

Santa Clara University DIY Ergonomics and Wellness Tips for working from home during the COVID 19 crisis

Suddenly the whole world is focused on prevention: preventing exposure to and the spread of COVID-19. As we transition into a more long-lasting work from home model, we would like to share simple ergonomic tips that may be implemented in your home space. Now is the best time to take care of yourself, don't wait.

First, make an inventory to determine what you have available at home:

Your Computer tools

- Laptop,
- Monitor(s),
- Keyboard,
- Mouse,
- Other accessories (headphones, screen covers, etc.)

Your Furniture

- Desk and office chair,
- Dining table and chairs,
- Sofa and/or recliner

Your work space in your home

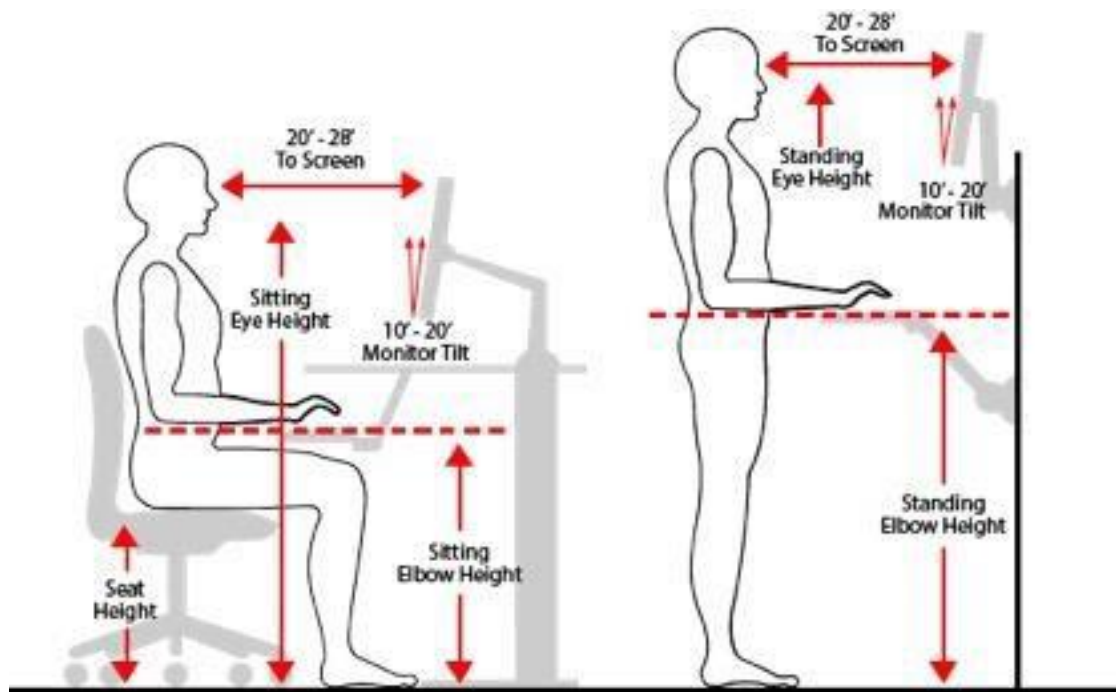
- Separate office,
- Bed room,
- Living room

You can request permission from your manager or supervisor to go pick up your monitor, keyboard, mouse and other small ergonomic accessories that you may have at your SCU office. A keyboard and mouse would be very helpful, and we strongly recommend bringing these items home if necessary.

Select the location of your working space at home.

A separate office is best to avoid distractions. If this is not available to you, choose a quiet corner in the living room or a bedroom. Alternatively, you may choose to use a small table located elsewhere in your house. A way to minimize distractions may be to use a noise cancelling headset and listen to soft music designed to aid in concentration. You can find several free playlists on platforms like YouTube, Spotify, Pandora, etc.

At your SCU office, you likely have a good ergonomic set up with adjustable equipment as demonstrated in the diagram below. Adjustable furniture allows you to set up your equipment at the correct heights to fit your body.



Ideally, your new ‘home office’ should resemble this set up as much as possible, but it is likely that your furniture at home is not adjustable. You can get closer to the correct heights by arranging items such as pillows, boxes, and books as adjustable supports.

Your screen needs to fit your **eye height** and your keyboard and mouse need to fit your **elbow height**. This will allow your head to rest on top of your shoulders, minimizing neck and back strain. In the above picture, you can see there is quite some distance between the ideal eye height and ideal elbow height.

This is the reason why working on a laptop is problematic – the screen and keyboard are too close together.



As many families find themselves working and learning from home, now is a good time to address the ergonomic needs of your whole family!

Below are some instructions and suggestions so that everyone in your household might better practice good ergonomic postures and habits.



As a fun activity, you can make some do it yourself laptop stands:
<https://maddoxtan.blogspot.com/2012/11/diy-cardboard-laptop-stand.html>

The 3 most important things to look at are seating, work surface, and computer.

1. Seating

The ideal seating is an **office chair**. Most basic office chairs have seat and back support adjustability. The levers are usually hidden underneath the seat. Squat down and look underneath the seat to find them. Adjust the seat height so that your hips are slightly higher than your knees. Adjust the back support so that it fits the small of your back along your lumbar curve.

When you work at a fixed height desk or table you may need to raise the seat high to get to the correct elbow height for your keyboard and mouse.

When using a **dining room chair**, you can sit on a pillow to raise the seat. The benefit of using just a regular chair at home is that it forces you to stand up more often because it may not be as comfortable the chair in your SCU office.

Sitting on the **couch** or in a **recliner** is less ideal since this means you are probably using a laptop. You can do this for short periods of time to break things up. A laptop tray can be helpful here.



If you have a keyboard and mouse available you can place those on your laptop tray. Then place your laptop at your eye height on some boxes on top of your coffee table.



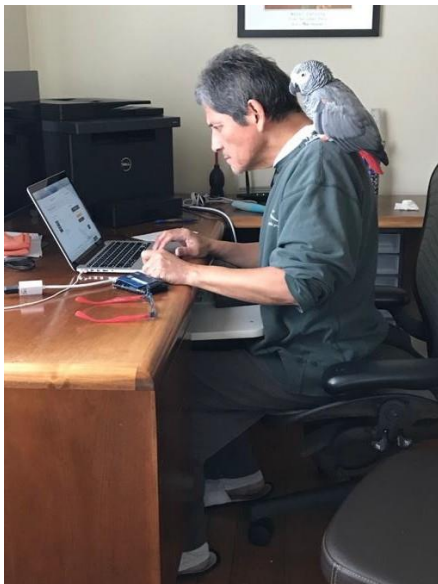
Poor



Improved

2. Work Surface

The best option would be an office desk. If you are lucky enough to have a keyboard tray, use it!



Poor



Improved

When using a kitchen and or dining table, you can improve its keyboarding height by simply sitting higher on a pillow on the chair.

If you decide that this is the time to buy your own desk for home, determine first the required desk height. Go back to the diagram on page 2 and measure your elbow height. It is best if someone else takes that measurement for you.

3. Computer.

Most people went home with just their laptop. The trouble with the laptop is that the screen and keyboard are connected. This is why we suggest using an extra keyboard and mouse to plug into your laptop. The laptop can then be placed on a laptop stand, a box, or books to sit at the target eye height.



When available, you can also use an external monitor, utilizing the laptop as a second screen.



By implementing these suggestions, you may find that you can work more comfortably and healthily even at your kitchen table.



Poor



Improved

Cell Phones

The cell phone is a smart computer and a great tool for when you are on the go. Too much time working from your cell phone can lead to 'Tech Neck,' a commonly used term for several types of upper back and neck pain and/or injuries.



When thinking ergonomically, which computer should you use? The answer is: The bigger the better.

The best option is a desk top computer with a larger screen and separate keyboard and mouse. If that is not available, then opt for a laptop, then an iPad, and lastly the cell phone. Consider the cellphone your emergency tool. It is small and physically hard to operate, often straining the user's neck and thumbs.

Movement and alternative positions.

To switch things up, you can create a standing option in your kitchen fairly easily.



Poor



Improved

It is best to alternate regularly between sitting and standing. They are both static postures and neither one is very good to do longer than one hour. Your best bet is to get up regularly and move around.

You can do your standard office stretches, but at home there is so much more you can do!

Maybe you have an exercise bike you can work with.
Or other exercise equipment.

Ideas for short 5 min movement breaks

You can do small house chores

- folding laundry
- cleaning a drawer
- checking the mail
- cleaning door knobs
- putting away dishes
- etc. - just put a 5 min timer on.

Take your lunch break away from your computer and take a walk, or play with your kids.

This is a strange time for all of us, but also a time of new awareness. We have an opportunity to look at the way we are doing things. Please include ergonomics in your creative thinking, to protect yourself from tension and pain, but mostly, to just work more comfortably at home in this difficult time.

Please contact SPcollins@scu.edu in EH&S in case you have any more questions or concerns about ergonomics in your home environment.

We can offer ergonomic phone support as needed.

