

Safety Guidelines for Strength Training

Fitness Australia Exercise Guidelines

Over the past decade, there has been an increase in the use of various strength training methods and activities across the fitness industry in Australia. The increased popularity of activities such as Kettlebells training, Olympic lifting and high intensity/high weight combination programming as well as the use of a variety of activity-specific equipment has created a level of uncertainty regarding the application, safety and suitability of such activities.

To address these concerns and with the aim of enhancing safe and effective practice, Fitness Australia through the REPS Council has developed the following safety guidelines for strength training. These guidelines apply to the adult population. They do not apply to children and/or adolescents under the age of 16 years.

Health Screening

Pre-exercise health screening should be undertaken prior to strength training in order to:

1. Ensure safety for the participant through risk stratification
2. Enable better health outcomes for the participant
3. Educate the participant
4. Facilitate the relationship between the exercise professional and health professionals

Movement Screening

The role of Movement Screening is to ensure that it is safe for the potential participant to participate in the programmed exercise regime, as related to musculoskeletal health. Movement screening will identify how a client can move. The process also facilitates and enhances relationship building between the exercise professional and appropriate allied health professionals and helps to define and delineate relevant professional tasks.

To perform movement screening as a part of their service, registered exercise professionals are to be qualified at a minimum of Certificate IV (Fitness) and should have completed a Fitness Australia approved program in movement screening.

Setting & Space Requirements

Space allocation must:

- a) Accommodate the range of movement required for prescribed exercises

- b) Accommodate other participant space requirements
- c) Allow for correct use of specific equipment
- d) Provide adequate space and protection to avoid potential accidents or falls
- e) Provide safe indoor flooring or safe ground in an outdoor setting

Equipment Selection

Equipment selection must be suited to the exercise and movement capacity of the individual as determined by the movement screen, client/program objectives and the exercise environment. As the capacity of the client increases, the equipment selection can be modified to facilitate greater stabilisation and dynamic movement, hence educating the client to move in a more 'life-like' / functional manner.

Supervisory Ratio

An optimal trainer to client supervisory ratio will depend upon a number of program variables including the client movement and health status, the complexity of programmed movement, the client training age, the delivery setting and the stage of the program. If complex program and client variables are present, a higher trainer to client supervisory ratio will be required.

Programming

Programming parameters such as frequency, intensity, volume, exercise selection and sequencing should be progressed in accordance with the individual client's capacity, health status and training age. This will ensure graduated progression in overall load (with adequate recovery periods), complexity of movements and strength capacity.

Technical demand should be gradually progressed from a base of functional movement patterns (eg: bodyweight squat). If and where necessary, these functional movement patterns may need to be regressed to limited skill isolated movement (eg: a machine based exercise) to cater to various individual requirements. The movement may, where appropriate, be progressed to integrated high skill movement (eg: compound free weight exercises). Exercise sequencing should be applied for clients who undertake ballistic movement and be dependent on a client's training age/capacity and movement screening outcome.