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UPDATE

Only High Doses of Vitamins and Selenium Shown to Fight Cancer

Animals with malignant tumors given high doses of vitamins C, E and selenium exhibited significant prolongation of their mean survival time. Complete remission of tumors developed in 16.8 percent of the animals. Low-dose administration of these vitamins failed to exert any beneficial effect on the mean survival time of the animals. Results indicate that high doses (mega doses) of the antioxidant anti-carcinogens vitamins C and E, in combination with selected other antioxidants with complimentary actions, are probably needed for adequate prevention and treatment of malignant diseases.

Cancer Letters, Vol. 115, Is. 1, 1997

Suggestions: If you have cancer, or are seeking to reduce your risk of getting cancer, low-potency vitamin supplements may be useless. Previous studies document that high doses of vitamin-mineral supplements are required to prevent and treat cancer effectively. If you have cancer, go to the disease prevention therapies section for an updated Cancer Treatment Protocol that describes the use of high-dose vitamin-mineral supplements to help fight cancer. Any attempt to treat cancer with vitamin supplements should be pursued only under the care of a physician.

ANTIOXIDANTS REDUCE BLOOD PRESSURE

In this study, short-term oral high-dose combination antioxidant nutrient therapy reduced systolic blood pressure. One possible mechanism for this anti-hypertensive action is that the nutrients may have increased the availability of nitric oxide. Nitric oxide enhances arterial elasticity and helps to control blood pressure. The antioxidants were 20 mg of zinc, 500 mg of ascorbic acid (Vitamin-C), 600 mg of alpha-tocopherol (vitamin E) and 30 mg of beta-carotene daily.

Clinical Science, Vol. 92, Is. 4, 1997

Suggestions: If you do not currently take these nutrient supplements, and you have high blood pressure, you should consider trying them. You may be able to reduce the dose of the anti-hypertensive drug(s) you've been taking. You should only attempt to reduce your anti-hypertensive drug dose under the care of your physician.

VITAMIN E REVERSES THE AGE-RELATED DECREASE IN T-CELL FUNCTION

Increased production of prostaglandin secretion by macrophages contributes to the age-associated decline in T-cell function. Vitamin E improved T cell responsiveness in old mice mostly by reducing macrophage prostaglandin production.

Mechanisms of Aging and Development, Vol. 93, Is. 1-3, 1997

Suggestions: Most people should take at least 400 IU of a vitamin-E supplement every day to help improve immune function and reduce the risk of a heart attack.

HIGH VITAMIN E DIET IMPROVES LYMPHOCYTE RESPONSE

In this study, the proliferation of splenic lymphocytes was significantly lower in old rats fed a regular diet, compared to young rats. When old rats were fed a high vitamin-E diet, the proliferation of splenic lymphocytes was similar to that of young rats. It is suggested that vitamin E has the ability to reverse the decrease in cellular immune functions caused by aging, and appears to be associated with the enhancement of lymphocyte responsiveness.

Journal of Nutritional Science and Vitaminology, Vol. 43, Is. 1, 1997

Suggestions: Vitamin E is one of the best and safest ways of enhancing immune function that is depleted by aging, to lower your risk of cancer and other diseases.

VITAMIN E RESTORES IMMUNE FUNCTIONS

Monocyte adhesion to human aortic endothelial cells is one of the early events in the development of atherogenesis, leading to atherosclerosis. In this study, endothelial cells were used to investigate the role of vitamin E in human monocyte adhesion to endothelial cells in vitro. Vitamin E had an inhibitory effect on LDL-induced production of adhesion molecules.

Mechanisms of Aging and Development, Vol. 93, Is. 1-3, 1997

Suggestions: If you are taking vitamin E to prevent or treat heart disease, this study provides evidence of one mechanism for this protective effect. If you are not taking Vitamin E, you should start taking 400 to 800 IU a day to protect against heart disease.

PROTEIN RESTRICTION AND PROSTATE CANCER

Rats fed protein-restricted diets for 20 weeks exhibited lower energy intakes, lower body weights and lower tumor growth rates than the control group. The metabolic clearance rate of serum prolactin was lower in rats fed the low protein diets for 16 weeks. The maximum binding capacity of prolactin receptors on the prostate membrane fraction was 42 percent lower in rats fed diets restricted in protein, despite normal serum hormone concentrations at 16 weeks. Restriction in dietary protein caused significant changes in energy intake, serum hormone concentrations, prolactin metabolism, prostatic prolactin binding capacity and prostate tumor growth rates. These studies support the hypothesis that dietary protein and energy intake, particularly during periods of rapid growth and development, may alter prostate biology and increase the risk of prostate cancer.

Journal of Nutrition, Vol 27, Is. 2, 1997

Suggestions: Reducing dietary protein may be desirable for those with prostate cancer. Protein can promote excess prolactin secretion. In lieu of severe dietary modification, prostate cancer patients may consider reducing elevated prolactin levels by taking the drug Dostinex under the care of a physician. Go to our disease prevention section in order to see an updated Prostate Cancer Protocol for early stage and late stage.

VITAMIN D3 DECREASES CELL PROLIFERATION AND INCREASES NERVE GROWTH FACTOR

Vitamin D3 might have a role in neural cell growth and development. In this study, treatment of a murine neuroblastoma cell line in vitro with vitamin D3 resulted in a decrease in cell proliferation, a change in cell morphology, and the expression of protein markers of mature neuronal cells. The decrease in cell proliferation was accompanied by an increase in the expression of nerve growth factor.

Developmental Brain Research, Vol. 99, Is. 1, 1997

Suggestions: Consider taking 400 IU to 1,400 IU a day of vitamin D3 for cancer prevention purposes. Higher daily doses of vitamin D3 for cancer treatment require monthly blood testing and physician monitoring to guard against vitamin D toxicity.

VITAMIN D3 INHIBITS TUMOR CELL INVASION

The active form of Vitamin D3 significantly inhibited fibrosarcoma tumor cell invasiveness by inducing the reduction of laminin production by the cells. The reduced laminin leads to the inhibition in the collagenolytic and migratory activity of the cells, and consequently, to the inhibition of invasiveness through the extracellular matrix.

Tumor Biology, Vol. 18, Is. 2, 1997

Suggestions: If you have cancer, consider taking 2,000 to 6,000 IU a day of vitamin D3 on an empty stomach under the care of a

physician. Have your blood tested monthly to detect vitamin D toxicity.

RETINOIC ACID INHIBITS LEUKEMIA CELLS

Incubation of leukemia cells with retinoic acid resulted in marked inhibition of cell growth and the expression of CD25 in some HTLV-I-positive T-cell clones. Retinoic acid did not affect normal lymphocytes. This suggests that retinoic acid may be suitable for the treatment of patients with adult T-cell leukemia.

Leukemia, Vol. 11, Is. 3, 1997

Suggestions: If you have leukemia, take water-soluble liquid vitamin A and vitamin D3. An alternative to taking vitamin A is to ask your doctor to prescribe retinoic acid drugs such as Vesanoid that may be more effective than vitamin A in treating leukemia. If you are going to take more than 5,000 IU of vitamin A per day to treat cancer, call the Life Extension Foundation for vitamin A precautions.

GINSENG ACTIVATES IMMUNE SYSTEM

In this study, Panax ginseng was purified to yield "ginsan" (an acidic polysaccharide). Ginsan induced the proliferation of T-cells and B-cells. Spleen cells became cytotoxic to a wide range of tumor cells without major histocompatibility complex-restriction. The ginsan activated killer cells, adherent macrophages and T-cells. The ginsan also activated macrophages to produce reactive nitrogen intermediates, and to become tumoricidal. It also exhibited significant in-vivo antitumor activity against melanoma cells, and in the benzo(a)pyrene-induced lung tumor model. Ginsan could potentially be an ideal nontoxic antineoplastic immuno stimulator by activating multiple effector arms of the immune system.

Anticancer Research, Vol. 17, Is. 1A, 1997

Suggestions: This study adds to a growing body of evidence that ginseng is an effective adjuvant cancer therapy. Take a combination of Korean and Siberian ginseng for cancer prevention.

GARLIC HELPS MEMORY IMPAIRMENT

The effect of aged garlic extract on the longevity and learning performances in mice was investigated. A surprising result was obtained by measuring brain size. In the mice not receiving the garlic, the degree of shrinkage in the frontal cerebrum was 2 to 9 percent. Chronic ingestion of aged garlic extract prevented this atrophy and kept the brain size at the control level.

Experimental Gerontology, Vol. 32, Is. 1-2, 1997

Suggestions: Take garlic to help prevent heart disease and cancer, and hope it also prevents your brain from shrinking with age.

VITAMIN-C AND ASTHMA

This study sought to determine if Vitamin-C has a protective effect on the hyperactive airways of patients with exercise-induced asthma. A protective effect was documented in nine of 20 patients. However, the efficacy of Vitamin-C in preventing exercise-induced asthma cannot be predicted.

Archives of Pediatrics & Adolescent Medicine, Vol. 151, Is. 4, 1997

Suggestions: Asthmatics should take, under the care of a physician, the full complement of nutrients and drugs that are recommended in our Asthma Protocol. For the protocol, call 1-800-841-5433.

VITAMIN E HELPS PREVENT LUNG CANCER

In this study, mice were injected with urethane, which induces lung carcinogenesis. The consumption of a vitamin E-supplemented diet for 30 days reduced the frequency of mutation by 50 percent in the vitamin-E supplemented group, compared to the control group. This response occurred during both the initiation and promotion phases of lung carcinogenesis. Also, vitamin E suppressed the level of proliferating cell nuclear antigen as a marker of cell proliferation in the lungs of mice treated with urethane.

European Journal of Pharmacology, Vol. 323, Is. 1, 1997

Suggestions: If you are a smoker, or have ever smoked, take at least 800 IU a day of vitamin E.

VITAMIN E PREVENTS TISSUE REJECTION

The diet of hamsters was supplemented with vitamin E after skin grafts from rats. This resulted in significantly reduced rejection at day six after transplantation and development of functional capillary density at day 20. This indicates prevention of microvascular rejection in comparison with the control group, where initial signs of rejection were noted at day six, and where, after 20 days, functional capillary density was significantly lower, indicating failure of graft acceptance.

American Journal of Pathology, Vol. 150, Is. 4, 1997

Suggestions: Organ transplant patients should take vitamin supplements.

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