



Walnuts Reduce Breast Cancer Risk By Half In Animal Studies

Main Category: Nutrition / Diet

Also Included In: Breast Cancer

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Mice fed a diet that included daily walnuts had half the risk of developing breast cancer compared to those on a typical diet, researchers from Marshall University School of Medicine reported in the journal *Nutrition and Cancer*. Elaine Hardman, Ph.D. and team set out to determine what impact the inclusion of a moderate amount of walnuts in the animals' daily diet might have on their breast cancer risk.

The mice were placed into two groups. One received a diet containing the human equivalent of 2 ounces of walnuts each day, while those in the other group were fed a typical diet without walnuts. The mice were monitored and assessed throughout their lifespan - through the mother from conception through weaning, and then through eating the walnuts directly.

The team found that the mice which were fed walnuts throughout their lives developed breast cancer at half the rate of the other mice. Even among those in the walnut group that did develop cancer, their tumors were considerably smaller and less numerous.

Hardman said:

"These reductions are particularly important when you consider that the mice were genetically programmed to develop cancer at a high rate. We were able to reduce the risk for cancer even in the presence of a preexisting genetic mutation

The authors stressed that changing a diet in a study does not necessarily demonstrate that the benefits result only from what was added to the diet or what was taken away from it. For example, in this case, the walnut-fed mice were receiving extra healthy fat, and in order to maintain the same calorie intake as the other group, unhealthy fat was reduced to keep dietary fat balanced.

However, Hardman added that previous studies have shown clearly that various ingredients in walnuts do reduce the chances of developing cancer, and slow down its progression when it does occur.

The team found that the diet that included walnuts altered the activity of several genes that are associated with breast cancer in both mice and humans. After carrying out some other tests, they were able to determine that raised omega 3 fatty acid intake could not fully account for the cancer protecting effect. They found that tumor growth slowed down when they mice consumed more vitamin E.

The researchers said their findings underline the key role diet plays on animal and human health.

Hardman said:

"Food is important medicine in our diet. What we put into our bodies makes a big difference - it determines how the body functions, our reaction to illness and health. The simple stuff really works: eat right, get off the couch, and turn off the TV.

"The results of this study indicate that increased consumption of walnut could be part of a healthy diet and reduce risk for cancer in future generations."

Walnuts

Walnuts are the edible seeds of *Juglans* trees, a plant genus of the family Juglandaceae. *Juglans* are deciduous trees that grow to a height of between thirty and 130 feet. The Persian walnut comes from the *Juglans regia* tree.

A 2011 study carried out at the University of Scranton in Pennsylvania found that walnuts are packed with heart-healthy antioxidants. ([Link to article](#))

Penn State researchers found that a diet rich in walnuts and walnut oil helped the human body deal better with stress. ([Link to article](#))

In 2006, researchers from the University of Barcelona's Hospital Clínic, Spain, found that adding a handful of raw walnuts to meals high in saturated fat was more effective at limiting the ability of the harmful fat from damaging arteries than adding olive oil. ([Link to article](#))

Below are some nutritional facts of English Walnuts (According to the United States Department of Agriculture) - serving size 177 g (1 cup chopped):

- Total Fat 76g. 117% of percentage daily value.
- Saturated Fat 7g. 36% % of percentage daily value.
- Trans Fat 0
- Cholesterol 0
- Sodium 2mg. 0% of percentage daily value. (negligible)
- Total carbohydrate 16g. 5% of percentage daily value.
- Dietary Fiber 8g. 31% % of percentage daily value.
- Sugars 3g

- Protein 18g
- Vitamin A 0%. Vitamin C 3%. Calcium 11%. Iron 19%. (% of percentage daily value)

Percent Daily Values are based on a 2,000 per day calorie diet.

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