



## FIT WHILE YOU SIT

### How posture impacts your health

As versatile and agile as it is, the human body must still maintain its intended shape. The body's natural framework allows each tissue, organ and system of the body to function properly. When that framework breaks down, the body struggles to function. Pain, illness and disease are then able to develop.

As a result of poor sitting position at work, millions suffer from low back and extremity pain. Headaches and temporomandibular joint disorder (TMJ) are also very common. These problems could easily be avoided by helping employees gain a basic understanding of their joints, and by teaching them exercises and stretches to combat the cumulative stress of poor seated posture and repetitive motions.

### Overcoming position and repetitive motion with stretches and exercise

What happens to the muscles, fascia, and ligaments while sitting:

#### Neck

- Shifts forward, becomes short/tight in the front and long/weak in the back

#### Forearms/wrist tendons

- Become overworked
- Tighten, and shorten in the front
- Weaken, lengthen in the back

#### Hands

- Stress flexor tendons
- Under-use extensor

#### Rear delts

- Lengthen, weaken

#### Shoulders

- Slouch and rotate inward

#### Ant delts/pecs

- Shorten, tighten

#### Quads

- Lengthen, weaken

#### Hamstrings

- Shorten, tighten

#### Pelvic/hip joints

- Shorten, tighten

#### Pelvic

- Rotates backward

#### IT band

- Shortens, tightens

#### Calves

- Weaken, tighten

#### Abs

- Weaken from lack of use

The following pages contain stretches and exercises that help combat these issues.

## Hands and forearms

### Rubber Band Drill

- Put your thumb and fingers together and place a rubber band around them. Extend thumb away from fingers to stretch the rubber band.
- Perform this exercises 5-10 times, 2 times per day.



x5-10 twice per day

### Flexor/Extensor Stretch

- For the first stretch, lift one of your arms and hold it comfortably in front of you with your palm facing down.
- Bend your hand downward and gently pull it toward your body with your opposite hand.
- You will feel slight tension in the outside part of your elbow and forearm.
- Hold the stretch for 15 to 30 seconds.
- Next, lift the same arm and hold it comfortably in front of you, this time with the palm facing up.
- Bend your hand downward, and gently pull the tips of your fingers back toward your body using your opposite hand.
- You will feel slight tension in your forearm and elbow.
- Hold the stretch for 15 to 30 seconds.
- Relax and return to the starting position and repeat the both stretches with your opposite hand.



15-30 sec.



15-30 sec.

### Wrist Rotations

- Extend both arms in front of you with your hands in fists (facing either up or down).
- Slowly rotate outward, then inward in a circular motion.  
\*This stretch can improve blood flow to your hands.



## Head and neck

### Neck Flexes

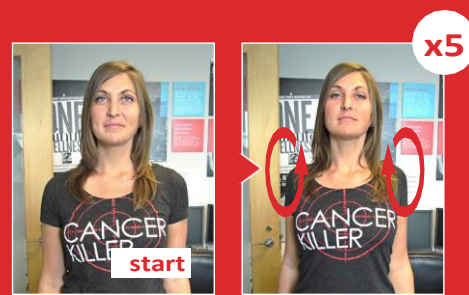
- Start from a standing or upright seated position with proper posture.
- Slowly tuck your chin inward. Do not tilt your head downward.
- Then, gently roll your head backward.
- Finish with your eyes looking up at the ceiling and your chin pointed up and away.
- This exercise can be performed with or without a pad/pillow.



## Shoulders

### Shoulder Blade Squeeze

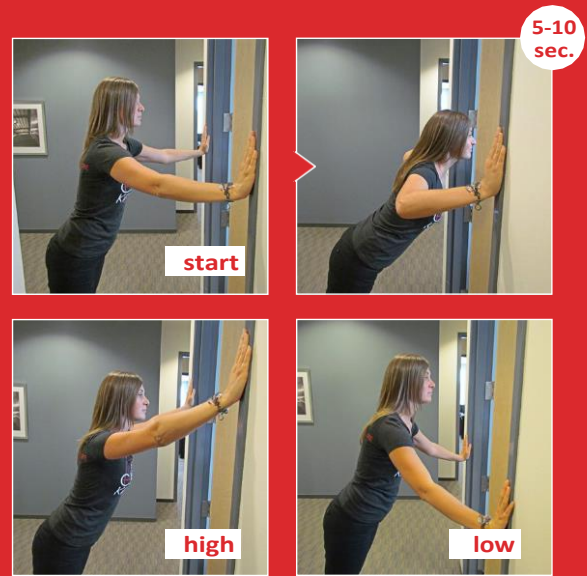
- Let your arms rest at your sides.
- Roll your shoulders backward.
- Squeeze your shoulder blades together. Hold this position for 2-3 seconds.
- Release, and allow shoulders to roll forward to the resting position. Repeat this five times.



### Doorway Stretch – low, mid, and high angle

- Stand arm's length from an open doorway.
- Place both hands on the door frame at shoulder height.
- Without bending your back, slowly lean into the doorway, supporting your weight with your hands.
- Lean into and through the doorframe until you feel a stretch in your chest. Hold for 5-10 seconds.
- Then, use your hands to push your body back to its normal upright position.
- Repeat the exercise twice: Once with your hands on the doorframe slightly above shoulder height, and once with your hands braced slightly below shoulder height.

\*Depending on the size of the door frame, you may choose to brace yourself with the insides of your forearms instead of your hands.



## Core

### Side Bends

- While seated, let your arms hang at your sides while maintaining proper seated posture.
- Slowly begin to bend your torso to your right, as if you are trying to touch your right shoulder to the outside of your right hip.
- At the same time, rotate your right hip upward, as if you are trying to touch it to your right shoulder.
- Return to your original upright position while maintaining proper seated posture at all times.
- Repeat the exercise using your left side.
- To complete the exercise, alternate sides and do 15-20 reps per side.





## Twist and Tighten

- While seated, cross your arms in front of you and away from your chest.
- In a controlled manner, rotate your torso as far to your right as possible. Keep your arms and back straight.
- Squeeze and hold your core momentarily, then relax.
- Then, stop your momentum and rotate slowly to your left. Be sure to twist as far as you can without straining.
- Squeeze your core again, then relax.
- Twisting to both sides constitutes one repetition. Complete 15-20 reps.



## Abdominal Flexes/Contractions

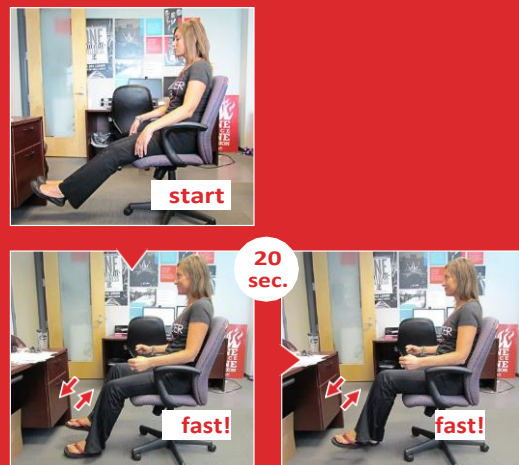
- While seated, place your hands on your knees.
- Tighten your abdominal muscles, pulling them inward.
- Hold for 3-5 seconds, then relax.
- Repeat 10 times.



## Fitness

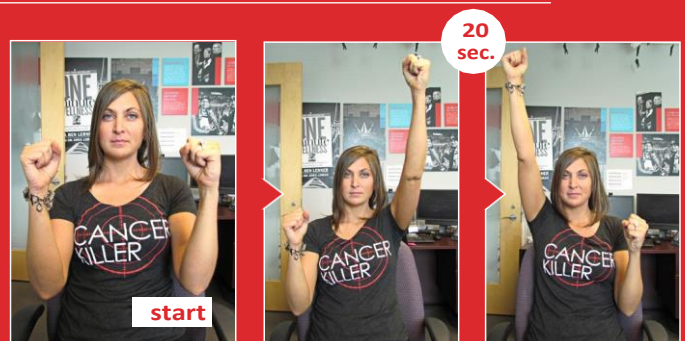
### Pump Legs/Seated Sprint

- While maintaining proper posture, lift your right foot slightly (3-4 inches) off the ground. Do not brace yourself with your arms.
- Lower your right foot, lift your left leg slightly (3-4 inches) off the ground.
- In succession, these movements should look like you are marching from a seated position.
- Repeat Steps 1 and 2 in rapid succession; this is a "sprint." You should sprint without stopping for 20 seconds.
- Rest.



### Pump Arms

- While seated and maintaining proper posture, bend your arms to bring your hands (or fists) to your shoulder height, resting just outside of your shoulders.
- Push your right hand/fist straight up into the air, extending your arm to the apex of its reach.
- Bring your right hand/fist back down to shoulder level while simultaneously pushing your left hand/fist straight up, now extending your left arm to the apex of its reach.
- For 20 seconds, alternate extending your left and right hands/fists into the air in rapid succession.



## Seated exercises

### Trunk Twists

- Raise elbows up to shoulder level.
- In a controlled manner, rotate your torso as far to your right as possible.
- Then, stop your momentum and rotate slowly to your left. Be sure to twist as far as you can without straining.
- Repeat 10 times.



### Leg Lifts

- Start with both feet flat on the floor.
- Lift one leg with toes pointed and hold. (Try to raise your leg high enough so the bottom of your thigh is off the seat.)
- Relax and roll your ankle around in a circle.
- Repeat with your other leg. Perform 10 repetitions with each leg.



### Chair Dips.

- Place your hands on your chair's arm rests.
- Try to gently push your weight up out of the chair without using your legs.
- Push and hold for 2-3 seconds, then relax. (It is not necessary for your rear to leave the seat.)
- Repeat 10 times.



### Hip Stretch

- While sitting, lift your right foot up and over your left leg so that the outside of your right ankle is resting atop your left thigh.
- Using your left hand, gently pull your right foot in toward your body.
- At the same time, use your right hand to pull your right knee (it should be bent) in toward your belly button. You should feel a stretch in your right buttock. Do not pull too hard.
- Maintaining proper posture, hold this position for 8-10 seconds.
- Return to your regular seated position, then repeat each step for the opposite side.

