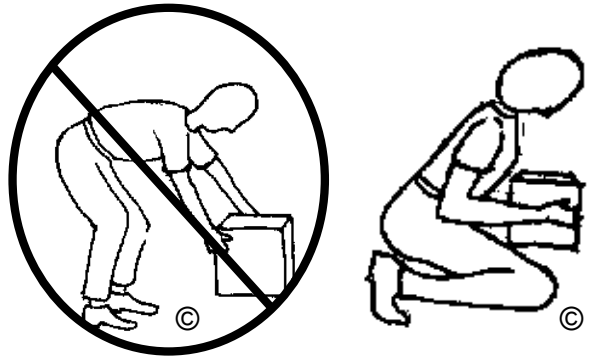
Wash your hair in the shower. Many women have washed their hair in the bathtub or sink – bending their bodies to get their head under the faucet. This places a great amount of pressure on the spine. Instead, wash your hair standing in the shower. Also, consider a soap holder or using a buff with liquid soap to avoid having to bend over to the bottom of the tub to pick up a dropped bar of soap.

Home/Work/Yard Management Activities

Washing Dishes Meal Preparation Cooking Ironing

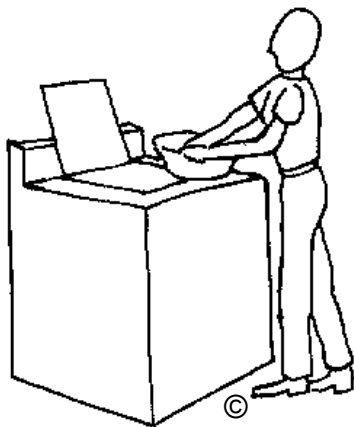
These seem to be common activities for people have some pain, particularly between the shoulder blades. Generally, we stand with our upper body bent over the sink, which increases compression force on the mid to upper spine. This can increase pain, but can also increase compression to the spine. To minimize this, try either placing one foot inside the cabinet under the counter, place your foot on a stool or stand with your feet spread far apart to lower your center of gravity – this will reduce the strain on your spine and mid-back region.

Reaching Under Cabinet Picking Up Low Items

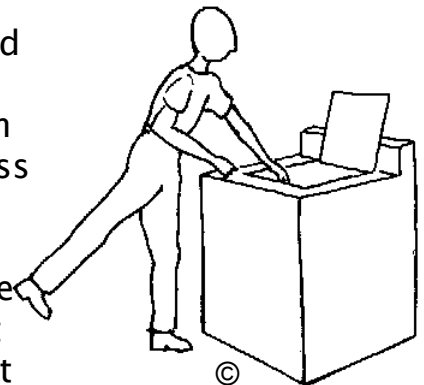


When lifting heavier pots, pans, 12-pack of soda, pet food, bird seed, bulk-sized items squat down. If you cannot squat, kneel down, lift the item onto a chair and then stand up. Squat partially to finish lifting the item. Keep your back straight!

Laundry



Of all the activities of daily living that we do, this task is by far the one that can cause the most compression to both the upper and lower spine. When reaching into the dryer, twisting at the spine can occur, especially if you reach across your body and into the dryer. Use the golfer's reach to get items out of the washer, squat in front of the dryer and keep the laundry basket on top of the washer or dryer – not on the floor. If squatting is too difficult consider using a reacher.



***Load/Unload Dishwasher:** Use the golfer's reach to place items in/out of the dishwasher too.

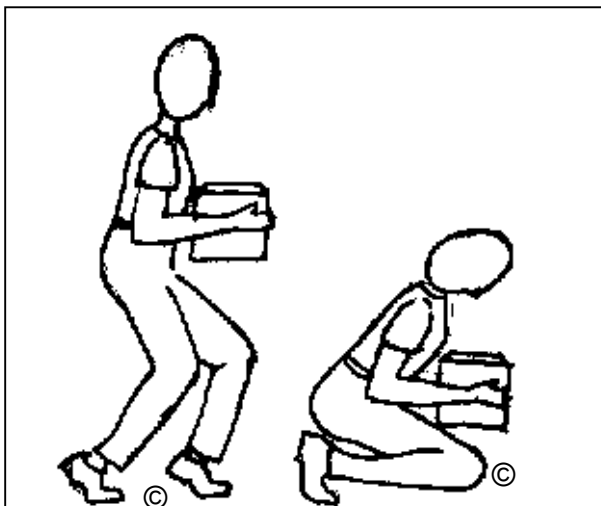
Making/Changing

Bed Sheets

When making the bed, reach across the bed using a golfer's reach. When tucking in corners, kneeling is the safest position. If you cannot kneel, sit in a chair – upright at your back – and tuck the sheets in – DO NOT lift the corner of the bed. Remember, if you sit AND lift, it's more pressure on your spine!

Household Maintenance

There are awkward positions we can put out bodies in when doing home improvement. Think about the project you are about to do in advance. Are there any tools (reacher, step stool, etc.) that could make it easier? Position your body so that the project is in front of you and at arms height. Kneel down or sit on the floor instead of prolonged bending – like when you clean/paint a floor board or cleaning out the bottom of a refrigerator.

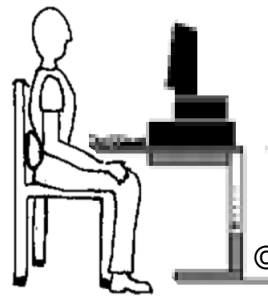


***Remember to squat when you place items on the floor too!**

Child Care

Heavy lifting can take place when caring for a baby or young child. Remember, you have a lifting limit of 10 lbs if you have osteoporosis – so DO NOT lift a child that weighs over this amount. Fortunately, when the child begins to weigh more than this, she can help a little bit. Encourage young children and toddlers to climb up on your lap while you are sitting. When putting a baby into a car seat, place one knee up on the seat of the car, hold baby close and then place the baby in the seat – this way you are not bending over.

Using Computer



When sitting at a computer, you are placing 40% more pressure on your spine than you do when you stand. So, take frequent breaks to stand up and have support at your lower back – this keeps your back from rounding and slumping into the chair.

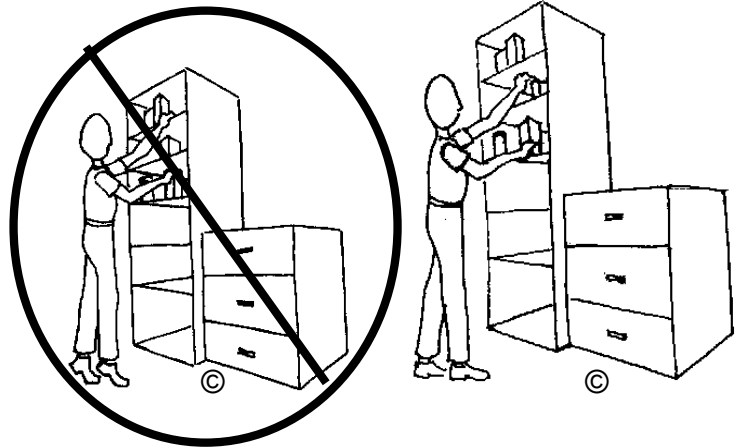
**Vacuumping
Mopping
Sweeping**



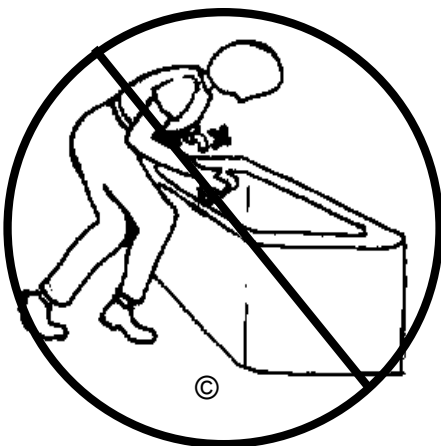
We have used long-handled “helpers” for centuries. However, many of us still bend over with the tool, despite it’s intent to help us avoid bending! So, remember to remain upright, use the tool (vacuum, mop, broom, etc.) immediately in front of you. Position your legs with one in front of the other. Then, shift your weight forward and backward through your legs to move the tool over the floor.

**Reaching into
Cabinets or Closets**

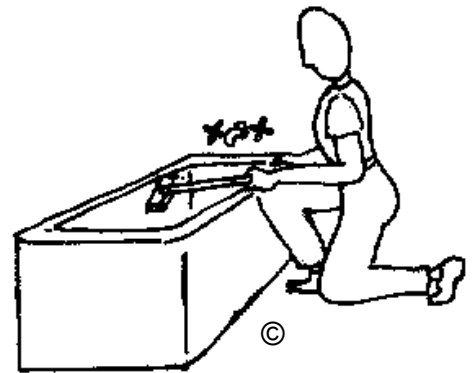
Reaching overhead can place increased compression force on the upper back, especially if you raise up on your toes to reach. Instead, remain back on your heels. You should stand with one foot in front of the other and lean into the foot in front of you as you reach overhead. Use a reacher and long handled devices to help you reach high items (long handled duster, curtain hook to slide curtains on the rod, etc.). Use of a sturdy step stool with a handle is a safe alternative as well.



Cleaning Bathtub



Cleaning the tub, shower and any object that is low and cannot be moved, you have a few options: kneel down, squat, or use a long-handled scrubber.



Dusting/Light Cleaning of low surfaces should be done on your knees or use a long-handled duster. Golfer’s reach is useful too, just hold on to a steady surface. Even a reacher with a dust rag works great!

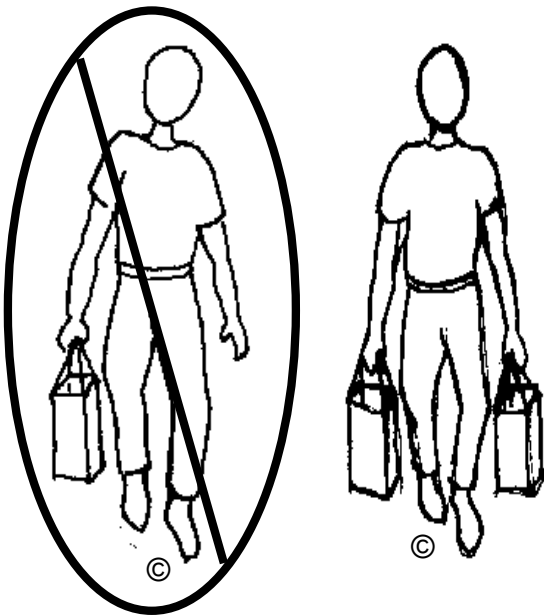
Grocery Shopping



When grocery shopping, you are usually thinking about the list of items you need to get, and not HOW you physically pick each item up. When you have bone loss, though, bending into a shopping cart with an item can place excessive pressure on your spine. Instead, use a golfer's reach to place items in and remove them from the cart.



Trunk of Car: Use the same strategy for removing and placing items into the trunk of your car.

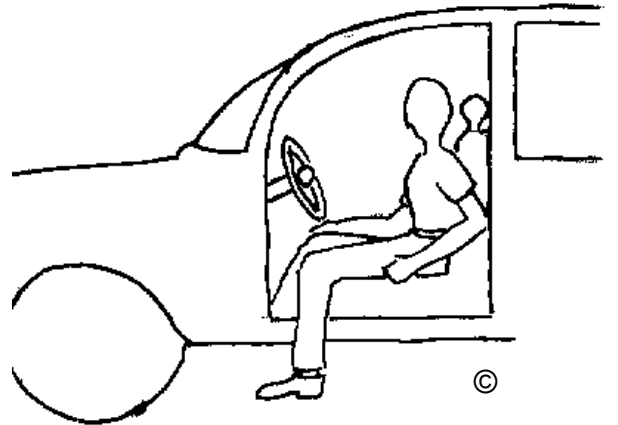
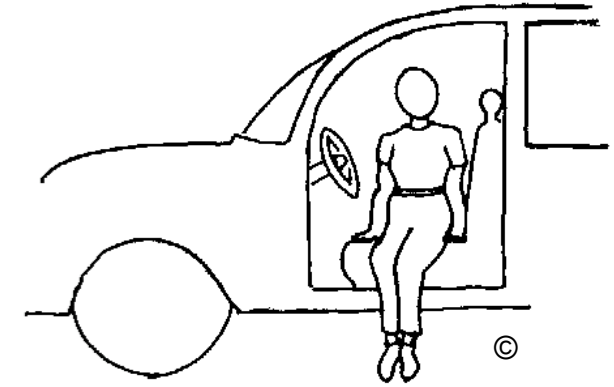


When you carry grocery bags (and other items in or out of your home), distribute the weight evenly between your arms. Or, carry the items on one arm, but hold your arm across your body to distribute the weight throughout your spine.

Take Out the Trash: Carry trash the same way you carry the groceries.
Traveling: Carry your luggage the same way you carry the groceries.

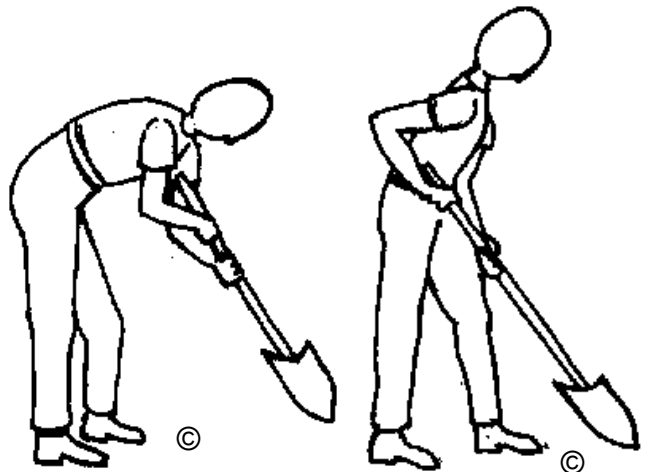
Driving/Car Passenger

Getting in and out the car can cause you to twist your spine if you sit in the seat while facing the hood of the vehicle. Instead, back up to the seat, sit down and turn your legs and your body to face the front. Before you turn in your seat, grasp the seatbelt and you will avoid twisting to reach for your seatbelt as well. For rides >30 minutes, be sure you have a lot of lumbar support. Often the car does not give you enough support, so roll up a towel or buy a lumbar roll for the car.



Mowing the Lawn Raking/Shoveling

As with using the long-handled tools used inside, so also do the same principles apply outside. So, remember to remain upright, use the tool (mower, rake, shovel, etc.) immediately in front of you. Position your legs with one in front of the other. Then, shift your weight forward and backward through your legs to move the tool over the ground or into the ground.



Leisure Activities (Tips on Bone Safety When Your Having Fun!)

Sitting Tasks –like knitting, sewing, watching TV. Put a pillow or a rolled towel at your lower back for lumbar support.

Fishing–watch for uneven surface near the edge of rivers or lakes that could cause you to fall. If you fish from a boat, do not stand up as this increases your risk to fall.

Shopping–carry items evenly, try not to stand in line for more than 5 minutes, if you have to–use a buggy and place one foot on the rung underneath to take pressure off your spine.

Decorating–watch how much you lift. Sometimes we are willing to do so much more than usual just because it's a special occasion. Observe safe motion here too–squat, golfer's reach, kneel – and share the fun with someone who can do the heavy lifting for you!

Dancing–minimize twisting moves and those that bend you forward.

Tennis, Golfing and Bowling –The National Osteoporosis Foundation, sports that involve twisting motions such as tennis, bowling and golfing should be avoided if you have osteoporosis

Walking – according to the Surgeon General, 30 minutes a day of aerobic activity is recommended. Walking is the safest and easiest way to do this. Wear supportive shoes and hydrate yourself well. This is a good weight bearing exercise with out excessive compression.

Hiking – consider using hiking sticks to assist you on uneven surfaces. Choose easy to moderate hikes that do not involve hand holds or scrambling.

Community Leisure – includes going to the theatre, out to eat, church or other public events. If you get back pain when sitting in different locations, consider bringing an inflatable lumbar support with you.

Swimming–avoid exercises that involve twisting your spine or pulling your knees to your chest.

Biking – not a weight bearing activity. It can place increased pressure on your spine if you lean forward. Sit upright. There is a higher risk of falling so consider wearing hip protectors.

Feeding the Birds – This can involve lifting heavy bags of bird seed or stepping on a stool without upper body support. Instead, get help to distribute seed into manageable containers and keep bird feeders at a height that does not require a step stool or ladder.

Caring for Pet – Avoid heavy food bags – keep it to a 10 lb maximum. When reaching down to pick up or place a food or water bowl, use golfers reach or squat.

Gardening – There is a lot to consider here! Using a garden stool that rolls is helpful. Using long–handled tools such hoes, long handled weeding device can minimize bending. Don't bend over to weed or pick flowers or vegetables. Squat, kneel or sit on a low garden stool to do this.

Exercising– If you do this regularly, you are certainly doing a good thing for your body. That is, unless you use machines or do exercises that involve twisting or bending. Consult with a physical or occupational therapist to learn about which exercises are the best ones for you.