



The Toll Sitting All Day Has On The Body

Editor's Note: The following article is taken from 'FirstHandNews: sitting on the job', a publication of Bodyworkbiz.com and is used here with permission. Additions and adjustments have been made, though large portions of text have remained intact.

As the workforce has shifted from factories to offices, the incidence of back pain has increased dramatically. Researchers blame this increase on one simple activity that we do all the time – sitting. Our bodies were not designed to sit for long periods of time. We were made to move. Almost everyone who sits for long periods of time will develop back pain, even with the use of an ergonomic chair. It's not uncommon to develop other problems as well. Surveys of office workers indicate that about half of all employees have frequent pain or stiffness in their necks and shoulders. Repetitive strain injuries like carpal tunnel syndrome are becoming more common and about 10% of keyboard users experience wrist pain or discomfort. Who would have thought that sitting could wreak such havoc on your body? Your body needs movement to operate effectively. If you have a sedentary lifestyle or sit for most of the day, your body is going to start complaining. The reason is threefold. First, when your muscles contract, you assist the flow of blood and lymph fluid through your body: the muscles act as a pump. If the muscles don't contract regularly the blood in your extremities pools and may cause swelling of your feet and hands, or those body parts may just feel cold because the blood circulation is insufficient. Second, sitting for long periods of time creates an imbalance in your muscles. The muscles on the back and top of the shoulders (rhomboids and trapezius), for example, can become overworked due to the chest (pectoral) muscles shortening. The Rhomboids and trapezius will tend to become long and tight from overuse in trying to pull against the tightening of the pectorals. However, other muscles like your gluteals (butt muscles), abdominal and mid-back muscles, can become weak and atrophy. This weakening means that they are not able to play their proper role in supporting the structures above them, thus reinforcing the imbalance between the rhomboids and the pectorals. Third, the fascia that wraps around every muscle cell and every muscle unit in the body can tighten and

thicken in response to the muscles holding the same position all day. In our above example, the fascia in the pectorals and rhomboids reinforces their respective shortening and lengthening. When the gluteals and abs weaken, their fascia may get bound down and tighten as well.

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What you can do if you're desk-bound

If you are stuck behind a desk all day, there are a number of things you can do to keep your body healthy.

- **Make sure you're using the chair to support your body.** Most people never use the backrest properly to support the low back. As they sit down they aim their bottom at the middle of the seat. Then to reach the backrest they slouch backwards. Correct this by aiming your sit bones toward the back edge of the chair as you sit down. Slouching can create various tension imbalances in the torso and neck, often resulting in headaches. Also, use armrests to help support the arms, as this takes stress off the shoulder muscles, use a wrist support to prevent carpal tunnel syndrome.
- **Be aware of your posture.** Even if using your chair properly, certain tasks can lead to common postural issues. Working at a computer can reinforce the pattern between the rhomboids and pectorals described above. Also, make sure that your computer screen is directly in front of you and that you use a document holder. Talking on a phone a lot using a handset can create imbalance between the left and right side of your neck - ask to use a headset. If you carry a heavy purse or briefcase, switch sides often to give your muscles a break.
- **Take frequent breaks.** Researchers had subjects sit in chairs as they measured tension in their back muscles. After about twenty minutes of sitting, their back muscles started spontaneously tensing up even though the chairs were adjusted to completely support their

Be sure to check your stress level and practice good stress management. Too much stress can cause tight muscles, which can lead to poor posture. Poor posture can cause tight muscles, which can reinforce feeling stressed. It can be a vicious cycle.

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backs! Taking breaks will keep your muscles from tightening up. Use the 20/20 rule: take a twenty second break at least every twenty minutes. Use these “micro-breaks” to stand up, stretch out and take a couple of deep breaths.

- **Breathe.** This may sound obvious, but many people do not breathe properly, and this can cause tension in the shoulders and neck. In between your “micro-breaks”, while you are working, be sure to take the opportunity to breathe deeply.
- **Vary the tasks you do** throughout the day so that you don’t work at one single activity for too long. For example, if your job involves typing and filing, alternate the tasks every half-hour.
- **Get a regular massage.** This helps you get rid of accumulated tension, stretch out overworked and tight muscles and to get your circulation going. Massage can also help you become more aware of your body so that you can improve your posture, with some styles being specifically aimed at helping your body have a better balanced posture.
- **Exercise regularly.** It is vitally important that you balance your inactivity with activity. Try some form of gentle aerobics like running or biking to improve your blood circulation. Activities such as yoga and tai chi can help you develop better posture.