OMNISAM
The Omnibus Satiety Metric:
A multimodal metric for predicting the satiating effects of real foods and drinks

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Designing food and drink

Designing food and drink that maximizes satiety has long been an ambition of industry and public health programs.

Foods that fill faster and for longer are desirable to consumers for controlling their weight, and for public health programs in obesity prevention. Current methods for measuring satiety have weak predictive value. We propose to overcome this deficiency by developing the Omnibus Satiety Metric.

Strategy

The overreaching strategy is to develop a multi-modal metric that targets the full spectrum of processes underlying the satiety cascade composing brain, blood, and behaviour (BBB).

Subjects will undergo a preload - ad libitum paradigm, with a 2-parameter factorial design comparing milk based products differing in levels of calories and protein to carbohydrate ratio. Extracting the temporal dynamics of BBB data, we will compute a metric for predicting next-meal energy consumption.

Purpose

The overall purpose of the OmniSaM project is to develop a proof-of-concept satiety metric that provides accurate predictions of the satiating effects of real foods and drinks.

Foundation

OmniSaM is founded by The Arla Foods Dairy Health and Nutrition Excellence Center. Ingredients are delivered by Arla Foods & Arla Foods Ingredients. Visit the project website here: OmniSaM.au.dk