



## Vitamins: What You Need to Know

By Dr. Tom James, MD

Some people refuse to take vitamins or supplements. Others feel that vitamins play a big part in their overall good health. So why the debate? We have mixed information, both scientific and rumor, on vitamins and supplements. The very word "vitamin" comes from a combination of the words "vital" and "mineral."

### What are vitamins and how do they work

Vitamins are complex compounds. Minerals are single elements like iron. Vitamins are necessary for many of things for your body's metabolism (chemical reactions that control life). Vitamins can't be made by the body. We have to eat foods or supplements that have vitamins in them. Many vitamins can be found in coenzymes, chemicals that help start your body's hormones.

### Vitamin-rich foods

Most people obtain their vitamins, minerals, and coenzymes – all three are known as nutrients – from a healthy diet. That is why you see so many articles in *e-PlanProfessor* about healthy eating. Eating five or more servings of vegetables and two to four servings of fruit will give you all of these nutrients.

Studies have shown that in today's fast-paced life, Americans tend to go without healthy meals. Medicinal Food News reports that only 41% of people eat the recommended amount of vegetables and about 23% eat the right amount of fruit.

### Vitamin pills and supplements

Nobel Prize winner Dr. Linus Pauling wrote about the benefits of Vitamin C. His work sparked great interest among the public 40 years ago. Now nearly half of Americans take at least one vitamin a day.

Vitamin D is necessary for good bone health. It helps put calcium into bones to keep them strong. Vitamin D is important to help both men and women prevent osteoporosis, the brittle bone disease. Vitamin D is a common addition to milk. Many people get their daily Vitamin D from milk, fish like salmon, or even sun exposure. If you can't get a regular supply of Vitamin D, a vitamin supplement containing vitamin D is also a good option.

### Recent vitamin research

The Women's Health Initiative studied 160,000 post-menopausal women who took a multivitamin daily. At the end of this eight-year study, the researchers decided that there were no benefits from multivitamins when it came to cancer, heart-disease risk, or overall death rates. People who believe in vitamins argue that no one has done studies on younger women who still have higher hormone levels.

For men, vitamin E and selenium could improve prostate health and reduce the risk of prostate cancer. However, a cancer prevention trial, that included some 35,000 men, found no benefit from that combination of nutrients. A study at the University of North Carolina showed that some cancers in laboratory animals actually grew faster if the animals got vitamin supplements.

### The benefits of vitamins

Some studies show that vitamins also can be good for you. The chance of birth defects goes way down if a pregnant woman takes vitamins with folate, one of the B vitamins.

The American Heart Association recommends that people in their 40s and 50s have at least two servings of fish, like salmon, each

The American Dietetic Association recommends multivitamins for people who may not get enough of one thing or another in their diet. Here are some of the people most at risk for vitamin deficiency:

- Vegans and vegetarians
- Elderly people
- Men and women who can't absorb food through their digestive system in a normal way
- People with alcohol problems
- Pregnant women
- Individuals who don't eat a balanced diet

For these people, taking a multiple vitamin is important. For all others, the best rule is mom's rule – eat three balanced meals a day.

---

### **Additional Websites for information**

#### Medicinal Food News

[Vitamin Pills: a false hope. The New York Times, Feb.16th, 2009](#)

[Multiple vitamin use and risk of cancer and cardiovascular disease in the Women's Health Initiative cohorts. Archives of Internal Medicine, Feb. 9th, 2009](#)

[Effects of selenium and vitamin E on risk of prostate cancer and other cancers. Journal of the American Medical Association. Jan. 7th, 2009](#)

[Mortality in randomized trials of antioxidant supplements for primary and secondary prevention. Journal of the American Medical Association, Feb. 28th, 2007](#)

[Position of the American Dietetic Association: Nutrient Supplementation. Dec. 2009](#)

---

### **About the Author:**



#### **Dr. Tom James**

Dr. Tom James is the Healthcare Advisor for Humana's Strategic Advisory Group. He's responsible for providing the clinical input into quality and efficiency measurements and display of healthcare providers within the Humana network. He's also involved with Humana's group Medicare clinical program development. Dr. James works closely with national professional organizations and societies to explain Humana's goals on transparency and other clinical issues, and to receive feedback that allows for greater alignment between Humana and the national professional groups.

Dr. James is board-certified in Internal Medicine and in Pediatrics. He received his undergraduate degree from Duke University and his medical degree from the University of Kentucky. Dr. James served his residencies at Temple University Hospital, Pennsylvania Hospital, and Children's Hospital of Philadelphia. He is currently the chairman of Partners for a Healthy Louisville, the community's business-health coalition and is the former chairman of the Quality Improvement Committee for the Jefferson County (Ky.) Medical Society. He is on the Board of such organizations as Kentucky Opera, Hospice of Louisville Foundation, and Kentucky Pediatrics Foundation. Dr. James remains in part-time clinical practice of internal medicine-pediatrics.

---

© 2010 Humana Inc.