

essentials of health

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A recent review of 18 studies shows that moderate intake of fructose, when used in place of other carbohydrates, may help improve blood sugar control nearly as well as oral anti-diabetic drugs.

MODERATE FRUCTOSE CONSUMPTION IMPROVES BLOOD GLUCOSE CONTROL IN DIABETICS

There has been much controversy recently regarding the effect of fructose consumption on cardiovascular and metabolic health in humans. Fructose is a sugar naturally found in fruit, vegetables and honey. Along with glucose, it is also found in sucrose (table sugar) and high fructose corn syrup.

A new study published in *Diabetes Care* indicates that moderate fructose consumption may not be as detrimental as previously thought, and that in certain groups it may even provide some benefit.

Researchers reviewed 18 trials involving participants with Type 1 or Type 2 diabetes. In each trial, subjects were fed diets that included fructose incorporated or sprinkled onto test foods such as breakfast cereals or in coffee. The diets with and without fructose contained the same amount of calories. Data gathered included fasting glucose, insulin and glycated hemoglobin (HbA1c), which is an indication of average blood glucose control over 3 months.

The researchers found that isocaloric exchange of fructose for carbohydrate significantly reduced glycated blood proteins, an indication of improved blood sugar control. The level of improvement was similar to what is typically achieved using oral anti-diabetic medications. In addition, these benefits were seen with no evidence of adverse effects on body weight, blood pressure, uric acid (gout), or cholesterol. Fructose consumption did not significantly affect fasting glucose or insulin.

The results of this study highlight the need to bring attention back to the concept of moderation. In the popular media, all the emphasis on fructose-related harm draws attention further away from the issue of eating too many calories. Although larger and more comprehensive studies are needed, the current study shows that fructose intake in moderation may have cardiometabolic benefits diabetic adults.

Adrian I. Cozma, HBSC et al. Effect of Fructose on Glycemic Control in Diabetes. A systematic review and meta-analysis of controlled feeding trials. Diabetes Care July 2012 vol. 35 no. 7 1611-1620.