High-fat diet lowered blood sugar and improved blood lipids in diabetics
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People with Type 2 diabetes are usually advised to keep a low-fat diet. Now, a study at Linköping University shows that food with a lot of fat and few carbohydrates could have a better effect on blood sugar levels and blood lipids.

The results of a two-year dietary study led by Hans Guldband, general practitioner, and Fredrik Nyström, professor of Internal Medicine, are being published in the prestigious journal *Diabetologia*. 61 patients were included in the study of Type 2, or adult-onset diabetes. They were randomized into two groups, where they followed either a low-carbohydrate (high fat) diet or a low-fat diet.

In both groups, the participants lost approximately 4 kg on average. In addition, a clear improvement in the glycaemic control was seen in the low-carbohydrate group after six months. Their average blood sugar level dropped from 58.5 to 53.7 mmol/mol (the unit for average blood glucose). This means that the intensity of the treatment for diabetes could also be reduced, and the amounts of insulin were lowered by 30%.

Despite the increased fat intake with a larger portion of saturated fatty acids, their lipoproteins did not get worse. Quite the contrary - the HDL, or 'good' cholesterol, content increased on the high fat diet.

No statistically certain improvements, either of the glycaemic controls or the lipoproteins, were seen in the low-fat group, despite the weight loss.

"You could ask yourself if it really is good to recommend a low-fat diet to patients with diabetes, if despite their weight loss they get neither better lipoproteins nor blood glucose levels," Nyström says.

In the low-carbohydrate diet, 50% of the energy came from fat, 20% from carbohydrates, and 30% from protein. For the low-fat group the distribution was 30% from fat, 55-60% from carbohydrates, and 10-15% from protein, which corresponds to the diet recommended by the Swedish National Food Agency.

Provided by Linköping University

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