compounds that exhibit anticancer activity in animal studies or in vitro. The amount of isoflavones in Haelan951 is said to be two-to-four times higher than that present in other soy products such as tofu and soy milk.

Potassium prevents heart disease
Some 1,981 men (mean age, 75 years) living in a retirement home in Taiwan were randomly assigned to receive food prepared with regular salt (control group) or with potassium-enriched salt (49% potassium chloride, 49% sodium chloride, two percent other additives) for approximately 31 months. Patients with impaired renal function were excluded. Age-adjusted cardiovascular mortality was significantly lower by 41% in the group receiving potassium-enriched salt than in the control group. Persons in the potassium group spent significantly less ($426 per year) on inpatient care for cardiovascular disease than did the control group, after adjustment for age and previous hospitalization expenditures.
Comment: The results of this study indicate that switching from regular salt to potassium-enriched salt decreased cardiovascular disease mortality and health care costs among elderly men. The beneficial effect was probably due mainly to the increase in potassium intake, although the decrease in sodium intake may have contributed as well. Previous studies have shown that increasing potassium intake reduces blood pressure in people with hypertension. Furthermore, observational studies in humans and experimental studies in animals have shown that potassium supplementation reduces the incidence of stroke, independently of any effect on blood pressure. Mechanisms by which potassium may improve cardiovascular disease include inhibition of platelet aggregation, enhancement of myocardial metabolism, and regulation of blood pressure (prevention of both hypertension and hypotension). The high potassium content of fruits and vegetables may explain in part why ingestion of these foods is associated with a reduced risk of developing cardiovascular disease.

N-acetylcysteine for obsessive-compulsive disorder
A 58-year-old woman with a history of obsessive-compulsive disorder since childhood had a stable but partial response to fluvoxamine (Luvox; a selective serotonin-reuptake inhibitor), which she had been taking for 12 years. N-acetylcysteine (NAC) was added at a dose of 600 mg/day, which was increased progressively over six weeks to 3 g/day for an additional seven weeks. A clear improvement in...
compulsive hand-washing was seen, and this improvement persisted for a further two months with continued NAC treatment.

Comment: Hyperactivity of glutamatergic neurotransmission has been implicated in the pathophysiology of obsessive-compulsive disorder. NAC was tried in this case, because it is believed to reduce synaptic glutamatergic activity. Obsessive-compulsive disorder frequently fails to respond adequately to medications and psychotherapy, so additional studies of NAC are warranted. While NAC is generally well tolerated, long-term use has the potential to deplete zinc and copper, so supplementation with these minerals is probably a good idea for people taking NAC.


Antioxidants for chronic pancreatitis

Thirty-six patients with chronic pancreatitis, many of whom had problems with alcohol or drug dependence, were randomly assigned to receive, in double-blind fashion, an antioxidant tablet or placebo four times a day for ten weeks, and then the alternate treatment for an additional ten weeks. The antioxidant tablets provided daily 300 mcg of selenium, 12 mg of beta-carotene, 282 IU of vitamin E, 500 mg of ascorbic acid, and 1,600 mg of methionine. Nineteen patients completed the trial. Improvements were seen during the active-treatment period (as compared with baseline) in physical function, social function, pain, and health perception. These parameters worsened during placebo treatment, and each of the improvements during active treatment was significant when compared with the change during placebo treatment (p < 0.05). Two patients complained of nausea, and one complained of an unpleasant taste from the antioxidant preparation; this was probably due to the presence of methionine.

Comment: Patients with chronic pancreatitis typically suffer from intractable abdominal pain that is resistant to most analgesics. There is evidence that the pain may be due in part to oxygen free radical-induced pancreatic damage. The results of the present study suggest that supplementation with an antioxidant preparation containing selenium, beta-carotene, vitamin C, vitamin E, and methionine can reduce pain and improve quality of life in patients with chronic pancreatitis.


Eating cherries reduces inflammation

Eighteen healthy men and women consumed 280 grams (about ten ounces) of Bing sweet cherries per day for 28 days. The mean serum C-reactive protein (CRP) concentration decreased compared with baseline by eight percent (p = 0.11) after 14 days and by 25% (p < 0.05) after 28 days. Four weeks after cherry consumption was discontinued, the mean CRP level was ten percent higher (p = 0.11) than at the end of the period of cherry consumption. These results suggest that cherry consumption exerts an anti-inflammatory effect.

Comment: In a pilot study published in 1950 (Tex Rep Biol Med. 1950;8:309-311), consumption of one-half pound of fresh or canned cherries per day (or an equivalent amount of cherry juice) prevented recurrences of gout attacks in patients with a history of gout. While that study has never been followed up, ingestion of cherries or cherry juice has become a popular folk remedy for the treatment of acute gout attacks and for the prevention of recurrences.

The results of the present study suggest that cherries contain one or more substances that have anti-inflammatory activity and provide a potential mechanism whereby eating cherries might be helpful for patients with gout. Because there was no control group in the new study, the possibility of a placebo effect cannot be ruled out. However, the time has come for a controlled trial to determine whether eating cherries is an effective treatment or prophylaxis for gout.


Eating overcooked food may impair protein utilization

Eighteen healthy adolescent males (aged 11-14 years) were randomly assigned to consume a diet that was either low (white diet) or high (brown diet) in Maillard reaction products for two weeks. After a six-week washout period, each person consumed the alternate diet for an additional two weeks. The foods included in the two diets were basically the same, but were processed differently when possible; e.g., fried vs. boiled chicken and fried vs. boiled potatoes. Compared with consumption of the white diet, consumption of the brown diet resulted in 47% higher fecal nitrogen excretion (p = 0.002), 12% lower apparent nitrogen absorption (p < 0.001), and six percent lower nitrogen digestibility (p = 0.001).

Comment: The Maillard reaction (also known as “glycation” or the “browning reaction”) occurs when protein is heated in the presence of a reducing sugar such as fructose, glucose, or lactose. A similar type of reaction (called lipoxidation) also occurs when proteins are heated in the presence of certain lipids. Previous studies have shown that ingestion of the molecules that form during these chemical reactions (i.e., advanced glycation end-products and advanced lipoxidation end-products) can evoke an inflammatory response and probably contribute to the pathogenesis of cardiovascular disease, diabetic end-organ damage, and chronic renal failure.

The results of the present study indicate that eating heavily cooked food also impairs protein digestion and absorption. While that effect would probably not be clinically significant for people consuming a high-protein diet, it could be important for those whose diets are marginal or low in protein.

The best approach would be to eat as many raw foods as possible and to use the least harsh cooking techniques when eating cooked foods. Thus, boiling and poaching are preferable to frying and grilling; medium-rare would be better than well-done; and protein-containing foods that are baked in the presence of lactose (i.e., milk) or high-fructose corn syrup (e.g., pastries, pies, doughnuts) should be avoided.
