Healthy Computer Habits

Physiotherapy in Calgary for Work Activities

In this highly computerized world, more and more people of all ages are experiencing aches and pains that come from sitting at a computer for long periods of time.

These aches and pains are felt in the neck, shoulder, upper and lower back, wrist and elbow joints. In some cases, the nerves to the hand become compressed, causing weakness and/or tingling in the fingers.

These symptoms can occur in the onset of Repetitive Strain Injury (RSI), which may include damage to tendons, muscles, nerves and other soft tissues from repeated physical movements over time.

There are a number of factors that contribute to the onset of RSI, including:

- Posture – is the most critical component. Slouching at the keyboard puts your spine and limbs in positions that contribute to increased strain and tension, as well as increasing the risk of eye strain;
- Office set-up – a poorly designed workstation, or one that does not fit you well, can contribute to the onset of RSI (i.e. reaching for the mouse or keyboard too high or low, wrists extended during keyboarding);
- Worker technique – pounding the keyboard, using your wrists to move the mouse, or gripping the mouse tightly increases the demands on the hand and wrist and can trigger or aggravate symptoms of RSI; and
- Work Habits – sitting for extended periods of time without changing position is hard on your whole body and is a factor in developing RSI.

Don’t ignore the early warning signs, such as weakness of your grip, numbness,and discomfort or pain in the arms, hands, wrists or shoulders. Early diagnosis and treatment are vital to ensure recovery from the symptoms of RSI.

The Canadian Physiotherapy Association has created the following S.M.A.R.T.guidelines for computer use that you and your family can follow at home, at school and at work. S.M.A.R.T. is an acronym for Stretch, Move, Add it up, Reduce strain, Talk to a physiotherapist:

Stretch – Include regular stretching into your work routine. Every 20 to 60 minutes, do three or four stretches – for hands, shoulders, neck and trunk.

The key is to move your joints through their normal range of motion. Inquire about computer software that is set to interrupt work at chosen intervals with appropriate stretches, or set your onscreen timer to remind you to take "micro-breaks" as needed to momentarily change your arm position or to shift your weight.

Move – Get up from your work station for a short stretch or walk around to promote blood flow to fatigued muscles every hour. No one has ever become more fit by sitting at a desk. Get regular daily exercise, away from the computer.It could be as simple as a walk around the office or getting off the elevator one floor early and taking the stairs. Moveout of the pattern that the work is creating (i.e. stretch the opposite motion). Ensure you are not putting pressure on the carpal tunnel; slow key strokes to allow the median nerve to move off the tendons.

Add it up – Add variety to your tasks. Take every break as an opportunity to go for a short walk and stretch. Keep track of activity and build up to 30 minutes of stretching and exercise every day. Vary your tasks (keyboarding,filing, telephone, reading documents, etc.).

Reduce strain – Make sure you are sitting correctly with your back supported:

- Adjust your chair, as below, to support your back and minimize awkward postures that can lead to muscle tension, fatigue and soreness.
- Sit with your buttocks right back in the chair and your feet flat on the floor, or on a footrest or phonebook. Your knees should be bent at a 90-degree angle, at the same level or slightly above your hips. Keep your shoulders relaxed; arms close to your body or resting comfortably on the armrests, which should be positioned close to your sides; elbows bent at approximately 90 degrees; forearms

parallel to the floor; and wrists straight, which may involve adjusting the angle of the keyboard;
- Keep your eyes level within range of the top third of the screen. Don't squint to see the screen (check for glare or enlarge the font);
- Keep your work, keyboard and mouse centered in front of the monitor and close to you, to avoid arching your neck or twisting your body;
- Use a good quality mouse that requires minimal pressure to click, and be sure to position it on the same level and as close to the keyboard as possible. Keep your wrist straight and move the mouse with whole arm movements;
- Use ergonomic computer accessories, such as document holders to encourage neutral neck postures, and head sets to avoid awkward neck postures (often seen as holding the phone in the crook of the neck) while interfacing with the computer and telephone;
- A wrist pad on the keyboard allows you to rest your wrists on the pad and reduces stress on the wrist; and
- If you're working on a computer all day at work, you may want to limit your computer-time at home.

Choose activities for leisure and recreation that will not continue to stress the same muscles / tendons (i.e. if you're keying on the computer all day, hanging out on the internet at night, or knitting / crocheting throughout the evening, this is not providing proper rest for the muscles and tendons that worked all day).

Talk to us – RSI can be prevented, but if symptoms do occur, early intervention is the best form of treatment. If you are experiencing regular or increasing discomfort while sitting at your computer, take early corrective action. Evidence Sport and Spine will listen to your symptoms and assess you to help provide appropriate treatment, including information about correct posture and positioning at your workstation. We will also work towards an earlier return to your daily lifestyle as well as provide guidance on how to prevent recurrence of injury.

Our physiotherapists are highly educated healthcare professionals who assist people of all ages and lifestyles to gain and maintain their desired level of active living and physical functioning. With the applied knowledge and understanding of the human body in action, we are able to help you to increase mobility, relieve pain, build strength, and improve balance and cardiovascular function.

With proper precautions, correct posture and balance of computer work and active lifestyle, you will be able to avoid many of the aches and pains often associated with extended computer work.

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