

The 60-Second Workstation Evaluation

By DR. JAMES PROODIAN

This week I would like to share with you an excellent article on ergonomics that we all can apply at work and at home. Many conditions I see in practice relate to years of 'micro-trauma' which can eventually lead to severe pain and limitations. Taking steps at work and at home to improve our posture and ergonomics can have a great effect on how we feel and function. Please try to follow these six easy steps to make a positive change in your life. The more educated we are about the 'mechanics' of better health, the less dependent we are on doctors and medication. My goal in my practice is to provide simple solutions to improve the health of my patients. Steps like these can cause an immediate and positive change in your health, too.

Step One

The first step in evaluating the workstation is to sit comfortably in your chair, facing the workstation. Begin by looking at the height of the work surface. Place your hands on your workstation (keyboard). Notice the angle of your elbows. Ideally, the angle should be slightly greater than 90 degrees. In other words, the elbows should be slightly higher than your wrists and hands, while the neck and shoulders are relaxed. If the work surface is too high, you will contract the mus-

Dr. Proodian's Health Corner



By Dr. James Proodian

cles in your neck and shoulders in order to adapt. Over the course of an 8-hour day this can create a fair amount of muscle soreness. On the other hand, if the surface is too low, the muscles in your forearms will tire.

Step Two

The next step is to adjust your sitting height so that your arms are in an appropriate position (see Step One). Usually, the easiest way to correct for the height of the work surface is to raise or lower the height of the chair that you sit on. If the work surface is too high, you should raise your seat to correct. If it is too low, then lower the seat accordingly. Sometimes, it may be easier to actually raise or lower the work surface itself.

Step Three

Once you have the work surface and the chair properly positioned, it will be necessary to

look at where your feet are. If the workstation is well suited to your body size, your feet should be resting comfortably on the floor. If not, the seat may actually exert pressure on the blood vessels in the back of your legs, which may eventually lead to problems. The addition of a footrest will usually remedy this situation.

Step Four

The next step is to look at the back of the seat. It should incline slightly past 90 degrees. This allows you to lean backwards into the seat, taking some pressure off the intervertebral discs in the lower back. It may also be helpful to use a lumbar support or small cushion placed in the lower back area. A rolled up bath towel is a good substitution for a lumbar support. By the way, the use of properly positioned armrests can also be very helpful in reducing strain on the lower back.

Step Five

Finally, let's look at the position of the computer monitor. This is one of the most common problems that I encounter. To find the ideal location, sit in a relaxed working position and look straight ahead. Now, close your eyes and wait for a few seconds. When you open your eyes you should be looking directly at the middle of the monitor. If it is too high, it should be lowered, and if it's too low, it should be raised.

Often times, there are shelves above the monitor that prevent it being properly positioned. If this is the case, you might consider moving the shelves.

Step Six

In addition to the steps I have outlined, you should also look at the following factors:

Location of the work - Is the work that you are doing properly positioned? The use of a paper (copy) holder attached to the computer monitor is often helpful.

Office clutter - Do you have room to do your work? One of the easiest things to correct is clearing off the work surface to give yourself more room.

Lighting - Is there enough light? Or, is there too much light? Most offices are designed with overhead fluorescent lighting. Computer users often do better with small desk lamps.

Temperature - Is the temperature acceptable? A workstation that is too hot or too cold will be uncomfortable.

Noise - Is there a lot of noise where you work?

In addition to those factors described above, it is also helpful to take frequent short breaks (e.g., 10 seconds every 10 minutes). These 'micro-breaks' can reduce muscle fatigue by as much as 20 to 50 percent over an 8-hour day.

Paul D. Hooper, DC, MPH, MSc has served as Chair of the Department of Principles and Practice at SCUHS since 1986. He holds a Masters Degree in Public Health from Tulane University, and a Masters in Science in Health Ergonomics from the University of Surrey in Guilford, England. Hooper has lectured and written extensively on ergonomics and other occupational health issues. He is President of Injury Prevention Technologies, an injury prevention consulting company based in Diamond Bar, California.

I hope you enjoyed Dr. Hooper's article and as you can see, with some easy changes, you can make your desk and workstation 'ergonomically correct' for you. And as always, feel free to ask me any questions regarding this or any of my other health articles. Education is the greatest tool I can use to help make positive changes in the health of my patients. Good luck.

Dr. James Proodian is a certified chiropractic sports physician and certified strength and conditioning specialist with degrees in public health and nutrition. He can be reached at Natural Healthcare Center of West End in Long Branch.