Resistance training – preventing injury

Summary

- Consult with your doctor before beginning a new exercise program.
- Before starting any resistance training make sure you have an assessment and program written for your specific needs. Start slowly and within your capabilities.
- If you're not sure whether you're doing a particular exercise correctly, ask a registered fitness professional, gym instructor or exercise physiologist for help.

Resistance training (also called strength training or weight training) is the use of resistance to muscular contraction to build the strength, anaerobic endurance and size of skeletal muscles. Regular, repeated and consistent resistance training results in stronger muscles.

Resistance training can be dangerous if your technique is not right. Before starting any resistance training make sure you have an assessment and program written for your specific needs. Ensure you follow any medical advice and are shown the exercises by a physiotherapist, exercise rehabilitation professional or registered fitness professional.

Resistance training for beginners

See your doctor before you start any new exercise program, particularly if you are overweight, aged over 40, have a pre-existing medical condition or haven’t exercised in a long time.

Pre-exercise screening is used to identify people with medical conditions that may put them at a higher risk of experiencing a health problem during physical activity. It is a filter or safety net to help decide if the potential benefits of exercise outweigh the risks for you. Ensure you read through the pre-exercise self-screening tool before embarking on any new physical activity or exercise program.

It is important to pay attention to safety and good form to reduce the risk of injury. A registered fitness professional can help you develop a safe, effective program.

Warming up before resistance training

Before doing your strength training exercises, you need to warm up for about five minutes. Stretching and light aerobic exercise are good ways to warm up.

Safety tips for resistance training

Be guided by your doctor or gym instructor, but general safety suggestions include:

- Proper technique is essential. If you’re not sure whether you’re doing a particular exercise correctly, ask a registered fitness professional, gym instructor or exercise physiologist for help.
- Start slowly. If you’re just starting out, you may find that you’re able to lift only a few kilograms. That’s okay. Once your muscles, tendons and ligaments get used to weight training exercises, you may be surprised at how quickly you progress. Once you can easily do 12 repetitions with a particular weight, gradually increase the weight.
- Only use safe and well-maintained equipment. Faulty equipment will significantly increase your risk of injury.
- Don’t hold your breath. Breathe normally while lifting by exhaling during the exertion or harder phase and inhaling during the easier or relaxation phase.
- Control the weights at all times. Don’t throw them up and down or use momentum to ‘swing’ the weights through their range of motion.
- Maintain a strong form while lifting, as this will prevent injury through incorrect technique. Always lift weights...
within your own capabilities and slow down or stop if you feel the weight is out of control or too heavy.

- Use the full range of motion. It is important when lifting a weight that it travels through the full range of motion of the joint. This develops strength of the muscle at all points of the motion of the joint and decreases the chance of injury through over-stretching.
- Wear appropriate clothing and safety equipment such as gloves. Dress comfortably and practically (for example, wear clothes that do not restrict movement and allow you to sweat easily).
- Maintain correct posture and body positioning (form) to reduce the risk of injury at all times.
- Once you have finished a set, gently place the weights on the floor – don’t drop them. Otherwise, you could injure yourself or people nearby.
- Don’t train if you are over-tired or feeling ill.
- Don’t try to train through an injury. Stop your workout immediately and seek medical advice.
- Muscle needs time to repair and grow after a workout. A good rule of thumb is to rest the muscle group for at least 24 hours before working the same muscle group again.

**Safety when using heavier weights in resistance training**

Once you progress to using heavier weights, the basic safety points above still apply. Extra safety measures to remember include:

- Use correct lifting techniques. For example, keep your back straight and lift from your thighs when picking up weights from the floor.
- Work out with a partner. Don’t lift a particularly heavy weight unless you have someone on hand to ‘spot’ you (take the weight when you can’t hold it any more).
- Listen to the advice of your qualified gym instructor or personal trainer, even if you feel that you are experienced enough to know what you are doing. Don’t let ego increase your risk of injury.

**Where to get help**

- Your doctor
- Your local council
- Local gymnasium or qualified trainer
- Qualified gym instructor
- Qualified personal trainer
- Physiotherapist
- ESSA – Exercise & Sports Science Australia Tel. (07) 3862 4122 to find an accredited exercise physiologist
- Smartplay Tel. (03) 9674 8777

**Things to remember**

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- Before starting any resistance training make sure you have an assessment and program written for your specific needs. Start slowly and within your capabilities.
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