

The Hidden Impact of Poor Posture

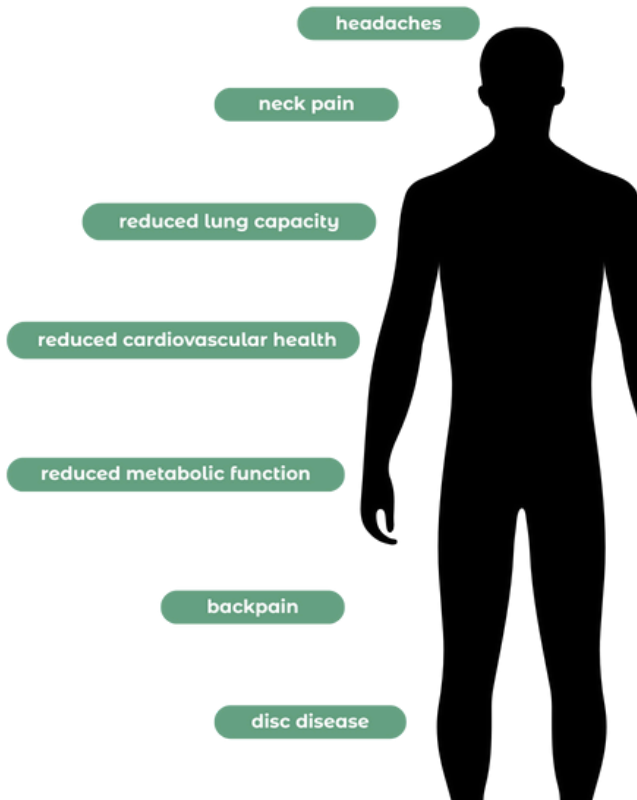


Melmer
Holistic + Health

Posture. It's something we rarely think about - until our body hurts. In our fast-paced, desk-bound world, poor posture has become a silent killer, slowly eroding our health without us even noticing. But why does something so simple matter so much?

Let's take a journey through human evolution, modern habits, and most importantly, how to take back control.

Dr Braeden Melmer
DC BSc (HK)



The Evolutionary Perspective: Built to Move

Humans are built to move. Our ancestors were walking, climbing, and running long before they built cities. Bipedalism - walking on two legs - was a groundbreaking evolution, giving us the freedom to explore, hunt, and survive. But somewhere along the way, our active nature has been replaced with endless hours of sitting.

A History of Movement

From ancient hunter-gatherers who roamed for survival to the industrial revolution, where repetitive labour demanded standing and manual work, our history is filled with movement. Yet in just a few generations, we've become a society of sitters. Desks, cars, couches - our world is built for convenience, but our bodies are built for action.

What Modern Life Has Cost Us

In fact, for every hour spent sitting after the age of 25, life expectancy is reduced by 22 minutes. To put that in perspective, one cigarette takes 11 minutes off your life. Yet, the average person spends 60% of their day sedentary. This isn't just about aching backs or stiff necks - it's a much bigger problem.



The True Cost of Sitting: Beyond Back Pain

Poor posture and prolonged sitting don't just lead to stiff joints or muscle aches. They have a profound impact on your metabolic, cardiovascular, and cognitive health. Research shows that sitting for four hours or more a day can increase the risk of cardiovascular mortality by 80% and all-cause mortality by 46%. But it doesn't stop there.

The Domino Effect of Poor Posture

- **Muscular Imbalance:** Weakening of key postural muscles and tightening of others.
- **Decreased Metabolic Activity:** Reduced enzyme activity like LPL (lipoprotein lipase) leads to fat accumulation.
- **Cardiovascular Risks:** Poor circulation and increased strain on the heart.
- **Mental Decline:** Cognitive performance suffers due to reduced blood flow to the brain.

Ergonomic Tips for Daily Life

- Ensure hips are at or above knee level when sitting
- Take breaks every 40 minutes
- Alternate between sitting and standing
- Create a workstation that encourages movement (standing desks, adjustable chairs)

The Myth of 'Good Posture' in Chairs

"But I sit with good posture!" you might say. Ergonomic chairs, lumbar support, and straight-backed seating are everywhere. Yet, research by Scannell and McGill (2003) found that even with perfect posture, the lumbar spine takes on a slightly flexed position when seated.

Simply put, even the best chair can't fully protect you from the risks of prolonged sitting.



Crossed Syndromes: How Your Body Adapts to Poor Posture

Dr. Vladimir Janda's concept of Upper and Lower Crossed Syndromes highlights how poor posture affects the body's muscle balance.

Upper Crossed Syndrome

- Tight Muscles: Suboccipitals, pectorals, upper trapezius, levator scapulae
- Weak Muscles: Rhomboids, middle/lower trapezius, deep cervical flexors

Lower Crossed Syndrome

- Tight Muscles: Iliopsoas, rectus femoris, thoracolumbar erector spinae
- Weak Muscles: Abdominals, gluteals

Why Crossed Syndromes Matter

These imbalances don't just cause discomfort - they become ingrained in your nervous system, creating a "new normal" for your body. Over time, these postural distortions can lead to chronic pain, headaches, reduced flexibility, and even affect your breathing.



Understanding Proprioception: Your Body's GPS

Posture isn't just about muscles - it's about your nervous system. Proprioception is your body's ability to sense where it is in space. When poor posture becomes your norm, your nervous system begins to adapt to this flawed state, making it harder to correct without retraining.

The Simple Solution: Move More, Move Often

The good news? You don't need a gruelling workout regimen to counteract the effects of poor posture. Frequent movement is far more effective than short bursts of intense exercise. Stand up, stretch, take a walk - every little bit helps.

The Active Couch Potato Phenomenon

Don't become an "active couch potato" (someone who exercises but spends the rest of the day sitting). Research shows that those who move consistently throughout the day - no matter how light the activity - have better cardiovascular health than those who only focus on intense exercise.



Practical Guide: Stretches and Exercises

The following exercises are designed to address the imbalances and movement restrictions caused by poor posture and prolonged sitting. When performed consistently 2–4 times per week, these exercises can lead to noticeable functional improvements within 3 to 6 months.

Lower Cross Exercises

**General rule of thumb – all stretches should only feel a 2-3/10 intensity MAX! If anything ever hurts more then this or is painful please stop and address it with your health practitioner*

a. Pelvic Neutral

Rocking the pelvis back and forth with fingers and thumbs touching between the bottom ribs and top of the hips. Feeling them separate and approximate. A rough guideline for alignment is the distance between your pinky and thumb should stay touching your bottom ribs and top of the hips.

Think of your pelvis as a cup of water – if our buttocks is sticking up we are too far forward and if our low back is too flat or flexed we are too far backward and are going to tip the cup and loose water.

Tip: Perform about 10 slow, mindful reps. This movement is more about building awareness than hitting specific rep targets



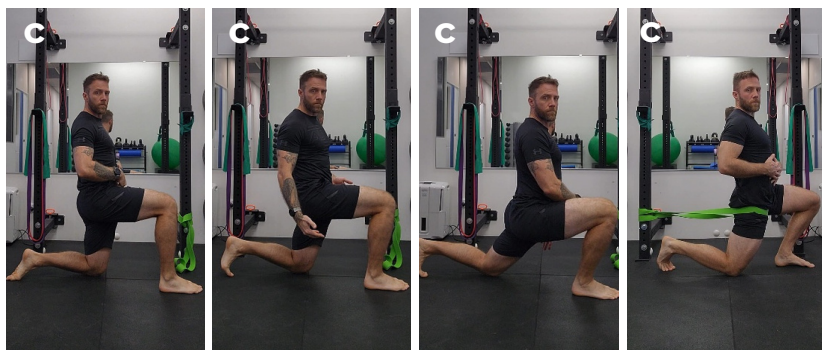
b. Abdominal Hollowing and Diaphragm Breathing

First, imagine we have a balloon in our stomach. Try to push our belly button to the sky and imagine a balloon expanding into our pelvic floor. Then, on exhalation trying to pull that belly button inwards toward the spine while gently “squeezing” that balloon from all sides. Perform 2 sets of 8 slow, controlled breaths.



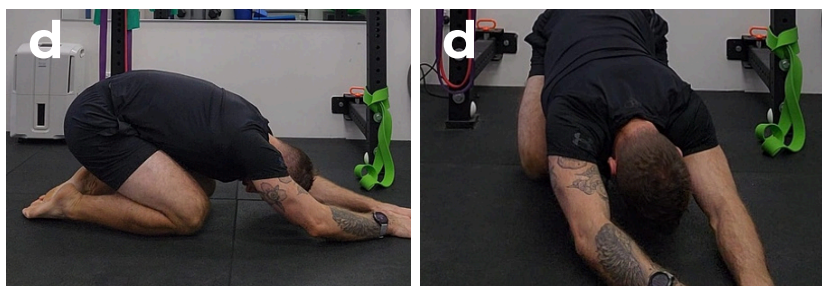
c. Deep and Superficial Hip Flexor Release (PNF)

In half kneeling ensure you are “tucking your tail” underneath your bottom. Press into the knee you are stretching into the floor and hold tension 2-3/10 for 20-30 seconds. Then, try to lunge into a “new tension or range” (2x2). Next, try to lunge into a more extended position and apply the same principles. Adding a band around the hip can add extra traction for mobilising the hip joint. Perform 2 sets of 6 reps with 3 second holds (presses).



d. Childs Pose with Side Flexion

Sit back onto your heels but don't force your buttocks to your heels. Ensure you reach as far as you can with your hands and gently press into the floor to create lengthening of the spine. Hold for 30-40 seconds. Then, crawl side to side holding for 20-40 seconds



e. Banded Internal Hip Activation

Pull the banded leg down and hold the position for 1-2 seconds, then slowly release the hip back up to the starting position. Perform 3 sets of 6 repetitions.



f. Banded Dead Bug

Alternate opposite arm and leg movements while keeping the non-moving limbs upright and stable throughout the exercise. Perform 3 sets of 6–8 reps per side.



g. Pigeon Pose with PNF

Bring the stretched hip underneath your body, guiding the heel toward the opposite shoulder—aiming for a mild 2/10 intensity stretch. Lean back and gently fold over the leg, if comfortable. At your end range, gently press the targeted leg into the ground for 2–3 seconds, then relax. On the next round, try to bring the heel a little closer to the opposite shoulder. Perform 2 sets of 4–6 rounds.



h. Side Plank

The side plank should not be undervalued as a core strengthening exercise. It can be performed with knees bent for a modified version or with legs straight if you have the strength. In either position, make sure your knees, hips, and shoulders stay aligned. Hold for 30 seconds, 3 times on each side.



i. Hip Flow or 90 90s

Start in a 90-90 position with both hips and knees bent. Begin rotating away from the direction you're facing by leading with your trail hip (right hip). Don't lift your new trail leg (left leg) until your right hip can't move any further. Then rotate your hips into the new 90-90 position, now facing the opposite direction. Do 2 sets of 8 reps.

After your sets, if you can, try lifting each leg off the ground one at a time. This helps activate the deep hip stabilisers.



j. Banded Hip Thrusts with Toe Taps

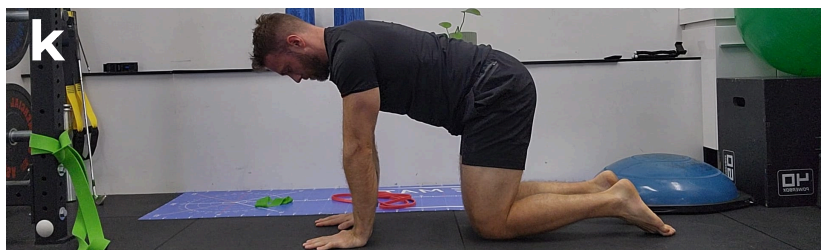
Perform 4 rounds of 10-second holds in a bridge position, maintaining tension in the band. During each hold, slowly tap your toes to the ground one at a time. Use your hands on the ground for stability if needed, or challenge yourself by placing your hands on your chest.





k. Banded Bird Dog

Alternate opposite arm and leg movements with control and stability throughout. Perform 3 sets of 6–8 reps per side.



Upper Cross Exercises

General rule of thumb – Done slow and controlled. Can add a 1-2-3 count when going through the full range of motion

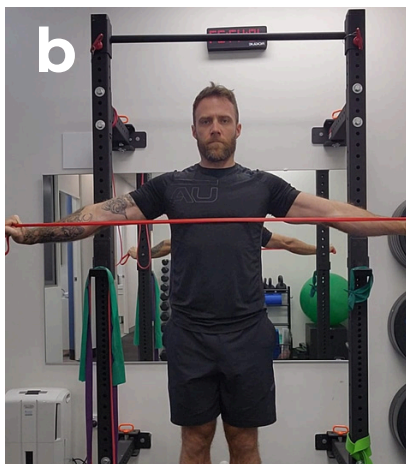
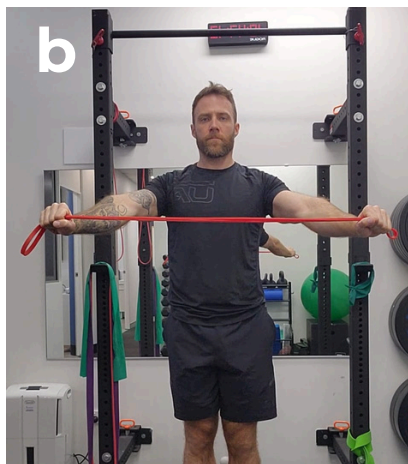
a. Seated Trunk Rotation with Lateral Flexion and Breath at End Range (mobility)

Perform 2 sets of 12 reps, focusing on a gentle squeeze through the hips to minimise any unwanted hip rotation during the movement.



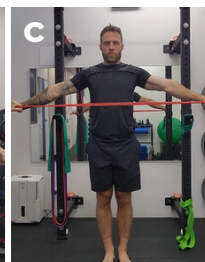
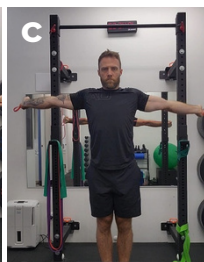
b. Banded Scapular Pull-Aparts (Strength/Activation)

With control, pull the band apart while squeezing your shoulder blades together. Hold for 3 seconds at the end range, then return slowly to the start. Complete 3 sets of 8 reps.



c. Banded Shoulder/Thoracic Dislocates (Mobility)

Perform with slow, controlled movement, maintaining straight elbows throughout if possible. Complete 2 sets of 12 reps.



d. Prone Scapular protractions with Y raise (Strength/Activation)

Focus on controlled movement and scapular engagement throughout. Perform 3 sets of 6 reps.



e. Prone Neck Holds with Thoracic Extension (Strength/Activation)

Tuck your chin (like making a double chin) while lifting your mid-back slightly off the bench. Keep your neck long and shoulders relaxed. Perform 4 sets holding for 10–15 seconds each.



f. Pectoralis Major & Minor Active Stretch (PNF) (Mobility/Stretch)

Using a doorway or bar setup, position your arms to target three different angles of the pec fibers (high, mid, and low). Gently lean your body forward until you feel a light stretch (about 2–3 out of 10 in intensity).

Hold that position and gently push your arms back into the frame (without movement) for a 2–3 second isometric contraction. Then, relax and lean slightly deeper into the stretch.

Repeat for 2 rounds in each of the 3 positions.



g. Banded chin tucks (Strength/Activation)

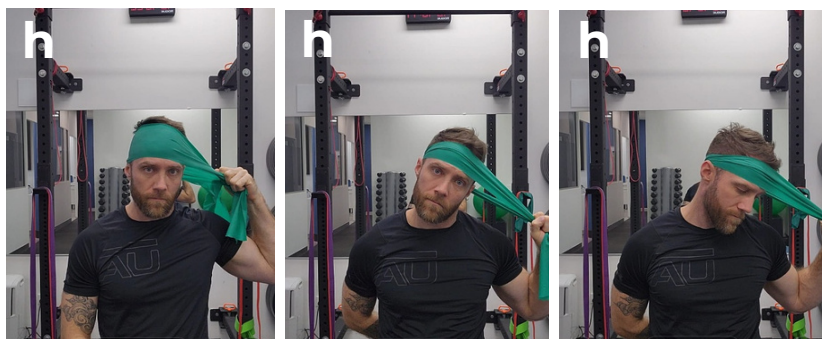
Using a resistance band, gently tuck your chin straight back (like making a double chin). Keep your neck relaxed and spine tall. Focus on slow, controlled movement. Perform 2–3 sets of 10 reps.



h. Trapezius, Levator Scapulae and Scalene Active Stretch (PNF) (Mobility/Stretch)

Use a resistance band to gently guide your head into a stretch, targeting the neck and upper shoulder muscles. Once you feel a mild stretch (around 2–3 out of 10 in intensity), hold the position and lightly push your head back into the band without actual movement (isometric contraction) for a 3-second count.

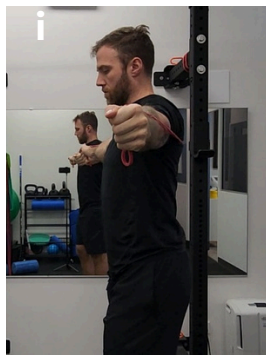
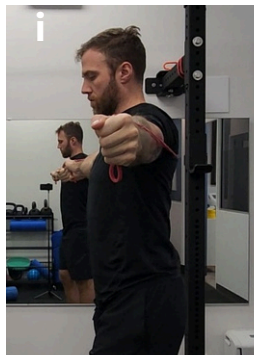
After the contraction, relax and gently deepen the stretch by moving into a slightly greater range of motion. Perform 2-3 rounds each side with 3 second holds (presses).



i. Serratus Banded “Punch” (Strength/Activation)

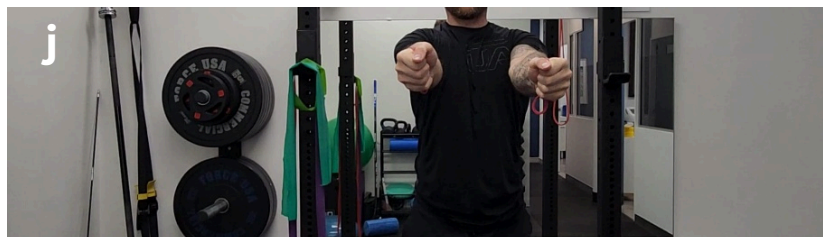
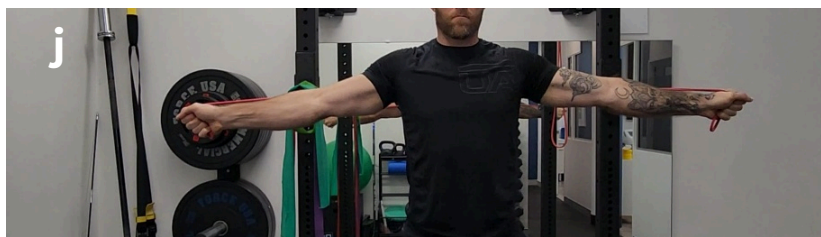
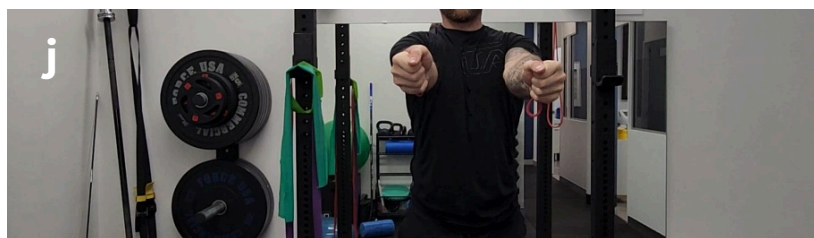
With the band anchored at about chest height (sternum or nipple line), extend your arm straight and slowly protract your shoulder by “punching” forward - keeping your elbow straight. Then retract by drawing your shoulder blade back without bending your elbow.

Perform 3 sets of 8–10 reps per side, with a pause during each protraction phase.



j. Banded Fly's (Strength/Activation)

Using a band anchored at chest height stand tall and bring your arms together in a wide arc, keeping a slight bend in the elbows. Perform 3 sets of 10–12 reps, pausing at the peak of the squeeze.



Reclaim Your Health

Poor posture doesn't have to be a death sentence for your health. Awareness is the first step, and small, consistent actions can make a massive difference. Start with the simple habits outlined here, and take back control of your body.

Want to take your health further?

Book an appointment with Braeden at Melmer Holistic Health, follow him on Instagram for practical tips, or explore his range of courses and products designed to help you live better.

Start your journey to better posture and better health today!



melmerholistichealth.com.au

admin@melmerholistichealth.com.au

[@melmerholistichealth](https://www.instagram.com/melmerholistichealth)