

MEET Cory Thuy

Cory has a strong passion for human performance, anatomy, biomechanics, ergonomics, neurophysiology and neuromuscular physiology.

Cory grew up in Kingsville and now resides in Essex with his wife and 2 children. After 6 years at the University of Windsor, where he studied Human Kinetics, Biomechanics and Ergonomics, Cory is now employed as an Ergonomist at Integram Windsor Seating.

While a student, Cory was a member of the Dean's Honor Roll, Peer Mentoring Program and participated in many research papers and projects. Cory was even awarded a 15k government research grant. Cory has a strong passion for human performance, anatomy, biomechanics, ergonomics, neurophysiology and neuromuscular physiology.

Cory explains that a new tool has been added to the Magna Ergonomics Program—the Office Ergonomic Self-Assessment tool. Cory states that, “when identifying and eliminating risk factors of musculoskeletal disorders (MSD), workers who spend most of their day working on an office computer are often overlooked.”

Risk factors in the office workplace may at first glance seem small, however the cumulative stress placed on the various joints, muscles and tendons by working in poor postures can contribute to the development of MSD.

Cory lists a few common workstation improvements that he often implements for office workers. First, is proper chair set-up to support the back and upper extremities. Seat position, back support and armrest height are very important factors to assess. Next, a correct monitor height

is important to help decrease awkward neck positions that may put pressure and strain on the muscles and tissues surrounding the neck. Lastly, effective workspace set-up also includes adjusting computer hardware location, introducing a document holder and placing frequently accessed files in a convenient location. In addition to these improvements, a headset is useful for employees that spend a lot of time on the telephone.

Correcting these simple things can promote a neutral and supported posture of the upper extremities and reduce strain on the neck, shoulders and wrists.

The Office Ergonomic Self-Assessment tool can be used by all employees to help identify risk factors associated with office work and offer recommendations on numerous items including chair set up, proper computer hardware orientation and neutral body postures.

To access the useful Office Ergonomic Self Assessment tool, log on to Magnet and type Office Ergonomics in the search tab.

CORY THUY

Integram Windsor Seating



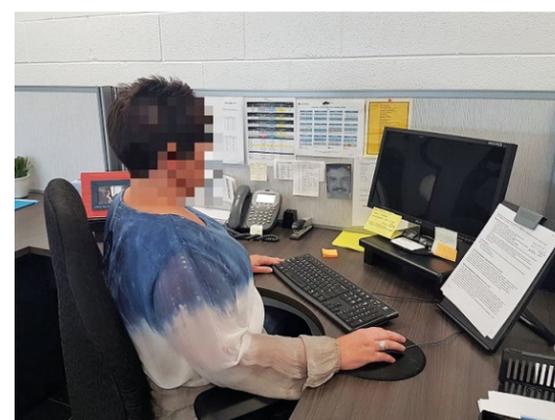
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Ergonomic RISK REDUCTION



BEFORE ASSESSMENT



AFTER ASSESSMENT



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SITTING is the NEW SMOKING



DID YOU know?

The Canadian Chiropractic Association reports that over a 6 month period, approximately 50% of Canadians suffered from low back pain.

PROPER LIFTING TECHNIQUE

Some contributing factors to low back pain and injuries may include lifestyle factors (i.e. being overweight), poor lifting technique, repetitive heavy lifting, and/or moving in an awkward position. The most common resulting injuries are back strains and sprains. Magna Wellness wants to help prevent these injuries! To do so, it is important to maintain a healthy lifestyle, be physically active, and perform the proper lifting technique and movements every time you lift a heavy object to prevent injury both at work and at home.

TIPS AND TECHNIQUES:

Plan Ahead

- Know the weight of the object you plan to lift
- Determine if it is safe to lift on your own—if not, ask for help

Check Your Pathway

- Ensure the area is clear, flat and dry

Stretch before you lift to warm up your muscles

Get as close to the object as possible

Keep your back straight, tighten your abdominal muscles and use your legs to squat down and lift upwards; do not bend or twist at the waist

Don't forget to breathe; inhale as you bend down, exhale as you lift up

Do not obstruct your vision with the object you are lifting—ensure you are able to see straight ahead

On average, Canadians sit for approximately 10 hours each day.



Whether sitting at the desk, commuting, eating, or watching TV, it means that

nearly 42% of the day is spent seated.

Research suggests that sedentary, inactive behaviour can have various adverse effects on physical and mental health, and as a result may have a negative impact on overall wellbeing. It is no wonder the expression “sitting is the new smoking” is making headlines today.

Research has demonstrated that sitting for prolonged periods of time has been associated with an increased risk of health problems, including weight gain, diabetes, heart disease and cancer. Prolonged sitting has also been linked to physical symptoms like lower back pain, and emotional symptoms such as decreased mood. Although the symptoms of prolonged sitting may vary, there is no doubt that a sedentary lifestyle can negatively affect one's productivity at work and at home as the evidence suggests.

For those who spend a lot of time sitting at work, there is no need to panic; many simple strategies have been explored to help address the issue of sedentary behavior and reduce its negative effects.

1 ▶ ACTIVE BREAKS

Active breaks during work are a great way to get moving throughout the day. Strategies for active breaks include simple actions like periodically standing up from the chair, walking to the break room or cafeteria, or readjusting posture. It is recommended to take a 1–2 minute break every hour to reduce the negative impact of prolonged sitting. Some research studies have also reported that spreading physical activity throughout the day can improve mood and decrease feelings of fatigue and discomfort. Other studies have shown that short periods of activity can reduce blood pressure, which can lower the risk of heart disease. That being said, there are some researchers who question whether short 1–2 minute periods of activity have the ability to improve heart and lung health. Additional research is needed to confirm the minimum intensity, duration and frequency of physical activity needed to physiologically affect heart and lung health during active work breaks. Nonetheless, taking a break, changing position, and adjusting posture every hour is recommended to improve physical and emotional symptoms related to prolonged sitting.

2 ▶ STRETCH ROUTINE

A simple way to add movement to the workday is to develop a stretching routine. Specific stretches can relieve tension from stiff joints and tight muscles, increase range of motion, and help promote better posture. This may help decrease back pain and prevent muscle and joint injuries. Stretching also increases circulation throughout the body, which can increase energy levels and improve productivity. Check out the desk stretching routine on below to get started!

3 ▶ WORKSTATION ASSESSMENT

The purpose of ergonomics is to make the workspace more efficient. An ergonomic assessment of the desk and workstation may help identify ways to alleviate discomfort associated with prolonged sitting and correct improper positioning in the workspace. The goal of an ergonomic workstation is to fit the work space to the individual, rather than trying to adapt the individual to fit the space. Proper positioning of chairs, keyboards, screens, and various desk items can lead to improvements in comfort levels and help to decrease pain associated with awkward posture.



Don't realize how much you sit throughout the day?

Try the online calculator to estimate the time you spend sitting on a daily basis: getcanadastanding.org

DESK STRETCHING ROUTINE

How can you get more active to break up the sitting time at your desk?

Well, getting up to move (i.e. walk around the office) in combination with a quick stretch break every hour is a great start! Here is a sample desk stretching routine to help get you started:



Sit-to-Stand

Start by sitting on the edge of your chair with your feet shoulder-width apart. Next, keeping your back tall and your knees in-line with your third toe, stand up slowly until you are fully upright. Slowly lower yourself back down, keeping your knees from falling inwards, until seated. This exercise should be felt in your legs and low back. Repeat 10 times.



Seated Spinal Twist

Sit on your chair sideways so that the backrest of the chair is against your right shoulder. Sit up tall with your feet flat on the floor, shoulder-width apart and place your hands on the back of the chair. Using your arms, slowly twist, pulling your chest toward the chair. Hold this stretch for 15–20 seconds and remember to breathe! Switch to the other side of the chair you're sitting on and repeat. This stretch should be felt in your mid-to-low back.



Cat/Cow Stretch

Sit up tall, with your feet flat on the floor, shoulder-width apart and rest the palms of your hands on the top of your knees. Inhale, arch your back and push your chest up to face the ceiling, pulling your shoulders back as you do so. When you exhale, round your spine, pull the shoulders forward at the front of the body and drop your head towards your chest. This stretch should be felt in your chest and upper/lower back. Repeat approximately 8 to 10 times, holding for only 3–5 seconds each time.

GARDENING Ergonomics

SAFETY HAZARDS TO CONSIDER:



PREVENT INJURY by performing a warm-up before gardening, raking or any yard work.

Be sure to **APPLY SUNSCREEN** before going outdoors, and cover up when outside for a prolonged period of time. Aim for a sunscreen with at least 30 SPF, and remember to re-apply every 2 hours. Take breaks from being in the sun when possible.

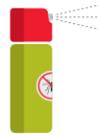


PROPER BODY POSTURE is important. Focus on crouching and keeping the back tall, rather than bending at the waist when pulling weeds.

Be sure to **DRINK PLENTY OF WATER** and stay hydrated! Aim for 6 to 8 glasses a day.



There are natural ways to **KEEP PESTS OUT OF THE YARD**. For example, planting basil in the garden will help repel house flies and mosquitoes. Lavender repels moths, fleas, flies, and mosquitoes—and smells amazing! Rosemary repels mosquitoes, along with a variety of insects that are harmful to vegetable plants. The added benefit of the herbs is that they often pair well with your other garden vegetables when cooking!



CONSIDER WEARING BUG REPELLANT, depending on where your garden is located and how bad the pests are in that area.



Try to take **FREQUENT STRETCH BREAKS** (every 15–30 minutes), to loosen up the muscles and keep them functioning optimally.

TIPS for proper usage of GARDENING TOOLS

1

Long-handled tools or extendable handles allow for more leverage, so that less energy is used when digging. They also provide more reach than a standard short-handled tool, and help get those areas in the garden that are hard to access. However, when choosing the proper tool for the job, consider your body height and the size of your hands. For taller people with big hands, you may want to choose a long-handled tool with thick grips. Someone who is shorter with smaller hands may want to choose a short-handled tool with thinner grips.

2

Thicker handles with a cushion or rubber padding may make the work easier on our hands, and reduce blisters or injury.



3

Rubber stoppers on shears and pruners help reduce the force and absorb the shock taken through the forearms.

4

Keep tools sharp to make work easier.

5

Ensure you care for the tools, and clean them when the day is done to keep them functioning properly.

6

Read the instruction manual before handling a tool to ensure you are using it appropriately, especially with power tools such as a lawn mower or leaf blower.

7

Consider using knee pads or a kneeling cushion, as these offer cushioning for the knees and can also make it easier to get up from the kneeling position.

8

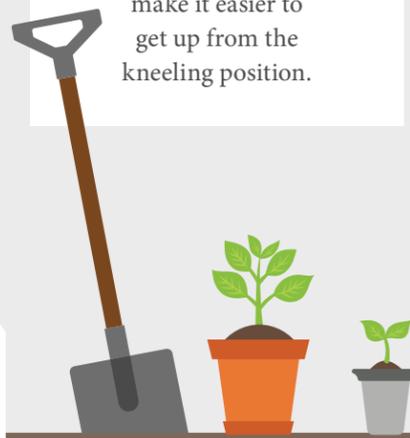
If kneeling, bending, or crouching is not an option due to low-back pain or lower-body limitations, standing gardens are a great alternative! These can be as simple as window-sill planters or potted flower gardens, or as extravagant as a bench or table-style garden. You can even consider building a potting bench station to help you prepare plants at a comfortable waist-height before transferring them to a lower-level garden.

TIP: Check out the gardening warm-up/cool-down video on our Magna Wellness YouTube page. Subscribe to our YouTube page—magnawellness—to start your routine today!



PRE-GARDEN WARM-UP:
[youtube.com/watch?v=2JZvd4-czj8](https://www.youtube.com/watch?v=2JZvd4-czj8)

POST-GARDEN STRETCH:
[youtube.com/watch?v=Ox7SmessNB0](https://www.youtube.com/watch?v=Ox7SmessNB0)



3-5 seconds

Repeat 10 times

Standing Back Extension

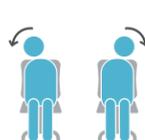
Stand with feet flat on the floor, shoulder-width apart. Place both hands on the backside of your hips with your elbows facing out to the sides. Slowly inhale and lean backwards while pushing your hips forwards. Hold this position for 3–5 seconds. Try to keep your head from falling back as this may lead to neck discomfort. As you exhale, slowly bring yourself back to a tall standing position. If you have difficulty balancing, you can perform this stretch facing a wall with both hands flat against it to keep yourself steady. This stretch should be felt in the low back and the front of your torso. Repeat this stretch 10 times.



20-30 seconds

Chest Opener Stretch

Interlace your fingers behind your back. If the back of your chair is low, you can rest your arms on the top of the backrest. Slowly drop your chin to your chest and try to push your chest forward while reaching your hands backward. This stretch should be felt in your chest. Hold this pose for 20–30 seconds while taking slow breaths.



20-30 seconds

Neck Side Flexion

Sit tall in your chair with your feet flat on the floor, shoulder-width apart. Slowly tilt your head to one side, bringing your ear toward your shoulder. Hold for 20–30 seconds and repeat on the other side. This stretch should be felt in the neck on the opposite side of the direction you are tilted.



20-30 seconds

Wrist Flexion Stretch

Standing tall, reach your left arm in front of you with your palm facing the ceiling. Grab the left palm with your right hand and slowly pull the left hand down so that your fingers start to point towards the floor. This stretch should be felt in the left forearm region that is facing the ceiling. Hold this for 20–30 seconds and repeat on the right arm.



Last chance to fire up the grill this fall with these Sweet Grilled Peaches!

PREPARATION TIME
15 minutes

SERVINGS
4

INGREDIENTS

- 16 OUNCES unsweetened frozen peach slices (3-4 peaches)
- ½ CUP honey
- 2 TBSP ground cinnamon

DIRECTIONS

1. Preheat the grill on medium heat.
2. Place peaches onto a large piece of aluminum foil. Use two if necessary to contain the peaches juices without spillage. Drizzle the honey over the peaches, and sprinkle with cinnamon. Seal the foil tightly.
3. Place the foil packet onto the preheated grill and cook for 10 minutes, turning once halfway through. Carefully open and serve!

NUTRITIONAL FACTS

per serving

178 calories	49g carbohydrates
0g fat	43g sugars
0mg cholesterol	2.7g dietary fiber
2mg sodium	1.1g protein



HEALTH TIP *Walking Groups!*

Want to become more active but don't know where to start?

Walking groups are a great way to add more physical activity into your day with the benefit of socializing and staying motivated in a group. Grab a few friends, neighbours, or family, and explore your neighbourhoods together!

This is also a great way to rack up those steps for your fitness devices!

Check out the Magna Wellness website (magnawellness.ca) to access the March 2018 'Good For You' newsletter issue on wearable technologies and how it can help your fitness!

Don't think you have time for walking or physical activity?

TIP: Start a walking group at work! Ask your coworkers to join you, map out a walking route, and then head out together on your lunch break!

ACTIVE WORKSTATIONS



In response to ongoing research on the health effects of prolonged sitting, a growing number of companies are equipping their offices with active workstations.

Research suggests that sitting for long periods of time can have negative effects on productivity, as well as the mind and body. Active workstations, like treadmill desks, stand-up desks and exercise ball chairs promote movement to help avoid the negative effects of sitting and being sedentary.

TREADMILL DESKS

Treadmill desks are a relatively recent office addition. Growing in popularity since 2010, they allow employees to walk while performing job tasks. Walking has been shown to reduce the risks of chronic disease and improve overall health. Despite the benefits of walking, there are still existing questions and concerns regarding the practicality of walking while simultaneously working. Many research studies have indicated that there are no negative effects on cognitive performance or work productivity with the use of a treadmill desk. Only a few contradicting studies suggest that treadmill desks may decrease work performance by providing more distractions and making it harder to use work equipment, such as laptops. These studies further explain that efficiency levels appear to be more related to individual factors and personality types; therefore, for employees with wandering minds, a treadmill desk may not be the right fit. With these research findings in mind, it may be more beneficial to use the treadmill desks as an activity break station instead of a permanent desk replacement.

STAND-UP DESKS

Stand-up desks have also increased in popularity amongst offices over recent years. Stand-up desks help reduce sitting time and allow employees to change body positioning more frequently. This may help reduce feelings of discomfort and pain often associated with prolonged sitting. There is, however, still limited research on the overall health benefits of standing desks. Standing versus sitting burns only slightly more calories, which is not enough to claim positive health effects on weight and obesity. A few studies also indicate that stand-up desks may actually increase back pain and discomfort in comparison to a traditional sitting desk, as standing for long periods can occasionally place more stress on the body. Some healthcare professionals debate that the root cause of back pain is not fixed, arguing that if someone has bad posture while sitting, they also likely have bad posture while standing. Therefore, research findings show both pros and cons to this type of workstation, and its benefits may depend on an individual's current postural strength, needs and preferences.

STABILITY BALLS

The popular active work station trend has also triggered a buzz around stability balls in workplaces. The theory behind using the stability ball in the office setting is that sitting on an unstable seat will improve abdominal strength and correct poor posture. However, research studies assessing the effectiveness of stability balls have found that there is a very little difference in muscle activation when sitting on a stability ball compared to a standard office chair. Moreover, some research suggests that sitting on a stability ball for long periods of time may negatively alter posture and result in soft tissue damage. One of the biggest downfalls of a stability ball is its inability to adjust the height. Ergonomically, this may cause additional discomfort and pain as the stability ball cannot be appropriately adjusted to fit the desk space. Therefore, most research on stability balls to-date appears to bear negative findings.

Ultimately, if one chooses to use an active work station, it is important to listen to the body and choose what works best for the individual. It is also important to consult with an ergonomist or doctor about what is best for the individual's needs.



CORECHAIR

The CoreChair is a newly designed office chair that allows more mobility while sitting, all the while providing support for the body. The design of this chair allows for optimal back and hip posture to prevent slouching. Ongoing research at esteemed institutions (i.e. University of Waterloo and Cornell University) suggest that the design of this chair may also allow for increased blood circulation compared to a standard office chair. The core chair may be a worthy ergonomic alternative as a new office seat.

FOR MORE articles, employee stories, quizzes, and recipes, please visit magnawellness.ca

WE WOULD LOVE TO HEAR FROM YOU!

Send your suggestions/comments to Magna Wellness at:

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