

Postural Education for Students

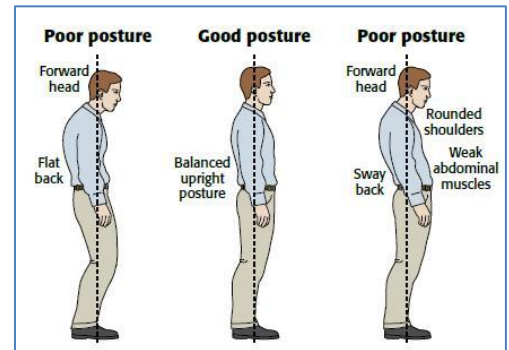
Good vs. bad posture

Correct postural alignment involves placing your spine and joints in a neutral position. If you are sitting, lying down, standing, or exercising, you should strive to maintain correct postural alignment. Your body likes to be in a neutral posture. Some cues to remember are:

- Chin tucked
- Shoulder blades pulled back (pinched down and in)
- Abdominals drawn gently up and in towards your spine
- Weight evenly distributed between sides

Common postural flaws that contribute to chronic pain and injury are forward head posture, rounded shoulders, thoracic hyperkyphosis (rounded upper back), and lumbar hyperlordosis (sway back).

Some potential problems leading to poor posture include prolonged sitting, poor desk set up, biomechanical compensations, overactive or underactive muscles due to overtraining or deconditioning, and general fatigue.



Importance

Poor posture can inhibit muscles from functioning normally which in turn forces other muscles, ligaments, and tendons to compensate. If not addressed appropriately, this imbalance can lead to pain and increase your risk for future injuries. Often times low back pain, neck pain, shoulder pain, or even knee pain is a result of poor posture.

Fixing your posture

Stand in front of a mirror or with your back against a wall to create visual/sensory feedback. Imagine there is a string from the top of your head to the ceiling elongating you from your head and chest. Tuck your chin straight back as if you are trying to make a double chin (do not tilt head up or down – look straight ahead). Gently draw your abdominals up and in without holding your breath. Pinch your shoulder blades down and in. Keep knees and toes straight ahead. If you are up against a wall, try to get the back of your head, mid-back, and hips against the wall. You should have a slight curve in your neck and low back. Hold this position for 10 seconds, repeat 10 times.

What to avoid:

- Do not place laptop on lap for extended periods of time
- Avoid slouching especially while using the computer and studying
- Avoid working in the same posture for an extended period of time
- Avoid footwear with poor support when standing for lengthy periods of time

Suggestions:

- Do not try to maintain good posture all day long when you first begin this correction. Maintain good posture for 5 minutes at a time to avoid pain and fatigue.

- Don't get frustrated! Remember postural correction is a gradual process that takes time
- Take frequent breaks – set your phone alarm or timer to go off every 30 minutes as a reminder to stretch or change position. All it takes is a 30 second break every 30 minutes to address postural stresses and strains.
- Use good back support and draw your abdominals tight when sitting or driving. You can place a towel roll or sweatshirt in the small of your back if you do not have support.
- Work standing up by placing your laptop on a high desk or countertop to give your spine a break.

Save your back:

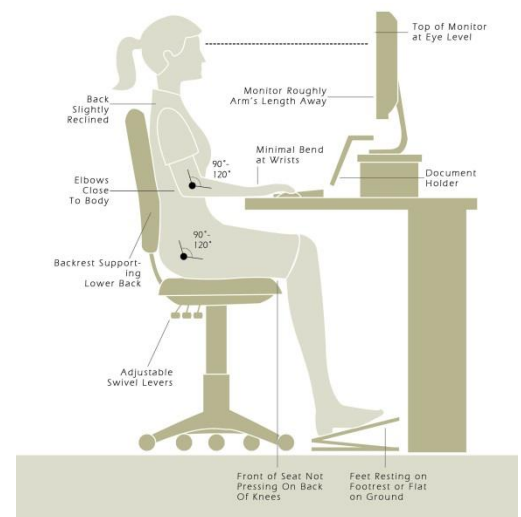
- Purchase a backpack that is not too big to discourage overloading with books and other materials.
- Choose a backpack with a waist strap for additional support (and use it).
- Wear both straps to distribute weight evenly. Avoid shoulder bags.
- Tighten the straps so the bottom portion is no lower than 4 inches below your waistline. This will place the backpack in a more ideal position and reduce stress on your low back.
- Carry a load that is no more than 5-10% of body weight (150 lbs. individual should carry no more than 15 lbs.)
- Do not overload your backpack with books or other materials. Take frequent trips to your locker, or carry excess books in your arms.
- Arrange the books in your backpack so the heaviest are closest to your back.
- You should be able to stand up straight without much effort when carrying your backpack.



Ergonomic Desk Set-Up

Have someone take a picture of you or look at you from all angles to observe your normal posture. Make the following corrections and reassess. Inform your classmates to observe you throughout the day and cue you to resume a more correct posture as you start to slouch.

- Keep head and neck upright
- Sit back into your chair so lower and upper back are flush with the chair (use a lumbar support if needed)
- Computer monitor or document height should be at eye level and straight ahead (at least 18-28 inches away from your eyes)
- If repeatedly looking between 2 documents, alternate sides
- If you have a laptop, get a docking station or use a wireless mouse/keyboard
- Elbows should be bent about 90°, wrists should be in line with the forearms to avoid increased strain on your neck and shoulders
- Place feet on the floor to take strain off the low back with knees at the same height as the hips (use a small step stool if needed)
- Attempt to change working positions frequently



Take home points:

- Understand how proper posture looks and feels
- Be conscious of your posture during the day
- Correction of poor posture is a gradual process which requires frequent attention and diligent participation
- Use a properly fitted backpack and do not overload it with books
- Change work positions frequently
- Perform postural exercises to correct muscle imbalances
- If you use a laptop, purchase a wireless mouse and keyboard to improve your posture with use

Postural Restoration Exercises

Mobility Exercises: The purpose of self myofascial release is to correct muscle imbalances, restore soft tissue length, increase soft-tissue extensibility, and break up adhesions/scar tissue. Prolonged sitting at a computer will cause the anterior (front side) muscles to shorten and the posterior (back side) muscles to lengthen, making it challenging to achieve upright posture. Lack of physical activity and muscle imbalances will decrease joint mobility. Inadequate range of motion can lead to pain and discomfort. "If you don't use it, you'll lose it."

Pectoralis Smash

Take a tennis or lacrosse ball and place it between your chest and the wall. Lean into the wall to apply pressure under the ball. Gently tilt head away from the ball. Reach your arm gently backwards so palm is nearly facing the floor. You can also perform this release by pressing/rolling the tennis ball on your pecs with your hand.



Latissimus/Posterior Rotator Cuff Smash

Lie on your side with a tennis ball positioned in your armpit/upper rib area. Reach the arm you are rolling overhead towards your ear. Turn your palm up towards the ceiling for increased tension. Slowly roll the area between upper arm and mid torso. If you find a particularly sensitive location, hold this spot for 30 seconds. You can also complete this standing against the wall.



Suboccipital Release

Lie on your back with tennis or lacrosse balls taped together under the base of your skull so your spine is in a neutral position (not tilted up or down). Gently tuck chin straight backwards as if trying to make a double chin. Relax until you get a good stretch. You can hold this up to 5 minutes as tolerated. Use this to relieve headaches or tightness.



Thoracic Spine Extension

Place a half foam roller or a rolled up towel in the center of the back of a chair vertically. Find a small step to place under feet or place a foot on your chair. Grasp hands behind head to support your neck. Gently extend backwards over the back of the chair. You should feel a stretch in your mid-back/spine. *Do not arch your low back* and make sure you are breathing. Hold for 5 seconds, 15 times.



Corrective Exercises: Activating the stabilizing muscles will reinforce the new mobility you obtained from completing the exercises above. Focus on these key points while working on your computer or carve out 5-10 minutes a day to practice these movements.

Scapular Retraction

Draw your shoulder blades together and downward. Keep your neck and low back muscles relaxed. This movement is subtle and should not cause a lot of increased tension throughout your body. Hold the retracted position for 5-10 seconds, 20 times.



Chin Tuck

Sit in good upright posture ideally in a chair with good back support. Tuck chin straight backwards as if trying to make a double chin. Your eyes should remain pointed straight ahead. Do not look downwards. Hold 5-10 seconds, 20 times.



Long Sit Overhead Reach

Sit against a wall with hip bones and shoulder blades touching the wall. Place the back of your hands against the wall in an "L" shape. Exhale and slide your arms up the wall overhead. Pull your ribs, sternum, and shoulder blades down to avoid arching your low back. Pause for a moment at your end point. Slide arms back down and then, repeat. Complete 15 lifts. Can complete this with legs straight or bent into a butterfly position based on your tolerance.

