

Cinnamon Adds Spice to Research in the Management of Type 2 Diabetes

Cinnamon is a familiar spice in American cuisine conjuring up thoughts of pumpkin pie at Thanksgiving, baked apples or hot mulled cider on a cool fall day. But there may be more to cinnamon than its aromatic smell and warm, spicy flavor.

Recent research has been aimed at evaluating the possible effects of cinnamon on insulin function that may bring some positive advances in the development and management of Type 2 Diabetes. Studies are beginning to demonstrate positive effects of cinnamon on insulin activity suggesting a possible role of this spice in improving glucose and insulin metabolism.

Diabetes mellitus (Types 1 and 2) affects almost 16 million Americans – approximately 6% of the U.S. population. Ninety to 95% of cases are Type 2. Type 2 Diabetes is a condition where insulin secretion may be impaired and commonly, the fat and muscle cells lose the ability to respond to insulin. Insulin is the key hormone that unlocks the door of the cell to allow glucose in from the blood stream to the cell for energy.

When glucose can't enter the cells, symptoms of fatigue result and the excess buildup of glucose in the blood causes other serious complications including blurred vision, numbness and nerve damage, sexual problems and sugar in the urine. Untreated, Type 2 Diabetes can lead over time to permanent nerve damage, kidney disease, blindness, and even death. Current treatments include management through diet and exercise, and commonly Type 2 diabetics take medications that help maintain normal blood glucose levels by stimulating the cells to take in glucose.

Initial research from the USDA's Beltsville Human Nutrition Research Center in Maryland indicates that cinnamon may be beneficial in preventing or delaying the development of Type 2 Diabetes. In laboratory animals and test tube studies, cinnamon has been shown to make fat cells more responsive to insulin, enabling glucose to be shuttled from the blood to the cells more rapidly. Maintaining blood glucose levels at or near normal levels can possibly prevent the development of Type 2 diabetes or adverse symptoms related to prolonged elevation of sugar in the blood.

While it is too early to recommend using cinnamon as a way to treat Type 2 Diabetes, some researchers are suggesting that the addition of up to one teaspoon of cinnamon each day may confer some benefits in controlling blood glucose. Cinnamon has been long used as a flavoring agent and adding a small amount of cinnamon to one's diet is unlikely to bring adverse reactions.

As yet unpublished studies are also showing similar positive effects with cinnamon and its compounds on glucose metabolism. Cinnamon may be a positive step in the direction of finding natural ways to maintaining normal blood glucose levels and controlling or preventing Type 2 Diabetes. Further research in this area is planned.

References:

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