Effect of maternal diet on breast milk composition

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON20260

Source
NTR

Health condition

Breast milk composition, maternal, infant and child gastrointestinal microbiome, maternal diet

Sponsors and support

Primary sponsor: National Institute for Food Control
150 1 - 24T 1 Complex Building - Trunghoa -
Nhanchinh - Thanh Xuan
Hanoi - Vietnam

UMCG, Groningen, The Netherlands
Source(s) of monetary or material Support: FrieslandCampina, Amersfoort, The Netherlands
Subsidy project by Transitie II en Pieken, project number T1003

Intervention

Outcome measures

Primary outcome

Composition of breast milk and its relationship with the maternal diet,
Microbiome of the breastfed infant

Secondary outcome

Relationship between the microbiome of the breastfed infant and the microbiome of an older brother or sister

Study description

Background summary

It is well known that breast milk composition differs from mother to mother. There is compiling evidence that the maternal diet (life long and short term) has an enormous effect on breast milk composition. This study will investigate possible differences in breast milk composition from Vietnamese women living in urban (Hanoi and HCMC) and rural (Ha Long Bay [fish-eating], Phu Tho and Tien Giang [rice-fish-eating]) regions. It is expected that within Vietnam relatively big differences will exist between breast milk compositions from mothers from the here fore mentioned regions.
Since breast milk is a strong determinant for the type of intestinal microbiome to develop in the infant during the breastfeeding period, and this developed microbiome is considered to have a relevant impact on the microbiome at older age, faeces will be collected from the breast fed infants, as well as from brothers or sisters (1-4 years of age) that have been breastfed before. Furthermore, the maternal intestinal microbiome is considered to be of importance (as aninoculant) for infant’s intestinal microbiome.

Study objective

The maternal diet is highly responsible for the composition of breast milk which will result in at least differences between cultures and geographical separated populations. The maternal diet and breastmilk composition will show off in the composition of of the infant's gastrointestinal microbiome, tracking into childhood

Study design

Breast milk and fecal samples are taken around the 4th week of lactation.

Intervention

No intervention. . This study will investigate possible differences in breast milk composition from Vietnamese women living in urban (Hanoi and HCMC) and rural (Ha Long Bay [fish-eating], Phu Tho and Tien Giang [rice-fish-eating]) regions.

Contacts

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Eligibility criteria

Inclusion criteria

• Apparently healthy, well-nourished Vietnamese lactating women, who gave normal vaginal birth to an apparently healthy term infant (± 4 weeks old).

• No pregnancy complications

• This new-born, with normal birth proportion according to the region, is at least their second child and the new born is breastfed (at least 75% of total diary milk intake)

• Apparently healthy brother or sister in the age of 1-4 years, with no signs of diarrhea and who were breastfed during the first months of infancy

Exclusion criteria

• Medication that may influence the breast milk composition (medicines that require a special diet, or disturb appetite, or are known to affect the intestinal bacteria)

• Maternal BMI before pregnancy was not in the normal range (<23).

Study design

Design

Study type:	Observational non invasive
Intervention model:	Parallel
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	25-11-2013
Enrollment:	100
Type:	Anticipated

Ethics review

Positive opinion

Date:	24-12-2013
Application type:	First submission

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
NTR-new	NL4185
NTR-old	NTR4335
Other	FrieslandCampina : Anne Schaafsma
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Study results

Summary results
N/A