

## Nutrition Research News

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### Vitamin C Supplementation Reduces Risk of Stomach Cancer

Reporting in the October issue of *Cancer Epidemiology Biomarkers and Prevention*, researchers reported that taking vitamin C supplements may lower the risk of common types of stomach cancer by 40 percent. This data was compiled as part of a large analysis involving case-control studies compiled from three regions, and included a patient population of 1,095 Americans diagnosed with cancer of the esophagus or stomach, and 687 controls who were cancer-free. Vitamin C users had a 40 percent lower risk of cancer in the middle and lower parts of the stomach.

Vitamin C has been shown to block the formation of cancer-causing nitrosamines in the intestinal tract, and a number of epidemiological studies have linked higher vitamin C intake with decreases risk of gastrointestinal tract cancer, including the esophagus, stomach, pancreas and colon.

The researchers concluded: "Our results support the hypothesis that vitamin C supplementation reduces the risk of cancer of the middle and lower parts of the stomach. However, definitive proof of this hypothesis would require a randomized clinical trial."

### Multivitamin Strengthens Immune System and Memory in Seniors

In a year-long study involving 86 persons over the age of 65, Dr. R.K. Chandra of the Memorial University of Newfoundland demonstrated that when given a daily supplement of 18 vitamins and minerals, patients responded by showing objective improvement in short-term memory, overall cognitive abilities and greatly-strengthened immune function. Dr. Chandra also suggests that supplements may prevent serious neurological damage and disorders such as Alzheimer's disease.

In previous studies, Dr. Chandra and other researchers have shown that supplementation with antioxidants (vitamin C, vitamin E, beta-carotene), selenium and zinc can reverse the typical decline in immune function that accompanies aging (*Nutrition*, Sept 2001).

As pointed out by Teresa Marshal, MD, in the August 2001 edition of *Nutrition*, it appears that nutritional deficiencies increase with age. She found that 80 percent of seniors consumed inadequate amounts of four or more nutrients. Calcium, vitamin D and folic acid were the most frequently neglected nutrients in her study of 420 persons over the age of 78 (*Nutrition*, August 2001).

### Glucosamine Sulfate Supplementation Reduces Symptoms of OA in Placebo-Controlled Study

J.Y. Reginster, et al., published the findings of their glucosamine trial with osteoarthritis patients in the Jan.27, 2001 issue of *Lancet*. In this study of 212 patients with osteoarthritis of the knee joints, 106 patients were given glucosamine sulphate (1,500mg per day) and 106 patients were given the placebo. This three-year study demonstrated that glucosamine sulfate halted the further progression of knee arthritis as revealed by radiographs, whereas the placebo group had progressive joint space narrowing throughout the study period. As assessed by Western Ontario and McMaster Universities (WOMAC) scores, symptoms worsened slightly in the placebo group,

compared with improvement of symptoms in patients using glucosamine. Glucosamine was well tolerated, and the dropout rate was small and equivalent to that of the placebo group.

The conclusion drawn by these researchers is that the long-term combined structure-modifying and symptom-modifying effects of glucosamine sulphate suggest it could be a disease-modifying agent in osteoarthritis.

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