



Spine Health

Statistics show that nearly 8 out of 10 in the general population will develop some sort of back issue at some point in their life. Most are caused by a combination of repetitive trauma, poor posture or body mechanics, stressful living conditions, loss of flexibility and general decline in physical activity. Back pain and injury can be greatly reduced by actively working to maintain spine health from improving posture and body mechanics, to strength training and remaining physically active. Below you will find tips for improving posture, body mechanics and safe spine strengthening exercises

Posture & Body Mechanics Check List



- Chin parallel to the floor, head centered
- Shoulders even, the shoulders should be drawn down and back roll your shoulders up, back, and down to help achieve this)
- neutral spine (no flexing or arching to overemphasize the curve in your lower back)
- arms at your sides with elbows relaxed and even
- abdominal muscles braced
- Hips should be neutral & even
- Knees even and pointing straight ahead
- Body weight distributed evenly between both feet

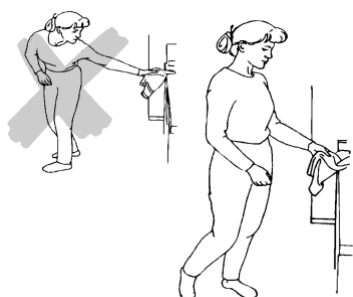


- Head should be neutral and aligned with spine
- Keep upper arms between vertical and 20° forward
- Keep elbows at an angle around 90°, close to the body, and avoid lifting or dropping shoulders
- Upper body should remain straight (Not twisted) and in an upright position
- Keep the lumbar support on the back rest in your lumbar area (the curve in the lower back).
- Your back should be straight and avoid twisting
- The hips, knees and ankles should be positioned at roughly a 90° angle or slightly higher
- Knees should be at or below the hip joints
- Ankles should be in front of knees
- Feet should be flat on floor or footrest



Always check the weight of the load before you attempt to lift.

- Keep your feet shoulder-width apart for a stable base of support.
- Position yourself as close to the load as possible.
- Bend knees & hips, not your back.
- Move your feet as you turn, do not twist at the waist.
- Keep your core activated & prevent over-arching of your back.
- Lift with your legs, not with your back
- Maintain the three natural curves of your spine.
- Use smooth, controlled movements to lift



When lifting objects, it's important to keep core activated (abdomen tight) rotate your body and **do not twist** and shift weight evenly when moving object.



When reaching for an object, always check the weight of the object before attempting to move it.

- Reach only as high as you comfortably can, avoid stretching
- Use step stool when needed
- Let your arms and/or leg carry the weight not your back.
- Keep the object close to you
- Stagger feet for support.



When Bending

- Kneel on one knee or squat with feet shoulder width apart
- Maintain the 3 natural curves of your spine
- Bend at the hips and knees not the back
- When leaning forward move your whole body not just your arms



Pushing and pulling objects:

- Stay close to the object and don't lean forward.
- Push rather than pull when able
- Use both arms

Always make sure core is activated and hips stay facing direction of the push





Sample Exercises to Support Spine Health



Abdominal Bracing: While lying on your back, press your low back into the floor as you tighten your stomach muscles moving your navel down towards the floor. Place your thumbs 2 inches inward from your pelvic bone so that you can feel the muscle contracting.

*You can also perform this sitting in a chair, sitting upright with your back and head in neutral position.

Hold for 5 seconds and repeat 8-10 times.



Bridge: While lying on your back with knees bent, tighten your lower abdominal muscles, squeeze your buttocks and then raise your buttocks off the floor/bed as creating a "Bridge" with your body. Hold and then lower yourself and repeat.



Hold for 5 to 10 seconds repeat 8-10 times



Dead Bug: While lying on your back with your knees and hips bent to 90 degrees, use your stomach muscles and maintain pelvic neutral position. Do not allow your spine to move. Hold pelvic neutral and then slowly straighten out a leg without touching the floor. At the same time raise the opposite arm overhead. Do not allow your spine to arch during this movement. Return to starting position and then repeat on the opposite side.

Perform 8-12 repetitions



UPPER TRUNK ROTATIONS: While sitting in a chair, cross your arms over your chest and then rotate your upper body side-to-side in a slow and controlled manner, keep pelvis neutral during motion

Perform 10-12 repetitions



SEATED LATERAL TRUNK STRETCH: While in a seated position, raise your arm overhead and bend your body to the opposite side for a stretch. Hold, return to starting position and repeat.

Hold for 5 to 10 seconds repeat 8-10 times



PLANK (Modified): While lying face down, lift your body up on your elbows and knees. Try and maintain a straight neutral spine

Hold 5-10 seconds repeat 5-8 times



SIT TO STAND - NO SUPPORT: Start by scooting close to the front of the chair. Next, lean forward at your trunk and reach forward with your arms and rise to standing without using your hands to push off from the chair or other object. Use your arms as a counterbalance by reaching forward when in sitting and lower them as you approach standing.

Perform 8-12 repetitions



SINGLE LEG RDL - ROMANIAN DEADLIFT: Stand and balance on one leg. Next, lean forward towards touching the floor as you extend and lift your leg behind your body. Keep your spine straight and hinge at the hip. Return to starting original position and repeat.

Perform 8-12 repetitions each leg