



GUIDE

Occupational Therapy

Body Postures during daily activity



The Ottawa Hospital | L'Hôpital
d'Ottawa



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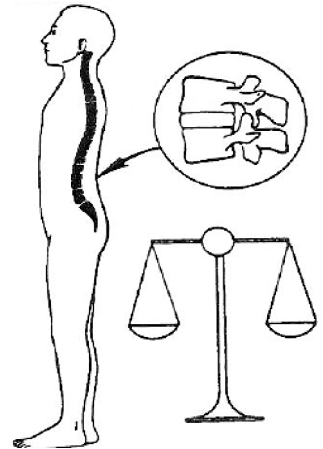
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Body mechanics is the study of proper body movement to prevent and correct posture problems, reduce stress and enhance physical capabilities.

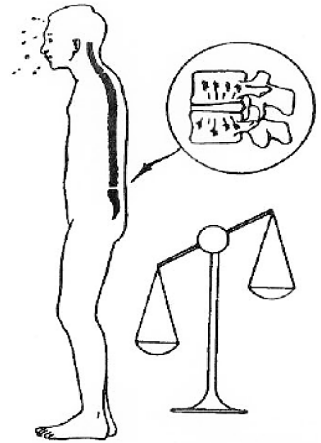


Good body posture is when the head, neck, back and pelvis are in a straight line. Your neck has a natural inward curve just above your shoulders which aligns your ears with your shoulders.

Your lower back has a natural inward curve and poor sitting posture and bending forward rounds out the curve. Frequent forward bending such as reaching in the refrigerator, bending at a low sink to brush teeth, tying shoe laces, over time may lead to back strain.



Bad posture in standing leads to carrying your head forward away from your shoulders with your chin poking forward. Common excessive neck movements involve looking down to read, putting head forward during driving and sleeping with too many pillows.



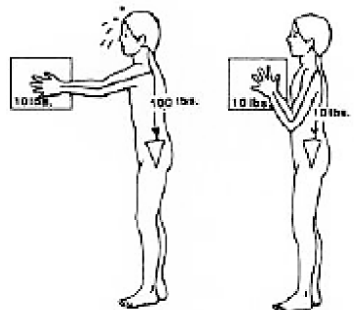
Most bad posture is due to poor habits over many years. We hold our body in one position for long periods of time or repeatedly move in one direction. As a result muscles shorten on one side of our body and stretch or become longer on the opposite side. These muscle imbalances are usually the cause of bent forward postures with rounded shoulders, hunched backs and loss of natural inward curves.



Using proper body mechanics along with proper stretching and muscle strengthening exercises can help to correct muscle imbalances.

Basics of body mechanics:

- **Check the weight:** before you try to lift anything off the floor, to make sure you can lift it safely.
- Maintain a **wide base of support** by keeping your legs at shoulder width; this reduces the possibility of slipping.



- **Hold objects close to you** to reduce the stress on your back.
- **Do not twist your back when carrying an object**, keep your nose and toes in the same direction; this will reduce the stress on your back.
- **Tighten your stomach muscles** when lifting. This will reduce the strain on the lower back.
- **Think before you lift:** plan how you will position your body to lift an object before you do so.
- **Lift with your legs:** using larger muscles groups reduced the stress on smaller muscles in the back.
- **Clear your path:** move obstacles out of your way before lifting.
- When you have the choice, **push rather than pull**, it is easier to use your weight to move an object.

Postural retraining can help decrease strain and discomfort.

Neck pain:

- Avoid poking your chin out during activities such as driving a car, working at the computer, or even vacuuming.
- Avoid twisting, bending or stretching your neck during activities. Instead use assistive devices with extended handles.

If standing for a period of time:

- Stand tall, tuck in your stomach.
- Periodically shift your weight from one foot to the other.
- Try resting one foot on an elevated surface to ease the strain on your lower back (stool, telephone book, inside a lower cupboard).



- Avoid unnecessary twisting. Remember “Nose and Toes in the same direction.”

In the kitchen:

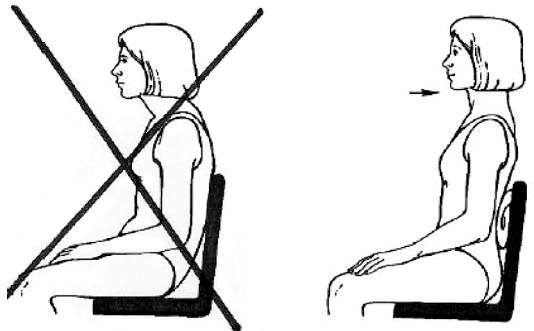
- Use a wheeled cart or a trolley to transport objects around the kitchen to avoid unnecessary carrying.
- Place frequently used items between waist and shoulder height to avoid bending.
- When retrieving an item below this level. You can use a long handled reacher. See lifting techniques.

In the bathroom:

- While over the bathroom sink, place one hand on the counter to help support your weight.
- Bend at the hips and knees not at the back.
- If experiencing lower back pain, you could lift one leg up on a stool or open lower cupboard and place foot on cupboard floor, while keeping your back and neck straight.

Sitting:

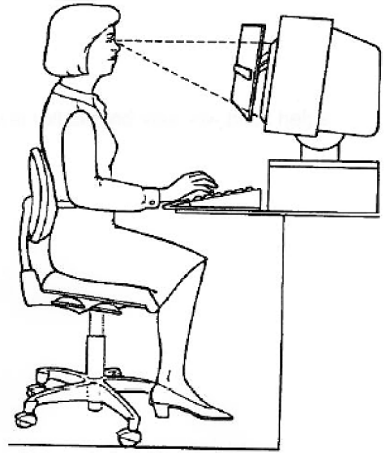
- Knees should be level with hips, feet flat and supported by the floor or a small stool.
- Avoid slumping in the chair.
- When rising from seated position, place one foot slightly ahead of the other and push up with your legs and use your hands if necessary, without arching your back or bending too far forward at your waist.



- Use a lower back rest while sitting (back roll, cylinder-shaped piece of foam).

Sitting at a computer:

- While typing avoid holding your arms out, unsupported.
- Keep your shoulders relaxed and your arms at your side with your elbows at 90 degree angle.
- Hold forearms and wrist parallel to the floor.
- Keep your feet flat on the floor or on a footrest.
- Position your monitor level with your eyes to keep head and neck upright.



When getting in to a car:

- Slide your car seat back to give you more leg room.
- Stand with your back toward the seat of your car.
- Support yourself with both hands on the car/seat.
- Keep back straight as you bend at your hips and knees to sit.
- Pull in your stomach and swing your legs into the car while pivoting on your buttock so your body moves as one unit (do not twist your lower back).
- To get out, reverse the procedure.
- Ask your occupational therapist for more information.

When doing activities above chest level. For example, washing windows, painting, changing light bulbs:

- Use a secure step stool so the activity is at a better level.
- Use a long handled device if appropriate.

When vacuuming, sweeping, shoveling or racking:

- Stay close to the work area.
- Use arm and leg muscle while keeping back straight.
- Avoid twisting movements.
- Use your body weight to help with the job.

Sleeping:

- Sleep on a firm flat mattress.
- While sleeping on your back place a pillow under your knees to align your spine.



- While sleeping on your side, place a pillow between your knees to align your spine.



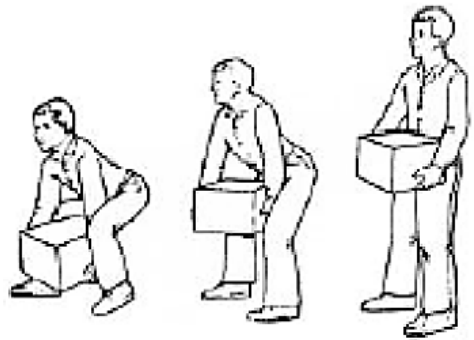
- To get out of bed from lying on back, bend knees up and roll to your side. Slide legs off edge of bed with knees bent. Push up with your arms using your legs as a counter weight to sit up.
- To move from sitting to lying down, reverse the procedure.
- Do not read or watch TV in bed. There is no good way to maintain good body mechanics during these activities.

- Avoid lying on a couch or bed while leaning on one elbow.
- Instead of making your bed once you are out of it, pull your sheets up while you are lying down. This will decrease the need to straighten out the sheets by bending to reach them in standing.

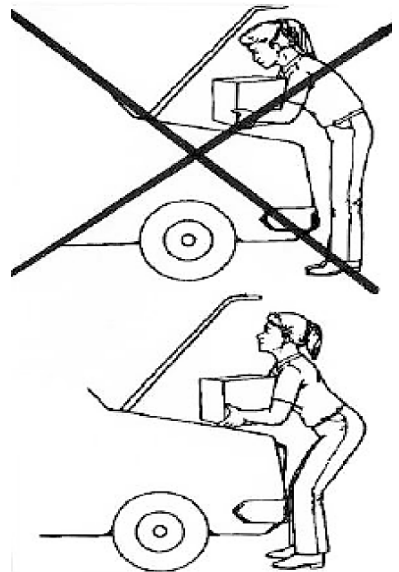
Lifting:

- Different lifting situations require different lifting techniques.
- **Basic squat lift** can be used for objects of moderate size and weight (laundry basket, bag of groceries).

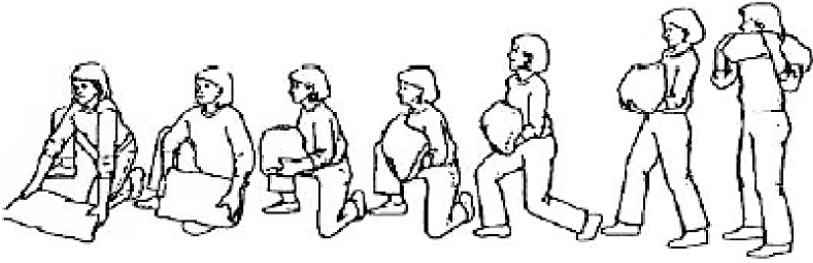
- Stand close to object
- squat down, keep back straight, grasp the item and hold close to body as you tighten your stomach. Stand up slowly using the leg muscles keeping back straight.



- **The power lift** is useful when reaching over an obstacle.
- Position self close to the item as possible.
- Bend at the hips with your back slightly arched, head and chest up, knees slightly bent
- Complete the lift.



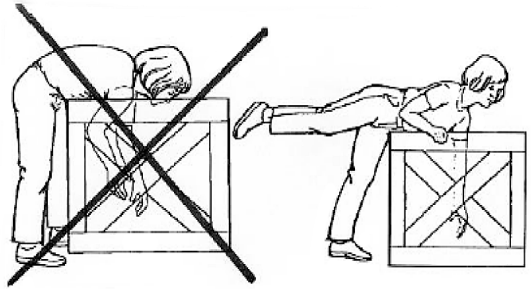
- **Half kneel lift** is useful for irregular shaped items or items that may move as you lift (e.g., pet, small child).



- Stand close to object, squat down onto one knee, keep back straight. Pick up object and slide it onto thigh, cradle the object against your body. Tighten stomach and slowly stand up using leg muscles.

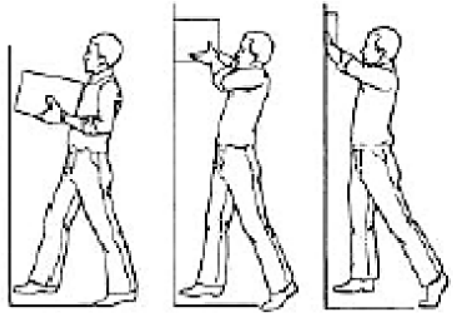
- **Golfer's lift** for objects that weigh a pound or less.

- **Avoid this technique if you have a back injury, back pain, previous back surgeries, anterior hip replacement surgery or are pregnant.**



- Keep back straight, pivot at the hips while extending one leg behind you as you reach down to pick up the item. Grasp object and slowly lift while straightening at the hips and pushing up with other arm, bring the leg back down.

- **Over head lift** for items on a shelf. Use a step stool to move up closer to shelf if possible.
 - Place one leg in front of the other. Shift weight to front leg. Reach up to grasp item in both hands keeping back straight. Slowly lift item off shelf while you shift weight back onto both feet. Lower item to your chest.



Ideas to consider

- Give your body regular stretch breaks.
- Push rather than pull and use your weight advantage while pushing.
- Move in close toward your task to minimize reaching, twisting and bending.
- Eliminate repetitive lifting if possible by placing items at a better height initially.

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