

Dietary Fats: Choice Of Fat Type Affects Fat Storage In The Stomach Area

Comment: This study in rats showed that the type of fat eaten affected where the fat was stored after cutting down food intake. Saturated fats (like butter and lard) caused more storage of fat in the stomach area than fish oil or olive oil. This trend, which has been seen in other studies, indicates that one can have less fat in the stomach area by reducing or avoiding eating saturated fats, while eating fats from fish or olive oil, which are so-called “healthy fats.” This is one way I stay lean.

Michael Mooney

<http://www.michaelmooney.net>

Soriguer F, et al. Redistribution of abdominal fat after a period of food restriction in rats is related to the type of dietary fat. *Br J Nutr.* 2003; 89(1):115-22

The aim of the present experiment was to test the hypothesis that during re-feeding a redistribution of intra-abdominal fat takes place and that both the recovery of weight and the redistribution of intra-abdominal fat are related to the type of dietary fat. The experimental study was carried out using male Sprague-Dawley rats. Three groups of animals were fed diets with three different fatty acid profiles. Each group contained two branches, one fed normally and the other fed initially with a 50 % energy reduction followed by re-feeding ad libitum with the same isoenergetic diet as the control branch, giving a total of six treatments.

Measurements were made of the final and incremental weight of the rat, weight of the intra-abdominal adipose tissue (total intra-abdominal, epididymal, omental and retroperitoneal adipose tissue weight), and feed efficacy (weight increment/metabolizable energy intake). Carcass, epididymal, omental, and muscle lipid contents, carcass protein and energy density were also measured.

The results revealed that diets rich in fish oil or olive oil increase catch-up growth more than diets rich in saturated fats. During re-feeding the lipid content in the adipose tissue increases while that of muscle tissue decreases. ***A diet rich in saturated fats induces a relative increase in the amount of intra-abdominal adipose tissue.*** The lipid content in adipose and muscle tissues and the distribution of intra-abdominal fat can all be modified by the type of dietary fat.