Nutrient-Fortified Milk Improves Children's Health

Fortifying milk with vitamins and minerals decreased the incidence of diarrhea and lower respiratory disease in young children living near New Delhi, India, report researchers from the US and India.*

In a year-long trial of 633 children between the ages of one and four, 316 children were given three daily servings of milk fortified with zinc, iron, selenium, copper, and vitamins A, C, and E, while 317 children drank unfortified milk. The children were visited twice weekly to collect information on their health. Children who consumed the fortified milk had 15% fewer days in which they experienced severe illness, 7% fewer days with high fever, an 18% drop in the incidence of diarrhea, and a 26% lower incidence of pneumonia.

"Some micronutrients have a crucial role in generation, maintenance, and amplification of immune responses in the body," the study authors noted, "Deficiencies in multiple micronutrients among preschool children are an important determinant of child health in developing countries."

—Dayna Dye

Gingerol Destroys Pancreatic Cancer Cells

Gingerol, a component of ginger, inhibits cell growth and induces cell death in human pancreatic cancer cells, according to Korean researchers.*

The scientists incubated two separate pancreatic cancer cell lines with varying concentrations of gingerol for different durations. Cell growth was inhibited in direct relation to the dose and duration of gingerol application. Gingerol interfered with the cell-growth cycle in both cell lines and hastened cell death in one of the cell lines.

Most important, gingerol killed cancer cells that carry a mutation in a gene known as p53, which is mutated in more than half of human cancers and can contribute to resistance to radiation and chemotherapy. In view of its beneficial effects, gingerol may eventually be used to facilitate tumor response to treatments for pancreatic cancer.

—Laura J. Ninger, ELS


Antioxidants May Complement Radiation Treatment

Consuming antioxidants during radiation therapy may improve rather than interfere with treatment, report researchers at the Cancer Treatment Centers of America.*

Scientists have long been concerned that because antioxidant supplements protect tissues from free radicals, they may also protect cancerous tumors from the intended destructive effects of ionizing radiation when taken before or during radiation treatment.

In this study, prostate cancer patients who were given radiation therapy and no antioxidants were compared to those who underwent therapy and consumed green tea extract, melatonin, high-potency multivitamins, and vitamins C and E. Prostate-specific antigen (PSA) levels, a prostate cancer marker, did not differ between the two groups, demonstrating that the supplements did not impede the effects of radiation.

This finding is "evidence that antioxidants as a complementary therapy in cancer treatment do not interfere with external beam radiation therapy," the researchers stated.

—Dayna Dye

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