# Development of vegetable and fruit preferences in infants.

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The aim of this study is to investigate the effect of repeated exposure to vegetables compared to repeated exposure to fruit during weaning on short and long term vegetable and fruit intake. Furthermore, the stability of the learned fruit or...

Ethical review	Approved WMO
Status	Recruiting
Health condition type	Other condition
Study type	Observational non invasive

# Summary

## ID

NL-OMON33314

**Source** ToetsingOnline

Brief title Vavo-study

## Condition

• Other condition

#### Synonym

NA

#### **Health condition**

Het onderzoek heeft geen betrekking op aandoeningen.

#### **Research involving**

Human

## **Sponsors and support**

Primary sponsor: Wageningen Universiteit Source(s) of monetary or material Support: Ministerie van OC&W

## Intervention

Keyword: foodpreferences, infants, taste development, vegetable

## **Outcome measures**

#### **Primary outcome**

- Increase of vegetable consumption in grams:

Secondary outcome

- Increase of vegetable consumption in calories:
- Mothers\* perceived liking
- Observational liking (analyzing of facial expressions)
- Rate of feeding
- 3 day food diary (only in 2nd phase after half a year)
- Mother\* food neophobia.
- Infant eating behavior questionnaire
- Parents food frequency questionnaire

# **Study description**

#### **Background summary**

Rationale: Despite the health benefits, children\*s consumption of vegetables is below the recommendations. A diet with a higher amount of vegetables increases the intake of a wide variety of \*health promoting\* phytochemicals and may lower the risk on chronic diseases such as obesity, cancer, cardiovascular diseases and diabetes. Most human food preferences are learned through mere exposure, imitation, and conditioning principles. During the last years, it has become clear that the development of food preferences starts very early in life. Furthermore, preferences that are learned early in life, are relatively stable and may track into adulthood. However, it is unclear how vegetable preferences develop from infancy until young childhood. In order to influence vegetable consumption, it is essential to study the opportunities to develop a preference for vegetable products early in childhood.

Besides repeated exposure and variety, the first introduced solid foods can also influence later food preferences. It is advised to start weaning with sweet fruits and vegetables, but other health professionals propose that starting weaning with sweet foods can facilitate the inborn preference for sweet and thwart the development of preferences for bitter vegetables. However, there is no scientific proof of what is the best way to start weaning.

#### **Study objective**

The aim of this study is to investigate the effect of repeated exposure to vegetables compared to repeated exposure to fruit during weaning on short and long term vegetable and fruit intake. Furthermore, the stability of the learned fruit or vegetable preferences and the later food preferences are measured (i.e. vegetable, fruits, sweets).

## Study design

In this longitudinal study we will measure the development of preferences for a particular vegetable or fruit type within subjects, during a 19 day exposure period to fruit or vegetables (of which 9 days exposure to the target fruit or vegetable) and 6 months after this exposure period. In addition, we compare the food preferences (fruit, vegetable, sweet foods in general), after 6 months, between infants who were weaned with a variety of fruits and infants who were weaned with a variety of weather the start of the target fruit of the target fruit of the target fruit.

#### Study burden and risks

The burden for the infants can be considered minimal. The parents start feeding there infants solid food at the moment they choose. The fruit and vegetable purees and riceflour porridge used in the study, are commercial available baby foods (Nutricia) specially for 4+ month old infants. Furthermore, the different feeding regimes are similar to normal feeding practices in the Netherlands. In the 5 measurements at the start of the study and 3 after six monts, in the Restaurant of the Future, the infants are fed by their parent at their usual feeding pace in a mood rooms, which are child friendly, quite room.

# Contacts

**Public** Wageningen Universiteit

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# **Trial sites**

## **Listed location countries**

Netherlands

# **Eligibility criteria**

#### Age Children (2-11 years)

## **Inclusion criteria**

- age between 4 and 7 months,
- parents want to start weaning the child
- baby is apparantly healthy

## **Exclusion criteria**

- Parents have already started weaning their child
- health: infant is known to have food allergies, problems with food digestion, problems with eating (swallowing)
- baby is to young (younger than 4 months), or to old (7 months or older)

# Study design

## Design

Study type:	Observational non invasive
Intervention model:	Parallel
Masking:	Single blinded (masking used)
Control:	Uncontrolled
Primary purpose:	Other

## Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	22-02-2010
Enrollment:	128
Туре:	Actual

# **Ethics review**

Approved WMO	
Date:	29-12-2009
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.

5 - Development of vegetable and fruit preferences in infants. 4-05-2025

# In other registers

## Register

ССМО

ID NL28886.081.09