Broccoli breakthrough in fight to treat arthritis

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An artificial version of a compound in broccoli could hold the key to treating arthritis, say researchers, Daily Mail reports.

The broccoli chemical sulforaphane is known to block the inflammation and damage to cartilage associated with the condition.

But patients would have to eat several pounds of the vegetable every day to derive any significant benefit. Sulforaphane in its natural form is also too unstable to turn into a medicine.

But UK drug company Evgen Pharma has developed a stable synthetic version of the chemical that offers the potential of a pill treatment.

A single dose of the drug, known as Sulforadex or SFX-01, is the equivalent of eating 5.5lb of broccoli in one day. In tests on mice affected by osteoarthritis, Sulforadex significantly improved bone architecture, gait balance and movement.

Professor Andrew Pitsillides, who co-led the research at the Royal Veterinary College in London, said, "These initial results are very positive for such an experiment and we have convinced ourselves that sulforaphane is a promising agent for the treatment of osteoarthritis. The clinical development of sulforaphane has been held back by the fact that it is inherently unstable - SFX-01 is a major advance in this area."
Professor Pitsillides added: 'Nearly nine million people in the UK have osteoarthritis and it costs the NHS more than £5 billion every year.

"There is no cure or effective treatment for the disease other than pain relief or joint replacement, so the potential for SFX-01 is massive."

Broccoli is also believed to reduce the risk of some cancers and cardiovascular disease, and improve symptoms of autism.

A University of Pittsburgh study found it could be used to prevent throat cancer. In laboratory tests, extracts from broccoli were shown to give mice protection against oral cancer.