

# health & wellbeing special

## OSTEOARTHRISIS

### DIET AND EXERCISE IN OSTEOARTHRISIS

**ARTHRITIS** is a general term that means inflammation of the joints. Osteoarthritis (OA), commonly known as wear and tear arthritis, is the most common type of arthritis. It is associated with a breakdown of cartilage in the joints and can occur in almost any of the joints in the human body.

It commonly occurs in weight-bearing joints: hips, knees and the spinal column. It also affects the fingers, thumbs, neck and big toe.

Cartilage is a firm, rubbery material that covers the ends of bones of the joints. Its main function is to reduce friction and serves as a "shock absorber". The shock-absorbing quality of normal cartilage comes from its ability to change shape when compressed (flattened or pressed together).

OA causes the cartilage in a joint to become stiff and lose its elasticity, making it more susceptible to damage. Over time, the cartilage may wear away in some areas, greatly decreasing its ability to act as a shock absorber. As the cartilage deteriorates, tendons and ligaments stretch, causing pain. If the condition worsens, the bones could rub against each other.

Symptoms of OA most often develop gradually and include: pain in the joint, especially with movement; pain after overuse or after long periods of inactivity; stiffness after periods of rest; bony enlargements in the first and second joints of the fingers (which may or may not be painful); and joint swelling.

OA is usually treated with a combination of treatments which include exercise, weight loss if needed, medications, physical therapy with muscle-strengthening exercises, hot and cold compresses on the painful joint, removal of fluid in the joint,

medication injected into the affected joint, and the use of supportive devices such as crutches or canes.

Surgery may be helpful to relieve pain when other treatment options have not been effective. The type of treatment will depend on several factors, including age, activities and occupation, overall health, medical history, location of the OA, and severity of the condition.

When a plan to tackle knee OA is decided, the power of food should not be overlooked. There's no specific diet for the treatment of this problem, but benefits can be gained by eating correctly. Keeping weight under control will build strong cartilage and reduce some of the inflammation. A major diet overhaul is not necessary, but a few simple steps will keep the joints happy:

- Reducing the number of calories
- Adding more fruit and vegetables to the diet
- Adding omega-3 fatty acids (some of the best sources of omega-3 are trout, salmon, mackerel, herring, tuna, and sardines)
- Using olive oil in place of other fats
- Adding vitamin C to the diet.

**“Gentle exercises, such as swimming or walking on flat surfaces, are recommended”**



Exercise is important to improve joint movement and to strengthen the muscles surrounding the joints. Gentle exercises, such as swimming or walking on flat surfaces, are recommended as they are less stressful on the joints. Avoid activities that increase joint pain, such as jogging or high-impact aerobics. Exercises that strengthen the muscles reduce pain in patients with OA, particularly with OA of the knees.

The following must be taken into account:

- Discuss exercise plans with your doctor
- Start with supervision from a physical therapist or qualified athletic trainer.
- Apply heat to sore joints (optional; many people with arthritis start their exercise programme this way)

- Stretch and warm up exercises
- Start strengthening exercises slowly with small weights (a 0.5kg or 1kg weight can make a big difference)
- Progress slowly
- Use cold packs after exercising (optional; many people with arthritis complete their exercise routine this way)
- Add aerobic exercise

Consider appropriate recreational exercise. Fewer injuries to joints affected by arthritis occur during recreational exercise if it is preceded by warming up, strengthening and aerobic exercises that get your body in the best condition possible.

Ease off if joints become painful, inflamed or red, and work with your doctor to find the cause and eliminate it.

Choose the exercise programme you enjoy most and make it a habit.

Most experts agree that if exercise causes pain that lasts for more than one hour, it is too strenuous. People with arthritis should work with their physical therapist or doctor to adjust their exercise programme when any of the following signs are noticed: unusual or persistent fatigue; increased weakness; decreased range of motion; increased joint swelling and continuing pain (pain that lasts more than one hour after exercising).