

Exercise and Bone Health

Exercise plays an important role in maintaining bone health throughout life with particular focuses at certain stages:

- Maximising bone growth throughout childhood and adolescence, particularly the growth spurt during puberty
- Enhancing bone and muscle strength during adulthood, including old age
- Optimising muscle strength and maintaining mobility and balance to avoid falls in later life

Research has demonstrated that when it comes to our bones not all exercise is equal. Bones benefit from controlled impact and muscle loads, meaning specific types of exercise are required to benefit bones. Exercise is also important to retain mobility and prevent falls.

Specific Types of Exercise

A combination of weight-bearing, resistance and challenging balance exercises are recommended for bone health.

For adults with diagnosed osteoporosis (including adults recovered from a fracture) a supervised exercise program working with a physiotherapist or exercise physiologist is recommended. Exercise professionals will accommodate other medical or physical limitations (for example a knee, shoulder or back issue) when developing an exercise routine for your bone health.



Weight Bearing Impact Exercise

Exercise done on your feet while you bear your own weight and land rapidly and firmly. Examples: jumping, jogging, skipping, stair climbing, as well as specific sports (for example basketball, netball, dancing, impact aerobics).



Resistance Training

Requires the movement of weight, best achieved with gym equipment. This training should progress in intensity over time.



Balance Training

For older Australians balance training is very important to reduce falls (which can lead to fractures). To be effective, exercises should progress to high challenge (ie: be difficult to do while maintaining balance). Balance training can improve balance in older adults living at home or in residential care. Balance exercises typically include:

- Static exercises (standing on one leg, standing tall raising arms, standing heel-to-toe with one foot in front of other)
- Moving exercises (walking in small circles, walking with sudden change of direction, stepping over obstacles, walking on toes, walking with arms raised above the head)
- Dual task exercises (standing on one leg while throwing and catching a ball)

Tips for Exercise

Any exercise program should start at your level of capacity and build over time. This combination of exercises must be regular and ongoing to provide a benefit to bones. A lack of exercise or a sedentary lifestyle can have a negative impact on bone health. Age is not a barrier.

For more information see the Healthy Bones Australia Exercise Guide available from the 'Resource Hub' (in the Fact Sheets section) on the Healthy Bones Australia website www.healthybonesaustralia.org.au

To find a physiotherapist or exercise physiologist visit the 'Find a Service' page (scroll to bottom of page) on the Healthy Bones Australia website www.healthybonesaustralia.org.au

Supervised Exercise Program – Healthy Bones Australia has aligned with an accredited exercise program called ONERO. This training approach is based on research studies conducted in women and men with osteoporosis. Exercise professionals must complete a certified training program to deliver ONERO training to members of the public. To find an ONERO Accredited Practitioner near you visit: <https://onero.academy/locations/>

Note: the ONERO Academy program is accredited by Exercise and Sport Science Australia and was developed by Professor Beck of Griffith University.



For more information

Call our toll-free number
1800 242 141



Visit our website
healthybonesaustralia.org.au

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