Selenium May Help Throat and Stomach Health

By Greg Arnold, DC, CSCS, May 18, 2010, abstracted from “Selenium Status and the Risk of Esophageal and Gastric Cancer Subtypes: The Netherlands Cohort Study” in the May 2010 issue of Gastroenterology

Link - http://www.nowfoods.com/079534.htm

Selenium is a trace mineral with recommended intakes ranging from 20-70 micrograms per day (1). Selenium elicits a number of healthful properties that include digestive health (2), joint health (3), fetal health (4), skin health (5), prostate health (6), and muscle health in the elderly (7).

Now a new study (8) has found that selenium may help with throat cancer and stomach cancer, which is expected to kill 14,530 (9) and 10,620 (10) Americans in 2009, respectively. In the study, 3,346 patients participating in The Netherlands Cohort Study on Diet and Cancer (11) completed a 150-item food questionnaire as well as toenail clippings to assess selenium intake and selenium levels in the body. The researchers placed more emphasis on the toenail clippings than the food questionnaire, due to the high variability of selenium content in food (leading to difficulty in accurate selenium intake). Toenails are also an accurate marker of body selenium levels for up to 1 year (12). The patients were then followed for an average of 16.3 years.

The researchers found that for a type of throat cancer called esophageal squamous cell carcinoma (9), those with the highest toenail selenium levels (more than 0.613 micrograms/gram) had a 63% reduced risk compared to those with the lowest levels (0.498 micrograms/g or less) (p = .02). While they also showed a 48% reduced risk in a type of stomach cancer called gastric cardia adenocarcinoma between the highest and lowest toenail selenium levels, there was a higher presence of error in that particular data (p = .14), causing the researchers to state those results as “borderline significant”.

Unfortunately, the researchers did not discuss the results from the food questionnaire on selenium intake and did not suggest any recommended intakes in selenium to obtain optimal body levels. They went on to conclude, “This prospective study supports an inverse association between toenail selenium and risk of [esophageal squamous cell carcinoma] and [gastric cardia adenocarcinoma].”

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