Press Release

INTERNATIONAL EXPERTS DISPUTE CONCLUSIONS OF ANTIOXIDANT REVIEW

27 February 2007

Experts from IADSA’s international scientific network have raised serious doubts about the evidence to support the negative conclusions of a newly published meta-analysis on antioxidant supplements.

Describing the study as a “pre-determined conclusion in search of a method to support it”, Dr. Andrew Shao, Vice President of Scientific and Regulatory Affairs at the Council for Responsible Nutrition USA, said that while meta-analyses can be useful when the included studies are very similar in design and study population, the combined studies in the paper ‘Mortality in Randomized Trials of Antioxidant Supplements for Primary and Secondary Prevention’ compromised the results because they differed widely from each other in key aspects.

The paper, which is published in the February 28th edition of the Journal of the American Medical Association (JAMA), concluded that it did not find convincing evidence that antioxidant supplements have beneficial effects on mortality. Additionally, it stated that beta carotene, vitamin A, and vitamin E seem to increase the risk of death.

Scientists, however, point out that while the meta-analysis raises issues for debate, limitations identified by the authors themselves means the paper does not advance knowledge of antioxidants in developing and maintaining health.

Dr Derek Shrimpton, Scientific Advisor to the European Federation of Associations of Health Product Manufacturers, said: “The paper proposes to overturn the conclusions of well conducted clinical trials in favour of conclusions drawn from a statistical analysis of all publications in the scientific literature on the subject irrespective of their merit.”

Echoing his view Professor David Richardson, Scientific Advisor to the UK Council of Responsible Nutrition highlighted the context of the paper - the use of nutrient antioxidants for prevention of disease – as a key issue. He explained that such bioactive substances are aimed at maintaining and optimising the nutritional status and health of the population, not for the prevention, cure or alleviation of disease. Professor Richardson said: “Although the analysis of data source is extensive, the conclusions reached go much further than the scope of the evidence and limitations of the individual studies concerned.”

The limitations of approach identified by the authors of the paper include studies with varied populations and that the effects of the antioxidants assessed were drawn from trials of both the general population and of diseased populations, including cardiovascular, renal and rheumatoid.

Further limitations included findings and interpretations that were identified as limited because of the quality and quantity of available evidence on the effects of specific supplements on mortality. The studies also embraced different antioxidants having different bioavailabilities and mechanisms of action, and the antioxidants were given at different doses, for different lengths of time, in different combinations, using different methodologies.

Dr Hirobumi Ohama, from the Japanese Institute for Heath Food Standards, said: “In some studies the mortality denominators among antioxidant and control groups are remarkably different and the inclusion of such diversified data may degrade the validity of the estimation.”

“The study authors concluded that overall there was no effect of antioxidant supplements on all-cause mortality,” said Dr Shao, explaining that it was only after the researchers divided the chosen clinical trials into ‘high risk bias’ and ‘low risk bias’ groups using their own criteria, that they observed a statistically significant effect on mortality.

The scientific network agreed that consumers could continue taking antioxidant food supplements for the benefits they provide.

ENDS
Notes to Editors:
1. IADSA, the International Alliance of Dietary/Food Supplement Associations, represents the worldwide dietary supplement manufacturing industry and is an accredited international non-governmental organization (INGO) with a seat at the table of the main international regulatory bodies.
2. IADSA has more than doubled in size since its creation in 1998, and now represents 57 national trade associations across the world.
3. For more information contact Derek Shrimpton, Scientific Advisor to the European Federation of Associations of Health Product Manufacturers, tel: (+44) (0)1241 830 788, mob: (+44) (0)7718 660 706.