CARBOHYDRATES LINKED TO MACULAR DEGENERATION

A low glycemic-index diet, which suppresses the release of blood sugar, may reduce the risk of developing age-related macular degeneration, according to a recent report.* Researchers gathered data from more than 4,000 participants in the Age-Related Eye Disease Study (AREDS). The study revealed that individuals with the lowest dietary glycemic index had the lowest prevalence of macular degeneration, which is a major cause of irreversible blindness and appears to be linked to several diabetes-related diseases including those of the eyes and heart. Furthermore, the scientists estimated that as many as 20% of cases of macular degeneration could have been prevented if the study participants had consumed diets with a glycemic index below the median.

"These cross-sectional analyses suggest that poor dietary carbohydrate quality as defined by dietary glycemic index, a modifiable risk factor, may increase the risk of [macular degeneration] through several common etiologic factors of diabetes and cardiovascular disease, including the formation of advanced glycation end products and increases in oxidative stress, inflammation, and hyperlipidemia," wrote the researchers.

—Marc Ellman, MD


VITAMIN C AND LINOLEIC ACID PREVENT SIGNS OF SKIN AGING

A higher dietary intake of vitamin C and linoleic acid, combined with lower intakes of fats and carbohydrates, is associated with skin that retains a more youthful appearance, despite advancing age, British researchers reported recently.* The investigators used dietary intake data gathered from more than 4,000 women, ranging in age from 40 to 74 years. Subjects received clinical examinations by dermatologists, who graded skin-aging appearance according to several criteria, including wrinkling, senile dryness, and skin atrophy.

Higher vitamin C intakes were associated with a lower likelihood of a wrinkled appearance and senile dryness, while higher intakes of linoleic acid were associated with decreased likelihood of senile dryness and skin atrophy. These associations were independent of age, race, sunlight exposure, and menopausal status.

Vitamin C is present in many fruits and vegetables, while linoleic acid occurs naturally in sunflower and safflower oils.

—Dale Kiefer


CURCUMIN MAY TREAT INTRACTABLE BRAIN TUMOR

Derived from the curry spice turmeric, curcumin may be a useful adjuvant therapy in the treatment of glioblastoma, an often difficult-to-treat form of brain cancer.* Malignant gliomas are aggressive, often-fatal tumors, due to their resistance to chemotherapy and/or radiation. Their survival is enhanced by over-expression of transcription factors such as nuclear factor-kappa B (NFkB) and activator protein-1 (AP-1).

Previous research has shown that curcumin exerts some of its anticancer activity by inhibiting these survival pathways. The researchers of the current study therefore examined its effects on various human and rodent glioma cell lines in the laboratory. Curcumin reduced survival of cancerous cells as well as sensitizing these cells to several existing chemotherapy agents, including cisplatin and doxorubicin, and to radiation. "These findings support a role for curcumin as an adjunct to traditional chemotherapy and radiation in the treatment of brain cancer," the investigators concluded.

—Dale Kiefer

Copyright of Life Extension is the property of Life Extension Foundation and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.