



BULLETPROOF YOUR BODY

Prehabilitation and Nutrition
for the Modern Office Warrior

A Comprehensive Guide

Welcome to Your Prehabilitation Pathway

Welcome to your comprehensive guide to office-based prehabilitation and nutrition. If your working day is spent primarily at a desk, behind a steering wheel, or managing a computer terminal, your body is quietly adapting to the posture of stillness.

This guide is designed to give you actionable, scientifically backed tools to counteract the structural strains of sedentary work. By integrating targeted movement mechanics with strategic nutritional support, you can actively protect your joints, restore optimal alignment, and build a body that thrives both inside and outside the workplace.



Why Prehabilitation Matters: The Toll of the Desk

It is a common misconception that injuries only happen during sudden, high-impact athletic movements. In reality, the micro-strains caused by sitting for eight hours a day can be just as damaging over time.

When you sit, several predictable mechanical shifts occur in your body:

- **Gluteal Amnesia & Posterior Chain Deconditioning:** Your glutes are placed in a prolonged state of stretch, causing them to "turn off." Your lower back and hamstrings are then forced to work double-time to support your posture.
- **Anterior Pelvic Tilt:** Tight hip flexors (from a constant seated position) pull down on your pelvis, arching your lower back and creating chronic lumbar compression.
- **Upper Cross Syndrome:** Forward-facing activities like typing pull your shoulders into internal rotation, overstretching the upper back muscles while severely tightening the chest (pectorals) and neck.

Prehabilitation is the practice of proactively strengthening these vulnerable areas before pain or injury occurs. By teaching your core to brace, your glutes to fire, and your shoulder blades to retract, you build a structural buffer that shields you from chronic back pain, repetitive strain injuries (RSIs), and posture-related degeneration.

The Secret Weapon: NEAT and Its Importance for Prehab

While structured gym sessions are fantastic, spending 45 minutes in the gym cannot entirely undo the structural toll of sitting completely still for the other 23 hours of the day. This is where NEAT (Non-Exercise Activity Thermogenesis) comes into play. NEAT refers to the energy expended for everything we do that is not sleeping, eating, or sports-like exercise — ranging from walking to the printer to typing, fidgeting, and standing.

Why NEAT is Critical for Prehab

In a prehabilitation context, NEAT is your primary tool for preventing static tissue loading. When you stay in one position for hours, fluid is squeezed out of your spinal discs, muscles shorten, and joints lose lubrication. Increasing your NEAT acts as a constant "reset button" throughout the day. It keeps blood flowing to recovering tissues, prevents muscles from freezing into poor postural patterns, and maintains basic joint mobility without causing fatigue.

NEAT Examples for Office Workers

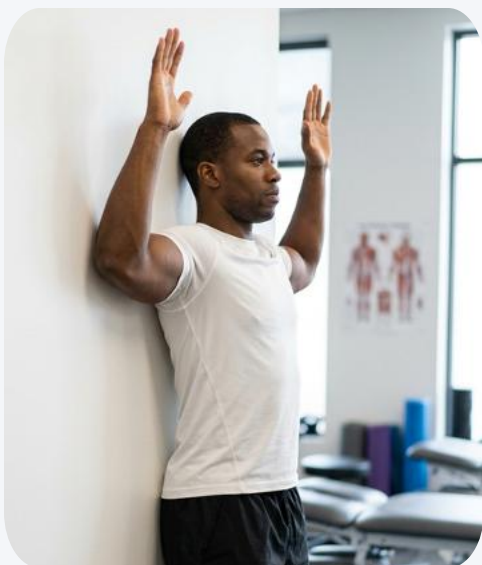
To boost your NEAT and protect your posture during the workday, try incorporating these micro-movements:

- **The "Pacing" Phone Call:** Make it a rule to stand up and pace around your office or room whenever you are on a voice-only call.
- **Active Brain Breaks:** Set a timer for every 50 to 60 minutes to stand up and complete a quick lap of the office floor or walk to the furthest bathroom or water station.
- **Walk and Talk Meetings:** Instead of sitting in a boardroom for a one-on-one catch-up, take a walk outside around the facility or local paths.
- **Post-Lunch Stroll:** Commit to a brisk 10-minute walk immediately after eating your lunch before sitting back down at your desk.
- **Fidget and Adjust:** Periodically change your sitting posture, stretch your legs under your desk, or use a standing desk converter to alternate between sitting and standing every hour.



MOBILITY & STRETCHES PROGRAMME

Perform daily – hold each stretch 30-60 seconds per side



1. Scapular Wall Slides

3 sets x 10 to 12 controlled slides.

- **Why it matters:** This resets the shoulder blades, opens up the chest, and counteracts the rounded-forward posture caused by typing or driving.
- **How to do it:**
 - Stand with your heels, glutes, upper back, and head placed flat against a wall.
 - Bring your arms up into a "cactus" position (elbows bent at 90 degrees), attempting to keep the backs of your hands and elbows in contact with the wall.
 - Slowly slide your hands upward toward the ceiling, keeping your back and arms pressed firmly against the wall. Go as high as you can without arching your lower back.
 - Slowly slide back down, pulling your elbows down into your ribs.



2. Doorway Pectoral Stretch

3 sets x 30 to 45 seconds per side.

- **Why it matters:** Spending hours typing shortens the chest muscles. Stretching the pectorals allows the shoulder blades to retract naturally into a healthy alignment.
- **How to do it:**
 - Stand inside a doorway, placing your forearms vertically flat against the door frame with your elbows bent at 90 degrees (at shoulder height).
 - Step one foot forward through the doorway until you feel a comfortable, deep stretch across your chest and front shoulders.
 - Keep your core braced and do not lean your head forward.



3. Wrist Flexor & Extensor Stretches

3 sets x 20 to 30 seconds, then switch arms.

- **Why it matters:** Typing and mouse usage create high tension in the forearms, leading to carpal tunnel syndrome or tendon issues. These stretches restore soft-tissue length.
- **How to do it:**
 - Extend your right arm straight in front of you at shoulder height, palm facing away from you (fingers pointing up). Use your left hand to gently pull your fingers back toward your body until you feel a stretch in your wrist flexors.
 - Flip your hand so your palm faces you (fingers pointing down). Use your left hand to gently pull the back of your hand toward you to stretch the wrist extensors.

MOBILITY & STRETCHES PROGRAMME (cont.)

Perform daily — hold each stretch 30-60 seconds per side



4. The Standing or Kneeling-Hip Flexor Reset

3 sets x 30 to 45 seconds per side.

- **Why it matters:** Sitting keeps your hips flexed all day, shortening the psoas and rectus femoris muscles, which pulls the pelvis out of alignment.
- **How to do it:**
 - Hold onto a sturdy desk or rail for balance. Take a step back into a shallow split stance or drop into a half-kneeling position on a mat.
 - Tuck your pelvis underneath you (imagine tucking your tailbone) and squeeze the glute of the back leg tightly.
 - Gently shift your hips forward a few inches until you feel a deep stretch in the front of your rear hip and thigh. Do not arch your lower back.



5. Standing Back Decompression / Spine

3 sets x 45 to 60 seconds while taking deep, slow breaths.

- **Why it matters:** Gravity and sitting compress the spinal discs over the course of an eight-hour shift. This decompression creates a distraction force that helps rehydrate the discs.
- **How to do it:**
 - Stand facing a secure, waist-high workbench, rail, or desk frame.
 - Grip the edge firmly with both hands, step your feet back, and hinge forward at the hips until your torso is parallel to the floor.
 - Softly bend your knees and push your hips backward away from the workbench, allowing your head to relax comfortably between your arms as your spine elongates.



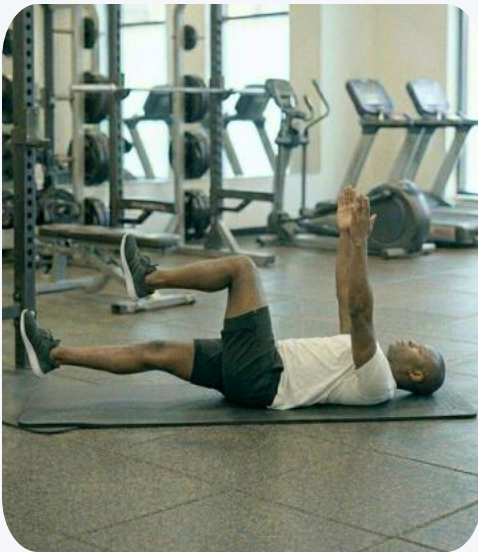
6. Spine Decompression Hang

3 sets x Accumulate 30 to 60 seconds of passive hanging. This can be broken up into shorter blocks of 15 seconds if grip strength is a limiting factor.

- **Why it matters:** While the workbench lean provides an excellent active horizontal elongation, a vertical passive hang utilises your entire lower body weight to create powerful decompression forces throughout the lumbar and thoracic spinal discs.
- **How to do it:**
 - Find a secure overhead pull-up bar. Grasp the bar firmly with an overhand grip, slightly wider than shoulder-width apart.
 - Slowly lower your body until your arms are fully extended. If your feet can still touch the floor, let your knees bend softly so that your lower body hangs as passive deadweight.
 - Do not try to pull yourself up; focus entirely on breathing deeply into your belly, allowing your spine to stretch out.

STRENGTH & STABILITY PROGRAMME

Perform 3x per week — focus on control and form



1. Deadbug

3 sets x 10 each side

- **Why it matters:** Activates the deep core stabilisers and restores a neutral pelvic position, protecting the lumbar spine from loading awkwardly.
- **How to do it:**
 - Lie on your back with your knees bent at 90 degrees and your arms extended straight over your chest.
 - Press your lower back firmly into the floor—maintain this flat contact throughout the entire movement.
 - Inhale and slowly extend your right arm behind your head and your left leg forward, lowering both until they are just above the floor.
 - Exhale and return both limbs to the start position with controlled effort.



2. Glute Bridges

3 sets x 15 reps

- **Why it matters:** Awakens dormant glutes, which reduces the workload placed on the lower back and hamstrings during everyday standing and walking.
- **How to do it:**
 - Lie on your back with your knees bent and feet flat on the floor, hip-width apart.
 - Engage your core and squeeze your glutes before you lift, then drive through your heels to raise your hips until your body forms a straight line from shoulders to knees.
 - Maintain a brief 2-second pause at the top, squeezing your glutes intensely.
 - Lower back down to the floor with total control.



3. Goblet Squats

3 sets x 10-15 reps

Why it matters: Builds lower body capacity while holding a weight at your chest, which naturally co-activates the core and upper back to reinforce an upright posture.

How to do it:

- Stand with your feet slightly wider than shoulder-width, holding one dumbbell vertically against your chest close to your sternum.
- Initiate the squat by pushing your hips back and bending your knees simultaneously, keeping your chest up.
- Descend as far as your mobility allows (aiming for hips below knees) while keeping your feet flat.
- Drive through your entire foot to return to the standing position.

STRENGTH & STABILITY PROGRAMME (cont.)

Perform 3x per week — focus on control and form



4. Band Pull-Aparts

3 sets x 15 - 20 reps

- **Why it matters:** Strengthens the mid-trapezius and rhomboids, pulling the shoulders back into an open, healthy alignment.
- **How to do it:**
 - Stand tall, gripping a light resistance band at shoulder-width with your arms fully extended straight out in front of you.
 - Squeeze your shoulder blades together and down to initiate the movement.
 - Pull the band outward, expanding your chest until the band touches your sternum.
 - Control the band slowly back to the starting position.



5. The Pallof Press

3 sets of 10 to 12 reps per side

- **Why it matters:** Forces the oblique muscles to actively resist rotation, teaching your trunk how to handle asymmetrical loads without stressing the spine.
- **How to do it:**
 - Stand perpendicular to a cable column or resistance band anchored at chest height.
 - Hold the handle with both hands at the centre of your chest, squeezing your core and glutes into a stable athletic stance.
 - Press the handle straight out in front of your chest, fiercely resisting the lateral pull of the band trying to turn your torso.
 - Hold the extended position for 2 seconds, then return slowly to your chest.



6. Chin Tucks

3 sets of 10 to 12 controlled reps

- **Why it matters:** Hours spent staring at computer screens leads to "forward head posture." For every inch your head drifts forward, it places an extra 4.5 kg (10 lbs) of stress on your neck muscles. Chin tucks strengthen deep cervical flexors to pull your head back, reducing neck tension and headaches.
- **How to do it:**
 - Sit or stand tall with your shoulders relaxed. Look straight ahead.
 - Without tilting your head down (keep your eyes level), draw your chin straight back as if trying to make a "double chin." Imagine sliding your head backward along a flat tabletop.
 - Hold this position for 3 to 5 seconds, feeling a gentle stretch at the base of your skull.
 - Slowly release back to the starting position.

Nutritional Support for Structural Repair

While physical movement handles the mechanical side of prehabilitation, your nutrition manages the structural repair of your tissues and keeps localised inflammation at bay.

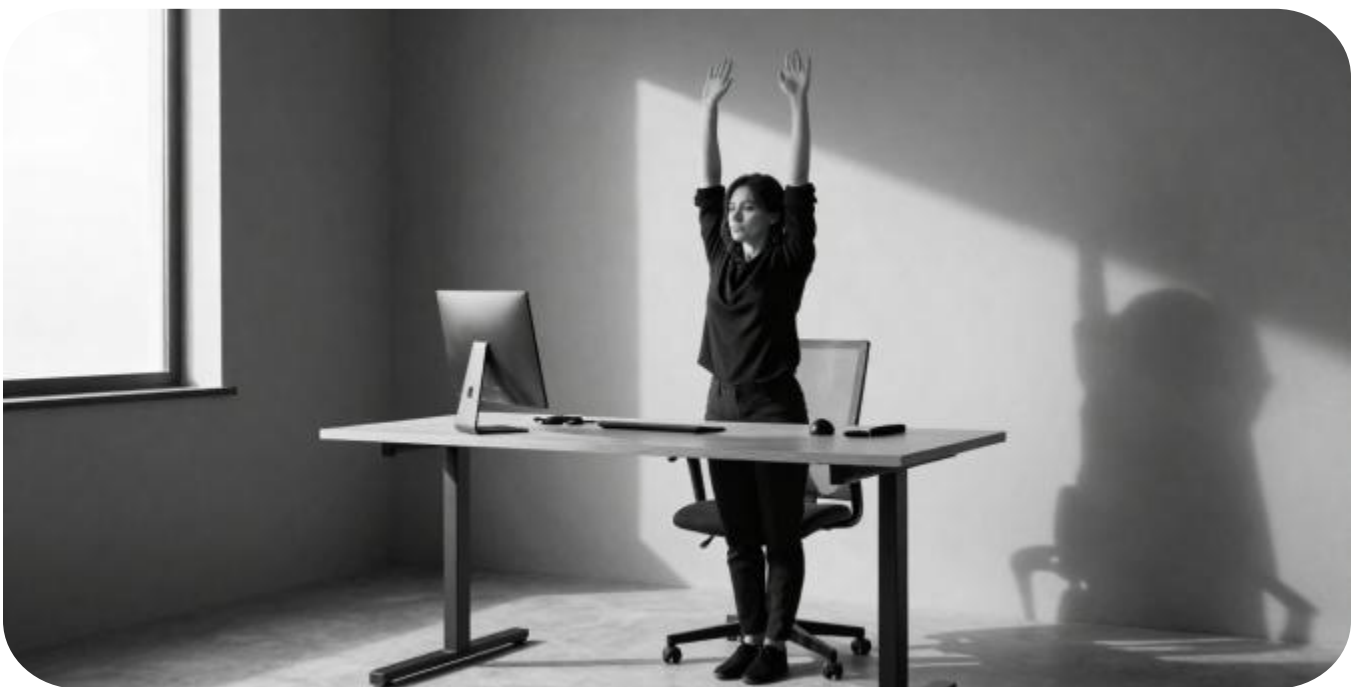
Nutrient	Daily Amount Needed	Best Food Sources	Why It Is Important
Dietary Protein	1.6 to 2.2g per kg of body weight (<i>e.g. 128–176g for an 80kg worker</i>)	Chicken breast, lean beef, salmon, eggs, Greek yogurt, lentils, tofu	The structural blueprint. Repetitive strain breaks down connective tissues (tendons and ligaments). Sufficient protein synthesis is essential for localised cellular repair.
Omega-3 Fatty Acids	1,000 to 2,000 mg (combined EPA/DHA)	Sockeye salmon, mackerel, sardines, walnuts, chia seeds	Potent anti-inflammatory agents. Sitting can create low-grade inflammation in static joints and spinal discs. Omega-3s help mitigate this, reducing joint stiffness.
Magnesium	350 to 420 mg	Spinach, kale, pumpkin seeds, almonds, dark chocolate (85%+)	A key cofactor in muscle relaxation. Deficiencies can cause chronic muscle tightness and cramps. Crucial for resetting neuromuscular tension after hours in a static posture.
Vitamin C & Collagen-Boosters	Vitamin C: 100–200 mg Collagen: 10–20g (if supplemented)	Bell peppers, broccoli, citrus fruits, berries, bone broth, gelatine	Collagen is the primary component of your tendons and ligaments. Vitamin C is a mandatory cofactor for collagen synthesis, ensuring your connective tissues remain resilient against repetitive strain (like carpal tunnel).
Water & Hydration	2.5 to 3.5 Litres (adjust for activity levels)	Pure water, herbal teas, water-rich vegetables	Your intervertebral discs are predominantly made of water. Sitting compresses these discs, squeezing moisture out. Consistent hydration helps rehydrate the spine, preventing premature disc degeneration.

Conclusion: Becoming an Athlete of Stillness

It is easy to assume that prehabilitation and precise nutrition are protocols reserved strictly for elite athletes. However, the modern office worker faces a unique and highly persistent physical challenge: enduring hours of stillness.

Sedentary deconditioning is not a passive process; it is an active decay of your body's natural stabilisers. By treating your desk day with the same physical respect an athlete treats a training session — using NEAT and micro-movements to keep tissues dynamic, mobility and stretches to free your joints, targeted exercises to wake up dormant muscles, and clean nutrition to repair cellular strain — you can completely shift your postural health.

If you spend eight hours sitting still, spending just 30 minutes moving with precision and elevating your baseline daily activity is the ultimate investment in a pain-free, sustainable career.



MOVE WELL. LIVE WELL.

Your body is your most important tool. Invest in it daily.



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Move well. Live well. Every single day.