INFORMATION
HANDOUT
for members & clients

Exercise your bones

Regular weight-bearing exercise helps build up bone mass in young people and helps maintain your bone strength during adulthood.

The great thing is, it is never too late to start exercising, and with the right program your bones will thank you! For those who already exercise, it is important that your program includes exercises that are important for bone health. It is very easy to adjust your program to include 'osteogenic' (or bone building) exercises: here are some pointers:

- People with medical conditions or those who have not been exercising regularly should consult a doctor before starting any exercise program. A physiotherapist or exercise physiologist with expertise in dealing with special populations can provide advice on the most suitable and safe forms of exercise for you.
- Weight-bearing exercises that are moderate to high impact and weight training are the key osteogenic exercises. Therefore, activities that involve lifting weights, running, sprinting, jumping and skipping are ideal. In contrast, low impact activities, like swimming and cycling, are beneficial for cardiovascular health and weight control but will not promote bone formation.
- Good bone building activities include:
- strength training or resistance-training programs
- jogging/running
- jumping
- dancing
- tennis
- volleyball
- brisk or power walking
- Ease into your new exercise program slowly, and progress gradually with supervision from a qualified exercise specialist.
- Physical activities that are short in duration but high in intensity will tend to build bone most efficiently (i.e., short sprints rather than a long, slow jog).
- Two short exercise sessions separated by eight hours are better than one long one.
- For bone health, if exercise time needs to be reduced, it is better to reduce the length of each session rather than the number of sessions per week.
- In older adults and the elderly exercise that improves posture and balance will help prevent falls and reduce the likelihood of suffering a bone fracture. The best approach here is to improve muscle strength and undertake specific balance and co-ordination exercises.
- Maintain a balanced, healthy diet and lifestyle. Ensure your calcium and vitamin D intake is sufficient, as both are required for building and maintaining bone mass. Avoid smoking and excessive alcohol intake as this can contribute to bone loss. Improving your lifestyle factors (i.e. exercise and diet) alone cannot prevent osteoporosis; for some individuals medications may be required to keep bone loss in check.

When considering bone health, it is actually possible to exercise too much, so your program should be tailored to suit your individual needs. Consider these important facts:

- Women and teenage girls who exercise to an extreme degree can develop amenorrhea (cessation of menstruation) due to oestrogen deficiency. Oestrogen deficiency in younger women contributes to bone loss, in much the same way that oestrogen deficiency after menopause does.
- Preoccupation with excessive exercise may go hand in hand with eating disorders, such as anorexia or bulimia. The loss of essential nutrients associated with these disorders has a harmful effect on bone, and in anorexics, extreme body thinness often results in amenorrhea.
- Both male and female athletes who undertake excessive exercise without adequate caloric intake are at heightened risk of osteoporosis. Athletes who train hard while trying to keep their weight below a certain level for competitive reasons are at particularly high risk.
- Excessive exercise can result in stress fractures or joint damage.
- The elderly and those who already have osteoporosis can put themselves at risk of fracturing if they suddenly begin a strenuous exercise regimen. Consult a general practitioner first and work with an exercise specialist to design an exercise program that is suited to your functional ability.
- Exercise regimes should be tailored to each individual's own abilities and circumstances. Be particularly careful if you have already had a fracture and avoid exercises or sports that might increase the likelihood of falling. ◆

For more information about osteoporosis you can visit the Osteoporosis Australia web site www.osteoporosis.org.au or phone Osteoporosis Australia on 02 9518 8140.