



**For Immediate Release**

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**Contact:**

**Pat Kearney**

**(703) 841-1600**

[pmk@pmkassociates.com](mailto:pmk@pmkassociates.com)

**Eating Peanuts Curbs Hunger and Can Help Control Weight Gain**

*Albany, GA, July 24, 2002* -- A new study shows when people ate peanuts, they felt very satisfied and naturally decreased food consumption at other times of the day. Despite the inclusion of a significant amount of extra calories in the diet, little change in body weight was observed. This is the first clinical study designed to confirm and explain a body of epidemiological data showing that nut-eaters tend to have a lower body mass index (BMI) than non-nut-eaters. The study entitled, "Effects of Chronic Peanut Consumption on Energy Balance and Hedonics," is published in the August issue of the International Journal of Obesity (Vol. 26, Issue 8, p.1129-37).

Researchers at Purdue University studied the effects of daily peanut consumption on dietary intake, satiety, energy expenditure and body weight. The principle investigator, Dr. Richard Mattes, Department of Foods and Nutrition, Purdue University, observed that, "the high protein and fiber content in peanuts may play an important role in curbing hunger and thereby not promoting weight gain." The findings are consistent with large population studies such as the Seventh Day Adventist Study and the Nurses' Health Study, where researchers found that people who consumed about an ounce of peanuts, nuts and peanut butter frequently, had lower BMI scores.

This new cross-over study included three diet treatments. Every subject participated in all three diet treatments, each providing a research-sized portion of approximately 500 calories of peanuts. The first treatment group consumed a Free-Feeding diet, which included the peanuts without any dietary guidance. Subjects in the second Addition treatment group were given instructions to add the peanuts to their usual diets. The third Substitution treatment group followed individualized diets, substituting the peanuts in place of 500 calories in the diet.

*Eating Peanuts Kept Caloric Intake Down Throughout the Day*

According to Dr. Mattes, in both the Free-Feeding and Addition groups, the subjects spontaneously remarked that they felt full and could not eat all of the food they typically eat daily. The men and women compensated for most of the additional calories by eating less than usual, even without dietary instruction to do so. This resulted in lower actual weight gain than was expected from including the extra calories into their routine.

Surprisingly, in the Free-Feeding group, the researchers found the actual weight gain to be just 2.2 pounds, far below the expected weight gain of about 8 pounds. Total daily energy intake was significantly lower than predicted, as the subjects naturally compensated for 66% of the energy provided by the peanuts.

In the Addition diet group, subjects were instructed to add peanuts to their usual diets for three weeks. Because this treatment period was shorter, expected weight gain with peanuts added to their usual diet was about 3 pounds and actual weight gain was only about 1 pound. This strong dietary compensation may be due to the high satiety value of peanuts.

#### *High Satiety Value of Peanuts*

"Peanuts have a great mix of features, such as high protein, high fiber, and a crunchy texture, which enhance satiety," said Dr. Mattes. The eating satisfaction is partly responsible for the lack of actual weight gain in this study. The results of this study are consistent with earlier research at Purdue showing that peanuts and peanut butter satisfy hunger up to five times longer than some high-carbohydrate snacks such as rice cakes. There is also some previous research that demonstrated that whole peanuts are inefficiently absorbed, which may be another possible factor contributing to the prevention of weight gain.

#### *Subjects Gave High Acceptability Rating to Daily Peanut Consumption*

One of the major problems people have with sticking to a diet is that they feel deprived or get tired of and bored eating "diet food." Researchers usually predict some decline in the pleasantness, or hedonics, of foods eaten daily for a long period of time. Surprisingly, the pleasantness, or enjoyment, ratings for peanuts stayed high over the five months of trial periods. This is an important finding for long-term adherence to a healthful dietary pattern for weight loss or maintenance.

#### *Improved Diet Quality*

In the most highly controlled Substitution group, fat intake was decreased by 50% and the calories were replaced with an equivalent amount of energy from peanuts. Essentially, subjects were instructed to follow a low-fat diet and include the peanuts each day. Weight gain was predicted to be zero because this was a calorie substitution diet. As predicted, no significant change in body weight was seen when peanuts were substituted for other fats in the diet and overall diet quality improved.

In addition to containing good unsaturated fat, peanuts provide plant protein and fiber, as well as vitamin E, folate, potassium, magnesium, and zinc, all which are thought to be important to health. Peanuts also contain bioactive components such as phytosterols, flavonoids, and antioxidants, the benefits of which nutrition scientists are only beginning to discover.

The Peanut Institute is a non-profit organization that supports nutrition research and develops educational programs to encourage healthful lifestyles. Learn more about peanuts and health at <http://www.peanut-institute.org>

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