Preferences for sweet taste after repeated exposure to sweet and sweet-sour drinks: can be changed in toddlers?

Gepubliceerd: 25-11-2019 Laatst bijgewerkt: 19-03-2025

We hypothesize that repeated exposure to a sweet drink will increase preferences for sweet taste.

Ethische beoordeling	Niet van toepassing
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON22016

Bron
Nationaal Trial Register

Verkorte titel
Sweet Taste Project

Aandoening

Not applicable

Ondersteuning

Primaire sponsor: Division of Human Nutrition and Health. Wageningen University
Overige ondersteuning: H2020-ITN-MARIE SKLODOWSKA-CURIE ACTIONS

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Change in sweet taste preferences after repeated exposure to sweet or sweet-sour apple

juices

Toelichting onderzoek

Achtergrond van het onderzoek

Only a small and heterogeneous body of research has currently considered the impact of varying exposure to sweet taste on subsequent generalized sweet taste preferences. Previous findings reveal that the taste of the diet can alter preferences for foods according to their taste properties. Higher exposure to sweet products during infancy could increase the liking for sweet taste and result in a subsequent increased intake of sugar-rich foods, since preference is the most important predictor of children's intake. However, the relationship between consumption of sweet products and sweet preferences is still controversial. Therefore, more evidence is needed to address the impact of dietary exposure to sweet tasting foods or beverages on the subsequent generalized acceptance, preference or intake of these foods in the diet. It is important to carry out this intervention with children since food preferences start being developed from the early infancy and this can influence later preferences and food choices.
The aim of this study is to investigate the influence of repeated exposure to sweet and sweet-sour apple juices on sweet taste preferences of children aged 29-44 months old and whether preferences are stable over time (after two months follow-up).
A total of 69 toddlers will take part on this cluster randomized trial, conducted at day-cares. Classes at day-care will be randomly assigned to one of the three intervention groups. Children will receive 150 ml of a sweet (Sweet-Group) or sweet-sour (Sour-Group) apple juice (diksap) per day at the day-care during 4 weeks. The third group will drink water (Control Group). Considering that many toddlers go 2-3 times per week to the day care, it is deemed that each participant will drink between 8-12 times the target drink during the intervention. Children will not be forced to drink everything. The leftovers will be measured by the researcher to calculate individual intake. Drinks in both groups (Sweet and Sour) will contain the same energy (kcal) and will only differ in the citric acid concentration. The consumption of the apple juice during the intervention will not disturb participants routine or daily schedule, since they will be offered at the day-care at the regular snack time. Before, after the intervention, and after 2 month-follow up, preference for a series of apple juices varying in sweetness and for a sweet and a sour yoghurt will be determined, taking approximately 15 minutes each session. Preference testing will be masked in game form.

Doel van het onderzoek

We hypothesize that repeated exposure to a sweet drink will increase preferences for sweet taste.

Onderzoeksopzet

3 time points: baseline (before the intervention), after intervention (1 month), after 2 months

follow-up

Onderzoeksproduct en/of interventie

Classes at day-care will be randomly assigned to one of the three intervention groups. Children will receive 150 ml of a sweet (Sweet-Group) or sweet-sour (Sour-Group) apple juice (diksap) per day at the day-care during 4 weeks. The third group will drink water. Considering that many toddlers go 2-3 times per week to the day care, it is deemed that each participant will drink between 8-12 times the target drink during the intervention. Children will not be forced to drink everything.

Contactpersonen

Publiek

Wageningen University & Research
Maria Duenas Martin

+31317482253

Wetenschappelijk

Wageningen University & Research
Maria Duenas Martin

+31317482253

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Healthy children (self-reported by the parents).
- 29 to 44 months old.
- No allergy/intolerance to products used in the study.
- Permission from parents or legal caretakers to participate (informed consent signed).

Belangrijkste redenen om niet deel te kunnen nemen

(Exclusiecriteria)

-Medical problems that influence the ability to eat e.g. swallowing or digestion problems.
-Turning 4 years old before the end of the study, as this means leaving the day-care and starting primary school.

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blindering:	Enkelblind
Controle:	Placebo

Deelname

Nederland

Status:	Werving nog niet gestart
(Verwachte) startdatum:	16-02-2020
Aantal proefpersonen:	69
Type:	Verwachte startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

Ethische beoordeling

Niet van toepassing

Soort:	Niet van toepassing

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 48416
Bron: ToetsingOnline
Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL8183
CCMO	NL71541.081.19
OMON	NL-OMON48416

Resultaten

Samenvatting resultaten
The results of this study will be published in a high-impact international research journal with a focus on sensory science and nutrition.