RESEARCH Database
International Updates

Positive Health searches the world's bio-medical journals for peer-reviewed published research, spanning most complementary disciplines with the kind facilitation of Dr Derek Pheby. Sandra Goodman PhD and Kathrin Stauffer PhD compile and prepare the update summaries featured in Positive Health. We endeavour to summarize about 20 reports on a variety of health topics per issue, although not every subject can be included in each issue. If we regularly omit a particular approach or health condition that interests you, please let us know and we will try to report on this or add it to our search strategy.

Allergies

HOPPU and colleagues, Department of Paediatrics, University of Turku, Turku, Finland, ulla.hoppu@utu.fi, have found a connection between vitamin C in breast milk and the risk of dermatitis in infants.

Background: The aim of the study was to examine the effect of maternal antioxidant vitamin intake on the development of atopy, a familial allergic reaction, in breast-fed infants.

Methods: 34 new mothers with atopic disease were recruited. 4-day food records of the mothers and breast milk samples were collected at the infants' age of 1 month. Infant's atopy was defined by the presence of atopic dermatitis during the first year of life and a positive skin-prick test reaction at 12 months of age.

Results: Maternal intake of vitamin C in diet but not as supplement was shown to determine the concentration of vitamin C in breast milk. A higher concentration of vitamin C in breast milk was associated with a reduced risk of atopy in the infant (Odds ratio 0.30; p = 0.038), whereas vitamin E had no consistent relationship with atopy. The group at risk of suboptimal vitamin C supply from breast milk was identified as infants whose mothers suffer from food hypersensitivity.

Conclusions: A maternal diet rich in natural sources of vitamin C could reduce babies' risk of suffering from atopy.

Other oxidative stress markers and antioxidant levels remained unchanged in both groups. Endothelial function remained unchanged in both groups.

Conclusions: Supplementation with vitamins C and E led to lower levels of lipid peroxidation, but not to any protective effects on blood vessels, in patients with lupus.

YU and others, Texas A&M University-Kingsville Citrus Center, 312 North International Boulevard, Weslaco, Texas 78596, USA, have characterized the antioxidant activity of compounds found in citrus fruit.

Background: Citrus fruit are well known as a good source for vitamin C, the main antioxidant vitamin. However they also contain a large number of trace substances that can act as antioxidants as well. The aim of this study was to measure the antioxidant potency of some of these substances.

Methods: Biochemical in vitro study.

Results: The citrus fruit compounds tested included two limonoids, eight flavonoids, and a coumarin. In general it was found that the flavonoids have a stronger antioxidant activity than the limonoids and the coumarin.

Conclusions: The flavonoids apigenin, scutellarein, kaempferol, rutin trihydrate, neohesperidin, neocitrochitin, naringin, and naringin, all found in citrus fruit, are shown to be powerful antioxidants.

Antioxidants

TAM and co-workers, Department of Medicine and Therapeutics, Department of Radiology, and the Clinical Immunology Unit, Hong Kong Cancer Institute, Hong Kong, tamls819@yahoo.com, have investigated the effects of antioxidant vitamins on oxidative stress in patients with systemic lupus erythematosus.

Background: Patients who suffer from lupus erythematosus have more coronary artery disease than can easily be explained. The aim of this study was to see if oxidative stress plays a role in this.

Methods: 39 patients were randomized to receive either placebo or 500 mg vitamin C and 800 IU vitamin E daily for 12 weeks. Markers of oxidative stress included malondialdehyde and allantoin. Antioxidants measured included erythrocyte superoxide dismutase and glutathione peroxidase, plasma total antioxidant power, and vitamin C and E concentrations. Primary outcome of the study included the change in lipid peroxidation as revealed by malondialdehyde levels. Secondary outcomes included changes in allantoin and antioxidant levels and change in endothelial function.

Results: After treatment, plasma vitamin C and E concentrations were significantly (p < 0.05) increased only in the vitamin-treated group, associated with a significant decrease (p < 0.05) in plasma malondialdehyde.

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Cancer

MAHABIR and others, Cancer Prevention Studies Branch, Center for Cancer Research, National Cancer Institute, 6116 Executive Boulevard, Suite 705, MSC 8314, Bethesda, MD 20892-7058, USA mahabirs@mail.nih.gov, have studied the connection between alcohol consumption and cancer of the kidneys.

Background: The extent to which alcohol affects the risk of cancer of the kidneys is unclear. This study examined the association between total alcohol intake as well as specific types of alcoholic beverage and the risk of renal cancer in a large cohort of Finnish male smokers.

Methods: Men from the Alpha-Tocopherol, BetaCarotene (ATBC) Cancer Prevention Study were followed for 12 years and kidney cell cancer cases were identified. Alcohol consumption was assessed at baseline. Cox proportional hazards modelling was used to adjust simultaneously for known or suspected risk factors for kidney cell cancer.

Results: 195 incident cases of kidney cell cancer were identified. In multivariate analysis, the relative risks of renal cancer according to increasing quartiles of total alcohol intake were 1.0, 0.9, 0.94, and 0.53, respectively (p = 0.005). For spirits consumption, the figure were 1.0,
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