

Barrett's Esophagus

A study published in the American Journal of Gastroenterology strongly suggests that antioxidant vitamins C and E and beta-carotene may help to reduce the risk of Barrett's esophagus.

The new study, which had 913 participants, over 50 percent of one's risk in the occurrence of Barrett's esophagus can be cut just by increasing one's daily intake of vitamin rich fruits and vegetables. "This is the first U.S. population based case-control study that examined the association between intake of antioxidants and the risk of Barrett's esophagus," according to lead author Ai Kubo of Kaiser Permanente. The benefits, however, seemed to come from eating enough fruits and vegetables in your diet as opposed to the intake of food supplements.

Most sufferers of Barrett's esophagus are of middle age and even though this condition is precursor to esophageal cancer, 90% of the patients never develop cancer. The reason for this is unknown. The Case Control Study consisted of 296 people with Barrett's esophagus. There were 308 controls with gastrointestinal reflux disease (GERD) and 309 healthy controls.

A quantitative analysis was done on their dietary intake as well as the supplemental intake of these antioxidants using a 110-point food frequency questionnaire. Kubo and his team found out that a 184mg/d of Vitamin C and beta carotene intake of 6.8 mg/d were associated with a 52 and 44 percent reduced risk of Barrett's esophagus than people who took lower doses. (i.e. 43mg and 1.8 mg/d, respectively.)

The data for Vitamin E 0619mcg/d intake was more surprising with a 75 percent reduced risk compared to those with the lowest intake of 5.4 mcg/day.

"Our results demonstrated strong associations of overall dietary antioxidant index as an index. Individuals in the highest category of antioxidant index had a substantially lower risk of Barrett's esophagus. Compared with those in the lowest category; a 70 percent reduction, with a significant trend showing across all categories." Kubo writes. However comparisons between people with Barrett's esophagus and GERD controls showed no significant effect whether they took dietary supplements or got them from food intake but the researchers concluded that fruit and vegetable consumption reduced one's risk of getting Barrett's esophagus.

These kinds of research are necessary due to the increased incidence of esophageal cancer in Europe and other developed and developing countries and all over the world, with a yearly increase greater than any other disease.

The etiology of Barrett's esophagus can be affected by many complex interactions between different compounds and nutrients. More research is needed so that interventions could be developed to highlight changes needed to mitigate the risk of esophageal cancer.

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Works Cited

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