Cod Liver Oil – Nature’s Magic Medicine

In spite of the millions of people worldwide who’ve found their arthritis helped by the safe natural supplement cod liver oil, it wasn’t till the new millennium that science began to unravel the mysteries of how it worked.

Professor Bruce Caterson – Professor of Biochemistry and head of the Connective Tissue Biology Group at Cardiff University – is one of the world’s most renowned scientists in the field of cartilage and arthritis research. But even he was surprised when the breakthrough results of their complex laboratory studies added the weight of modern scientific evidence to the fishy old wives’ tales.

“My colleagues and I were amazed at the way in which our study proved how cod liver oil worked,” says the Professor. “Natural components of the oil actually shut down the activity of two damaging enzymes which not only destroy protective cartilage, but also causes the inflammation which makes this disease progressive.”

There are many forms of arthritis, the most widespread being osteoarthritis and rheumatoid arthritis, which together result in 3 million disabled people and account for 1 in 5 of all GP visits. Osteoarthritis is the commonest of all joint conditions and normally the result of injury, occupation or straightforward wear and tear of the weight-bearing joints – ankles, knees, hips and spine. Rheumatoid arthritis is three times more likely in women and this acute inflammatory illness, affecting 600,000 people, tends to be symmetrical, affecting both hands, both feet, both shoulders, both knees. Joints may become severely deformed requiring long term medication and often repeated surgery. And it’s not only adults who suffer, 15,000 children live with the pain and disability of juvenile rheumatoid arthritis.

The non-steroidal anti-inflammatory drugs (NSAIDs) used in the treatment of both these conditions can have severe side effects causing stomach damage – 12,000 people hospitalised every year, 1,200 deaths and a bill for £250 million.

As a result of their research, Professor Caterson and his colleagues in Wales have achieved a medical breakthrough which will hopefully wake up the medical profession to an arthritic treatment which spares their patients the risks of drastic side effects, without compromising pain relief. The startling fact is that this two thousand year old remedy works in the same way as the drug industry’s most recent state-of-the-art family of anti-inflammatories. Known as Cox 2 inhibitors and hailed as the new miracle aspirin, they come with a huge list of contra-indications, special precautions and adverse reactions including abdominal pain, digestive disturbances, dizziness, high blood pressure, headaches and disturbances in liver function.

In both rheumatoid and osteoarthritis it’s the breaking down of the substance of the protective layers of cartilage that eventually destroys the cartilage and prevents joints from working normally. Early on in the history of rheumatoid arthritis and rather later with osteoarthritis, the pain and inflammation is caused by the release of enzymes – cyclooxygenase and lipoxygenase – and triggers of inflammation – interleukin-1-a and TNFa. These chemicals damage the tissues of the joint including tendons, ligaments, bone, protective coverings and the cartilage.

The ideal diet should provide a balance between the Omega 3 and Omega 6 essential fatty acids, but a typical Western diet contains far too little Omega 3 and far too much Omega 6. It’s the Omega 3 essential fats in cod liver oil which Professor Caterson has found to be the vital ingredient, as it’s these special fats which actually block the cell’s production of all the damaging enzymes and other chemicals. They tested cultures of cartilage cells and found dramatic improvements in their fatty structure within 8 hours of exposing them to the fatty
acids. But it’s only the addition of the Omega 3 fatty acids from cod liver oil that actually abolished the damaging activity of the bad chemicals including the Cox 2 enzymes. The cartilage cell’s ability to produce its own essential and beneficial substances was not affected.

I met Professor Caterson in the tiny fishing village of Svolvaer, 200 miles inside the Arctic Circle in Northern Norway. It’s from these unpolluted Arctic waters that the cod are fished for the production of Seven Seas cod liver oil. Talking about his research he said “Our findings provide evidence that Omega 3 fatty acid supplementation can specifically affect the regulatory mechanisms involved in cartilage metabolism. Taking cod liver oil slows the progression of arthritis, reduces pain and inflammation and in many instances will substantially reduce the amount of NSAIDs patients need. Cod liver oil will certainly improve quality of life for arthritis sufferers.”

It’s over 30 years since I became interested in cod liver oil. In 1966 I met an extraordinary American called Dale Alexander, otherwise known as ‘The Codfather’. This remarkable self-educated man, with no medical or scientific training, had written a book called ‘Arthritis and Common Sense’, which extolled the virtues of cod liver oil as one of the best remedies for the relief of arthritic pain.

As a wartime schoolboy I’d stood in line for my daily dose of orange juice and cod liver oil – given free by the government to children up to five, pregnant and nursing women. The mixture is rich in vitamin C for resistance and vitamin D, essential protection from the bone-deforming disease rickets.

Until meeting the Codfather I’d had little interest in this ancient granny’s remedy but Dale Alexander changed all that, as he did the lives of the millions of arthritis sufferers who’ve read his book since.

The earliest history of cod liver oil is lost in the mists of time but it was certainly used by the Vikings as a rich source of food energy, which they knew protected them from illness and relieved their aches and pains. The Eskimos were also great believers in the value of cod liver oil and research back in the 70s was the first to show the links between high consumption of oily fish and cod liver oil and their extremely low levels of heart disease.

As early as 1752 doctors at Manchester Infirmary were giving the oil to patients with rheumatism, arthritis and other bone diseases and when rickets was rife in industrial Britain in the second half of the 19th century, doctors found that this remarkable substance could both treat and prevent the illness. Though it wasn’t till the late 1920s that vitamins A and D and the essential fatty acids were discovered.

As an osteopath I’ve recommended cod liver oil to thousands of patients since my meeting with the Codfather, but I was particularly keen to know whether Professor Caterson thought it had a value in protecting joints from arthritis, especially in serious athletes and dancers who are very prone to joint problems in later life. “We don’t have any proof of that as yet, but it’s going to be our next line of research. Arthritis doesn’t just affect cartilage but ligaments, bones, muscles and other tissues and we’re hoping to study the long-term protective effects on all these substances.”

After centuries of use there can’t be any doubt about the safety of taking cod liver oil but with the ever increasing concerns surrounding pollution there have been questions about the levels of toxic chemicals building up in fish livers. To counteract this risk Seven Seas have developed a unique filtration process which now removes virtually all traces of chemical residue, leaving almost undetectable levels of a few parts per million billion.

Research across a selection of European cities shows that mothers’ milk contains far more toxic pollutants than this super-refined cod liver oil.