

Are there room for butter in a healthy diet?

Period: January 2013 -December 2015
Budget: 4.812.000 DKK
Funding: The Danish Milk Levy Fund (Mælkeafgiftsfonden)
Project manager: Tine Tholstrup
Institution: University of Copenhagen, Department of Nutrition Exercise and Sports
Collaborators:

Background

Butter eaten in large amounts raises blood cholesterol concentration. However, the effects of a moderate butter intake have not been elucidated.

Aim

- a. to investigate the effects of a moderate butter intake on blood lipids (total, LDL and HDL cholesterol, TG) and risk markers of diabetes type 2 in humans.
- b. to work out a healthy dietary regimen of which butter is a part.
- c. to write a overview paper on the role of milk fat and risk parameters of life style diseases

Methods

The experimental part: The effects of a diet containing 25 g of butter (21 g of milk fat/12 MJ) are compared with a diet containing the same amount of olive oil (refined, therefore without polyphenols) in a blinded, randomized controlled cross-over design with duration of 2x8 weeks separated by wash-out periods. Risk markers investigated are blood lipids (plasma total, LDL and HDL cholesterol, and TG), plasma glucose and insulin.

The theoretical part: Individual types of fat and carbohydrates are substituted by a realistic amount of butter in a way that the composition of the diet meets the requirements of NNA (New Nordic Dietary Recommendations) and will result in a report applicable to dietary recommendations. Besides a review article on milk fat and life style disease will be compiled.

Results

A plausible result of the project may be that butter when eaten in moderate amounts could be part of a healthy diet. Acquaintance of this might improve the image of butter benefitting the consumers, as well as the dairy industry.