

## *Chapter 4*



# A Healthy Walk Program

## 4.1 Warm Up

Before you undertake stretches and physical activity you need to warm up your body which will increase the heat through your muscles and reduce the risk of tearing or straining muscles and tendons<sup>20</sup>. A warm up includes 5-10 minutes of slow walking. This will:

- ❖ Increase your heart rate.
- ❖ Increase respiration rate.
- ❖ Distribute blood to where it is needed e.g. in leg muscles.
- ❖ Increases body temperature making it easier for muscles and tendons to stretch.

## 4.2 Stretches

Stretches are included after you have warmed up your body to:

- ❖ Increase flexibility.
- ❖ To reduce muscle tension.
- ❖ To reduce the risk of muscle or tendon injuries<sup>20</sup>.



### **There are Eight Rules for Safe Stretching**

1. Warm up before stretching.
2. Stretch before and after you exercise.
3. Stretch alternate muscle groups.
4. Stretch slowly and gently, never bounce or stretch rapidly.
5. Stretch should be held for a minimum of 15-20 seconds.
6. Stretch to the point of tension never pain.
7. Do not hold your breath when stretching, breathing should be slow and easy.
8. Stretch all major muscle groups and make sure you perform each stretch on both limbs.



### 4.2.1 *Stretching Exercises*



#### **Standing Calf Stretch**

Stand with both feet pointing forward, front knee bent and back leg straight, and hands on hips. Press the heel of the back leg into floor and gently push down until a gentle stretch is felt in lower calf muscle. Keep back straight and head and shoulders lifted. Try to increase the length of the stride while keeping your back foot flat. Alternate leg.

- ❖ Hold for 20 seconds
- ❖ Do not bounce
- ❖ Do not force a stretch



#### **Lower Calf Stretch**

Stand with both feet pointing straight ahead, heels touching the ground. Bend both knees forward slowly lean forward. Alternate leg.

- ❖ Hold for 20 seconds
- ❖ Do not bounce
- ❖ Do not force a stretch



### **Shin Stretch**

Stand with both feet pointing straight ahead. Support your body with the aid of a tree, or similar, bend both knees. Keeping the front heel on the ground and the back leg resting on the toe, lean forward. Alternate leg.

- ❖ Hold for 20 seconds
- ❖ Do not bounce
- ❖ Do not force a stretch



### **Quadricep Stretch**

Stand with one foot in your hand and draw your knee and hip back as far as possible towards the buttocks. You may need to support yourself with the aid of a partner or chair. Alternate leg.

- ❖ Hold for 20 seconds
- ❖ Do not bounce
- ❖ Do not force a stretch



### Hip Extension

Stand with both feet pointing straight ahead. With one hand resting on a chair/bench for support, slowly lower your hips towards the floor until resting on one knee. Keep back straight and lean forward. Alternative leg.

- ❖ Hold for 20 seconds
- ❖ Do not bounce
- ❖ Do not force a stretch

*(Note: participants who have knee problems or had knee surgery may find this stretch difficult and are advised to avoid it)*



### Hamstring Stretch

Keep a proper curve in low back - as shown. Bend one foot upward as you straighten your knee. Feel the stretch at the back of your thigh. Repeat the stretch with the other leg. Do not allow lower back to lose the curve.

- ❖ Hold for 20 seconds
- ❖ Do not bounce
- ❖ Do not force a stretch

### 4.3 Balance Exercises



*These exercises have been approved as suitable activities for balance improvement by a qualified physiotherapist.*

The use of balance activities will assist participants to:

1. Reduce falling.
2. Reduce injuries.
3. Increase confidence.

The following activities can be performed at any time. Furthermore, participants should be encouraged to complete these activities daily. The more they practice the better the outcomes.

As part of the walk program it is suggested that a warm up is undertaken before the activities are attempted. Warm up examples below.

#### **Safety Notes**

If participants feel unwell or experience pain when they participate in ANY activity they should stop immediately and seek medical attention.

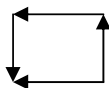
All the activities should be performed on a flat surface.

Instruct participants to open their eyes if they start to fall. This may sound ridiculous but people do forget.

Walk leaders should understand that participants will be at different ability levels. As such, they should be prepared to offer different levels of activities. The examples below are set out from the easiest to the more difficult. Inform participants only to perform activities they feel comfortable with.

#### **Warm Up (10-15 minutes)**

- Slow walk – change length of stride (normal – small – large).
- Step – pause – step, repeat.
- Walk side on.
- Grapevine.
- Walk a box formation.
- Stretches – have participants hold on to stable object (e.g. fence, partner etc) if they are at all unstable.



### Activity 1

Stand with feet approximately shoulder width apart, feet forward, body upright, eyes open, head up.

- Move hands in different directions slowly (like Tai Chi).
- Close eyes and repeat.
- Feet closer together, eyes open, repeat hand movements.
- Close eyes and repeat.
- Bring feet together and repeat with eyes open and then closed.
- Introduce mirror activity. Each person stands facing partner. One person moves their hands slowly and the other one follows (mirrors) them. With eyes closed touch hands.

### Activity 2

Stand on one foot, body upright, eyes open, head up (a lot of people will have difficulty with this – even teenagers).

- Arms outstretched to balance.
- Arms by side.
- Eyes closed, arms outstretched.
- Eyes closed, arms by side.
- Repeat above and move hands in different directions slowly (like Tai Chi).
- Introduce mirror activity. Each person stands facing partner. One person moves their hands slowly and the one follows (mirrors) them. With eyes closed touch hands.

★ PLEASE NOTE: As this is a more challenging balance exercise, participants are advised that it may be a good idea to begin with their eyes open while doing it and/or perform the exercise next to a chair, table, wall which they can lean on for support if they become unsteady. Alternatively the exercise can be performed with a supporting partner to minimise the risk of falling.

### Activity 3

- To increase the challenge and variety of the above activities, include partner activities like catching balloons or balls etc.

## 4.4 The Walk Posture and Action

### ***Checklist for good walking posture:***

#### **Head**

The head should be centred, in line with the spine and held in a neutral position. The chin should be parallel with the floor. Eyes should be looking forward (2 -3 metres).

#### **Shoulders**

The shoulders need to be down and back and not rounded, however they do need to be relaxed.

#### **Chest**

The chest should be lifted and expanded.

#### **Arm action**

The arm swing should be natural and comfortable. The forward swing should be relaxed and close to the side of the body. It is important that the arm swing should not cross the centre of the body.

#### **Leg action**

The length of each stride should be comfortable and efficient. Stride length will vary amongst individuals and will depend on leg length, hamstring tightness and the rotation of the hips.

#### **Foot placement**

With each stride the heel touches the ground first, the forefoot and the toes are raised toward the shins. The forefoot is then lowered to the ground with control (avoid pounding or slapping). The foot rolls from heel to toe. The faster the rear leg is brought forward, the faster the rate of walking (stride frequency).

#### **Picture Walking Stride**

From 'What you need to know about Walking' with Wendy Bumgardner website <http://walking.about.com/library/how/blhowposture.htm>



## 4.5 Cool Down

After each walk you should include a cool down session, which will take about 5-10 minutes. A cool down should include slower paced walking and gentle stretching of the main muscle groups used during the physical activity.

### Why Cool Down?

- ❖ To help reduce muscle stiffness and soreness by removing waste products from the muscles (lactic acid).
- ❖ To return body temperature to normal level.
- ❖ To prevent pooling of blood in lower limbs which can cause dizziness and fainting.
- ❖ To stretch main muscle groups.

### Socialise

- ❖ After each walk to make people feel welcome and want to come back.
- ❖ Enjoy a drink and a talk with other walkers in the park or at a coffee shop.
- ❖ Enjoy a talk by a health professional.

