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Your Journey With Arthritis...Now Gets Easy



Moderate-to-severe knee osteoarthritis



My knee pain seems to be getting worse by the day... Is there any specific diet that can help me?



A healthy, well-balanced diet is essential for good health. It is even more important for a person with osteoarthritis (OA) to have a balanced, nutritious diet. Although no specific diet is recommended for patients with OA, they can benefit by healthy eating habits. Following are a few benefits of healthy eating habits in patients with OA:

- Aids in weight management
- Builds strong cartilage
- Reduces inflammation

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Recently, the so-called **anti-inflammatory diet** has been recommended for patients with OA. This diet consists of:

- Fresh foods that are processed as little as possible; replace fast food and processed foods with fruits and vegetables
 - All fruits and vegetables, except onions and potatoes
 - Strawberries, gooseberries, blueberries and raspberries
 - Dark green and orange-coloured fruits and vegetables such as apricot, carrot, pumpkin, spinach and broccoli
 - Cabbages of all types
 - Soya foods including soya beans and tofu
 - Tea including green and black tea
 - Moderate quantities of dark plain chocolate (Beware!! increased consumption translates into higher calories!!)
- Foods containing omega-3 fatty acids such as olive oil, canola oil, grapeseed oil, flax seeds, walnuts and walnut oil, pumpkin seeds and fatty fish such as mackerel, salmon, sardines and herring
- Low-fat or fat-free dairy products such as milk, cottage cheese and yogurt, instead of eggs, red meat and butter
- Spices such as ginger, curry leaves, turmeric and rosemary
- Avoid foods high in saturated fats and trans fats such as commercially prepared cakes, pastries, take-away meals and fried foods
- Reduce intake of foods rich in omega-6 fatty acids such as sunflower oil and animal fats and foods prepared in them. Remember that evening primrose oil supplements are rich in omega-6 fatty acids!
- Avoid highly refined carbohydrates such as white bread, white rice and pasta; instead, use whole-wheat flour and brown rice

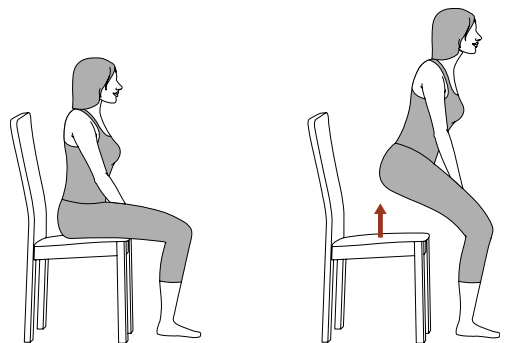


Although nutritional supplements such as glucosamine and chondroitin may ease the symptoms of OA in some patients, scientific evidence for their use in all patients is lacking. However, they are not known to cause any adverse effects. Always consult your doctor before taking any of them.

I am already in so much pain... How can I get more exercise? Wouldn't it hurt more?

Regular exercising provides dual benefits, firstly, by improving knee function and, secondly, by reducing pain and disability. Aerobic exercises, muscle-strengthening exercises, water and physical therapy-based exercise modules have shown to benefit patients with OA. Physical activity will only help to build more endurance and strengthen the muscles around the joints. Stronger muscles help in stabilising the knees. However, only gentle exercises are recommended. One must involve in activities that are gentle on the knees, such as walking, cycling or swimming.

Modified squats: For some people with knee OA, exercises that need bending the knee deeply may be painful. Such individuals may try this exercise. Stand in front of a chair with a straight back rest. Slowly squat as though trying to sit on the chair. Make sure not to project the knee beyond the ankles. Stop if there is pain. Start with 5 such squats 3 times a week and slowly increase to 10.



High-impact exercises must be avoided completely. These include:

- Running and jogging
- Jumping a rope
- Aerobics
- Activities in which both feet have to be off the ground

Important: Always get your doctor's approval before beginning any exercise routine!

My doctor has advised me to lose some weight. How do I effectively manage my weight?

Every half a kilogram (1 lb) weight gain can exert 4 times additional pressure on your knees.

Even in case of severe OA, the treatment success rate increases if the extra weight is lost. One may lose extra weight by following a healthy, balanced, low-calorie diet combined with regular exercise.

Aquatic exercises done in a pool may be beneficial as the body floats in the water removing the load on the joints and muscles, particularly when done in a heated pool.

Walking also aids in weight reduction. Walking on a surface such as grass would help in preventing damage to the joints and tendons.

Yoga, pilates and tai chi can also potentially help in weight management as well as in reducing pain and strengthening the core muscles.



What can I do to reduce my pain and stiffness and also improve my limitation of activity?

The following tips will help you in reducing pain and stiffness and also improve the limitation of activity:

Weight Loss: Losing weight helps improve the quality of life and perform better in activities of daily living.



Exercise: Regular exercising helps not only in relieving pain and stiffness but also in strengthening the muscles and stabilising the joints.



However, it may be difficult to exercise while in pain. Hence, low-impact exercises, such as water aerobics, walking and cycling, must be attempted after obtaining approval from your doctor.

Hot and cold compress: Applying a cold compress helps to reduce pain and inflammation, particularly after exercising. However, ice packs should not be applied directly on the skin for more than 20 minutes at a stretch. Also, applying a small heating pad or immersing the affected joint in a warm water bath for a few minutes before exercising helps in reducing joint stiffness, making it easy to move.

Painkillers and supplements: Depending on your pain and the condition of your joint, your doctor may prescribe painkillers to help reduce pain and inflammation. However, one must avoid overusing them, as prolonged use may result in unwanted side effects. Sometimes stronger painkillers may also be prescribed, depending on the severity of pain. Dietary supplements such as chondroitin and glucosamine may be helpful in some patients, but there is not enough scientific evidence for their efficacy.



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Knee braces and splints: In patients with moderate-to-severe pain, use of knee braces helps reduce the load on the knees while walking. They stabilise the knees and support them.

Physical therapy: A physical therapist can help by advising on the right exercises to strengthen the muscles and improve the range of motion.





My doctor says knee replacement will help me ... but do I really need knee replacement?

Stages 3 and 4 knee OA are considered to be moderate and severe OA, respectively.

Patients in stage 3 knee OA or moderate OA will experience increased pain more frequently even while walking, running, kneeling or even bending. People may develop joint stiffness after sitting for long periods of time or in the morning on waking. Swelling in the joints may be observed after long walks too. In this phase of OA, the usually prescribed painkillers may not be effective in reducing pain. Treatment options in this stage, along with the conservative options of physical therapy, weight loss, topical analgesics and painkillers, can potentially include:

- 1. Steroid injections:** Cortisone injections may be given near the affected joint. Effects last up to 2 months. One must consider this option carefully as repeated steroid injections may result in joint damage.
- 2. Narcotic medications:** Over-the-counter painkillers may not provide much relief at this stage; hence, the physician may prescribe narcotics such as codeine, oxycodone and propoxyphene. These are used only for short-term pain relief, as there is a risk of tolerance and dependence.
- 3. Viscosupplementation:** Individuals who do not respond to any of the above options may be managed with hyaluronic acid injections within the affected joints. Three to five injections may be given within the joint over a period of 3-5 weeks. Single-dose injections are also now available. It may take up to several weeks for the viscosupplementation to show an effect and the symptom relief may last up to 6 months.

Individuals in stage 4 knee OA experience severe pain and discomfort while walking or even on slight joint movement. There is almost complete destruction of cartilage and

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literally no synovial fluid within the joint, leading to joint stiffness and immobility. Surgical management is often the treatment of choice for such patients. Various options include:

- 1. Osteotomy or bone-realignment procedures:** The surgeon cuts the bone above or below the joint to lengthen, shorten or change the bone alignment. This procedure shifts the body weight away from the part of the bone undergoing maximum damage.
- 2. Total knee replacement, or total knee Arthroplasty:** This is often the last option for managing OA. During this procedure, the entire knee joint is removed and is replaced with a plastic or metal device. Recovery may take several weeks, often requiring intensive physiotherapy.

If the knee pain and limitation of motion persists despite all other conservative approaches, knee replacement could be the best option. Knee replacement not only reduces pain but also improves mobility.



Partial knee replacement



Total knee replacement

Knee replacement involves removal of either a part of the diseased knee joint or the complete joint that is then replaced with an artificial joint, which may be made using metal or plastics. Although it may take many months for complete recovery, it is still beneficial as the effects of the surgery last for several years to a lifetime.

Knee replacement may be the treatment of choice when there is:

- Severe knee pain that hinders daily activities
- Moderate-to-severe pain while resting either during day or night
- Instability of the knee joint
- Long-term inflammation and swelling that does not subside with rest and medications
- Deformed knees, both bowlegs and knock knees
- Knee stiffness that does not allow bending or straightening of the knee
- No relief in pain with medications, exercise or other non-surgical means

There are several factors involved in assessing the treatment of joint pain including condition of the joint, pre-existing conditions, activity level and type of arthritis. Your doctor will provide a treatment recommendation on the basis of the above-mentioned factors and more.

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