

Turmeric, Chondroitin Sulfate and Glucosamine Supplements in Osteoarthritis

Turmeric is a yellow-colored powder ground from the root of the turmeric plant. The plant grows in India and Indonesia and is related to the ginger family (It is a common ingredient in curries).

- reduces pain, inflammation and stiffness related to rheumatoid arthritis (RA) and osteoarthritis
- turmeric/curcumin blocks inflammatory cytokines and enzymes, including cyclooxygenase-2 (COX-2), the target of celecoxib (Celebrex).

Chondroitin is a major component of cartilage that helps it retain water. It is made by the body naturally. For production of supplements, it can be manufactured from the cartilage of animals, like cows, pigs or sharks, or it can be made in the laboratory. The supplement is sold as chondroitin sulfate.

- Chondroitin may provide additional pain relief for some people with knee and hand osteoarthritis.
- Because no side effects due to chondroitin were reported, it can be tried as an alternative to nonsteroidal anti-inflammatory drugs (NSAIDs) for patients who cannot take NSAIDs and who need long-term treatment.

Glucosamine is a natural compound found in healthy cartilage, particularly in the fluid around the joints. For dietary supplements, it is harvested from shells of shellfish or can be made in the laboratory. It can come in several chemical forms, but the one most used in arthritis is glucosamine sulfate.

- In laboratory tests, glucosamine showed anti-inflammatory properties and even appeared to help cartilage regeneration.
- Glucosamine may provide modest pain relief for some patients with osteoarthritis of the knee, hip and spine. Natural Medicines Comprehensive Database classified glucosamine as “likely effective” for osteoarthritis, thus rating it higher than chondroitin.

