

## Are Antioxidant Vitamins all They are Cracked up to Be?

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Antioxidant vitamins such as vitamin E and beta carotene do not ward of heart problems and beta carotene, a vitamin A source, may be harmful, according to an analysis of 15 key studies.

Antioxidants have been widely recommended for heart health, however recent studies have suggested that the pills may not be effective and may even be damaging. Some experts argue that while the pills don't seem to prevent heart attacks and premature death, they might be useful if started early and may delay the progression of heart disease or other blood vessel problems.

In the current study, researchers analyzed 15 studies involving nearly 220,000 people, most of whom had either had heart or blood vessel disease or were at an

## increased risk of such problems.

Eight of the studies involved beta carotene alone or in combination with other antioxidants, while seven of the studies involved vitamin E, either alone or with other antioxidants. Follow-up periods ranged from one to 12 years.

Researchers found that beta carotene was associated with a 0.3 percent increased risk of cardiovascular death and a 0.4 percent increased risk of death from any cause. They noted, however, that the harmful effect was largely due to two studies that included a lot of smokers.

Vitamin E did not reduce death from cardiovascular or any other cause and did not lower the incidence of strokes.

It was thought that antioxidant vitamins protect the heart by blocking the damaging effects of oxygen.

Animal studies show favorable results with this approach and studies have found that people who eat vitamin-rich foods have less heart disease.

Experts suggest that antioxidants may work when they are in food but not necessarily when they are in pills. Additionally, they say that people who eat vitamin-rich food generally take better care of themselves, which may explain their lower heart disease risk.

However, some experts say that the role of antioxidants in delaying death or potentially benefiting other heart problems, such as cardiac arrhythmias, needs to be explored.