Weight loss research

Researchers in Germany used 15 human volunteers to test an appetite reducing effect. Obese outpatients, who were following a weight reduction diet, took spirulina tablets before each meal three times a day for four weeks. In this double blind crossover study against a placebo, about 6 tablets three times a day over four weeks showed a small but statistically significant reduction of body weight. There was also a significant drop in serum cholesterol levels.[70]

70. Becker, E.W. et al. Clinical and biochemical evaluations of the alga spirulina with regard to its application in the treatment of obesity. Inst. Chem. Pfanzenphysiologie. Nutrition Reports Int'l, April 1986, Vol. 33, No 4, 565.

Reduces effects of radiation for the Children of Chernobyl

Years after the Chernobyl disaster, four million people in Ukraine and Belarus live in dangerously radioactive areas. The water, soil and food over an 11,000 square mile area is contaminated. Over 160,000 children are victims of radiation poisoning, with birth defects, leukemia, cancer, thyroid disease, anemia, loss of vision and appetite and depressed immune system, now called "Chernobyl AIDS."

Doctors reported spirulina's health benefits for child victims of Chernobyl radiation. Spirulina reduced urine radioactivity levels by 50% in only 20 days. This result was achieved by giving 5 grams a day to children at the Minsk, Belarus Institute of Radiation Medicine. The Institute program treated 100 children every 20 days.

An unpublished 1993 report confirmed 1990-91 research, concluding "spirulina decreases radiation dose load received from food contaminated with radionucleides, Cesium-137 and Strontium-90. It is favorable for normalizing the adaptive potential of children's bodies in conditions of long-lived low dose radiation."[71]

Based on testing in 1990, the Belarus Ministry of Health concluded spirulina promotes the evacuation of radionucleides from the human body. No side effects were registered. The Ministry considered this food was advisable for the treatment of people subject to radiation effects, and requested additional donations from the Earthrise Com-pany of California and Dainippon Ink & Chemicals of Japan.[72]

Previous research in China in 1989 demonstrated a natural polysaccharide extract of spirulina had a protective effect against gamma radiation in mice.[74] Subsequent research showed phycocyanin and polysaccharides enhanced the reproduction of bone marrow and cellular immunity.[26]

In a 1991 study of 49 kindergarten children aged 3 to 7 years old in Beryozova, spirulina was given to 49 children for 45 days. Doctors found T-cell suppressors and beneficial hormones rose, and in 83% of the children, radioactivity of the urine decreased.[73]

A Russian patent was awarded in 1994 for the use of spirulina as a medical food to reduce allergic reactions from radiation sickness. The patent was based on a study of 270 children living in highly radioactive areas. They had chronic radiation sickness and elevated levels of Immunoglobulin (IgE), a marker for high allergy sensitivity. Thirty five were prescribed 20 tablets per day (about 5 grams) for 45 days. Consuming spirulina lowered the levels of IgE in the blood, which in turn, normalized allergic sensitivities in the body.[75]

Research continuing through 1999 in Belarus showed immune building, normalization of peroxide

lipid oxidation and detoxifying effects of spirulina supplements in children and teenagers. Scientists theorized spirulina may form non-absorbable complexes of radionucleides through analogues such as calcium or potassium and promotes their excretion.[76]

71. Loseva, L.P. and Dardynskaya, I.V. Spirulina- natural sorbent of radionucleides. Research Institute of Radiation Medicine, Minsk, Belarus. 6th Intl Congress of Applied Algology, Czech Republic, Sep. 9, 1993.
72. Sokolovskiy, V. Corres. from the First Secretary BSSR Mission to the United Nations, May 20, 1991.
73. Belookaya, T. Corres. from Chairman of Byelorussian Committee "Children of Chernobyl" May 31, 1991.
74. Qishen, P. et. al. Radioprotective effect of extract from spirulina platensis in mouse bone marrow cells studied by using the micronucleus test. Toxicology letters. 1989. 48:165-169.
75. Evets, P. et. al. Means to normalize the levels of immunoglobulin E, using the food supplement spirulina. Grodenski State Medical Univ. Russian Fed Comm Patents and Trade. Patent (19)RU (11)2005486. Jan. 15, 1994.
76. Loseva, L.P. Spirulina platensis and specialties to support detoxifying pollutants and to strengthen the immune system. Research Institute of Radiation Medicine, Minsk, Belarus. Presented at 8th Int'l Congress of Applied Algology, Italy Sep. 1999.