Plant-Based Diet May Be Good For Controlling Weight

Consuming more plant foods and fewer animal products may help individuals control their weight, according to a new study.

The study was led by nutritional epidemiologist P. K. Newby at the Jean Mayer U.S. Department of Agriculture (U.S.D.A.) Human Nutrition Research Center on Aging at Tufts University in Boston, Massachusetts, and Alicja Wolk at the Karolinska Institute in Stockholm, Sweden.

The researchers examined the health records of more than 55,000 healthy women participating in the Swedish Mammography Cohort. They looked at the body mass index (BMI) of the following groups:

• healthy women participating in the Swedish Mammography Cohort.
• individuals control their weight, according to a new study.
• semi-vegetarians, who eat some meat, dairy products, and eggs
• lacto-vegetarians, who consume milk but not meat or eggs
• vegans, who consume no animal products
• omnivores, who eat all foods

BMI is a common measurement used to determine whether a person is at a healthy weight, overweight, or obese. A BMI of 18.5 to 25 refers to a healthy weight, a BMI of 25 up to 30 refers to overweight, and a BMI of 30 or higher refers to obesity.

"The omnivorous women were significantly heavier than any of the three vegetarian groups and also had a significantly higher BMI." – Dr. Newby

All of the vegetarian women had a lower risk of being overweight or obese compared with the omnivorous women. Specifically, the prevalence of overweight or obesity (BMI over 25) was 40 percent among omnivores, 29 percent among both semi-vegetarians and vegans, and 25 percent among lacto-vegetarians. All three vegetarian groups had about half the risk of overweight or obesity as omnivores.

"The omnivorous women were significantly heavier than any of the three vegetarian groups and also had a significantly higher BMI," says Newby.

"Even among the vegetarians who consume some animal products, our results suggest that self-identified vegetarians of any kind have a lower risk of overweight and obesity than do omnivorous women." The study was limited to older women, and the authors did not adjust for physical activity. They noted other research showing that vegetarians of all ages and both sexes were leaner than omnivores.

Another large study found that differences in BMI among vegetarian groups remained significant when adjusted for physical activity and other lifestyle factors.

The study suggests that plant-based diets are inversely related to obesity.

"All the vegetarian groups had higher intakes of fruit, vegetables, and fiber and lower intakes of fat and protein," says Newby. (Source: Agricultural Research, March 2006.)

Copper Can Help Women Retain Calcium While Dieting

To help reduce obesity rates in the United States, researchers are looking carefully at the physiological changes that take place during weight loss. A study by scientists at the Human Nutrition Research Center in Grand Forks, North Dakota, has revealed specific findings about the importance of adequate amounts of copper during the weight-loss process.

On the basis of a carefully controlled nutrition study in humans, the copper requirements of women while losing weight exceed the current recommended levels for their age range.

When people, particularly those who are obese, go on weight-loss diets, they often lose calcium from their bones. Physiologist Henry C. Lukaski, Assistant Director of the Human Research Nutrition Center, presented an abstract of the findings at a meeting sponsored by the American Society for Clinical Nutrition.

Some of the women in the study received daily supplements of 3 milligrams (mg.) of copper; others received supplements of only 1.23 mg. Both of these levels exceeded the current Dietary Reference Intake (DRI) for copper (0.9 mg.) in women older than 19 years of age.

All of the women, ranging from 25 to 35 years of age, were then given a weight-loss diet. During the diet, the researchers used isotopes to track the participants' loss of calcium. The women who took 3 mg. of copper retained more calcium in their bones than women taking 1.23 mg. of copper, and they maintained their pre-weight-loss bone mineral density.

"The higher copper intake appears to have helped those participants retain more calcium," said Dr. Lukaski.

The study suggests that during weight loss, the current DRI for copper might not be adequate.

Good sources of copper include green vegetables, mushrooms, nuts, seeds, wheat bran, cereal, and whole grains. (Source: Agricultural Research, March 2006.)

New Lung Test Detects Fungus

New Zealand scientists have created a test that can detect a fungal lung infection by examination of a person's breath. The test uses a combination of gas chromatography and mass spectroscopy.

The team tested the breath of people with Aspergillus fumigatus infection and detected a substance called 2-pentylfuran. The substance was not present in people who did not have the infection.

A physician at the University of Otago in Christchurch said that the detection of an airborne biomarker of a pathogen is a first. A. fumigatus can cause infections in people with weakened immune systems as a result of such diseases as cystic fibrosis.

Previously, a biopsy of the lung had been required to detect A. fumigatus. (Source: Infectious Diseases Society of America, October 2005.)