

GP Fact Sheet: Exercise

Evidence

- Exercise as a single intervention is effective in reducing falls (Gillespie et. al. 2012).
- Meta-analysis has shown that more effective programs include balance training (Sherrington et. al. 2017).
- Successful exercise programs have been home and group-based.



For example:

- The *Otago Strength and Balance* home-based exercise program taught by physiotherapist or nurse: ↓ falls up to **32%** (Campbell et. al. 1997).
- The *LiFE* home-based program taught by a physiotherapist, occupational therapist or exercise physiologist to incorporate simple balance and strength exercises into daily activities: ↓ falls up to **31%** (Clemson et. al. 2012).
- A group based exercise program designed by a physiotherapist, conducted by trained exercise instructors, and included a balance component: ↓ falls up to **40%** (Barnett et. al. 2003).
- Tai Chi: ↓ falls up to **33%** (Voukelatos et. al. 2007).

Key points

- Fall prevention exercise should be offered to the general community as well as those at high risk for falls.
- To protect against falls, exercise should safely provide a moderate to high challenge to balance.
- Lower limb strength training may be included in addition to balance training.
- Fall prevention exercises may be undertaken in home based or group settings. Giving choice may support uptake and adherence.
- Exercise duration and intensity should be tailored to the patient's ability and fitness level. It should be ongoing and progressive.
- Patients who report unsteadiness or are at higher risk of falls should be referred to a health professional for individual exercise prescription. Referral should specify fall prevention.
- Walking training may be included in addition to balance training but high risk individuals should **not** be prescribed brisk outdoor walking programs.

Referral and patient resources

- Fall prevention exercise program options in NSW can be searched using the Active and Healthy website: www.activeandhealthy.nsw.gov.au.
- For patients requiring individual exercise prescription, a physiotherapist or exercise physiologist can assess gait and balance, design an individually-tailored program, provide one-on-one progressive exercises and recommend correct use of assistive devices.
 - Australian Physiotherapy Association: [Find a physiotherapist](#) (treatment: gerontology or musculoskeletal)
 - Exercise & Sports Science Australia: [Find an exercise physiologist](#) (specialty: older adult)
- Some occupational therapists may be trained in fall prevention exercise programs.
- A podiatrist or physiotherapist can advise on foot and ankle exercises (see foot pain).

Patient resources

- Example [balance exercises](#) in Staying Active and On Your Feet booklet www.activeandhealthy.nsw.gov.au.
- Patient fall prevention resource: [Staying Active and On Your Feet](#) (NSW Active and Healthy website www.activeandhealthy.nsw.gov.au).
- Patient education leaflet: [Falls Prevention – Strength and Balance Exercises](#) (click [here](#) for other patient flyers on the NSW Clinical Excellence Commission website).
- [LiFE \(Lifestyle-integrated Functional Exercise\) program to prevent falls: participant’s manual](#) (Sydney University Press).

References

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