Office ergonomics and stretching exercises for working in the office or at home.

Jessica Ogren, OTR/L, CDMS, QRC

August 2020
Objectives

- Proper Body Mechanics & Ergonomic WorkStation Design
  - Minimize stress on the body through proper ergonomic set-up
- Stress & Muscle Tension
  - Techniques of stress reduction
  - Use of a Theracane, tennis/racket balls, foam rollers etc.
- Preventative Stretching
  - Benefits and Techniques
Proper Body Mechanics in Your Home Office

Definition

The principles of applying GOOD POSTURE to your daily activities. This can mean using leg muscles rather than your low back to lift objects. But it also refers to having all of your joints in “neutral posture” when performing your job tasks and activities at home. This includes sitting or standing while working in a more sedentary capacity.

**CORRECT POSTURE**

**CHECK YOUR POSTURE**
Shoulders down and back. Forward facing. Weight mainly distributed on balls of feet.

**THIS IS RIGHT**
Maintain abs. 90 degree angles on hips and knees. Don’t bend your back when picking up objects.

**INCORRECT POSTURE**

**CHECK YOUR POSTURE**
Avoid slumping or rounded shoulders. Engage your abs to prevent this. Adjust your neck.

**THIS ISN’T RIGHT**
Bending your back hurts back function over time. Don’t hunch forward. Creates tense shoulders.
What is wrong in this photo:

- Surface too high
- Screen too low (bend neck to see)
- Poor posture (leaning forward)
- Contact stress to the elbow
Seated Posture: Where Desk Ergonomics Starts

Maintain a balanced spinal posture by aligning your ears over your shoulders and your shoulders over your hips. Sit at the 90/90 posture (hips, knees and elbows at 90 degrees) with the entire back properly supported. Adjust your chair and add back support if needed.

**Improper alignment**

**Proper alignment**
Which picture shows good posture when sitting?

Tips for using your current chair:

• Sit all the way to the back of the chair so your spine is supported. Maintain the 3 natural curves of the spine. Neck straight and looking forward.

• Feet should be flat on the floor or use a foot rest if need to raise chair to proper height for desk surface. Shoulders relaxed with arms close to your sides.
Alternate Sitting and Standing

Get creative and alternate sitting and standing while you work. Ensure monitor and keyboard are at proper heights. Use well supported shoes and an anti-fatigue kitchen mat to stand on. Some kitchen countertops, ironing boards, or tables are at the proper height.
Seated Posture Continued…

Even with chair adjustments, you may need additional supports, such as those pictured below, to maintain the 3 natural curves of your spine. You can also use a throw pillow or towel rolled up behind you as well.
Keying & Mousing
What is wrong in the photos below?

Arm is stretched out to reach the mouse, bring in closer or use a short keyboard without the 10-key pad. No wrist rest being used which helps to straighten the wrist and keep wrist off hard surface.

Chair too low, reaching up for keyboard and monitor too low.
Keying & Mousing recap:

- Place the keyboard and mouse directly in line with the monitor to avoid turning your head.
- The keyboard and mouse should be close to you so that your elbows remain at your side and you’re not reaching away from your body.
- Keep your shoulders relaxed, elbows bent at 90 degrees and wrists straight.
A soft gel wrist rest and mouse pad may be helpful to provide cushion support and keep the wrist straight. It also avoids contact stress of the wrist and forearm. Recommended for mouse as well. Can use a rolled up towel in place of a wrist rest.
Monitor Height

- The top 1/3 of the monitor screen should be at eye level, monitor arms can be helpful for proper alignment or the use of books/box.

- Adjustments to a lower position may be necessary if you wear bifocals. Computer glasses also reduce eye strain.

- Give your eyes a break, close them for a few seconds or look out the window.
Use of a document holder centered in your midline is helpful to reduce cervical strain from flexing and rotating your neck to view. A clipboard works well if you don’t have a document holder.
The Ergonomic Workstation – all in one poster reminder

- Monitor distance: 18"-36"
- Monitor height should be at or slightly below eye level
- No reaching forward to keyboard and mouse
- Document holder in line with monitor and keyboard
- Use monitor risers to raise screen
-Feet should be supported either on the floor or on a footrest
- Keyboarding height = approximately elbow height
- Keep keyboard and mouse beside one another and at the same height
- Adjust armrests to elbow height
- Adjust backrest to provide lumbar support
- Shoulders low and back
- Wrist straight
- 90° to 120° angle
- Keyboard tray should be flat or on a slight negative angle
The Effects of Stress

- Stress can have serious negative effects on the body. Stress not only weakens immunity but affects the muscles and joints of our body.
- Our bodies response to stress: could include crying, sweating, muscle tension/tightness, headaches, fatigue, feeling overwhelmed, stomach ache, etc.
Muscles tense to deal with what your body perceives as stress.

Constantly tight muscles can cause knots in your muscles and pain.
Quick Stress Busters

- **Laugh Out Loud** – increased oxygen is produced when you laugh and this in turn increases blood flow causing stress to dissipate.

- **Clean the Clutter** - Being surrounded by too much stuff can be overwhelming and contribute to stress. It brings on anxiety when you can't find that one document you need. So de-clutter to de-stress. Tackle a drawer, a shelf, or a tabletop at a time. An uncluttered space can feel satisfying, organized and restorative.

- **Drink Orange Juice** - Researchers say vitamin C may help people manage their stress more effectively, in part by lowering levels of stress hormones like Cortisol. As an added bonus, vitamin C-rich foods such as orange juice, grapefruit juice, strawberries, or sweet red peppers can help boost your immune system.
Quick Stress Busters

- **Take a Walk** - Exercise eases stress. It helps your body produce endorphins - neurotransmitters in your brain that make you feel good. It also requires focus, helping you forget what's making you anxious. Walk briskly for at least 30 minutes to meet daily exercise recommendations; even to take a couple of minutes to walk up and down the stairs or up and down the hallway will help.

- **Take a Deep Breath** - Aromatherapy isn't just for spas. No matter where you are, taking a deep whiff of lavender or rosemary can put you into a more relaxed state. Inhaling those aromas can lower your levels of the stress hormone Cortisol. But just the act of breathing deeply is also a stress buster. Deep breathing sends oxygen surging through your bloodstream, helping to calm your entire body.

- **Preventative stretching**
How the Theracane Works

- The Theracane is designed to put pressure into the muscle to break up the lactic acid and increase circulation or blood supply to the muscle to promote healing.

- Similar to results of a therapeutic massage only you can do this independently.

- You also may use a tennis or racket ball and roll over the knot using either the wall or laying on the floor (foam roller works best while on the floor).
Preventative Stretching

Components of a good program:

• Stretching should NOT be Painful. Should not feel like tightness or pulling over muscle and joints.

• Maintain good posture while performing exercises, correct technique is very important.

• Regular breathing pattern while you stretch; do not hold your breath. Muscles need oxygen to grow in length over time and to relax and release lactic acid.

• Hold stretch for 15 seconds and complete each stretch for 1 repetition (on each side if indicated). Stretching in the morning, at noon and after work are all good.
Preventative Stretching for Office Workers

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<thead>
<tr>
<th>Neck Retraction</th>
<th>Neck Side-Bending</th>
<th>Upper Back</th>
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<tbody>
<tr>
<td>Tuck chin and press back, hold for 15 seconds.</td>
<td>Relax shoulders and bring ear to shoulder on each side, hold for 15 seconds each side.</td>
<td>Clasp hands in front of body and reach away from self, hold for 15 seconds.</td>
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preventative stretching for office workers

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<th>Pectoralis Stretch</th>
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**Pectoralis Stretch**

Clasp arms behind body and pull shoulders back stretching the chest and lifting arms, Hold for 15 seconds.

**Wrist Extension**

Touch palms together at chest and push down, hold for 15 seconds.

**Low Back Stretch**

Place hands on lower back and gently bend backward, hold for 5 seconds, repeat 3 times.
Preventative Stretching for Office Workers

Seated piriformis stretch is good for sore hips and glute muscles – Place ankle on opposite knee, with back in a neutral posture, lean forward at the hip and press down on the knee. Hold for 15 seconds. Repeat other side.
Questions?

Contact Human Resources:

Karyn Jeffrey
Associate Director of HR
507-222-4174
kjeffrey@carleton.edu