

HEALTH SUPPLEMENTS INFORMATION SERVICE (HSIS) COMMENTS ON THE BENEFITS OF ANTIOXIDANT VITAMINS

In response to a meta-analysis and review article regarding the antioxidant supplements beta carotene, vitamin A, and vitamin E and set to be published in JAMA on 28th February, the Health Supplements Information Service (HSIS) feels that a balanced perspective needs to be added to this debate so that consumers in the UK are not misled.

Positive evidence for antioxidants in cardiac health:

- ❑ The Cambridge Heart Antioxidant Study - published in the Lancet¹, this report concluded that vitamin E doses of 400 to 800 IU per day, in people with atherosclerosis, reduced the risk of heart attack by 77 per cent.
- ❑ Another report - titled "Multivitamin Use and Mortality in a Large Prospective Study" - showed that out of over 1 million participants, those adults who used vitamin E, or other antioxidant vitamins, in combination with a daily multivitamin had a 15 per cent lower risk of dying from heart disease or stroke than those who did not take vitamins¹.
- ❑ Blood levels of the antioxidant nutrients vitamins A, C, and E, and beta-carotene are reported to be lower in people with a history of heart attack, compared with healthy individuals¹.
- ❑ The results from the Physicians Health Study 2 (PHS2) indicated apparent benefits of beta-carotene supplementation on subsequent vascular events among 333 men with prior angina or revascularisation⁶.
- ❑ With regards to the safety of beta-carotene for long-term use, the PHS2 results indicated that beta-carotene supplementation (50mg on alternate days) had no significant detrimental effects on cardio-vascular disease during more than 12 years of treatment and follow-up¹.

NOTE: Smokers are advised to use beta-carotene supplements with caution¹.

Commenting on behalf of HSIS, Dr Ann Walker notes: "The truth is that many clinical trials *do* support the efficacy and safety of antioxidant vitamins such as Vitamin A, E and beta-carotene, particularly in cardiac health, when combinations of antioxidants have been used.

"With reference to this meta-analysis and the review article published today, it is important to note there is nothing new in this study. A **very similar meta-analysis** has been conducted **before with similar results**. Like the previous meta-analysis, this meta-analysis has a **fatal flaw** - collating data from both primary and secondary prevention trials. A primary trial is one where healthy people are studied and the outcome (mortality in this case) is then very much lower than in the secondary trials. For this reason, very large numbers of people are needed for primary prevention trial, whereas fewer are required for secondary prevention trials.

Secondary prevention studies look at the reduced risk of mortality of people WITH EXISTING DISEASE – usually this is cardiovascular disease, as cancer, the other big killer does not lend itself so easily to this type of study for many reasons. As a result, the meta-analysis was devised to compare like with like – **not to include disparate groups, which this latest meta-analysis has undertaken.**

"From a nutritional point of view, the use of supplements in primary prevention trials is preventative nutrition – i.e. to prevent illness. In secondary trials the use of nutritional intervention is aimed as a therapeutic effect – to reverse extensive existing illness. While the use of single supplements in primary prevention may have some merit, this is not so in secondary prevention trials. How sensible scientists can suggest that a modest intervention of a single antioxidant supplement (which is readily available in food), can have a major effect in reversing life-threatening pathology, where patients already have advanced cardiovascular disease, is ridiculous. Such an intervention would be a 'drop in the ocean' against such severe conditions.

“In my view, the results of these mixed-sample meta-analyses are worthless.

In conclusion Ann highlights: “Vitamin, mineral and dietary supplements not only have proven health benefits, they are essential to the maintenance of good health and can help bridge the nutritional gap for many people in the UK whose diets are often lacking in essential nutrients.”

-ENDS-

For further information please contact:

Nicky Smith, Nexus Healthcare

020 7808 9750 / 07867 513 361

Kym Nelson, Nexus Healthcare

020 78089751

Kate Maberly, Nexus Healthcare

020 7808 9755