

A bad week for the nutritional supplements industry

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We've known for a long time that vitamins are good for you. Perhaps the best example is vitamin C, which completely cures scurvy, a disease that has plagued mankind for millenia. (It was described by Hippocrates some 2400 years ago.) Scottish doctor James Lind described how to cure scurvy with citrus fruit back in 1753, but it wasn't until 1932 that scientists Albert Szent-Gyorgyi and Charles Glen King identified vitamin C as the essential nutrient behind the cure for scurvy. (Szent-Gyorgi gave vitamin C the name ascorbic acid because of its anti-scurvy properties.)

Many other vitamins and micronutrients are required for good health, such as vitamins B and D, iron, folic acid, calcium, and potassium. Deficiencies in these vitamins cause all sorts of diseases, some of them very serious.

So it seems intuitively obvious that if a little bit of these nutrients is good for you, then a lot should be even better. Right? ...The problem is, our intuition is wrong. Two separate studies published this past week, involving tens of thousands of subjects, showed that high doses of vitamin supplements, rather than being helpful, can sometimes kill you.

In the first study, Jaakko Mursu and colleagues followed 38,772 older women for 25 years. The women in the study, whose average age was 62 back in 1986, reported their use of multivitamins and supplements over the years. The news was not good: the risk of death *INCREASED* with long term use of multivitamins, vitamin B6, folic acid, iron, magnesium, zinc, and copper. The risk of death only decreased with the use of calcium... The authors concluded that there's "little justification for the general and widespread use of dietary supplements," and the story was widely reported as showing that supplements are risky (Wall St. Journal) and unnecessary (New Zealand Herald).

In the second study, Eric Klein and colleagues studied 35,533 men over the past 10 years, looking at whether vitamin E or selenium would decrease the risk of prostate cancer. Both supplements have been claimed to have benefits, so the researchers randomly divided the subjects into four groups, giving them daily doses of (1) vitamin E only, (2) selenium only, (3) vitamin E and selenium, and (4) nothing (in the form of placebo pills).

The result: the risk of cancer *INCREASED* for the men taking vitamin E, selenium, or both. Although the increased risk is small, it is abundantly clear that neither of these supplements is helpful against prostate cancer...

So I'm afraid the news boils down to this: eat lots of fruit and vegetables, and a balanced diet, and you'll get all the micronutrients and vitamins you need.