

Key Principles OF STRENGTH TRAINING



How to choose between different types of strength training

Lifting weights is generally preferable to training using body weight exercises for gaining maximum muscle strength.

Connecting with a community health centre

Some community health center, aged care groups and caregiver groups run community exercise programs. Generally programs focus on gentle movement and light activities. Consult with your local community centre for current programs, and please discuss with your health professional prior to committing into any new exercise program.

IMPORTANT

Lifting weights is the preferred option for maximum strength benefits.

➤ **Free weights are challenging and can be a great tool for progression; they require greater work from your muscles to stabilise the body.**

Training at home

If you do not have access to a facility that has weights, you can strength train at home. You may need access to basic equipment, such as free weights, elastic bands and cuff weights, which are relatively inexpensive.

If you can't access a gym or purchase equipment for home you can use objects at home to provide resistance. This is the least preferred option, as strength gains and benefits are lower compared to using weights.

IMPORTANT

You can purchase basic equipment for home or use objects at home to provide resistance.



You can push against immovable objects such as a wall, sofa or chair (called an isometric contraction) and you can substitute weights with plastic bottles or containers filled with sand or water.

Isometric contractions are great as supplementary exercises that you can do sitting at your desk at work or while traveling. For some exercises, such as push ups or pull ups, your body weight is sufficient to provide a strong training stimulus.

However, these exercises are difficult for novices, and not always possible due to conditions such as rotator cuff disease of the shoulders.

Selecting which exercises to do

There are some key points to consider when selecting appropriate exercises for your strength program. A well-balanced program incorporates exercises that strengthen different areas of the body and movement in different directions.

ENSURE YOU SELECT EXERCISES FROM EACH OF THE FOLLOWING GROUPS:

UPPER AND LOWER BODY

Choose exercises for both the lower body (legs and hips) and upper body (chest and back).

FRONT AND BACK OF THE BODY

Choose exercises for both the muscles on the front of the body such as chest press or knee extension and the back of the body such as seated row or knee flexion.

SIDEWAYS MOVEMENT

Choose exercises that move your body sideways such as hip abduction or side shoulder raise.

FUNCTIONAL MOVEMENT

Finally choose functional exercises that require your body to work together, just as it does in every day life. Examples are the squat or the seated row.

Rest

Take **2-3 seconds rest between repetitions** to ensure you can maintain correct and safe technique. This is more important as you become tired.

Taking an extra breath and short rest allows your muscles time to regenerate energy to help you perform the next repetition in perfect form.

After you have completed 8 repetitions (also known as 1 set), **rest for 1-2 minutes before starting the next 8 repetitions.**

This is important to ensure you can maintain correct and safe technique. If you do not take a rest you may find your muscles fatigue and you may not be able to continue with correct technique.



YOUR GOAL

To complete 3 sets of 8 reps

with a 1-2 minute rest in between sets.

A Rep = One complete movement of the exercise from start to finish. So 8 reps means you will perform the movement 8 times.

A Set = The number of consecutive repetitions that you complete.

HOW OFTEN

For maximum benefit, do strength training

3 days per week.

Allowing a day off in between training sessions to recover is just as important as training to increase your strength. It is fine to exercise the arms one day and legs on the next day if you find it too tiring or time consuming to do the entire routine during a single session.

Do not exercise the same muscle group two days in a row.

BREATHING

**INHALE before you move
EXHALE as you start to move**

Never hold your breath while strength training.

Count out loud for 3-4 seconds during the repetition.

Intensity

When starting a new exercise, before you add any weight, ensure to test the muscle group by performing 1-2 repetitions through the full range of motion slowly and carefully.

If there is any pain or discomfort when you do this, do not add any weight. Check with an instructor or physician before proceeding further.

If you cannot complete a set of 8 repetitions with no weight because of fatigue, or pain practice until you can. At that point you can begin to add weight, as described below.

IMPORTANT

To start adding weight, select a weight, lift it once, and rate how hard it feels using the **Rating of Perceived Exercise (RPE) Scale** to rate the intensity of the weight you have chosen, keeping it between 15 (hard) and 18 (very hard).

Aim
RPE of
15-18

If it is less than a RPE of 15, select a heavier weight.

Increase the weight by a small amount if the RPE rating is close to 15. Increase the weight by a larger amount if the RPE is lower & the weight feels light.

Starting with a weight that is too light means that it will take a few more sessions to reach your goals.

Starting with a weight that is too heavy could potentially cause injury, so err on the side of safety initially.

<https://homecare.sydney.edu.au>

STRENGTH TRAINING RPE SCALE (Rating of Perceived Exertion)

6	Light/Easy
7	
8	Easy to lift. Can perform 15 repetitions or more without fatiguing
9	
10	
11	Moderate/Somewhat Hard
12	
13	Feels somewhat heavy. Can lift between 11 to 15 repetitions, but no more
14	
15	Vigorous/Very Hard
16	
17	Very heavy. Can perform no more than 10 repetitions
18	
19	MAXIMAL
20	Extremely heavy. Can perform no more than 3 repetitions

TIP

If you are new to weight training, build up to a weight that feels "hard" to lift, but which you can lift 8 times with proper form before having to rest.

Aim to start by working at an RPE of 12 to 14. Once you feel comfortable, increase the weight to work at a harder intensity, with an RPE of 15-18. The exercise should feel difficult, but still doable.

Speed of movement

Perform each movement slowly through the whole range of movement.

Use your muscles to control the movement slowly taking **3-4 counts** to lift and return to the starting position, spending an equal amount of time lifting the weight as you do lowering it.

Progression

As soon as the weight being lifted no longer feels hard to lift, increase the amount of resistance for that exercise following the progression guidelines on the videos and exercise cards for each exercise. The exact amount of increase is different for each person and cannot be predicted in advance.

This is the most important point for effective strength training, to increase strength and prevent loss of muscle mass.

Muscle strength will increase every session by a small amount if you are training properly according to the guidelines. Strength gains occur most rapidly when first starting, therefore it is expected that you can increase the weight by small increments every week.



TIP

After a month, go back and rate the weight you first used when starting, and you will see that it now feels much easier, like a 12 instead of a 16. This is a good way to track your improvement!

TIP

Increasing by small increments each week is preferable to increasing by large amounts intermittently.

Good Form

Always move in a slow and controlled manner.

Never swing the weight or use momentum to complete the lift.

Avoid using compensatory body movements to help you lift the weight. If you are unable to perform the exercise safely following the correct technique as shown in the videos and cards, then reduce the weight or load so you can do it safely.

