

Create an Ergonomic Work Space

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Have you ever felt a strain in your back, neck, or shoulders while at work? When working on a project do you take small breaks to rest your body? What angle does your chair sit at? It seems like we spend a majority of our lifetime at the office, but there are some simple things we can do to keep our body's active and safe while on the job.

According to Erik Zamboni, who has a Doctorate in Physical Therapy and is certified in ergonomic assessment as well as in strength and conditioning, creating an ergonomic work environment can help to prevent injury and harm to a person's body. Most often, patients complain of lower back, shoulder, and neck pain.

Zamboni says in a person's lifetime 80 percent of the population will have lower back pain. In terms of prevention, one of the simplest things to do is look at lifting techniques. For heavier objects, make sure to do a squat lift where you keep your back straight and your knees bent. "It's a great way to reduce risk for back injuries," Zamboni said.

Another lift, called the golfer's lift, works well for picking up lighter items. Imagine leaning over and picking up a golf ball. If the job requires a lot of repetitive lifting, Zamboni says keep the item between the power zone, the shoulder and knee level. "Keep (the object) close to your body," he said. "It will lessen the strain it will put on you in terms of leverage."

Zamboni also suggests trying to minimize repetitive lifting from the floor or above the shoulder when possible. Neck and shoulder pain can often be contributed to lifting as well, but can also be posture related. "Leaning forward in an awkward posture over a long period or repetitive over the head lifting (if shoulders are not in good shape), can lead to tendinitis type injuries," Zamboni explains. "There is a lot of pain as a result of bad posture."

So how can employees minimize their risk of pain or injury? There are several things including posture and desk organization. Zamboni says to adjust chair heights to create about a 90 degree angle at the knees, hips, and elbows. "That keeps your body in a more relaxed state, and reduces strain in the shoulders and in the neck," he said.

Keep your feet flat on the floor. If a chair is not adjustable, then put something underneath the feet like a phone book. Dangling legs can create problems. "If the feet are dangling, that reduces circulation in the legs causing your whole posture and body alignment to be off," explained Zamboni.

Also, remember what your mother told you and sit up straight with your shoulders back. The human head can weigh between seven to nine pounds and is situated very delicately on the top of the spine. Zamboni says it's like putting a bowling ball on the top of a pencil. "(The head) rests easier when it's not leaning forward, increasing strain," he said.

The computer on an employee's desk can also create strain. Keep the keyboard and mouse close in whenever possible and scoot the desk chair forward to help reduce strain on the shoulders and neck.

Zamboni explains a computer's monitor height should be about 15 degrees below eye level. "This helps the eyes to focus on the center of the screen where most of the work is getting done," he said.

Nowadays, most offices have gel pads for a keyboards and mouses. These can be helpful tools when used properly. A person should just let his or her wrists rest on the pad; making sure not to press wrists against the pad. "Keeping your wrists pressed against the pad will actually create problems, versus preventing them," said Zamboni. Again, remember typing etiquette and hold wrists up when possible.

Another tip is to make sure to take micro-breaks every twenty minutes for about 20 seconds throughout the day. Zamboni says this doesn't need to affect productivity. "It can be grabbing a fax from the printer, getting a cup of water, or stretching," he said. "Just so it allows the body to be out of a position for a short period of time."

People can get focused on projects and work for several hours without taking a break. Zamboni says the body can get sore, and a microbreak gives the body a moment to relax.

If an area feels like it's tightening up, Zamboni says a micro-break is a perfect time to stretch. Here are three easy stretches for the back, neck, and wrist.

Back Stretch

Sit in a chair and turn to the right for about 20 seconds. If you are doing the stretch correctly, you will feel a slight pulling sensation. You shouldn't feel any pain. Repeat the process on the left side. Zamboni says only do the stretch three to five times.

Wrist Stretch

Hold the wrist up to a 90 degree angle for 20 seconds. Make sure to keep the elbow straight. Then do another 20 second in the opposite direction (facing down). If you are doing the stretch correctly, you will feel a slight pulling sensation. If you feel pain, you have gone too far. Repeat the process on the other side.

Neck Stretch

If you want to stretch the right side, take your right arm behind your back and with your left hand hold your right wrist down. Then tilt your left ear towards the left shoulder and hold for 20 seconds. Again, you should only feel a gentle pulling sensation if you are doing the exercise correctly. Go the opposite direction for the other side. Only do the stretch three to five times.

Zamboni says stretching can be very time consuming, so on your micro-breaks make sure to focus on those areas that are sore. An exercise program is always good in terms of reducing injury, especially back injuries. There is a simple technique employees can do at the office to work on their core (stomach, back and hip muscles). "Core fitness is very appropriate in terms of reducing back injury risk," Zamboni said.

Tightening and relaxing the stomach muscles, think of brining the belly button towards the back bone, hold it for a few seconds and relax. Do 30 of those. Zamboni says this is a great exercise for a micro-break.

And finally, use staff meetings to talk about risk and injury. "That can take very little time to bring up and have a significant impact," Zamboni said. "Increasing the awareness of how to use protective and personal office equipment, how to properly lift, and take micro-breaks. This can help problem areas to stop arising."

For additional information on work related injuries or ergonomics, contact Erik Zamboni, DPT, CSCS, CEAS, at Living Well Therapy Pc 312-2004.