# Sensory specific satiety and flavour intensity - Differential effects in children and adults

Published: 02-10-2006 Last updated: 21-05-2024

To determine the differential effect of age (children vs. adults) on the development of sensory specific satiety (SSS) in relation to intensity of drinks (both sweetness and flavour). To compare two methods of assessing SSS.

Ethical review Approved WMO

**Status** Pending

**Health condition type** Other condition

**Study type** Observational invasive

# **Summary**

#### ID

NL-OMON29981

#### Source

ToetsingOnline

#### **Brief title**

SSS in children and adults

#### **Condition**

• Other condition

#### **Synonym**

n.a.

#### **Health condition**

geen aandoening

#### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Wageningen Universiteit

Source(s) of monetary or material Support: Ministerie van

OC&W,Unilever,Unilever;Olivier van Noortlaan 120;P.O. Box 114;3130 AC Vlaardingen

#### Intervention

**Keyword:** age, intensity, methodology, sensory specific satiety

#### **Outcome measures**

#### **Primary outcome**

The development of SSS through consumption of the test products. This will be assessed in two ways. First, by comparing the decrease in palatability ratings of the test foods from before to after consumption of a fixed amount with the mean decrease in liking of the other, non-eaten, foods. Secondly, by comparing the amount eaten ad libitum of the test foods.

#### **Secondary outcome**

n.a.

# **Study description**

#### **Background summary**

Scientific literature points out that differences in sensory characteristics of products, e.g. flavour intensity, might have an effect on sensory specific satiety. Moreover, these characteristics might differentially affect sensory specific satiety in children and adults.

#### Study objective

To determine the differential effect of age (children vs. adults) on the development of sensory specific satiety (SSS) in relation to intensity of drinks (both sweetness and flavour). To compare two methods of assessing SSS.

#### Study design

2 - Sensory specific satiety and flavour intensity - Differential effects in childre ... 27-05-2025

The study is a randomized, crossover, intervention study, in which the development of SSS of two test products will be tested. For each of the products, development of SSS will be tested in two different ways (ad libitum and fixed consumption), on separate test days. For the subjects, the four sessions take place on separate test days, separated by at least 72hrs.

#### Intervention

Each participant will undergo 4 sessions. During these sessions he/she will taste and rate a small amount of 5 different foods. Next, he/she will eat a larger amount of one of these 5 foods (test food), either ad libitum, or a fixed amount (300ml). Finally, he/she will taste and rate the same 5 foods again.

There are 2 test foods, and 2 conditions (ad libitum and fixed consumption). Each subject will test both foods in both conditions.

The test foods vary in intensity (both taste and sweetness). The foods contain soy and dairy. All ingredients are suitable for human consumption and microbiologically safe.

#### Study burden and risks

The intervention is non-therapeutic to the subject. The risk associated with participation is negligible and the burden can be considered as minimal. Subjects (and/or their parents in the case of the under aged participants) will sign informed consent upon participation.

## **Contacts**

#### **Public**

Wageningen Universiteit

Postbus 8129 6700 EV Wageningen Nederland **Scientific** 

Wageningen Universiteit

Postbus 8129 6700 EV Wageningen Nederland

## **Trial sites**

#### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

Adults (18-64 years) Children (2-11 years) Elderly (65 years and older)

#### **Inclusion criteria**

healthy, BMI between 18.5 and 30

#### **Exclusion criteria**

dieting, restrained eaters, allergy to the test foods, use of medication that might influence taste

# Study design

## **Design**

Study type: Observational invasive

Intervention model: Crossover

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Other

## Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-06-2006

Enrollment: 110

Type: Anticipated

# **Ethics review**

Approved WMO

Application type: First submission

Review commission: METC Wageningen Universiteit (Wageningen)

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

## Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register ID

CCMO NL12489.081.06