



RAVENSWOOD

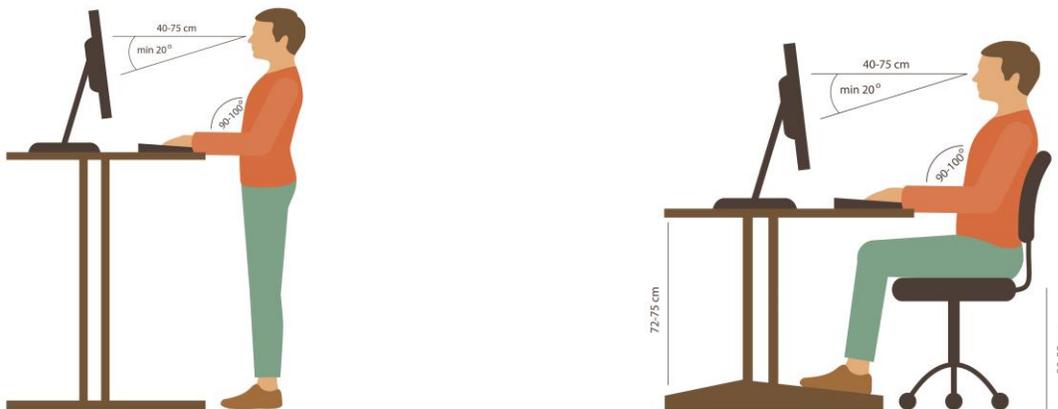
Chiropractic & Wellness Center

Office Workstation Elements: Putting Your Workstation Together

OVERVIEW

If you want to prevent injury & pain, it is important for you to make your workstation to fit you instead of you trying to conform to it. Below summarizes the principles that allow you to do this:

- First set your chair if sitting or desk if standing to the correct height
- Then set your keyboard to a correct height if sitting or place it on the desk if standing
 - It should be at the same height if you were trying to play your keyboard like a piano
- Put your mouse in close proximity beside the keyboard
- Then set your monitor at arm's length, straight in front of you, so the top of the screen is at eye level
- Set any other items



For work station set up:

Sitting: <https://www.youtube.com/watch?v=Z3uBJdW6Akk&feature=youtu.be>

Standing: <https://www.youtube.com/watch?v=zkeYxAjBq5c>

*General recommendation on standing vs. sitting times is that you should try standing for 60 to 90 minutes then sit for no longer than 30. Of course, you will need to adapt this formula to your particular work situation.

STEP 1

STANDING DESK WORKSTATION- SET THE DESK HEIGHT

It's important that the desk height is in the correct position to maximize comfort and increase health benefits.

If not set up improperly, you may experience back, neck and shoulder pain.

- Stand with a gentle bend in your knees and elbows at 90 degrees
- Set desk height slightly below (about an inch) of elbow height

Standing Desk Design Considerations

- A fixed height desk is good for most people in the average size category and is typically used for very short periods of time
- Whereas an adjustable height desk can change heights easily and is good for many individuals and also works as a seated workstation for those needed breaks
 - If you get a height adjustable desk, look for ones with a motor for easy height changes and a memory button feature so at the push of a button it can transition itself to be at the correct seated or standing height for yourself
- Modify a regular height desk if you are using a standard 30-inch desk. There are several devices on the

market that will raise the keyboard and monitor at the same time so you can go from a proper seated position to a proper standing work height

→ I recommend Varidesk Plus

- Also if standing on an anti-fatigue mat (highly recommended) then make sure the desk can be raised up an additional 1-2 inches to accommodate for the mat

Anti-Fatigue Mats Design Considerations

- A mat, such as an anti-fatigue mat can help to reduce pressure on the body and add support to the feet.
- No slip surface and a sealed bottom
- The thickness of the mat should be between 5/8-3/4" thick

TIP: Usually at a restaurant or bar there is a foot rest attached at the bottom to make you feel more comfortable. Employ the same principle in your workspace by having a 4 inch text book like object so you can rest one foot on it while you stand, it will give your legs and back a little break so you can stand longer without fatigue.

SITTING DESK WORKSTATION- SET THE CHAIR HEIGHT

Improper sitting causes damage to the discs, weakens muscles and strains ligaments and joints.

- Raise seat to maximal height
- Sit with a fist's width from your leg to the back of the chair
- Adjust seat tilt so there is little pressure of the seat on the lower part of the back of the thigh
- Sit up straight with back firmly against rest in a slightly arched position
- Lower seat so feet are flat on the floor and thigh has slight downgrade to the ground
- The seat back should be reclined up to 10 degrees
- Do not lean forward, sit close to your work & do not slump



Chair Design Considerations

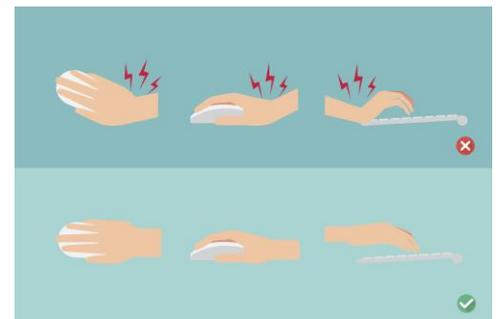
- Comfortable and proper size for the individual
- Non-slip breathable fabric with 2 inches of padding
- Provides adequate upper & lower back support or add support cushions to existing chair (search Obusforme or other types of "back or lumbar supports")
- Five-legged base & casters suitable for carpet or hard floors
- Durability
- Fully adjustable:
 - seat height, pan & tilt;
 - backrest height, forward movement & tilt;
 - armrest height & retraction
- Hydraulic controls
- Seat pivots forward and backward
- Waterfall seat front, stay away from flat seats

STEP 2

A) SET THE KEYBOARD TO THE RIGHT HEIGHT

If not positioned correctly then shoulder, wrist and arm pain may result.

- Forearms level to floor, elbows at 90 degrees, close to side
- Shoulders should be relaxed and elbows should be supported by armrests if sitting
- Place keyboard so that the fingers rest easily on the Q to P row on the keyboard
- Wrists should be neutral, no extension or deviation
 - A wrist pad should be used to allow for a neutral wrist position (if needed at all)



-Also noted is that the center of keyboard should be in front of your belly button

Keyboard Design Considerations

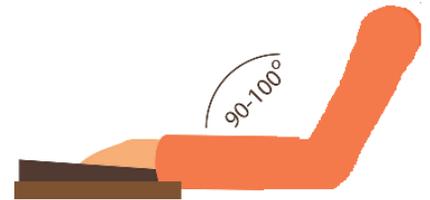
- Fit user comfortably with easy use of buttons
- Keyboard tabs to angle keyboard to user should not be used because they add extension to the wrists
- Use a split design if you type for long periods at a time
- If on desktop use remote/cordless design
- Narrower keyboards (no numeric pad) are sometimes appropriate depending on needs

STANDING

- Simply place keyboard directly on desk, adjust desk as necessary

SITTING

- Place keyboard directly on desk
 - If keyboard too low, then raise keyboard or desk as needed to allow for the proper position described above
 - If keyboard too high, then use an under mounted keyboard tray or a keyboard tray with an adjustable arm



Keyboard Attachment Design Considerations:

1. Under-Mounted Desk Keyboard Tray:

- Cheaper, but if tray allows for correct height then recommended
 - Fit user comfortably (as above)
 - Locks so it does not move with light forward pressure

2. Adjustable Keyboard Arm with Platform

- More expensive but preferred due to their adjustability to you
 - Adjusts for height, angle & negative slope
 - Swivel feature if necessary
 - Are stable with pressure
 - Tuck away easily and allow enough room for thighs and chair

→ If unable to mount something to bottom of desk then you will need to keep keyboard on top of desk, raise chair so you can reach the keyboard properly and then employ the use of a foot-rest

Foot Rest Design Considerations

- Stable and moveable, non-skid surface, that won't interfere with your chair's base

B) PLACE THE MOUSE

If not positioned correctly then shoulder, wrist and arm pain may result.

- Placed on the side of dominant hand, close to edge of keyboard
- The wrist remains neutral at all times
- Forearm level to floor, elbow at 90 degrees, near side and supported
- Should be used with a gliding action from the shoulder with minimal wrist deviation

Mouse Design Considerations

- Fit user's hand comfortably; easy use of buttons
- Requires minimal shoulder and wrist movement
- Durable and easy glide mousing surface with wrist pad
- Wireless design preferred
- Persons with shoulder pain should use the track ball mouse
- Foot operated mice are available for use within repetitive motion injuries or other circumstances



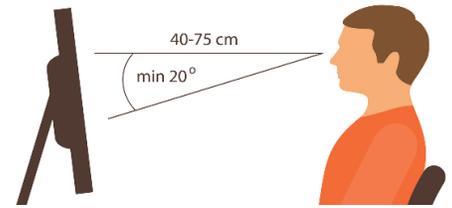
TIP: If you don't use the numeric keypad on the keyboard often then get a "narrower" keyboard, which will keep you from reaching for the mouse.

C) SET THE MONITOR HEIGHT

If not positioned correctly then headaches, eye strain, neck and shoulder pain may result. Fifty percent of body weight is comprised of the upper body, so the stabilizing muscles of the spine will have to work hard if you are not balanced.

This may cause back pain and body fatigue.

- Place approximately one arm's length away
(18 to 36 inches, but the larger the monitor the further it can be placed)
- Head just to the left of the center of the monitor, for right handed persons; opposite for left
- Top of the monitor at eye level when sitting up straight or standing
- Tilt monitor up slightly (10 degrees)
- Keep your neck in line with your spine (not looking downward) when looking at the monitor



TIP: If you wear graduated lenses or bi/trifocals then the screen should be:

- lowered slightly to see images properly
- tilted up an additional 10 degrees

Monitor Design Considerations

- clear and crisp images with glare reduction
- adjust brightness and contrast
- large enough to use without having to lean forward
- use multiple monitors if necessary

- consider using an adjustable monitor stand to ensure correct position

STEP 3

A) SET YOUR OTHER ITEMS

Document Holder

- use inline document holder (preferred)
- otherwise, place on either side of monitor angled at 20 degrees
- use a document holder that attaches to the side of monitor.

Headset Guidelines

- If you have: more than 4 calls/hour, 2minutes in length; more than 5 minutes use every hour then you should be using a headset
- use wireless design

Phone

- place 18 to 30 inches at a 45-degree angle on the side of dominant hand of the user

B) LAPTOP CONSIDERATIONS

Laptops pose unique problems. They are very portable and can be used almost anywhere but prolonged use (greater than 30 min at a time) should be avoided.

- create a workspace for consistent home use
- use a laptop holder or docking station for commonly used locations
- then employ the above principles

OTHER IMPORTANT ELEMENTS

A) STRETCHES

Eyes-every 20 minutes, look away 20 feet for 20 seconds- “20/20/20”

Brugger’s – a great exercise to wake up your spine and improve posture

Step 1: Sit up straight all the way forward in your seat, with legs spread and feet flat in front of you

Step 2: Pull shoulders back and down

Step 3: Palms facing forward

Step 4: Chest should be proud and the shoulders should be over the hips

Step 5: Hold for 2 minutes every hour



Hour Stretch – it’s important to stretch every hour to increase circulation and hydrate your discs

Step 1: Stand up, put hands on hips, and lean backward and hold position for 3 seconds. Repeat 3 times.

Step 2: Walk fingers down thighs past knee, hold 8 seconds repeat once

Step 3: Walk around for 2 minutes



Seated Neck Stretch- a great stretch to help increase range of motion and reduce tightness in the neck

Step 1: While sitting, anchor one arm under chair, place other arm over head with fingers touching ear, and tuck chin

Step 2: Place gentle pulling pressure with hand on head until a stretch is felt; hold for 8 seconds

Step 3: Rotate head 30 degrees towards the pressure arm, apply pressure stretch for 8 seconds

Step 4: Repeat a total of 5 times, until chin approaches shoulder

Step 5: Perform two times per day at work (beginning & end of day)



B) BREAK GUIDELINES

Sitting:

- Recommended not to sit longer than 30 minutes but never sit longer than 1 hour at a time
 - 15 minutes every 2 hours
 - 5 minutes every 1 hour
 - 2 minutes every 30 minutes

Standing:

- Do intervals standing for 90 minutes and then sitting for 30 minutes

C) LIGHTING- adequate, not too bright

- turn monitor 45 degrees if there is a glare from light source or use anti-glare screen

D) SLEEP-very important to memory, concentration, productivity, level of agitation & overall health and wellbeing

- On average, an adult should get 6-8 hours of sleep a night. Females require more sleep than males.

E) EYE CHECK UP ANNUALLY