

## ERRATUM

This article was originally published in Volume 26, Number 6, Pages 565-583 without the accompanying tables due to a printing error. The article is reprinted below in its entirety and we apologize for any inconvenience.

## COMMENTARY

# Will the 'Good Fairies' Please Prove to us that Vitamin E Lessens Human Degenerative Disease?

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Recent research about the role of free radical derivatives of oxygen and nitrogen in biological systems has highlighted the possibility that antioxidants, such as vitamin E, that prevent these processes *in vitro* may be capable of carrying out a similar function in living organisms *in vivo*. There is increasing evidence that free radical reactions are involved in the early stages, or sometimes later on, in the development of human diseases, and it is therefore of particular interest to inquire whether vitamin E and other antioxidants, which are found in the human diets, may be capable of lowering the incidence of these diseases. Put simply, the proposition is that by improving human diets by increasing the quantity in them of antioxidants, it might be possible to reduce the incidence of a number of degenerative diseases. Of particular significance to these considerations is the likely role of the primary fat-soluble dietary antioxidant vitamin E in the prevention of degenerative diseases such as arteriosclerosis, which is frequently the cause of consequent

heart attacks or stroke, and prevention of certain forms of cancer, as well as several other diseases. Substantial evidence for this proposition now exists, and this review is an attempt to give a brief account of the present position. Two kinds of evidence exist; on the one hand there is very substantial basic science evidence which indicates an involvement of free radical events, and a preventive role for vitamin E, in the development of human disease processes. On the other hand, there is also a large body of human epidemiological evidence which suggests that incidence of these diseases is lowered in populations having a high level of antioxidants, such as vitamin E, in their diet, or who have taken steps to enhance their level of intake of the vitamin by taking dietary supplements. There is also some evidence which suggests that intervention with dietary supplements of vitamin E can result in a lowered risk of disease, in particular of cardiovascular disease, which is a major killer disease among the developed nations of the world. The

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