



## Osteoarthritis Exercise Group

While you may worry that exercising with osteoarthritis (OA) could harm your joints and cause more pain, research shows that people can and should exercise when they have osteoarthritis. In fact, exercise is considered the most effective, non-drug treatment for reducing pain and improving movement in patients with osteoarthritis. Exercises can be prescribed to facilitate weight loss, preserve joint range of motion, improve strength, improve functional performance, and reduce symptoms. It is important to individualize exercise therapy for hip or knee OA, particularly considering individual patient preference, and ensure that adequate advice and education to promote increased physical activity is provided.

**Knee OA:** Quadriceps weakness is common among patients with knee OA, in whom it had been believed to be a manifestation of disuse atrophy which develops because of unloading of the painful extremity. Strengthening of the Quads lead to a reduction in pain and improvement in function.

**Hip OA:** Finnish studies showed a 30% reduction in pain after completing a targeting evidence-based exercise program for Hip OA, while another found decreased pain and improved mobility when compared to placebo and non-treatment groups.

**Shoulder OA:** Less research, however Strength and aerobic exercise can possibly alleviate symptoms, control pain and restore function.

Current public hospital waiting time for knee replacement is 223 days (approx. 7.5 months) and hip replacement is 120 days (approx. 4 months). Gosford Hospital is up to 12 months, so doing regular exercise while you are waiting can help your recovery afterwards!

Weight gain is prevalent after joint replacement surgery, recent 2021 study demonstrated that a weight loss program prior to joint replacement surgery kept weight off 12 months post operation (and some did not end up needing the replacement at all).

A loss of 5kg in bodyweight reduces the amount of pressure on knees by up to 4 times.

Our classes are suitable for individuals with any diagnosis of osteoarthritis.

### **Diabetes Education and Exercise Program**

Regular exercise is important for managing and living with Diabetes. It has been shown to improve Blood Sugar Levels both acutely and long term, as well as improve with other health conditions. The more physically active you are, the greater the health benefits will be. The greatest benefits in regards to type of exercise is a combination of Aerobic and Resistance exercise.

Education throughout the sessions will build your understanding of the effect exercise has on the body and how to manage food consumption, exercise and blood glucose levels effectively. The role of social support for exercise adherence and management of health conditions is well documented. The group creates a fun and supportive environment to share experiences and learn from others managing a type 2 diagnosis.

Participants have achieved an average decrease of 2 mmol/L in their blood glucose levels and an average reduction of 2% body fat over the program. Individuals in the program also improved in strength, cardiovascular fitness, balance and flexibility.

Resistance exercise demonstrates a more significant reduction in blood sugar than aerobic exercise

Studies show 2 exercise sessions per week of supervised resistance exercise demonstrate the optimal volume of exercise for reducing blood sugar.

A 6-week block of exercise is minimal required to demonstrate any significant changes in Hba1c results, with 2 sessions per week.

Research has also shown that people with type 2 diabetes who reduce their blood sugar level by 1% are:

- 19% less likely to suffer cataracts
- 16% less likely to suffer heart failure
- 43% less likely to suffer amputation or death due to peripheral vascular disease

Our classes are suitable for individuals who have been Diagnosed with Type 2 Diabetes and a referral is required by their GP for “Group Allied Health Services under Medicare” for sessions to be rebated, although private paying participants are also welcome and can access rebates under their health fund.

### **Falls Prevention Exercise Class**

Every year, one in every three people over the age of 65 fall and as a person ages the risk of falling becomes even greater. The majority of hospitalisations for older people are due to falls. The risk of falling in older adults is usually related to combination of factors, including:

- Balance and/or walking problems. Balance can be affected by vision changes, vestibular problems and altered sensation in the feet.
- The use of multiple medications. Studies indicate that when individuals take five or more medicines, the risk of falls increases.
- Home hazards (including dim lighting and trip hazards)
- Positional low blood pressure (such as orthostatic hypotension, when blood pressure drops upon standing)
- Feet and footwear issues

Falls often occur in the bathroom when sitting or standing from the toilet or shower, or at night in a dark bedroom when getting up quickly and tripping on the way to the bathroom.

Numerous studies and evidence demonstrate that falls prevention exercises, including balance and strength training reduce falls risk. It is recommended that exercise programs are designed or delivered by a trained professional, such as a physiotherapist or exercise physiologist. This will ensure the exercises are challenging yet safe for older adults to do.

Education is provided throughout the program on ways to improve balance at home and reduce risks of falls. This is both in an exercise setting and safety measures to reduce the likelihood of a fall at home or out in public.

Falls Prevention Classes work for reducing falls through evidence-based practice. It also provides a reason for people to get out of the house and mobilise throughout the day as a sedentary lifestyle can lead to muscle atrophy and weakening, increasing the risk for a fall. Reducing falls risk will reduce the likelihood of hospitalization due to a fall and improve quality of life. Exercise can slow the rate of bone loss, reducing the risk of a fracture from both falls and Osteoporosis.

Our sessions are suitable for anyone with reported issues with balance and/or fear of falling, history of falls, Osteoporosis, age over 55.