

It's a killer: How wrong is the headline-grabbing Vitamin E study?

A report that daily vitamin E doses of 400iu or more can increase the risk of death led to a spate of "killer vitamin" headlines in November.

Yet three key facts were notably missing from the scare stories.

1. that the study was not a new clinical trial but a controversial meta-analysis of existing studies
2. that the vitamin E used was a synthetic version
3. that all of the subjects were suffering from life-threatening chronic illnesses.

The analysis was reported at the American Heart Association's Scientific Sessions 2004 and simultaneously released on the website of the Annals of Internal Medicine.

The conclusion was: "Increasing doses of vitamin E were linked to an increase in death", according to lead author Dr Ed Miller, MD, PhD, associate professor of medicine at Johns Hopkins University in Baltimore.

In animal and observational studies, Miller and colleagues reported, vitamin E supplementation was shown to prevent cardiovascular disease and cancer. However, other studies suggested that high doses could be harmful.

To determine if there is a "dose response", they examined different doses of vitamin E supplements and risk of death from any cause. They studied death rates in published clinical trials comparing vitamin E supplementation to placebo and included findings from 14 studies, from 1993 to 2004. Doses ranged from 15 to 2000iu day, and average intake was about 400iu a day.

According to the analysis, there is no increased risk of death with a dose of 200iu per day or less, and there may even be some benefit. This squares with the results of major studies such as the Harvard Medical School research of 1993 involving data from 40,000 male health professionals which showed an association between a high intake of vitamin E and a lower risk of coronary heart disease in men.

* Read the full story and a science-based response to the study in December's 'Vital Update'.