

I've Got Your Back: Interactive Tips on Pain Relief and Good Posture at Work

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Never have
you ever...?

I HAVE
NEVER

I HAVE



What is Ergonomics?

What is Ergonomics?

- ▶ Ergonomics is described as preparing the worker to be able to perform work tasks safely with the aim of reducing costs from employers, increasing productivity in the workplace, decreasing WMSDs, and decreasing overall absenteeism with workers⁴

Musculoskeletal Injuries

- ▶ Musculoskeletal disorders (MSDs) are pathological injuries to the bones, ligaments, joints, muscles, nerves, and vascular system which can affect the overall function of the human body.
- ▶ Work-related musculoskeletal disorders (WMSDs) are injuries to the musculoskeletal system occurring in the workplace, due to the environment, caused by repetitive motions like bending, crawling, twisting, lifting, pushing, and pulling.⁵

Why is it important?

- ▶ Liberty Mutual Insurance reported in their safety index for 2018 that 13.7 billion dollars were spent in 2017 on overexertion injuries in the workplace.²
- ▶ The Bureau of Labor Statistics reported that in the private workplace industry there were approximately 2.9 million non-fatal injuries in the workplace in 2016. Thirty percent of those injuries were classified as sprains, strains, and tears resulting from overexertion injuries.³

How Poor Posture Effects Your Body⁶

- ▶ "The perfect design"
 - ▶ Abnormal will never feel normal
- ▶ Results of poor posture
 - ▶ Muscle imbalance
 - ▶ Tightness
 - ▶ Weakness

How Poor Posture Effects Your Body⁶

- ▶ TMJ dysfunction (Jaw pain)
- ▶ Cervical spine/ Lumbar spine pathology
- ▶ Sacro-Iliac joint dysfunction
- ▶ Degenerative Joint Disease/ Degenerative Disc Disease
- ▶ Decreased work performance
- ▶ Decreased recreational performance

The Little Things Do Matter!

Force On Neck	10-12lb	27lb	40lb	49lb	60lb
Neck Tilt	0 degrees	15 degrees	30 degrees	45 degrees	60 degrees

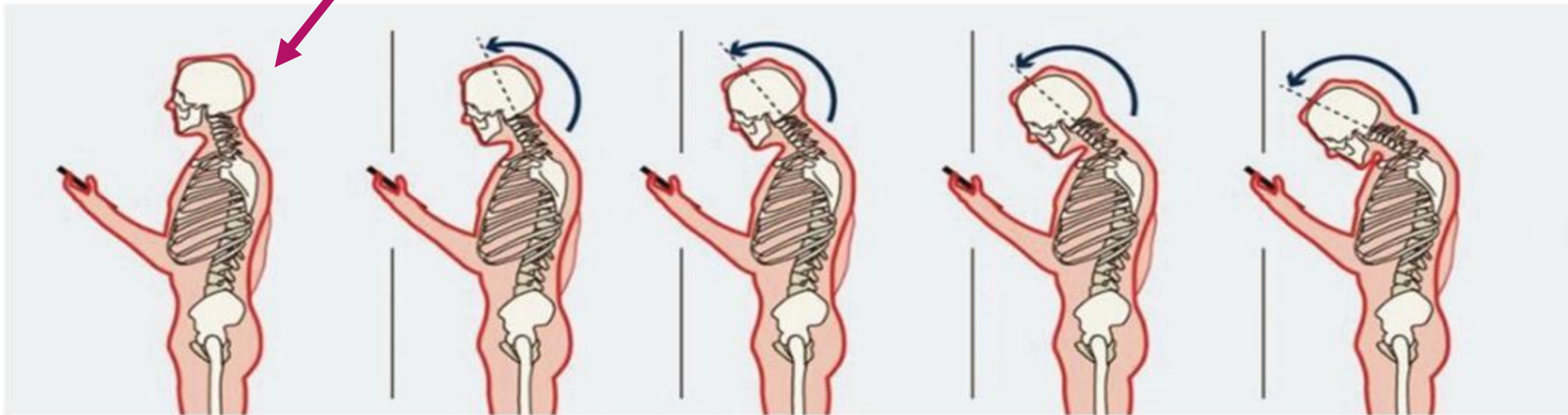


Image source: "Forces on the neck", Text Neck, Physiopedia, https://www.physio-pedia.com/Text_Neck

Sitting at a desk, looking at a computer screen with a "forward head" posture will demonstrate the same results!

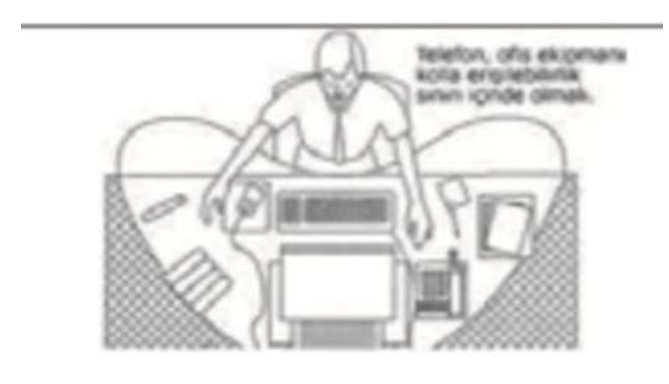
Desk Ergonomics
–What is good
for you?

What's wrong with this picture?



Position of desk and equipment⁷

- ▶ Computer monitor-
 - ▶ Top at eye level or slightly below
 - ▶ Arm's length away
 - ▶ Screen- Minimize glare
- ▶ Leg Room- Enough under desk to stretch legs
- ▶ Reaching- Items on your desk in reach without stretching



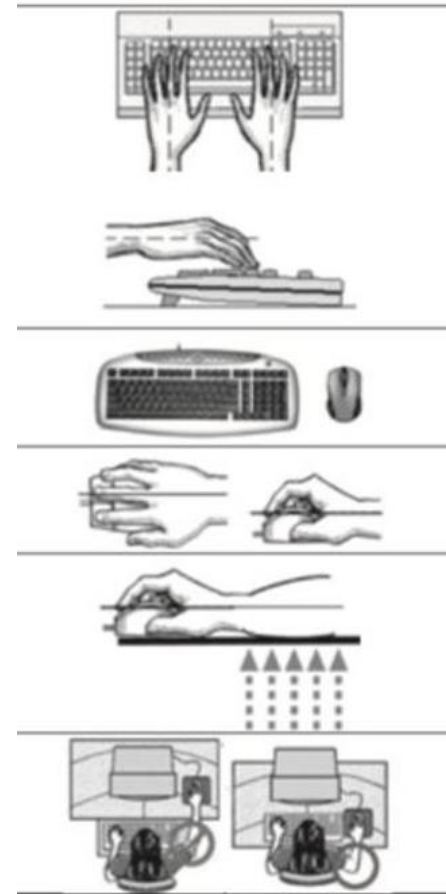
Position in chair⁷

- ▶ Chair-
 - ▶ Adequate upper and lower back support
 - ▶ Height- Feet should rest on floor or use stool
- ▶ Posture in Chair
 - ▶ Upright- avoid forward head
 - ▶ Change position – avoid sitting in the same position for a long time
- ▶ Breaks
 - ▶ Short breaks: Stretch or move for 1-2 minutes every 20-30 minutes
 - ▶ Longer: Move 5-10 minutes every 1-2 hours

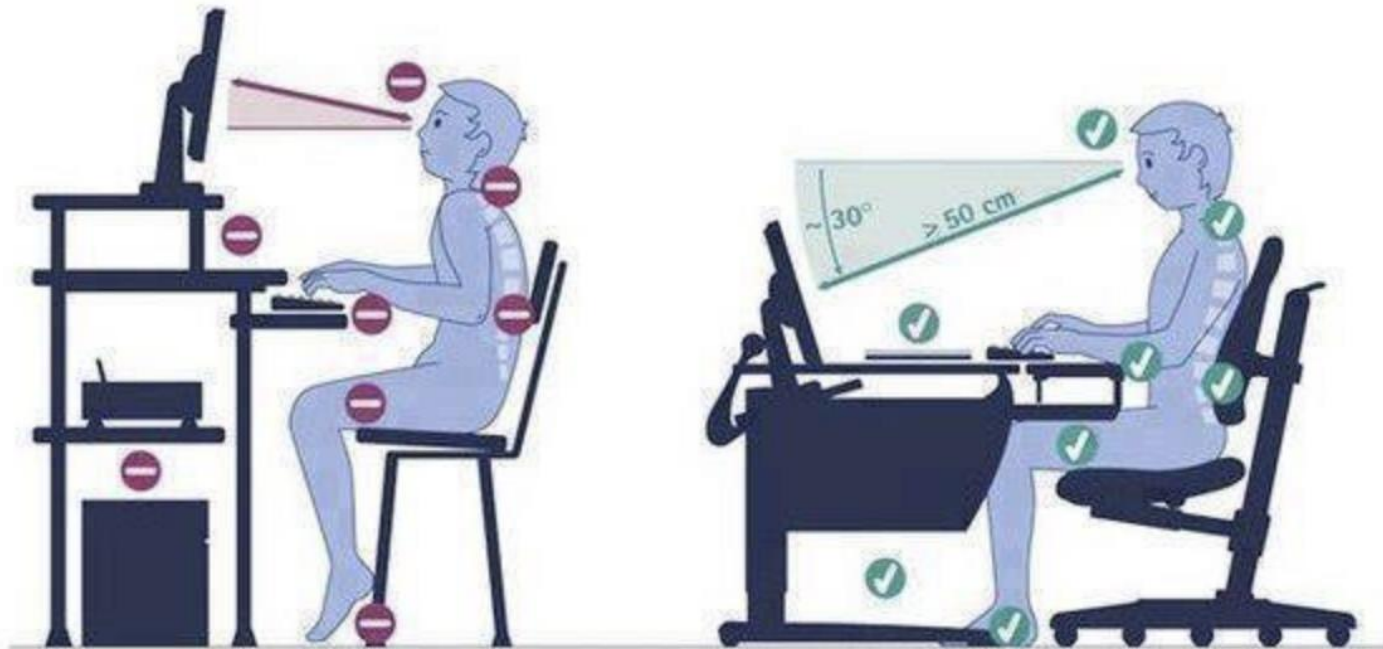


Keyboard and mouse use⁷

- ▶ Keyboard-
 - ▶ Directly in front and at elbow height
 - ▶ Keep wrists straight and in line with forearms
 - ▶ Avoid over-reaching
- ▶ Mouse
 - ▶ When grip, wrists straight
 - ▶ Forearm supported
 - ▶ Avoid over-reaching
 - ▶ Avoid long periods of holding and repetitive movements



Which one do you look like?



Tips to Prevent Workplace Injuries

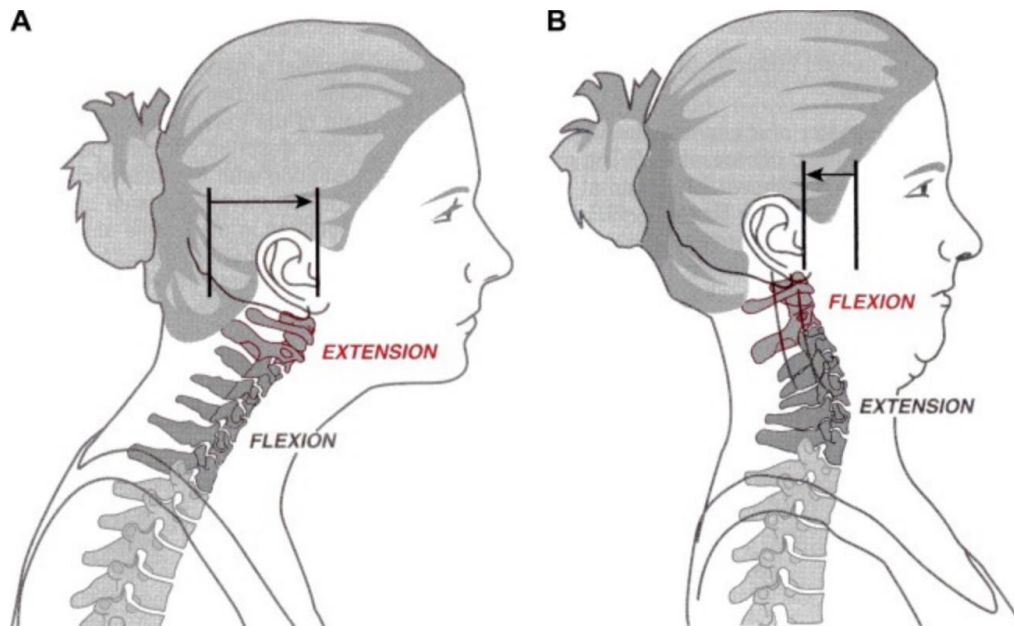
How to prevent

- ▶ This is not medical advice. These exercises are commonly given to improve posture and aid in ergonomics.
- ▶ If you have pain with these exercises, seek medical attention due to potential for injury.

Exercises

- ▶ Here are a few exercises to improve posture
 - ▶ Chin tucks
 - ▶ Shoulder blade squeezes
 - ▶ Spine stretch
 - ▶ Pelvic tilts

Chin Tucks



- ▶ Sit in an upright posture
- ▶ Move the chin slightly toward your chest
- ▶ Slide your head backward keeping your jaw and eyes in the same level

Shoulder Blade Squeezes



- ▶ Sit with an upright posture
- ▶ Squeeze your shoulder blades together

Spine Stretch



- ▶ Put your hands on your hips
- ▶ Lean backward

Pelvic Tilts



Posterior Pelvic Tilt. Roll the pelvis. Do not squeeze the glutes or lift the hips.



Anterior Pelvic Tilt. Roll the pelvis to lift the lower lumbar spine. Do not arch the entire spine.

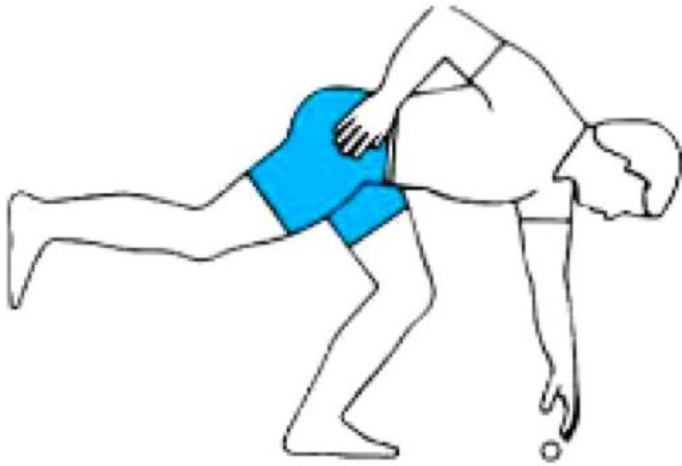
- ▶ Lie down with your knees bent and feet flat on the ground
- ▶ Tuck your belly button in (AKA “suck in your gut”!)
- ▶ Flatten your lower back by squeezing your glutes

Lifting Techniques

There are two main lifting techniques:

- ▶ Golfer's Lift
- ▶ Lifting a Box

Golfer's Lift



- Keep back straight
- Do not hold breath
- Keep core tight
- Bend knee

Lifting a Box



5 L's of Lifting⁸

▶ **Load**

- ▶ Test the load before you lift
- ▶ Ask for assistance
- ▶ Break it up if it's too heavy

▶ **Lever**

- ▶ Keep the load close to the body
- ▶ Keep your back upright during the lift

▶ **Lordosis**

- ▶ Keep your head upright
- ▶ Maintain the “hollow” in your back

▶ **Legs**

- ▶ Use your larger leg muscles to lift
- ▶ Avoid twisting motions

▶ **Lungs**

- ▶ To begin lift -> inhale
- ▶ During lift -> exhale

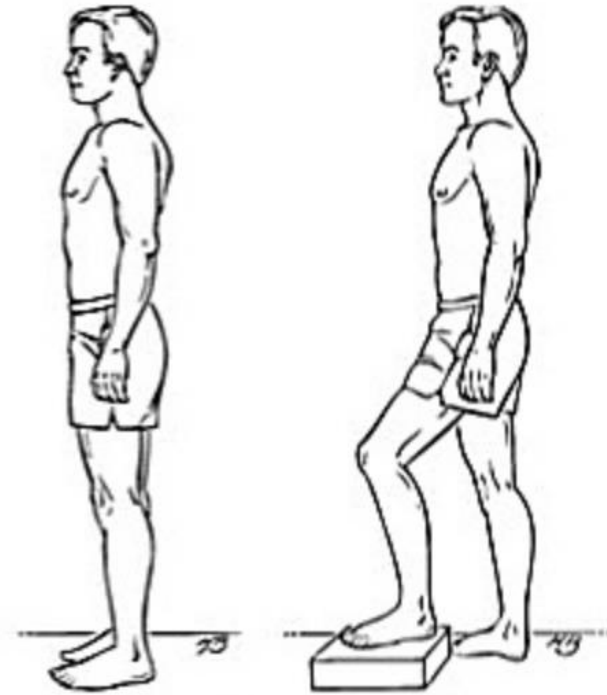
Cleaning Tips- Push/Pull

- Push/pull with whole body
 - Push with legs and hips, not just arms
- Move weight forward and back
- Keep elbows and mop handle close to body- don't overextend or grip too tightly



Standing for a Long Time?

- ▶ Put foot up on a stool or bend one knee to change position



Good Posture

Stations

- ▶ Golfer's Lift- Nick
- ▶ Box Lift and Carry- Dana
- ▶ Push/pull Activity- Jenn
- ▶ Desk station- Josh
- ▶ Supported sitting for posture- Anthony

References

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