

FOSTAR (Fish oil in osteoarthritis) Study

Summary (in lay language):

Knee osteoarthritis (OA) affects about 30% of Australians over the age of 65, but also at younger ages. It causes joint pain and stiffness, especially on exercise. The cause is unknown but it results in loss of joint cartilage. There are few treatments available to stop the progression of osteoarthritis, which can finally result in need for an artificial joint. Most treatments such as paracetamol and non-steroid anti-inflammatory drugs (NSAIDs) reduce pain but have no effect on cartilage. NSAIDs can have serious side effects such as stomach ulcers and increased cardiovascular events (such as heart attacks). Fish oil has possible benefits in OA as it decreases pain and inflammation in rheumatoid arthritis (RA, another type of arthritis with joint inflammation and swelling), less use of NSAID in patients with RA, and in laboratory experiments may reduce cartilage breakdown in OA. It is likely that fish oil will have few side effects and decrease blood cholesterol. Many people with OA are already taking fish oil, however, there is no studies to know if it is effective in OA. If fish oil is shown to reduce pain and disability and cartilage loss in OA, it will provide Australians with OA an alternative treatment that is low in side effects with positive effects on cardiovascular disease.

Funding: National Medical and Research Council (NHMRC)

Objective:

The aim of this study is to look at the effect of fish oil on pain and progression of knee OA, by doing a randomised clinical trial. Participants with knee OA will be given either high dose fish oil (15mL) or similar oil with low levels of fish oil (equivalent to 2 fish oil capsules per day). The study will run for 2 years and during that time, we will measure pain and blood levels of fatty acids (part of the fish oil) and cholesterol. At the beginning and end of the study, magnetic resonance imaging (MRI) of the knee, a knee xray, and bone density testing will be done. The outcomes of the study will be to determine if fish oil affects pain and function (measured by questionnaires) and progression of OA (measured by cartilage changes on MRI).

Locations:

1. Adelaide: Rheumatology Unit, The Queen Elizabeth Hospital; Chief Investigator Dr Catherine Hill
2. Sydney: Rheumatology Unit, Royal North Shore Hospital, Chief Investigator A/Prof Lynnette March
3. Hobart: Menzies Research Institute (Chief Investigator Professor Graeme Jones)

Volunteers:

Men and women 40 years and over
Knee osteoarthritis
No immediate plans for knee joint replacement surgery
No inflammatory arthritis (no rheumatoid or psoriatic arthritis)

What the study entails?

This is a 2 year study of low or high dose fish oil for knee osteoarthritis. The fish oil will be provided free of charge for the participants.

The study involves 8 visits to the study site (approximately every 3 months).

A knee MRI scan and bone density scan (DEXA) will be done at the beginning and end of the study and blood will be taken at each visit.

Who to contact?

The study co-ordinators are:

1. Adelaide: Ms Ruth Battersby, Rheumatology Unit, The Queen Elizabeth Hospital 08 82227367
2. Sydney: Ms Tanya Fedorova, Rheumatology Unit, Royal North Shore Hospital 02 99266470
3. Hobart: Ms Kristen Hynes, Menzies Research Institute, 03 62267700 or free call 1800 638124