

THE WORKING-FROM-HOME NECK AND SHOULDER HANDBOOK

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let's sort out your neck and shoulders!

A GUIDE TO HEALTHY DESK WORK

Stiff, achy neck? Tense upper traps? This year has probably brought on a lot of tension, to say the least. A lot of people have had to adapt to working from home, and now that it's been a while, those make-shift home workstations are probably starting to take a quiet toll on our bodies. We can do better, and this guide can help!

What if you are you already meticulously set up with perfect ergonomics? We can still get pain with working long hours or while under high levels of stress. Not working at a desk? For many of you, this guide can still help.

Knowledge is power. Let's bulletproof your neck. This guide is based on scientific evidence and the culmination of experience from experts in the fields of physiotherapy and human movement. It is intended for most cases of uncomplicated neck pain that occur with long hours of sitting in front of a computer or looking down. This guide, while not a substitute for medical advice, can help avoid discomfort, promote longevity, and keep you feeling your best.

context matters

THERE IS NO SUCH THING AS PERFECT POSTURE

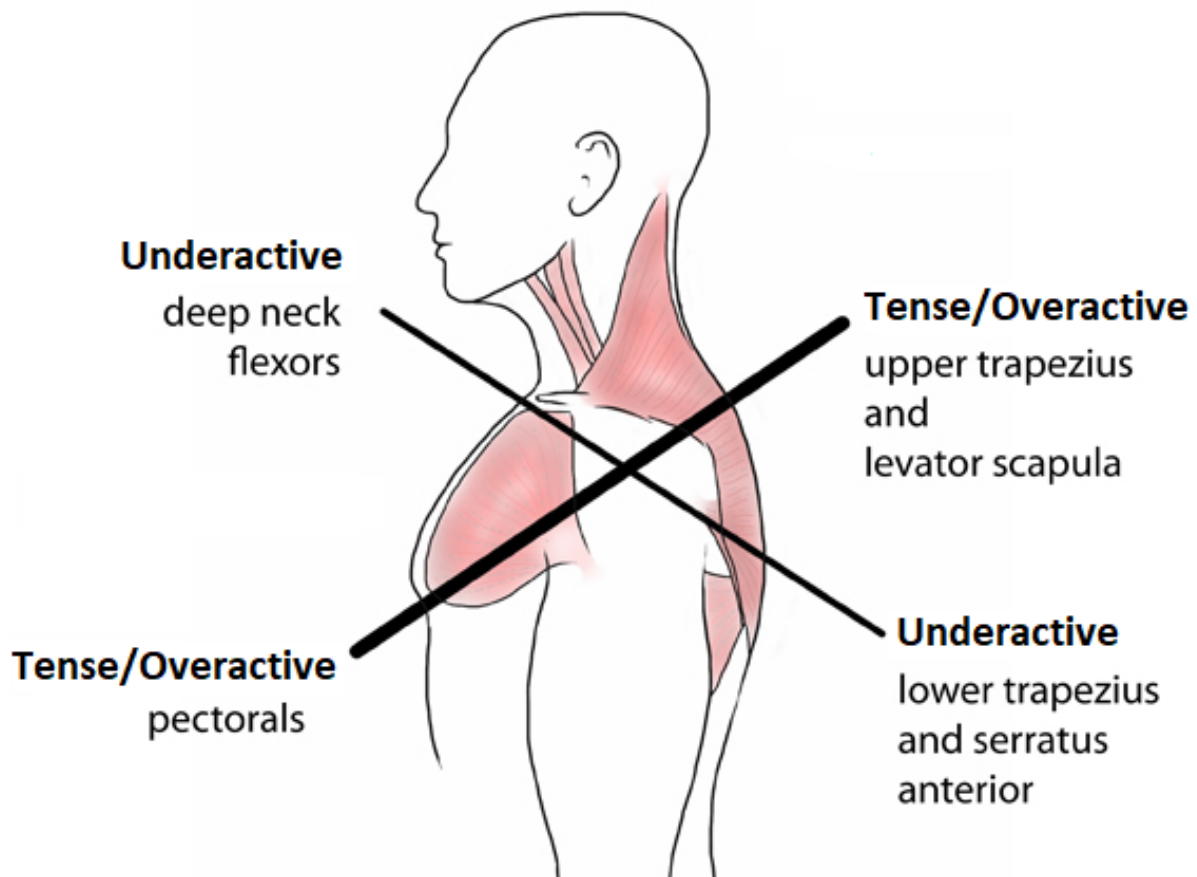
First things first, it is **very important** to mention that there is no such thing as perfect posture! No matter how you are sitting while you read this book, **there is nothing wrong with you**-- remember that. Some people, with what many would consider 'terrible' posture, may never even have pain at all, and some people with perfect-looking alignment can still have terrible discomfort. **We all come in different shapes and sizes**, and our bodies adapt as we perform the different individual tasks unique to us that we have to carry out in a day. There is really no such thing as 'good' or 'bad' posture, **just 7.8 billion variants of 'normal'**.

So why do we get neck pain? The cause is often multi-factorial, but generally, our bodies are more likely to experience pain **if there is a increase in physical demands or stress that exceeds our physical tolerance levels**. Your body needs time to adapt to new demands; otherwise overworked muscles and joints start to get tired and irritated, leading to pain and tension. **Usually, people with better mechanics, and healthier joints and muscles are more resilient against these increased demands**, which is why mechanics and posture DO matter, to an extent. **Regular movement definitely matters**. No matter where you are starting from, practicing good mechanics, moving often, and keeping our muscles and joints healthy-- all reduce and prevent pain, facilitate healing and recovery, improve longevity, and allow us to enjoy our days to their fullest.

biomechanics 101

'UPPER-CROSSED' POSTURE

Let's get into the mechanics of our neck and shoulders, starting with the most common situation we see with long hours of sitting--upper-crossed (or 'head-forward') posture. Muscles adapt to become over-active or under-active in response to the positions that they spend the most time in, and in response to the movements that they most often perform. In this case, its sitting. Joints get stiff too; if they stay in one position all day, they tend to get stuck in that position. While we are all a little different, this is where most of us tend to end up after long days in front of our screens:



biomechanics 101

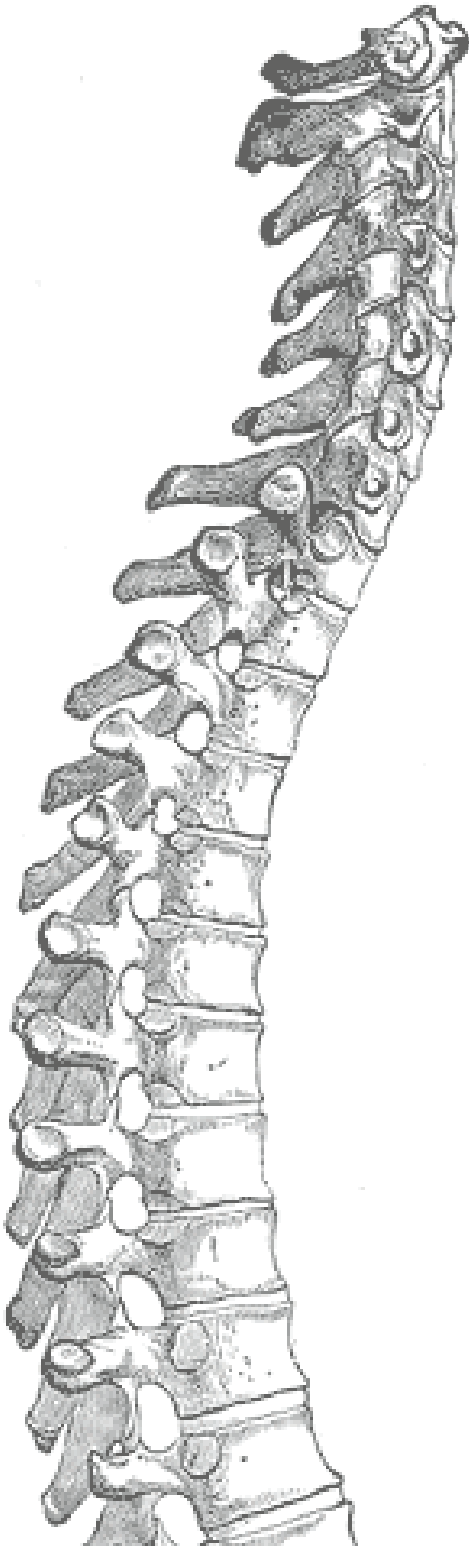
SOFT TISSUE CHANGES

Your upper trapezius and levator scapula muscles run from the top of your shoulder blade to the base of your neck and work to elevate your shoulders. Your pectorals run from the front of your shoulders to the center of your chest and protract your shoulders forward. With head-forward posture these muscle groups often sit in a shortened position, and get 'sticky' there-- needing some work to fully lengthen and relax. These muscles tend to benefit from stretching and massage.

Your deep neck flexors sit in the front of your neck and help to hold your head upright. The lower trapezius and serratus anterior muscles promote good shoulder alignment. With computer work, these muscles rest in a stretched position, forcing them to work extra hard to support your head and neck, and making them become under-active and easily fatigued. These are muscles that often benefit from focused strength and endurance training.

biomechanics 101

JOINT MOBILITY



Joints get stiff over time too if they spend most of their time in the same position, and not enough time moving through their full ranges of motion. This is most commonly seen at the base of the neck where the lower portion of the cervical spine (the top seven vertebrae of your spine) articulates with your thoracic spine (the middle 12 vertebrae of your spine where your ribs attach).

If we spend most of our time with our heads and shoulders hanging forward, this part of the spine becomes **stiff in that forward flexed position**, and it begins to **lose its ability to extend backwards or rotate** from side to side. Its important to move around from time to time in all of our ranges of motion-- not just forward flexion-- to keep these joints mobile and healthy.

you probably don't need any imaging

X-RAYS AND MRIS AREN'T OFTEN HELPFUL

It is too common for people with the most benign cases of neck pain to end up in their doctor's office and, in an over-the-top effort to be as safe and thorough as possible, they get misguidedly referred on for numerous unnecessary scans and investigations. Very few cases of neck or back pain actually fit the criteria for imaging, and the College of Family Physicians of Canada recommends imaging and specialist referral only if specific red flags are present (i.e. a fracture, signs of infection or cancer, or radicular pain into your limbs that doesn't improve after a few weeks of conservative treatment, to name a few).

Most x-rays and MRIs, even if you are still in your 20s, will show normal age-related wear and tear. These changes are poorly correlated with how much pain someone has. When we label normal age-related changes as a 'problem' or 'abnormality', it can really set people down the wrong path of avoiding movement and over-protecting their neck, when movement is actually what it needs to get better.

degenerative change myths

YOUR IMAGING MIGHT NOT EVEN MATTER

Degenerative disc disease?' 'Facet joint arthropathy'? Have you been diagnosed with scary terminology? Often the **fear** we get from these findings **is more harmful** than the changes we see in the structure itself! Research shows that there isn't a big connection between how much wear and tear someone has on a scan and how much pain they have. People with severe degeneration may have no pain, and people only mild wear and tear can have severe pain.

Many cases of degeneration are like wrinkles on the inside—they are normal signs of aging and not necessarily the cause of your pain. Up to 78% of 20–30 year olds with no pain will have disc buldges on an MRI. Up to 98% of adults have signs of degenerative discs. **Yes, in some cases, imaging findings do matter.**

Sometimes scans can provide helpful insight into more complicated situations. However, for most people imaging is unnecessary and there is usually little to worry about when you get scans showing degenerative change.

be mindful

TAKE BREAKS + MOVE

Movement is medicine! If you take anything away from this guide, this is it! Many mild to moderate cases of neck and shoulder pain will get better just by getting your whole body moving. **It is okay to work through some mild discomfort!** Too often we think that the best solution for our aches and pains is rest.

We all slouch from time to time, and thats okay. No one position is actually bad for us, providing its in moderation. The problem is a lack of regular movement. Focus on changing positions frequently. Set alarms on your computer to remind you to get up and move around from time to time.

Even 'perfect' posture can cause trouble if we don't move enough. Guess what? Although standing desks have become popular, **standing can be just as hard on your neck and back as sitting** if you do not take the time to move and change positions frequently throughout the day.

be mindful

BREATHE.

Inhale. Exhale. **Relax your shoulders.** You're fine! Many people get so caught up in work and stress that they end up developing altered patterns of breathing, taking short and shallow breaths and not fully expanding their lungs with air. This kind of breathing can also overwork the muscles around our neck and shoulders, as they have to pick up slack for the lack of expansion in the lower ribs and diaphragm, causing tension and discomfort as they get tired. This kind of breathing can also set off the 'fight or flight' part of our nervous systems, making us more prone to pain and irritation, anxiety, and making it more difficult to get our muscles to relax and feel better.

Check in on yourself throughout the day. Are you taking full breaths using your diaphragm, expanding your ribs all the way down to the base of your lungs, or are you taking short and shallow ones? Are you clenching your jaw, or holding tension in your shoulders without even realizing it? Be present and practice breaking those habits. Breathe and relax. Your health what matters most.

home office ergo

CHECKLIST FOR A HEALTHY WORKSTATION

1. Set your chair height so that your feet rest flat on the floor and your thighs are horizontal and parallel with the floor.
2. There should be a 2-3 finger-wide gap between your knees and the front edge of your chair.
3. Your back support should rest in the small of your back. A pillow or lumbar support roll can help here.
4. Your computer screen should be 18-30 inches from your eyes, and the centre of your screen at or just below eye level.
5. Your wrists should be straight and in a neutral position; avoid tilting the back of the keyboard upwards or sitting with your hands bent upwards at the wrists.
6. Keep items that you use most often within easy reaching distance.
7. Sit tall, and breathe deeply in and out through your nose when you remember.

If you have been working from home with a poor workstation for some time now, **advocate for yourself. Your health matters.** You have the right to a workstation that allows you to keep your muscles and joints in good shape. Reach out to your employer to see if equipment or support can be provided to keep you healthy and productive, wherever you're working from.

when to see your doctor

STAY SAFE

Most cases of neck pain don't need to be seen by a doctor and will eventually get better with conservative management. However, there are specific warning signs to look out for that may indicate your problem is more serious. Contact your family doctor if you experience neck pain with any of the following:

- Pain intensity that is truly severe and/or worsening over time
- Immediately following trauma such as falling, a motor vehicle accident, or a blow to the head
- Severe pain radiating down into both arms at the same time
- Severe headache
- When light tapping on the spine is painful
- When there are signs of infection or inflammation (fever, fatigue, night sweats, redness, discoloration, swelling or any visible tissue deformity)
- When there is significant weakness, heaviness, or loss of feeling in the extremities
- When pain is constant and unchanging no matter what position you are in or activity you are doing, and/or accompanied with unexplained weight loss
- Pain that is associated with dizziness, vertigo, light-headedness, clumsiness, or loss of balance
- When accompanied by other unwell symptoms in your body

Remember, this book is not a substitute for medical advice. If you aren't sure about your situation, consult with a medical professional!

exercises

BULLET PROOF YOUR NECK AND SHOULDERS

This guide provides a general overview of neck pain. Everybody is going to be a little different, and individualized plans are more likely to get you better if you are already in a lot of pain. That said, there are some simple exercises that often help many cases of neck and shoulder discomfort. These exercises begin to address the common imbalances and areas of stiffness described in the biomechanics 101 section of this book.

Focus on good form (get someone to watch at first) and try to **work in a comfortable range of motion**. Do not try to force a movement; slow and gentle is the way to go. It is okay to feel some discomfort as you go, but stop if it exceeds a mild level (i.e. if pain is greater than 2/10, with 10 being the worst). Stop if your pain feels worse afterwards or if you experience pain down your shoulder, shoulder blades, into your arms, or if you get a headache. Stop if you experience any dizziness or lightheadedness. **It is always best to play it safe!** Get in touch if you are unsure whether you are doing these exercises right or if they aren't working for you.

Do not do these exercises if you fit any of the criteria in the 'when to see your doctor' section- seek their help first.

exercises

CHIN TUCKS/CERVICAL RETRACTIONS

So many cases of neck pain improve with just this exercise. Chin tucks activate the deep neck flexors at the front of your neck which help to stabilize your neck and hold your head up straight. Chin tucks also stretch out the tense muscles in the back of your neck and decompress and mobilize the stiff joints at the base of your neck.

1. Stand or sit tall with good posture
2. Keeping your head level and your gaze forward, exhale and draw your chin towards the back of your throat, like you are trying to make a double chin.
3. Hold for a second, relax, inhale and return to neutral.

Repeat this movement 10 times a few times throughout the day

Tips: Imagine you are balancing a glass of water on top of your head —try not to let it spill as you pull your head back.

Don't poke your chin out too far when you go back to the starting position. Focus on returning to neutral.

exercises

CHIN TUCKS/CERVICAL RETRACTIONS



Sit or stand tall



Pull your head back

exercises

UPPER BACK STRETCH/THORACIC EXTENSIONS

When sitting with your head and shoulders hanging forward, the upper thoracic spine flexes forward, and because we spend so much time in this position, it gets stiff and sticky there. Work the joints in the opposite direction with this stretch.

1. Sit tall with good posture. Interlock your fingers behind your neck. If this is difficult to reach, try to place your palms down on your shoulders instead.
2. Gently engage your core, drawing your stomach and front ribs in; this will keep you from moving through your lower back as opposed to your upper back.
3. Using your hands to keep your neck straight, inhale and lean back, extending through the upper back.
4. Exhale and return to the start position.

Repeat this movement 10–15 times a few times throughout the day

Tip: Avoid arching through your low back as this may cause irritation for a few people! A good way to prevent this is to imagine that you are tucking your tailbone under you.

exercises

UPPER BACK STRETCH/THORACIC EXTENSIONS



Begin with arms behind neck or on your shoulders



Extend back, lifting elbows, focusing on moving through your
upper back

exercises

WALL SLIDES A

These wall slides wake up the lower trapezius and serratus anterior muscles, which stabilize your shoulders and keep your body in optimal alignment.

1. Stand 1-2 feet from a wall, with your arms positioned as pictured.
2. Keeping your forearms in contact with the wall, push your chest away from the wall.
3. Slide your arms up the wall, forming a 'Y' shape with your arms. Breathe out as you go.
4. Lift your wrists away from the wall for 1-2 seconds.
5. Inhale as you slide your arms back down to the starting position.

Repeat 10-15 times once or twice a day

Tip: Try to keep your neck lengthened, lifting your head away from your shoulders as you go.

exercises

WALL SLIDES A



1. Press your forearms into the wall, pushing your chest away



2. Slide your arms up the wall



3. Lift your arms off the wall

exercises

WALL SLIDES B

This version of the wall slide opens up the pectorals, extends the upper thoracic spine, and wakes up the muscles of your back. Work gently through a comfortable range of motion, rather than trying to force your way through it.

1. Stand with your back leaning into a wall, arms spread and palms facing out, with your feet resting about a foot in front you. Bend your knees a little and try to keep your low back flat against the wall the whole time. Lengthen the back of your neck against the wall as well.
2. As if you were making a snow angel, inhale as you slide your arms up the wall, trying not to let your head, arms, or back lose contact as you go.
3. Exhale, and slide your arms back down. Repeat. Work in a comfortable range of motion only.

Tip: Placing a towel behind the back of your head and the wall can help if you have trouble getting your head and shoulders all the way back to start.

exercises

WALL SLIDES B



Press the back of your head, shoulders, low back towards the wall



Slide your arms as high up as you comfortably can
without losing contact

still stuck?

GET IN TOUCH

Still having trouble with your neck and shoulders, or can't seem to get the exercises right? Is another pain or discomfort getting in the way of you enjoying your life? Get in touch! We will work together to get down to the cause of your symptoms and start a plan to get back to living free from your pain and back to doing what you love.

WHAT TO EXPECT FROM PHYSIOBOX

- An experienced physiotherapist who **takes time to connect with you** and **fully understand** your problem.
- An approach **grounded in science, practicality, and holistic care.**
- An individualized plan with a start and end-date; **most problems sorted in 4-6 visits.**
- **Longer appointment times**, and always 100% **one-on-one** sessions.
- Physiotherapy that **cares about the whole person**, their **overall health**, and **well-being.**

Focusing on the Care of:

Sports + Training Injuries, Concussion
Traumatic Injuries (falls, collisions, tears, fractures)
Chronic Pain
Arthritis and Degenerative Change
Pre- and Post-Operative Rehab

why choose physiobox

PHYSIOTHERAPY BEYOND THE STATUS QUO

My name is Mark Austin. After getting my start in physiotherapy in a hospital research lab, I moved on to work in traditional, busy physiotherapy clinics treating oilsands injuries, athletes, people with chronic pain and disability, and everyday sprains and strains.

After seven years of working in these clinics, I knew we could do better. I opened my own small independent physiotherapy clinic, physiobox, offering longer sessions and seeing fewer patients in a day, in order to focus on comprehensive, science-based care that is inclusive and affordable to all.

Since I run a smaller practice, my availability is limited, so book soon! If you are wondering if my services may be of help to you, I am always free to chat-- get in touch at mark@physiobox.ca



Mark Austin, BKin MScPT
REGISTERED PHYSIOTHERAPIST

what others are saying



"Mark is knowledgeable, passionate, and empathetic to your needs as a patient. His recovery programs are deep and tailored to help you get back to activities quickly! I have recommended him many times, and everyone who's seen Mark has stuck around."

"I fully believe that I should have been working with him from the start. I had never done physio before this. Now, I would never not do physio first. Thank you for everything, Mark! My quality of life is better today because of you and your commitment to me."

"He's updated on the modern science of body therapy and I could feel he genuinely cared about helping me out as fast as possible. Honesty and knowledge are what I look for in the healthcare industry and this guy has it."

"I found Mark to have exceptional instincts and he possesses great knowledge! His passion to be of service to people shows in the care that he provides. So refreshing to have somebody take a whole approach to healing, rebuilding the body and preventing injuries in the future."



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