

Health News from 3Care Therapeutics

Omega-3 combined with glucosamine achieves better improvements in joint health than glucosamine alone, says a new study from Germany.

The study, published in the journal *Advances in Therapy*, is said to be the first clinical trial to employ the combination of glucosamine and omega-3 fatty acids in people suffering from osteoarthritis.

Dr Gruenwald and his co-workers recruited 177 people with moderate-to-severe hip or knee osteoarthritis and randomly assigned them to receive either a **glucosamine sulfate supplement (1500 mg per day) or glucosamine plus omega-3 fatty acids (providing 444 mg of fish oil, of which 200 mg were omega-3-fatty acids)**. “Because the patients studied had moderate-to-severe knee or hip osteoarthritis pain, a placebo group was not used for ethical reasons,” explained the researchers. After 26 weeks of supplementation, the researchers tested pain levels using the established Western Ontario and McMaster Universities Arthrosis index (WOMAC) score.

“In this randomized controlled clinical trial of patients with osteoarthritis, we could prove that the combination of glucosamine sulfate and omega -3-fatty acid is superior to glucosamine alone. **Using the classical WOMAC pain score we showed 27 per cent more responders in the combination group compared to glucosamine alone, this difference was statistically significant,**”

Dr Joerg Gruenwald

While there was no significant difference between the number of responders in each group when a minimal pain reduction of at least 20 per cent was used, significant differences were observed when a higher responder criterion of at least 80 pain reduction was used (44% with combination vs 32% with glucosamine alone; $p=0.044$). In addition, the combination product reduced morning stiffness and pain in the hips and knees by between 48.5 and 55.6 per cent, compared to 41.7 and 55.3 per cent, respectively, in the glucosamine only group.

Commenting on the potential mechanism, Dr Gruenwald and his co-workers note that the ingredient probably acted synergistically. “Omega-3 fatty acids inhibit the inflammation process in OA, whereas glucosamine sulfate further supports the rebuilding of lost cartilage substance,” they stated.

Approximately 46 million people in the USA (one in five adults) are reported to have long-term health problems associated with arthritis. Arthritis is one of the most prevalent chronic health problems and the nation’s leading cause of disability among Americans over age 15. Arthritis leads to 39 million physician visits and more than a half million hospitalizations. This debilitating chronic condition costs the U.S. economy \$128 billion per year.

Critical to this picture, is that half of the Americans with arthritis surveyed don’t think anything can be done to help them.

The joint health market is dominated by glucosamine, which is extracted from the shell of crabs, lobster and shrimps. The ingredient is often used in combination with chondroitin sulphate, extracted from animal cartilage, such as sharks.

Source: *Advances in Therapy*

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"Effect of glucosamine sulfate with or without omega-3 fatty acids in patients with osteoarthritis"

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Arthritis Facts

Number of Americans with Arthritis or chronic joint symptoms:

- 1985 - 35 million
- 1990 - 37.9 million
- 1998 - nearly 43 million (1 in 6 people)
- 2006 – 46 million (nearly 1 in 5 adults)
- Women - 24.3 million of the people with doctor-diagnosed arthritis
- Men - 17.1 million of the people with doctor-diagnosed arthritis

Other indicators:

- Arthritis is one of the most prevalent chronic health problems and the nation's leading cause of disability among Americans over age 15.
- Arthritis is second only to heart disease as a cause of work disability.
- Arthritis limits everyday activities such as walking, dressing and bathing for more than 7 million Americans.
- Arthritis results in 39 million physician visits and more than a half million hospitalizations.
- Costs to the U.S. economy totals \$128 billion annually.
- Arthritis affects people in all age groups including nearly 300,000 children.
- Baby boomers are now at prime risk. More than half those affected are under age 65.
- Half of those Americans with arthritis don't think anything can be done to help them.
- Arthritis refers to more than 100 different diseases that affect areas in or around joints.
- Arthritis strikes women more often than men

Source, Arthritis Foundation.

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