



PRE-START INTRODUCTION

Daily routine

Most people will be woken up by an alarm, jump straight into the shower, get into the car, get to work, have a coffee and a chat before going on to perform their daily tasks without doing any type of exercise whatsoever.

The risk

By not warming up your body properly, you place your body at a greater risk of muscular discomfort such as soreness, cramping, or even sustaining an injury such as a strain or sprain. Exercising before we start work or after a long break (lunch) helps improve blood circulation, which warms up the muscular system and can assist with improving performance and function.

Spending 5 minutes to prepare your body for work can make a world of difference. Studies have shown that warm-ups which are *dynamic*, activate muscles and increase range of motion.

The plastic effect:

An easy way to remember the effect of how a muscle responds to warming up and stretching. Cooled muscles are more easily damaged. Just like thin plastic, if you suddenly load it up with weight or have it pulled against resistance, there's a higher chance the plastic will snap.

When plastic is heated it has more give and will stretch and mold the way you want it to. Even better, when plastic is heated then cooled, it tends to stay in that new stretched position.

Sport / Physical Activity / Work

An athlete's *job* is their sport. Their livelihood relies on them performing at their peak and avoiding injury. An athlete understands that they must fully prepare their body for movement and activity by warming-up well. Why would we not adopt the same approach when we go to work? Just like the athlete, we want to ensure that our bodies are at their peak, that we are able to work efficiently and without discomfort or risk of injury.

INJURY PREVENTION

- Develop a 3-5 minute exercise routine
- Implement that routine prior to the start of any physical activity whether it's for work or play
- Don't overstretch – this may increase your risk of injury
- Always use controlled movements when manual handling
- Respect fatigue – over-exercising or pushing past your physical exertion limits can increase your risk of injury



MANUAL HANDLING

*“Manual handling is **any activity** requiring the use of muscular force (or effort), exerted by a person to lift, move, push, pull, carry, hold or restrain an object, including a person or animal.*

*It covers **more than lifting heavy weights** and affects more than the back” (Safework SA, 2006)*

Risks to assess

- The weight, size, shape, location of the load.
- Sudden or unexpected jarring movements
- Maintaining the same posture for long periods
- Awkward movements such as twisting, bending and over-reaching
- Personal factors – injury status, age, fitness, strength, experience, medical conditions, individual work habits, postural awareness.

What factors can you control when performing a manual task?

- ✓ Your preparation
- ✓ Your posture
- ✓ Your technique
- ✓ The muscles that you use
- ✓ The force applied
- ✓ Your time management
- ✓ The load

Steps for manual handling (regardless of task):

1. Size up the load
2. Ensure there is a clear pathway
3. Position your feet correctly starting position
4. Get close to the load
5. Maintain a neutral spine



Postural awareness / muscle activation exercise

1. Setting the upper back
 - Squeeze the shoulder blades together for a few seconds and relax.
2. Transverse abdominis (TA) / "core" muscle activation
 - Place your fingertips on your hips and walk them in a couple of centimetres in and down. Gently cough and you should feel the muscle rise into your fingertips.
3. Activating your glutes / use your legs to lift
 - Pretend you're sitting back down into a chair with the weight in your heels. Push the floor away with your heels, activating more through the glutes and less through the quadriceps muscles.

WARMING UP

Stretching benefits your body and your mind.

Stretching assists to lengthen your muscles and increases blood flow, allowing your joints to move more freely. Work and life's daily tasks frequently require us to remain in a *static* position for long periods of time. This can cause *muscular imbalance*; some muscles become shorter whilst others get stretched out. By stretching at regular intervals during the day, you can expect to have less muscle fatigue, feel less sluggish and have less aches and pains. And if this is not benefit-enough, studies also suggest that stretching releases dopamine which makes you feel happier!

Here are some stretches and exercises that can easily be performed at regular intervals throughout your day.

UPPER BODY

Chest and neck stretches:

Why: To stretch out your chest, shoulders and neck

How: 1. Place your left palm against the wall and turn your body away from it. Hold for 20-30 seconds and then repeat on the right arm.

2. Place your left arm behind you and your right arm on the side of your head. Pull gently down with the right arm until you feel a stretch down the side of your neck. Hold for 20-30 seconds and then repeat on the opposite side.



BACK

Back stretches:

Why: To keep your back mobile through gentle range of motion

How: 1. With your hands on your hips, arch backwards. Hold for 10 seconds and repeat 5 times.

2. Bring your knee up towards your body and give it a big hug. Hold for 10 seconds and repeat twice on each side.



Glute stretch

Why: Stretch the muscles surrounding the pelvis to loosen up the lower back

How: 1. Sit comfortably and cross your left foot over the top of the right knee. Sit up tall and hinge forward from the hips. Hold for 20-30 seconds and repeat on the right side.



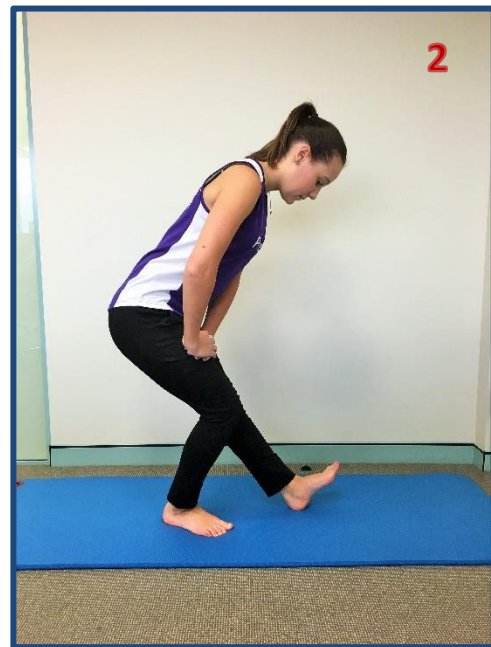
LOWER BODY

Leg stretches:

Why: To stretch the large muscles groups of the legs.

How: 1. To stretch the quadriceps, stand on one leg with your knees touching. Grab your left foot and pull towards your butt. Remember to stand upright. Hold for 20-30 seconds then repeat on the right leg.

2. To stretch the hamstrings, stand with the left leg outstretched in front of the other. Bend slowly forward, placing your weight through the bent leg. Keep your left foot pointed upwards. Hold for 20-30 seconds then repeat on the right leg.

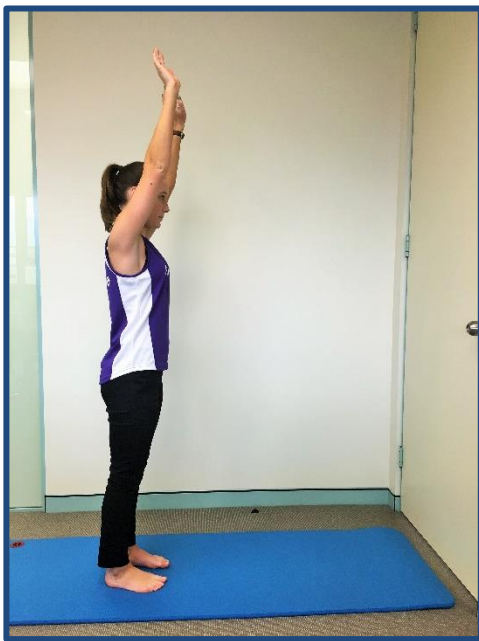


DYNAMIC WARM UP

Warrior lunges

Why: To improve lower limb mobility and to warm up the core muscles

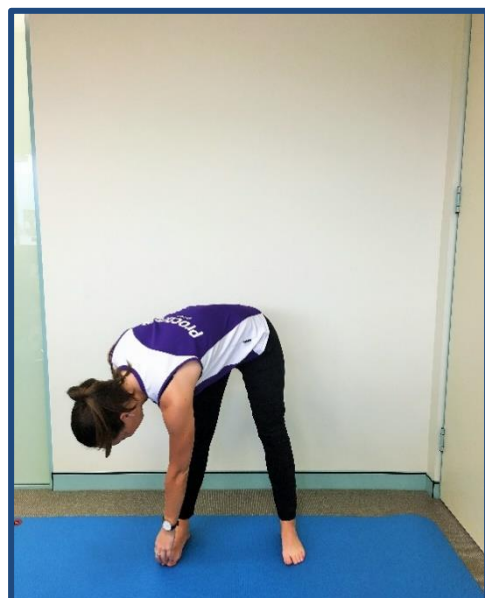
How: Stand with your feet hip-width apart and raise your arms above your head. Step forward onto your left foot whilst lowering your body. Don't allow your knee to go past your front foot. Step back to the starting position and lower your arms. Repeat on the opposite leg. Alternate for 10 repetitions on each leg.



Star touches

Why: To improve lower limb and glute (butt) flexibility

How: Stand with your feet hip-width apart. Reach your left hand down towards your right toe, keeping your legs straight. Return to the starting position. Repeat with the opposite arm. Alternate for 10 repetitions on each side.

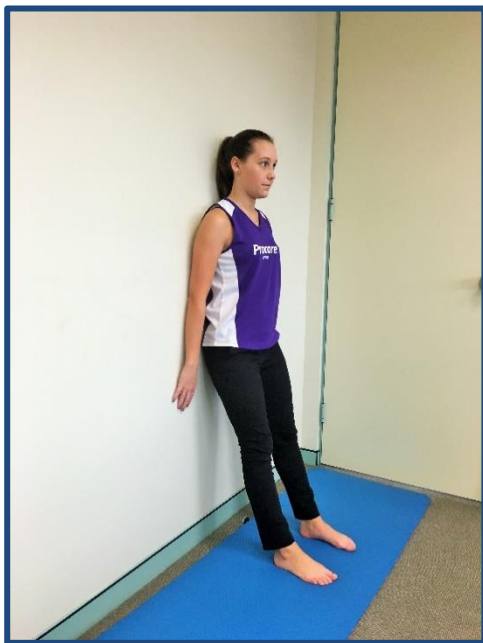


Wall squats

Why: To get the big muscles groups in your legs and butt firing and to improve their endurance.

How: Stand with your back against a wall and shuffle your feet forward to about 30cm away from the wall, hip-width apart. You can keep your arms pressed against the wall too for support. Slide your back down the wall, making sure you maintain contact. Lower yourself to a point where you feel comfortable and hold for 15 seconds before returning to the start position. Have a short rest in-between squats and repeat 5 times.

**As you feel more confident, gradually increase the depth, until you can reach a 90 degree angle at your knees.*



Arm rotations

Why: To warm up the shoulders

How: Stand comfortably with your feet hip-width apart and your arms extended out either side of your body. Rotate your arms in forward circles for 20 repetitions. Have a short rest and then repeat with backwards circles.



Wall push-ups

Why: to get your upper limbs and chest muscles firing

How: Face a wall, standing a little further than an arm's length away with feet hip-width apart. With your hands flat against the wall, a little wider than shoulder-width apart, lean your body forward towards to wall and then push back to starting position. Remember to keep your back straight as you move in and out – it's your arms and chest that are moving. Repeat 15 times.

