

Osteoarthritis and Vitamin K

New research indicates that a deficiency of one vitamin may increase the severity of osteoarthritis. Low levels of vitamin K may trigger abnormalities in bone and cartilage, says **Boston University School of Medicine** researcher Tuhina Neogi in an interview that appeared in **Bostonia** (the BU alumni quarterly). Neogi noted this as the impetus behind her examination of vitamin K and osteoarthritis. Neogi and her team examined data collected from more than 670 subjects who participated in the Framingham Offspring Study. Blood samples revealed levels of phyloquinone (also known as vitamin K1), and x-rays were used to assess joint space narrowing and the presence of osteophytes, the bony growths that sometimes form in the joints of osteoarthritis patients.

The study produced two key results: 1) Low vitamin K1 levels were associated with a greater severity of osteoarthritis, and 2) Subjects with lower K1 levels had a greater number of osteophytes than subjects with high levels of the vitamin. Based on the outcome of this study (published in the current issue of **Arthritis and Rheumatism**), the BU team has already received Arthritis Foundation funding for a clinical trial in which osteoarthritis patients will receive either a vitamin K supplement or a placebo.

Neogi told **Bostonia**: "We don't know how much vitamin K is necessary for these bone and cartilage proteins to function optimally. Our preliminary observational results suggest that we probably need more vitamin K than the recommended daily allowance." The current recommended daily allowance for vitamin K is 65 micrograms for women over the age of 25, and 80 micrograms for men in the same age group. But in his **Nutrition and Healing** newsletter, Jonathan V. Wright, M.D., recommends 5 to 15 MILLIGRAMS per day.

Source: Health Sciences Institute, April 25, 2006

"Low Vitamin K Status is Associated with Osteoarthritis in the Hand and Knee" Arthritis and Rheumatism, Vol. 54, No. 4, April 2006, interscience.wiley.com

"Is There a Link Between Vitamin K and Osteoarthritis?" Cynthia K. Buccini, Bostonia, Fall 2005, bu.edu

The following SHAKLEE products provide vitamin K:

Alfalfa - 50 mcg per serving

Vita-Lea - 80 mcg per serving

Vita-Lea Gold with vitamin K - 80 mcg per serving

OsteoMatrix - 40 mcg per serving.

This information is not intended to replace medical care. This information is not intended to diagnose, treat or cure. This report is not to be used as a substitute for appropriate medical care and consultation, nor should any information in it be interpreted as prescriptive. Any persons who suspect they have a medical challenge should consult their physicians/pediatricians for guidance and proper treatment