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**Authors:** Kent Kwoh et al.  
**Presentation:** American College of Rheumatology (ACR) Annual Scientific Meeting  
**Issue:** Glucosamine may not help to prevent joint damage in osteoarthritis of the knee  
**Presentation Date:** 20 October 2009

**Study conclusions:**

A 24 week study was conducted to determine the effectiveness of glucosamine in preventing the worsening of cartilage damage in knee osteoarthritis. A beverage form of glucosamine hydrochloride at 1500mg was taken once daily. Participants, with mild to moderate knee pain, were randomly placed into two groups with 98 participants receiving glucosamine and 103 receiving placebo. Researchers found that the odds of worsening cartilage damage and bone lesions in both trial groups were the same and hence showed no significant clinical difference.

**Response:**

1. Overall, there are many studies<sup>2,3,4,5</sup> to support the beneficial effect of glucosamine on joints although a recent study shows that glucosamine did not reduce structural worsening of joint in knee osteoarthritis over 24 weeks. The OsteoArthritis Research Society International (OARSI) stated glucosamine in its recommendation as an option for treatment of moderate osteoarthritis<sup>1</sup>.
2. Glucosamine is an essential component of the cartilage tissue, which cushions our joints. There is clear evidence that glucosamine is bioavailable both systemically and at the joint after oral administration of glucosamine sulphate in osteoarthritis patients<sup>6</sup>.
3. There are several comments pertaining to no slowing down of cartilage damage of knee joint in the study:
  - i) To see a structural benefit in reducing cartilage damage, it could require more than 24 weeks of dietary supplementation<sup>5</sup>.
  - ii) The study should also look at equally important parameters like the functional aspects such as joint mobility and stiffness.
  - iii) A single big dose of 1,500 mg glucosamine in liquid form everyday may not be optimum as compared to 2 or 3 times daily intake in smaller dosages.

In conclusion, the study results do not change the accumulated scientific evidence and positive experience of consumers in the benefits of glucosamine as one of the dietary supplements that helps in healthy joint function.

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## References

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