# PLANNING A WARM UP

There are many different ways of warming up, which should vary depending on what is planned for the main workout; for example, if a client is performing an upper-body workout of a split routine, it would be no use warming up on an upright bike as this will only work the lower body muscles.

### Considerations for planning a safe and effective warm-up

Planning a safe, effective warm-up requires you to take certain considerations on board:

#### Age

Older adults tend to need longer due to stiffer joints and reduced cardiorespiratory efficiency.

#### Type of session

The content of the main workout should dictate what is planned for the warm-up.

#### Intensity of the main workout

The harder the main workout is, the higher the intensity needs to be in the warm-up, while ensuring it is still a gradual build-up.

#### The client's fitness level

Fitter clients need less time to warm up than deconditioned clients, as their bodies are more efficient at transporting and utilising oxygen.

#### Environment

For example, it may take longer to warm up if the temperature is low.

## General warm-up guidelines

If you are performing specific joint mobility exercises, you should aim for 15-20 reps at each joint, while gradually increasing ROM. N.B. If a client were to use the X-trainer or rower for their CV pulse-raiser, most joints would be mobilised, therefore it would not be necessary to perform a full range of separate mobility exercises, unless the client were particularly 'tight' in a certain area.

A pulse-raiser should take 5-10 minutes for a healthy client in a 'normal' exercising environment, however this may need to be longer when considering the factors identified previously. The aim is to gradually increase intensity throughout the pulse-raiser to ensure the client achieves a rate of perceived exertion (RPE) between 4 and 5 (1-10 scale).

Warm-up stretches should be dynamic and gradually build up to take muscles safely through their full ROM.

### Dynamic stretching

Dynamic stretching aims to move limbs to lengthen muscles to the end of their range of motion under control. There is no bouncing or jerking, which differentiates this method from ballistic stretching. Alternative dynamic stretching techniques may involve mimicking the movements to be performed in the activity or sport and can act as a kind of rehearsal during the warm-up. Around 8-10 repetitions of each movement are performed under control, gradually taking the stretch further to increase the range of motion.

### Squat to overhead arm swing

#### Teaching points:

- Squat down by bending the ankles, knees and hips.
- Swing the arms down and back during the descent into the squat position. Keep chest lifted throughout.
- Return to standing position with the arms stretched over the head.
- Repeat.

#### Muscles stretching:

- Quadriceps.
- Gluteus maximus.
- Latissimus dorsi.
- Soleus.
- Iliopsoas.

## Squat to overhead arm swing with rotation

#### Teaching points:

- Squat down by bending the ankles, knees and hips.
- Swing the arms down and back during the descent into the squat position.
- Keep chest lifted throughout.
- Return to standing position with arms stretched over head while rotating the upper body to one side.

Alternate the side of rotation with each rep.

#### Muscles stretching:

- Quadriceps.
- Gluteus maximus.
- Obliques.
- Soleus.
- Iliopsoas.

### Lunge with rotation

#### Teaching points:

- Stand in an upright position with feet hip-width apart.
- Lunge forward while simultaneously rotating the torso towards the lunging side leg.
- Push back strongly off the lead foot and return to the starting position.

#### Muscles stretching:

- Quadriceps.
- Gluteus maximus.
- Obliques.
- Iliopsoas.

# Posterior step with overhead reach

#### Teaching points:

- Stand in an upright position with feet hip-width apart.
- Take a small step back while both arms reach over the head.
- Ensure the lunging side heel makes contact with the floor.
- Brace the abdominals to prevent excess lumbar extension.
- Push back strongly off the posterior foot and return to the starting position.

#### Muscles stretching:

- Latissimus dorsi.
- Rectus abdominis.
- Iliopsoas.
- Gastrocnemius.

## Standing dynamic pectoral stretch

#### Teaching points:

- Stand upright with feet hip-width apart.
- Horizontally extend the arms to a wide position.
- Push the arms forward while allowing the thoracic spine to round slightly.
- Repeat the above varying the angle of the arms or use static stretches.

#### Muscles stretching:

- Pectoralis major.
- Rhomboids.
- Mid trapezius.

## Recommendations for different components of the warm-up

#### Mobility exercises

Upper-body mobility		Lower body (body weight)
(body weight)		Knee raises.
<ul> <li>Shoulder lifts</li> </ul>		• Leg curls.
and circles.		<ul> <li>Foot pedalling.</li> </ul>
<ul> <li>Arm circles</li> </ul>		<ul> <li>Calf raises.</li> </ul>
and raises.		
<ul><li>Shoulder</li></ul>		
pressing	Trunk mobility	CV machines
action.	(body weight)	Cycling, treadmill and stepper
• Chest	<ul> <li>Rotations.</li> </ul>	mobilise the lower body (knees,
pressing	<ul> <li>Side bends.</li> </ul>	hips and ankles).
action.		<ul> <li>Rowing and X-trainer mobilise the</li> </ul>
N.B. These can be		lower body (knees, hips and ankles)
performed while		and upper body (elbows, shoulders
cycling or walking if		and back) in specific movement
the client can		ranges.
balance. USE WITH		
CAUTION		

## Warming and stretching exercises

#### Warming exercises (pulse-raising)

Using a CV machine warms the muscles and raises heart rate. Intensity should be progressed gradually and in accordance with the client's level of fitness. Stretching exercises

#### Static stretches.

Sometimes, static stretches maybe appropriate in the warm-up, e.g. if the dynamic stretch is too complex for the client to perform whilst maintaining balance and technique, or if the client has a recurring injury or tightness in a particular muscle, it might be recommended to perform a static stretch first.

## Specific warm-ups

### Specific warm-up (resistance training) Light sets

• A light set of resistance exercises is sometimes used to prepare specifically for the main resistance workout.

#### Specific warm-up (CV training)

- Using a CV machine warms the muscles and raises heart rate.
- Certain machines can also mobilise joints and lengthen muscles to the ROM they will extend to during the main workout:
  - Cycling, treadmill and stepper mobilise the lower body (knees, hips and ankles).
  - Rowing and X-trainer mobilise the lower (knees, hips and ankles) and upper body (elbows, shoulders) in specific movement ranges.

Your warm up should first include some activity to raise the pulse. This will (obviously) involve movement and so there will be some mobility within a pulser raiser.

Once the body is warm you can introduce your stretches. Ideally these will be dynamic - though static stretching is not "forbidden"!

There will be times when mobility exercises will transition into dynamic stretches and you will explore this concept on your live training days.