

A Paleolithic-type diet may help reduce future risk of diabetes and cardiovascular disease

April 3 2016

A Paleolithic-type diet may help obese postmenopausal women lose weight, improve their circulating fatty acid profile and lower their future risk for diabetes and cardiovascular disease, new research reports. The study results will be presented in a poster Sunday, April 3, at ENDO 2016, the annual meeting of the Endocrine Society, in Boston.

"Eating a Paleolithic-type diet without [calorie restriction](#) significantly improved the fatty acid profile associated with [insulin sensitivity](#), and it reduced abdominal adiposity and body weight in obese postmenopausal women," said lead study author Caroline Blomquist, a doctoral student in the Department of Public Health and Clinical Medicine at Umeå University in Umeå, Sweden. "A Paleolithic-type diet, high in polyunsaturated fatty acids, may have long-term beneficial effects on obesity-related disorders, including [reduced risk](#) for diabetes and [cardiovascular disease](#)."

Blomquist and her colleagues conducted their 24-month intervention in 70 obese postmenopausal women with normal fasting plasma glucose levels. The women were randomly assigned to one of two groups. Those in the Paleolithic-type-diet group aimed to consume 30 percent of their total energy (E%, "energy percent,") in protein, 30 E% in carbohydrates, and 40 E% in fats with high unsaturated fatty acid content. By contrast, the women in the prudent control diet group aimed to eat 15 E% in protein, 30 E% in fat, and 55 E% in carbohydrates.

The Paleolithic-type diet was based on lean meat, fish, eggs, vegetables, fruits, nuts and berries, with rapeseed, olive oils and avocado as additional fat sources. The diet excluded dairy products, cereals, added salt and refined fats and sugar.

Over two years, each group also took part in 12 group sessions led by a dietitian, and all participants kept ongoing records of their food intake.

Body measurements and proportions, food intake and physical activity, as well as circulating lipid levels, gene expression in fat of key factors in fat metabolism and inflammation, insulin resistance and relative fatty acid composition in plasma, were documented at baseline and at 6 and 24 months.

At 24 months, the women eating the Paleolithic-type diet reported that their intake of saturated fatty acids decreased by 19 percent; of monounsaturated fatty acids increased by 47 percent; and of polyunsaturated fatty acids increased by 71 percent. The women on the prudent control diet reported no significant changes in their intake of fatty acids.

Specific [fatty acids](#) associated with insulin resistance were significantly lower in the women eating the Paleolithic-type foods compared with those on the prudent control diet.

At 24 months, the women on both diets lost significant body weight and had significantly less abdominal obesity.

"Obesity-related disorders have reached pandemic proportions with significant economic burden on a global scale. It is of vital interest to find effective methods to improve metabolic balance," Blomquist advised.

Provided by The Endocrine Society

Citation: A Paleolithic-type diet may help reduce future risk of diabetes and cardiovascular disease (2016, April 3) retrieved 13 May 2024 from <https://medicalxpress.com/news/2016-04-paleolithic-type-diet-future-diabetes-cardiovascular.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.