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Life Extension Update Exclusive

Four supplements help protect against middle-aged weight gain

The findings of research presented at the 19th Annual Convention of the American Association of Naturopathic Physicians held in Seattle from September 8-11, 2004, revealed a protective role for four nutritional supplements against midlife weight gain. On average, men gain 10 pounds and women gain 16 pounds of body weight between the ages of 25 to 54.

M C Nachtigal ND and colleagues from the Fred Hutchinson Cancer Research Center in Seattle analyzed data collected in the VITamins And Lifestyle (VITAL) study, which surveyed men and women between the ages of 50 and 76 to obtain information on vitamin, mineral, and herbal supplement use as well as medical history, diet, physical activity and weight change over the past decade.

The researchers reviewed 15,000 questionnaires submitted by participants with an average age of 55. Multivitamins, fiber tablets, soy, ginkgo, St John's Wort, vitamin B6, vitamin B12, chromium, omega-3 fatty acids and other supplement use was analyzed and correlated with body weight changes occurring between the ages of 45 and 55. They found that those who reported using multivitamins, vitamin B6, vitamin B12 and chromium experienced less weight gain than those who did not use these supplements. This effect was most noticeable among those who were overweight or obese at age 45. There was little difference between men and women in these findings.

It was suggested that chromium and B complex might modify appetite, leading to the intake of fewer calories. Individuals who are deficient in B complex may be more likely to overeat, therefore correcting deficiencies of these vitamins could lead to less calorie consumption. A clinical trial of the supplements is the next step to confirm their effect on weight gain in middle-aged men and women.

What's Hot

Low glycemic index diets work in rodents

A report appearing in the August 28 2004 issue of The Lancet detailed experiments conducted by David Ludwig MD and colleagues of the Optimal Weight for Life obesity program at Children's Hospital in Boston which found that rats provided with a low-glycemic index diet experienced greater body fat loss and a reduction in cardiovascular disease and diabetes risk factors compared to rats who consumed a high-glycemic diet. The glycemic index of a food rates the rapidity with which it releases sugar into the bloodstream. The consumption of low as opposed to high glycemic index foods may be helpful when for weight loss and the treatment of diabetes.

http://www.lef.org/whatshot/2004_08.htm

Hypoglycemia

There are three general types of hypoglycemia. Two of them are rare organic forms involving the pancreas. The third and most common form is called functional hypoglycemia (FH) and is usually caused by an inadequate diet too high in sugar and refined carbohydrates. Hypoglycemia may be better described as carbohydrate intolerance: the body is unable to absorb certain carbohydrate loads effectively without adverse consequences. Different people react differently to ingested sugars and starches, with some individuals having a higher tolerance level than others.

Although predisposition to FH may be an inherited condition and is most often due to dietary factors, it can also be found in people with such disorders as schizophrenia, alcoholism, drug addiction, juvenile delinquency, hyperactivity, diabetes, and obesity. In some people, severe FH can contribute to other illnesses such as epilepsy, allergies, asthma, ulcers, arthritis, impotence, and mental disorders.

Hypoglycemia may damage brain cells. When hippocampal brain-cell cultures are deprived of glucose, a massive release of lactate dehydrogenase (LDH) occurs, which is an indicator of neuronal death. The addition of the vitamin B6 metabolite pyridoxal 5-phosphate has been shown to inhibit the LDH release. When pyridoxal 5-phosphate is given before glucose deprivation, a more potent inhibitory effect on LDH release has been observed. Scientists have suggested that pyridoxal 5-phosphate protects neurons from glucose deprivation-induced damage. These scientists recommend that pyridoxal 5-phosphate be used prophylactically to protect against brain-cell death induced by metabolic disorders such as hypoglycemia (Geng et al. 1997).

Another possible cause of low blood sugar is the inability to release glycogen (stored sugar in the liver), secondary to vitamin B6 and chromium deficiency. Some hypoglycemics are helped by the daily administration of 100-250 mg of pyridoxal 5-phosphate and 200 mcg of chromium. Chromium is a mineral found in brewer's yeast, whole-grain breads and cereals, molasses, cheese, lean meats, and dietary supplements.

<http://www.lef.org/protocols/prtcl-061.shtml>

Featured Products

Vitamin B6 capsules

B vitamins are used in the body individually or in combination with enzymes to help release energy from carbohydrates, fat, and protein. Vitamin B coenzymes are crucial to the metabolic pathways that generate the energy needed by every cell in the body. Because they are co-dependent in their metabolic activities, a deficiency of one B vitamin can affect optimal functioning of organ systems throughout the body.

Vitamin B6, or pyridoxine, is an important component of the coenzyme PLP, which metabolizes amino acids. Because of its amino acid transfer ability, the body can produce nonessential amino acids from available amino groups, as well as metabolize protein and urea. Without vitamin B6, our bodies would not be able to manufacture red and white blood cells, hormones, insulin, adrenaline, antibodies, neurotransmitters (such as serotonin that controls sleep patterns, appetite, and sensitivity to pain), and enzymes.



<http://www.lef.org/newshop/items/item00556.html>

Chromium capsules

Chromium is an essential trace mineral that is necessary for carbohydrate metabolism, glucose regulation, and energy production. Chromium can also produce anabolic effects, but without side effects.

Chromium polynicotinate is a niacin-bound, absorbable form that may be used as part of your diet to help maintain a healthy blood sugar level.



<http://www.lef.org/newshop/items/item00169.html>

If you have questions or comments concerning this issue or past issues of Life Extension Update, send them to dye@lifeextension.com or call 954 766 8433 extension 7716.

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