

Help sheet 15:

Structured physical activity programs

Structured physical activity programs are those where the activity is conducted either in a group or individualised program format, under the supervision of a trained exercise leader or therapist (see Help sheet 14 in this Resource Kit for more detail around individualised programs prescribed by physiotherapists).

Group physical activity programs are generally conducted at planned activity groups, community health centres, community rehabilitation centres, neighbourhood houses, gyms and senior citizen centres (amongst other venues). Group physical activity programs may be appropriate for older people who:

- would benefit from the social interaction of a group
- are already attending a centre and would benefit from an increase in their activity levels
- have concerns about exercising in their local environment
- would benefit from the supervision offered by a trained exercise leader or physiotherapist
- have a particular problem (for example, balance) that can be addressed with group exercise (for such people, individualised programs may also be appropriate).

If considering group exercise for frailer older people, a group run by a physiotherapist would be the most appropriate as the physiotherapist can screen for any health problems prior to starting the program and tailor the program to meet the individual's needs.

Group physical activity programs allow older people to socialise.

Strength training (progressive resistance training)

Strength training programs are becoming increasingly popular for older people. Research shows that after the age of 50 years muscle strength decreases by more than 10 per cent each decade. This loss of muscle strength can result in decreased bone strength, decreased function and an increased risk of falls and fractures.

Two systematic reviews have recently reviewed the effects of strength training for older people (Latham et al., 2004; Dodd et al., 2004). The reviews show this form of exercise can result in strength gains for older people and there is some evidence of improvements in performance of everyday activities (for example, stair climbing, walking).

Strength training is of benefit to both frail older people and healthier older people (Evans, 1999; Connelly & Vandervoort, 1995). For some very frail older people an increase in strength may be required (for example, to get out of a chair) before any other form of activities can be performed, such as walking or balance exercises. For such frail people an individualised program should be designed by a health professional or exercise physiologist.

Strength training doesn't necessarily involve lifting weights and using gym equipment. Similar benefits may be achieved by performing functional activities that involve lifting weights, such as moving small garden pots as part of gardening, or performing home-based exercises involving moving body weight against gravity (such as step ups) or elastic tubing (theraband).

People with cardiac problems or a history of high blood pressure should consult their general practitioner (GP) before starting strength training program (see Help sheet 14 in this Resource Kit).

Mr Jackson is an 83 year-old retired teacher. He had always been very independent and enjoyed gardening and writing. He had a history of high blood pressure and neurological problems. He was still managing well when he sustained two nasty falls in quick succession, one in the garden and one at the shops. He became more unsteady on his feet and the falls knocked his confidence; he stopped going out, stopped gardening and became quite frustrated at his loss of independence. He said he 'suddenly felt old'. One day he saw advertised in the paper an ad for 'Pryme Movers' strength training at his local gym and after checking with his doctor he started attending the classes. He immediately enjoyed the challenge of the classes as well as the support from the fitness instructor present. After a few weeks he noticed he felt stronger and more confident. He is again going out, managing his own shopping and doing his gardening (as well as helping his neighbours with their gardens!). He now recommends strength training to everyone he meets, young or old.

No matter what your age or activity level, you can become stronger by exercising your muscles.

Balance training

Balance training is an important component of any exercise program when reducing falls is one of the aims. Balance training consists of performing activities that challenge the person's balance control (for example, reaching forward, stepping one foot onto a step). Such activities may need to be performed under the guidance of a physiotherapist or trained exercise instructor to decrease the risk of falls for those with balance problems. There is good evidence that performing balance exercises can improve a person's balance.

Tai chi is one form of physical activity that has been found to be an effective method of improving balance and reducing falls (Wolf et al., 1996). Tai chi is a gentle form of physical activity, based on martial arts. It involves performing slow controlled movements and is becoming increasingly popular. For more frail older people a less challenging version of tai chi called Tai Chi for Arthritis has been developed (see Help sheet 18 in this Resource Kit for contact details for Arthritis Victoria).

Hydrotherapy (exercise in water)

Hydrotherapy is performing exercises in water, generally in heated pools with the supervision of a physiotherapist or other trained exercise leader. It is a popular form of exercise, especially for people with osteoarthritis. There are some health conditions that preclude people from performing exercise in water, therefore, if a person is planning to start a hydrotherapy program they should consult their doctor or be reviewed by the physiotherapist running the program first.

Other physical activity classes

General exercise or exercise to music classes are a common form of group exercise that often combine flexibility, strength, balance and coordination exercises. These classes are targeted at people of different levels of physical abilities and it is generally best to check with the person conducting the class as to whether the class would be suitable for each individual.

Another form of physical activity is 'Lifeball'. Lifeball is a team game, similar to netball and basketball, that incorporates activities such as walking, passing and throwing to encourage physical movement and teamwork. The game encourages physical activity in older people by involving movement and social interaction. For further information on Lifeball, contact the Positive Ageing Foundation of Australia on **1800 757 555** or via their website www.positiveageing.com.au or email info@positiveageing.com.au

For general health benefits, comprehensive programs that combine moderate intensity endurance activities with other forms of strength, flexibility and balance training and **tailor activities to individual needs and preferences**, will be most successful in terms of health benefit (American College of Sports Medicine, 1998).

For more information

For information regarding physical activity classes in your region, call Kinect Australia on **8320 0100** or the 'Go for your life' infoline on **1300 73 98 99**.

Pryme Movers programs are conducted at YMCAs throughout Victoria. Potential programs are strength training, water aerobics and walking groups, amongst others. For more information contact your local YMCA.

References

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