

Effect of Cinnamon in Diabetes

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Abstract: Cinnamon contains oils and some important compounds like eugenol, cinnamate, cinnamaldehyde. It contains good antibiotic, antimicrobial, anti-inflammatory, and more other activities. Due to its fragrance it is useful ingredient in kitchen. Cinnamon is used for various purposes like preserving a body to stop the natural breakdown of cells and it is used for various illness. Cinnamon gives several benefits on diabetes, cancer, lowering blood pressure and gastro protective properties. *C. aromaticum* and *C. zeylanium* are both available in nature. Diabetes disease occurs when our body has high blood sugar level. It comes out from our blood. When we take heavy amount of glucose it causes health problems. Diabetes is not a cured disease; it will be managed by human being. If we do not mention the sugar level then in every case it is very curious. When in our body insulin level is very low it is called high blood sugar level, and when the insulin level is high it causes low blood sugar level.

Cinnamon helps in decreasing blood sugar level in pre-diabetes and type-2 diabetes patients. Cinnamon does not mainly play a role in decreasing the blood sugar level but it helps body cells to be specific for the utilization of insulin in the body that can help to decrease blood sugar level.

Keywords: Cinnamon, blood sugar, Diabetes, pre-diabetes, type2 diabetes, insulin,

Introduction

Diabetes occurs in high blood glucose level. When homeostatic carbohydrate and lipid metabolism is not properly regulated by insulin, then diabetes condition arises. Diabetes cannot be cured but can only be managed. Several drugs are used to combat diabetes. In spite of tremendous progress in managing diabetes, (by using synthetic drugs), there are certain areas in the world where existing treatments are not available or are too expensive. Hence, some plants possessing antidiabetic properties are utilized against diabetes which can be affordable by the poor people. Spices like cinnamon are the source of many bioactive compounds that can regulate digestion and metabolic processes. Cinnamon possesses numerous medicinal properties. Recently,

it is used potentially for the treatment of type-2 diabetes. Insulin potentiating factor (IPF) present in cinnamon may be involved in the alleviation of the signs and symptoms of diabetes.

This IPF is an unidentified factor: but this factor present in cinnamon may be Methylhydroxy-chalcone polymer (MHCP). Cinnamon extracts improve the insulin receptor function that helps insulin to bind to cells and inhibits the enzymes that block the process which indirectly increase insulin sensitivity. MHCP helps in stimulating the auto phosphorylation of insulin receptor, unregulated glucose uptake, glycogen synthesis. These events directly respond to insulin sensitivity.

From the above summary, a brief description and how it affects and helps to diabetes is given as