

Microbiota and cow's milk tolerance

Period: January 2016 - December 2018
Budget: 4,258,000 DKK
Funding: The Danish Milk Levy Fund
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Aim

The main objectives of this project are to increase our knowledge about the interplay between the gut microbiota and cow's milk proteins as well as their hydrolysates, and the influence of this interplay on the tolerance inducing capacity of the cow's milk products.

Description

Cow's milk allergy is a health problem of growing concern for which reason efficient strategies for the prevention of cow's milk allergy is urgently needed. In recent years it has been shown that the gut microbiota composition influences the development of allergy as well as the induction of tolerance. However, our knowledge about how infant diet influences the microbiota constituent is basically undescribed, and how the microbiota composition influences the sensitising or tolerance inducing capacities of the food is only scarcely described. In this project we seek to add knowledge on how different protein ingredients for use in infant formulas influences the microbiota composition of infants and further investigate how the microbiota composition influences the cow's milk allergy preventive effect of different protein ingredient and their hydrolysates. This may lead to new strategies for including microbes probiotics and/or their derivatives in future hypoallergenic infant formulas, as well as for improved personalised advice related to choice of hypoallergenic formulas.