

"With ordinary talent and extraordinary perseverance, all things are attainable." - Thomas Foxwell Buxton

CAN SITTING FOR LONG PERIODS CAUSE INJURIES?

Do you sit at a desk most of the day for prolonged hours? While sitting jobs require less muscular effort, that doesn't mean no risk of injury. For example clerks, assembly-line employees, data entry operators who work in a sitting position may suffer back pain, muscle tenderness and aches. There are reports of varicose veins, stiff necks and numbness in the legs being more common among seated employees.

If you do sit for work, it isn't a completely horrible thing. Being able to alternate between sitting positions results in minimal risk of discomfort. It's when sitting for prolonged periods without a choice that the risk increases. Sitting requires your muscles to hold your trunk, neck and shoulders in a fixed position. A fixed position squeezes the blood vessels in the muscles reducing the blood supply to working muscles when they need it most. Insufficient blood supply accelerates fatigue. This is why employ-

ees that sit all day doing little physical work often feel quite tired at the end of the day. Insufficient blood supply also makes muscles prone to injury. Sedentary employees may also face a gradual deterioration in health. The most common health problems being disorders in blood circulation and mobility issues. Pressure on the underside of the thighs from a seat that is too high can aggravate this further. The result is swollen or numb legs and eventually varicose veins.

When sitting for prolonged periods of time localized tension on certain regions of the body in particular the neck and lower back result. The reasons are, prolonged sitting

- 1. reduces body movement making muscles more likely to pull, cramp or strain when stretched suddenly
- 2. causes fatigue in the back and neck muscles by slowing the blood supply increasing tension on the

- spine, especially the lower back or neck
- 3. causes a steady compression on the spinal discs contributing to premature degeneration

What is a good sitting position? The best description of a "good" sitting position would be a set of natural body positions. A workstation that allows frequent changes and more mobility allowing an employee to have a more natural and healthier work pattern is a "good" sitting position.

Why sitting in a chair for long periods is bad for your back:

When the human body is in prime condition it functions as a well-oiled machine, the heart acting as the engine keeping the infrastructure of muscles and bones moving properly. But when we don't take care of parts of our body, parts of the well-oiled machine can slip up and break down with painful results.

continued on page 2

IN THIS ISSUE

Can sitting for long periods cause injuries?

Commitment to Exercise

Why most people quit exercising

Functional conditioning

Sciatica

Continued: SITTING AT A DESK

Areas of our body that endure a lot of wear and tear, in particular our back a major load-bearer, is more susceptible to injury than other areas. When we sit completely still our backs may suffer. Our lower back has to prop up the weight of the top half of our body and the position we sit in can make it harder. The force of our upper body settles into our lower back, the lumbar region of the spine. If you have to move around in your seat, this can increase the workload for your back. When sitting you want the chair you're sitting in to promote a neutral

body position keeping your vertebrae aligned. This will help reduce the chances of developing musculoskeletal disorders in your back.

Many of us are guilty of sitting forward in our chairs. This increases the stress on our back. Instead, sit back in your chair and let your chair help share the load. The more of the load your chair takes the less work your back has to do. Your chair should fit you, not you fitting your chair.

How do you know if a chair fits:

- 1. Feet should reach the floor.
- 2. Five chair legs are better than four for added stability.
- 3. Hips should be at the same level or higher than the knees.
- 4. Forearms should rest easily on the arm rests.
- 5. Sit completely against the back of the chair.

If you do have to sit all day for work, to help reduce back pain from sitting for prolonged periods of time, stand up, stretch and walk around, if possible, every 20 minutes.

EXERCISE COMMITMENT

Staying motivated to exercise isn't easy. Even for veteran exercisers some days it's easy, some days it's not. For a beginner, someone trying to loose weight, someone trying to get back into an exercise routine and people who exercise regularly, there isn't much difference when it comes to exercising. Trying to maintain discipline and motivation is just as challenging for all. After about 6 to 12 weeks doldrums set in and many quit. After that initial excitement of starting an exercise program, something happens. The enthusiasm fades. Many haven't experienced significant results leading to discouragement. The combination can be very discouraging which leads to giving up. Most people quit just when they're on the verge of success in terms of making exercising a habit and seeing fat loss. Some of the mistakes are:

Focusing on the scale: Choose an item of clothing that used to fit comfortably that you want to wear again but doesn't fit as well anymore. Use that as your "scale" and measure of accomplishment rather than numbers on a scale.

Working too hard: Everyone "knows" exercising 3 times a week is good for you. It may be good for you, but it takes time to build up to that. After all, you may not have been exercising at all. Once a week is good start.

Not working hard enough: Then there are others who know they are newbies and are over cautious to the point they aren't working hard enough to feel anything working. Challenging yourself safely is important.

Comparing yourself to others:

If others can do a particular exercise, or are loosing more weight than you, who cares. You will eventually reach your goals. Exercise is something that you have to enjoy and get something out of.

Giving up too soon: It took a long time for you to become completely inactive or removed from physical activity. Don't expect to be able to embrace it within a few weeks or even a few months. Seeing results isn't the only measure of benefiting from exercising. Consider better sleep, more energy, better quality of life etc.

The non-physical issues with being successful in making exercise habitual are usually not understood. There are three main areas to consider when deciding on starting an exercise program: physical, psychological and logistical.

Physical: Most have an idea of how they want to exercise and know their general health and fitness level. However, knowing that exercise is needed and suddenly starting to exercise without planning for the below areas usually results in disappointment.

Psychological: Issues such as figuring out your real motivation for exer-

cising, the willpower and discipline to exercise and goal setting. A common reason many start exercising is to loose weight. That itself is not motivation enough. Why you want to loose weight is what needs to be addressed. Depending on why, different approaches to an exercise program will be needed and the more efficient your exercise. The amount of willpower, discipline and how good you are at following through with set goals is usually easier to determine about oneself. Figuring out weaknesses in these areas and then taking the steps to overcome them is the next challenge. Support from family, friends, individual coaching can all help.

Logistical: Where are you going to exercise, what equipment do vou need but most of all when are you going to exercise. Sometimes the fitness goals require more exercise time than scheduled or perhaps your fitness goal will be reached but it takes ten times longer than anticipated. Time must be made to exercise just as time is made for everything else...work, kids, meals, sleep, chores, vacations, etc. spend until your goals, type of exercise and workout program/ schedule is determined.

FUNCTIONAL CONDITIONING

Functional conditioning exercises are exercises that enable an individual to function more efficiently with activities pertaining to daily living, work, recreational or competitive sports. An important key to improving one's functional condition is through core conditioning developing trunk (abdominal and back/spine) strength and stability. This idea supports the theory of movement behind Pilates. As a tree needs a strong trunk to survive so branches can grow long, strong and survive, humans require a strong trunk to make performing functional, every day work, recreational or home living tasks easier. goal when exercising is to balance our bodies, improve circulation, reduce stress, improve endurance, look better and feel good about ourselves. **Pilates** exercises allow this through functional exercises, stretching, strengthening and toning mus-

cles.

A misconception of exercise is that more is better. A lack of profuse sweating, burning calorie after calorie doesn't mean the exercise isn't working. Quality is better than quantity when it comes to improving physical condition. Seven good repetitions of an exercise is far better than pushing through 12 or 15 repetitions, fatiguing towards the end and losing form.

Core strength has two main benefits:

- 1. Improved exercise technique
- 2. Improved economy of movement.

For example, runners with weak core muscles tilt their hips side to side as they run. Core strength helps support limbs, allowing for improved technique. Improved strength in posture muscles, abdominals and erector spinae, allows more efficient movement by using

fewer muscles, less oxygen and less energy. As a result this type of strength helps achieve a higher level of endurance because the body isn't fighting against itself through compensatory movements when exercising.

Minor improvements in core strength can lead to significant improvement in performance and enjoyment. Considering our running example: stronger abdominal and back muscles will help with pelvis stability resulting in a more symmetrical and appropriate stride length. This means increased efficiency, decreased metabolic demands and ultimately, decreased times. The same kind of results apply to other sports, activities and daily living both at work and at home.

Functional conditioning exercises utilizing the Pilates exercise method, By Edward J. Yuiska, PT

Pilates Patio!

BEACHES

2279 QUEEN ST. EAST (2ND FLOOR) TORONTO, ON, M4E 1G5 TEL: 647-802-3508

EMAIL: lani@pilatespatio.com

WE'RE ON THE WEB! www.pilatespatio.com



Get ready for summer. Increase your energy, tone and feel your clothes fit more comfortably

> We have a new set of **Saturday classes:**

with Pilates.

9:30am Mat/Reformer 10:30am Reformer 11:30am Reformer 12:30 Reformer

SCIATICA

Sciatica is a term that refers to pain caused by compression or irritation of one or more nerves exiting the lower spine making up the sciatic nerve. The medical term for sciatica is radiculopathy meaning a spinal disc has extended beyond its normal position and is irritating the radicular nerve in the lower back, connecting with the sciatic nerve. The sciatic nerve branches off travelling down the lower extremities through the back of the leg. Sciatic pain can be experienced along this nerve route.

What do you do if you have sciatica? Rest for a day or two after sciatic pain flares up is advisable however, after than inactivity usually makes the pain worse. Without appropriate exercise and movement the back muscles and spinal structures become weakened and less able to sup-

What is sciatica? Sciatica is a set of port the back. This can lead to back symptoms not a diagnosis itself. injury and strain causing additional back pain. Many exercises for sciatica focus on strengthening the abdominal and back muscles in order to provide more support for the back. Stretching exercises for sciatica target muscles that cause sciatic pain when tight and inflexible. A regular program of strengthening and stretching can allow for quicker recoveries from a sciatic flare up and help prevent future sciatic pain.

> Stretching for sciatic relief: lying prone (face down), pressing up on hands into an extension in the back maintaining contact with the mat with your pelvis.

> Single knee to chest stretch-pull: lying supine, pull one knee up to the chest, alternate legs. Lumbar rotation: lying prone, legs in table top, rotate knees from one side to the other.

> Most types of sciatica will benefit

from hamstring exercises stretches. Tightness in hamstrings will place increased stress on the low back and often aggravate or even cause some of the conditions that result in sciatica.

There are different types of sciatica. For example, sciatica from a herniated disc occurs when disc material protrudes backwards and irritates or compresses a nerve root causing pain to radiate along the sciatic nerve. Lower back exercises, upper back extensions, abdominal strengthening for the upper and lower regions of the upper abdominal muscles can help. For a detailed description of the various types of sciatica and relevant exercises refer to

http://www.spine-health.com/ wellness/exercise/overview-sciaticaexercises