

OSTEOARTHRITIS & EXERCISE

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Osteoarthritis (OA) can be a very debilitating condition. It is characterized by joint pain, swelling, weakness around the affected joint, and a lack of flexibility and balance. These impairments may lead to weight gain, a decline in functional mobility and reduced quality of life. There are a number of avenues that can be taken to combat the effects of OA. The purpose of this handout is to address the beneficial effects of exercise as it relates to OA.

The primary aims of an exercise program for an individual with OA are:

- **Reduce pain**
- **Increase flexibility and joint mobility**
- **Increase strength**
- **Improve balance**
- **Improve cardiovascular fitness (ability to walk etc.)**
- **Improve functional strength (ability to climb stairs, squat etc.)**
- **Improve general quality of life**

The benefits of exercise depend on the severity of the OA. An individual with mild to moderate OA may respond better to an exercise program than someone with severe OA.

An exercise program should incorporate strengthening exercises for each joint, general overall strengthening, flexibility exercises and functional exercises. It is very important to increase the difficulty of all components of the program as they become too easy. It is recommended that the program be based on the specific symptoms (ie., pain, weakness), and function (ie., unable to climb stairs). The reported effects of a thorough OA exercise program include: **decreased joint pain, increased function, increased energy levels and increased physical mobility.**

Studies have shown that exercises such as yoga, T'ai Chi, walking and running in water provide beneficial effects such as decreased pain and joint tenderness, and improved function and cardiovascular fitness for individuals with OA.

The success of a strengthening and cardiovascular program for those with OA is dependent upon compliance to the program and appropriate progression of the program. That means that the exercises must be completed regularly and must be challenging for the person performing the exercises. Studies indicate that the right program can lead to improvements in pain, joint tenderness, swelling and weakness associated with OA. The program should include strengthening exercises specific to each joint, combined with flexibility, functional exercises and aerobic exercise. If this program is not followed regularly, the positive effects will **not** last. Other studies have shown that a thorough home exercise program is important in the management of OA of the knee.

Some exercises can further aggravate or damage the joint affected by OA. It is recommended that those with OA perform an exercise program designed by a trained professional such as a registered physiotherapist or certified athletic therapist.

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Michelle Bogias, BPE, BHSc(PT), is a registered physiotherapist and certified pilates instructor who has developed her interest in sports physiotherapy through her work as a physiotherapist in KW and Cambridge since 1996. Since 1996 she has gained extensive post graduate training in orthopaedics and also practices acupuncture. Michelle is a certified pilates instructor (*Stott Pilates*) and teaches pilates at GRSM and in the community.