

The Associated Press

updated 6:18 p.m. ET, Tues., Feb. 27, 2007

Vitamins A, C and E don't help you live longer

Review of dozens of studies delivers blow to popular antioxidants

Antioxidant vitamins, including A, E and C, don't help you live longer, according to an analysis of dozens of studies of these popular supplements.

The new review showing no long-life benefit from those vitamins, plus beta carotene and selenium, adds to growing evidence questioning the value of these supplements.

Some experts said, however, that it's too early to toss out all vitamin pills — or the possibility that they may have some health benefits. Others said the study supports the theory that antioxidants work best when they are consumed in food rather than pills.

An estimated 80 million to 160 million people take antioxidants in North America and Europe, about 10 to 20 percent of adults, the study's authors said. And last year, Americans spent \$2.3 billion on nutritional supplements and vitamins at grocery stores, drug stores and retail outlets, excluding Wal-Mart, according to Information Resources Inc., which tracks sales.

The new study, appearing in Wednesday's *Journal of the American Medical Association*, was led by



Researcher found that the popular antioxidant vitamin E doesn't lead to a longer life. Neither do vitamins A or C. But experts are divided on whether that means you should skip the pills altogether.

the Cochrane Hepato-Biliary Group at Copenhagen University Hospital in Denmark. The Cochrane organization is a respected international network of experts that conducts systematic reviews of scientific evidence on health interventions.

For the new report on antioxidants, the researchers first analyzed 68 studies involving 232,606 people and found no significant effect on mortality — neither good nor bad — linked to taking antioxidants.

The bad news

When they eliminated the lower-quality studies and looked

only at the most trustworthy ones, they actually found a higher risk of death for people taking vitamins: 4 percent for those taking vitamin E, 7 percent for beta carotene and 16 percent for vitamin A. The actual cause of death in most studies was unknown, however.

Those findings are based on an analysis of 47 studies involving 180,938 people who were randomly assigned to get real vitamins or dummy pills. Some involved super-doses far exceeding the recommended daily amount of the compounds; others involved normal

doses.

Some experts who reviewed the research were dismissive of the increased death risk and the analysis overall, saying it pooled studies that were too diverse.

However, the study's senior author, Dr. Christian Gluud of Copenhagen University Hospital, said, "The main message is that prevention by beta carotene, vitamin A and vitamin E cannot be recommended. These three antioxidant supplements may increase mortality."

Gluud said most of the studies didn't reveal why those taking supplements died, but "in all likelihood, what they died from is what people normally die from, maybe accelerated atherosclerosis, maybe cancer."

Antioxidant supplements have been tested repeatedly by many clinical trials with no consistent clear evidence for their health effects, Gluud said.

"We have had this huge industry really wanting to demonstrate an intervention effect that has gone to lengths to do so," Gluud said. "Sadly enough for the industry, and for us as consumers, it has failed to do so."

Preliminary studies suggested antioxidants might block the heart-damaging effects of oxygen on arteries and the cell damage that might encourage some kinds of cancer.

Stick with healthy food instead But some researchers now believe antioxidants work only when they are in food, or that people who eat

vitamin-rich food are healthier simply because they take better care of themselves. And beta carotene supplements have been found to increase lung cancer risk in smokers.

Meir Stampfer, professor of nutrition and epidemiology at the Harvard School of Public Health, said the new analysis hasn't discouraged him from taking his vitamins.

Stampfer said the studies were too diverse to pool together because they looked at various combinations and doses of antioxidants tested in different groups of people. The trials ranged from a three-month study of 109 elderly nursing home residents to a 12-year study of 22,071 male doctors.

"This study does not advance our understanding, and could easily lead to misinterpretation of the data," said Stampfer, who was not connected to the new report.

The complaints were echoed by Andrew Shao, a scientist at the Council for Responsible Nutrition, a supplement trade association.

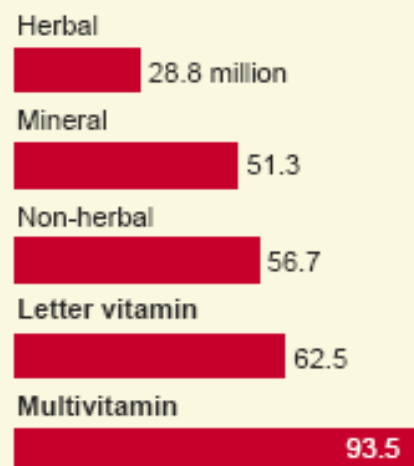
"Only when they included and excluded certain trials were they able to find this alleged increase in mortality, which they themselves can't explain," Shao said. "There is plenty of data out there that show regular use of antioxidant supplements help to maintain health."

Donald Berry, chairman of the department of biostatistics at the University of Texas M.D. Anderson Cancer Center, said the analysis per-

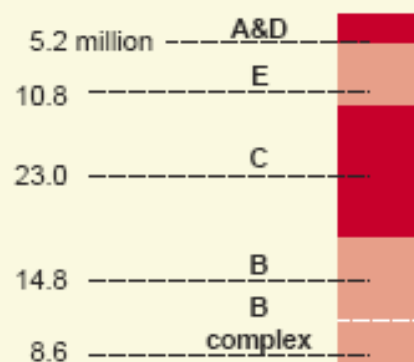
Vitamin popularity

More than 93 million units of multivitamins were sold in 2006, outselling letter vitamins by more than 31 million units.

Total supplements and vitamin units sold in U.S., 2006*



Letter vitamin, by type**



*Includes sales by all supermarkets, drug stores and mass merchandisers excluding Wal-Mart. **Does not include 2,430 units of vitamin K sold.

SOURCE: Information Resources Inc.

AP

suades him antioxidants have no measurable health benefits, but he disagrees with the researchers' finding of an increase risk of dying.

"There are so many choices you can make when you're doing these analyses," he said.

Alice Lichtenstein, a professor of nutrition science and policy at Tufts University who was not involved with the research, said the study's main message is: "Rely on food to get your nutrients."

© 2008 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.