

Running with Osteoarthritis

With the beautiful surrounds of the Northern Beaches at our doorstep, we have a very active demographic and recreational running is one of the leading choices for exercise. Running is loved by millions around the world for its proven health benefits, but once someone receives a diagnosis of osteoarthritis (OA) in the knee or hip joints there is often mixed messaging surrounding the best course of action to take. This may cause them to hold back from exercising in the manner they wish. We are often asked the question “Should we be continuing to run with arthritis?”. So let’s take a look at some of the best available evidence.



Essentially, the answer is yes! You can continue to run with arthritis, but the answer is not always so clear cut. There is good evidence to say that long-distance running can be healthy for the knee joints, and there is no strong evidence to show that runners have increased levels of joint degeneration compared to non-runners. Studies have followed both runners and non-runners alike longitudinally and found that when taking radiographs over a period more than 10 years, the runner’s knees did not show greater signs of OA or degeneration of the joint. This is despite a longstanding narrative that anyone with OA should quit running to preserve what is left of their cartilage.

There have also been studies finding that self-selected running has helped to improve pain in those over 50 years of age with OA rather than increase it. These results did allude to the fact that sessions were likely less intense and shorter than they once may have been.

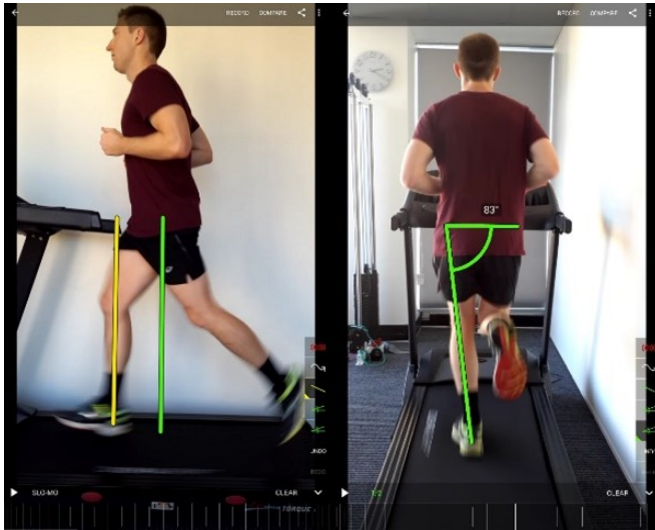
This is not to say that every single person with OA will be able to run without pain, but it is certainly not the definitive end to your running career that you might have thought! There are many strategies to help minimise the risk of running-related

injuries when someone has underlying osteoarthritis, such as:

- **Building your running from a pain-free baseline** - Often runners can get frustrated if every run is painful to some degree. Central to removing these frustrations is finding that nice baseline which is a pain-free run of a specific distance. This can then be gradually progressed to longer and faster runs.
- **Reduce overall loads where necessary** - Reducing the overall load is the easiest and often first parameter that runners experiencing pain can change safely. Examples include reducing weekly kilometres or speed of runs. It also may be just being more strict with having rest days between runs. Those with OA may also need to look at total volume in general, as your knees may not cope with the past weekly mileage that you have been used to.



- **Resistance training** - Strength training has been proven not just to help alleviate pain in osteoarthritic knees, but also improve running performance. Strengthening all key muscle groups around the knee including gluteals, quadriceps, hamstrings and calf muscles will help to build resilience around an osteoarthritic knee
- **Footwear** - Having good cushioning is important in runners with OA. As a guide the shoe should be very comfortable and those runner's with some joint degeneration are advised to probably avoid minimalist running shoes. Also critical is changing shoes when they are losing support. Around the 600-800 km mark is commonly found to be the period athletes find their shoes become less comfortable.



- **Running retraining** – Key in the development of running-related pain is excessive loading in the joints/muscles/ligaments. In an osteoarthritic knee in particular, the joints are more vulnerable to increased loads. Retraining of a runner's gait pattern can often help reduce these excessive forces and shift load, which can be an effective long-term strategy.
- **Keep adapting!** – As the capacity of the injured runner increases, the goals of the rehabilitation consistently change with them. There is no recipe or fixed timeline that will work across the board for every runner, but with a positive approach and clearly laid out goals you will find you are starting to enjoy your running again.

Article by Kieran Watson

Chakravarty, E., Hubert, H., Lingala, V., Zatarain, E., & Fries, J. (2008). Long distance running and

knee osteoarthritis. A prospective study. American Journal of Preventive Medicine, 35(2), 133-138.

Lo, G., Musa, S., Driban, J., Kriska, A., McAlindon, T., Souza, R., . . . Suarez-Almazor, M. (2018).

Running does not increase symptoms or structural progression in people with knee osteoarthritis: Data from the osteoarthritis initiative. Clinical Rheumatology, 37(9), 2497-2504.

Timmins, K., Leech, R., Batt, M., & Edwards, K. (2017). Running and Knee Osteoarthritis: A

