

Diet for weight loss

There is currently no definitive evidence to say that certain foods help with osteoarthritis however they are low risk alternatives. The arthritis research UK website suggests that selenium may be linked with the slowing of the progression of OA however supplements are not as effective as food alternatives. A balanced diet to include vitamins, omega-3, calcium, and 5 daily portions of fruit and vegetables is recommended. Obesity is a risk factor for the development and progression of OA particularly in the knee and there is evidence to suggest that weight loss can be effective in managing symptoms. For advice on a healthy lifestyle the following links may be of interest;

<http://www.nhs.uk/Livewell/healthy-eating/Pages/Healthyeating.aspx>

<http://www.bda.uk.com/foodfacts/osteoarthritis.pdf>

Evidence for exercise

Exercise programmes have been shown time and again to improve both pain and function¹ for sufferers of osteoarthritis or deconditioning of the knees and associated musculature. Knowing which exercises can be a minefield, here is some useful up-to-date guidance.

- Tai Chi or exercises involving coordination, stretching or balancing exercises have demonstrated some benefit.
- Walking has an effect.
- Moderate benefit on physical function can be achieved when general lower limb strengthening and aerobic exercises are adopted.
- The largest benefit can be achieved by strengthening quadriceps (thigh) muscles, this has been shown in as many as 10 studies.

Where, how or with whom the exercise programme is delivered also has an effect. Exercising in a group session has been shown to have a greater benefit than a home exercise programme.

Exercising under supervision also has a greater benefit. Importantly, be reassured that any type of exercise programme that is done regularly, can improve pain and physical function related to knee osteoarthritis or deconditioning in the short term. Physiotherapy can be of benefit in the treatment of osteoarthritis and guidance of exercise. You will need the referral from your GP or consultant to access the physiotherapy service. See below for link to exercises for your knee

<https://www.poole.nhs.uk/a-z-services/t/therapy-services/therapy-outpatients/patient-information-leaflets/hip-information-leaflets.aspx>

Medication

Primary medication may include paracetamol and anti-inflammatory creams. Topical anti-inflammatories (creams) have been found to have fewer negative side effects than pills.

Capsaicin cream may also be helpful.

If these options are insufficient, consider:

- Opioids are not suitable for everyone and require monitoring.
- Non-selective NSAIDs/COX-2 inhibitors, e.g. Naproxen may require stomach protection drug known as a PPI, there could be a small risk of gastro-intestinal bleed or ulcers, additionally these may interfere with other drugs action eg aspirin. See GP for further advice.

Medication Intra-articular cortico-steroid injections

If you are struggling with moderate to severe knee pain from your knee then it may be appropriate for your knee to be injected with a corticosteroid for short term relief of your symptoms. Research has shown this to be an effective measure for settling symptoms (1-4 weeks), but this can be significantly longer. However, it should be carried out by an appropriately trained health professional (ESP, GP or Orthopaedic consultant). Normally you **should not** receive more than 3 injections to your knee within a 1 year period and if you are still experiencing symptoms despite these then it may not be the most appropriate form of treatment for your knee. Please refer to the Arthritis Research UK website for further information on osteoarthritis of the knee and local steroid injections:

<http://www.arthritisresearchuk.org/arthritis-information/conditions/osteoarthritis-of-the-knee.aspx>

<http://www.arthritisresearchuk.org/arthritis-information/drugs/local-steroid-injections.aspx>

Glucosamine

It is a naturally occurring substance found in joint cartilage and joint fluid. It is available as a supplement to maintain joint health. Strong evidence to support the use of Glucosamine is scarce but some favourable results have been reported. For best results take 1500mg + 1200mg of Chondroitin, available in your local chemist.

Acupuncture

Acupuncture may be offered as an adjunct to standard physiotherapy treatment in an attempt to reduce pain. As current evidence does not conclusively support this modality, your therapist will only offer this treatment if they feel it is appropriate as part of your care.

References

1. Fransen M, McConnell S, Harmer AR, Van der Esch M, Simic M, Bennell KL. Exercise for osteoarthritis of the knee. Cochrane Database of Systematic Reviews 2015, Issue 1. Art. No.: CD004376. DOI: 10.1002/14651858.CD004376.pub3
2. Fernandes L, Hagen KB, Bijlsma JWJ, et al. EULAR recommendations for the non-pharmacological core management of hip and knee osteoarthritis. Ann Rheum Dis 2012;202745 24/3/13 ONLINE doi:10.1136/
3. NICE clinical guideline 177. Osteoarthritis: Care and management in adults February 2014. ISBN: 978-1-4731-0426-6 guidance.nice.org.uk/cg177

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