Pennington Nutrition Series
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Cinnamon

And Your Health

- Cinnamon (*C. zeylanicum*) is a small evergreen tree 10-15 m tall belonging to the family Lauraceae.
- The bark of the tree is used for a spice.
- In the United States, cinnamon is often used to flavor baked goods, cereals, bread-based dishes, and fruits.
- Cinnamon contains antioxidants and other active ingredients which are found in the water-soluble portions of cinnamon, but not in the cinnamon oil.

Type 2 Diabetes

According to the 2005 prevalence data from the CDC, approximately 7.3% of the U.S. adult population has diabetes. Of the two forms of diabetes, Type 2 is the more common form. This type is characterized by the failure of body cells to recognize and respond to insulin, the hormone responsible for moving glucose out of the blood stream and into the cells. The result of this is elevated blood sugar (glucose) levels, which can lead to complications, some of which are severe, if left untreated.

Some individuals have a condition known as pre-diabetes. They are at a high risk for developing type 2 diabetes. Lifestyle changes such as increasing exercise and adopting a healthy diet of whole grains, fruits, vegetables and dairy can delay the development of diabetes at this stage.

The Active Component

A polyphenol found in cinnamon, referred to as MHCP, is believed to be responsible for cinnamon's ability to influence glucose metabolism. MHCP increases glucose metabolism by 20-fold. MHCP mimics insulin, stimulating glucose uptake and glycogen synthesis. When MHCP is combined with insulin, the response is greater than with either alone, indicating synergism between the two compounds.

Diabetes Studies

More recently cinnamon has been tested on human subjects. When given cinnamon, Type 2 diabetics had significantly reduced fasting glucose, triglycerides, LDL cholesterol and total cholesterol after 40 days of supplementation.

The consumption of 1/2 teaspoon (or less) of cinnamon daily could produce improvements in glucose and blood lipids over time. Excess intake may irritate the stomach lining in some individuals.

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