Relationship between maternal diet, breast milk composition and offspring's microbiome and nutritional status in Malaysia

No registrations found.

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

Summary

ID

NL-OMON20005

Source
NTR

Health condition

maternal diet; breast milk composition; infants; microbiome

Sponsors and support

Primary sponsor: International Medical University
Source(s) of monetary or material Support: FrieslandCampina

Intervention

Outcome measures

Primary outcome

link(s) between maternal diet and breast milk composition

Secondary outcome

link(s) between breast milk composition and infant's microflora

Study description

Background summary

It is well established 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. 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, this study will examine faecal samples from the breast fed infants. As maternal diet exerts a strong influence on the composition of breast milk and the child’s intestinal microbiome, maternal and child dietary intakes will be investigated.

Study objective

Does maternal diet influence the child’s intestinal microbiome via breast milk?

Study design

Each mother-infant couple will be included for 4-6 weeks. There will be 3 collections time points: t1=0, t2=2-3 weeks, and t3=5-6 weeks.

Intervention

Breast milk samples will be collected at three different times and will be analyzed for minerals, vitamins, protein, fat, lactose and fiber.
Fecal samples for metabolic profiling will be collected from the infant around the same period of the breast milk collection.
Info on dietary intake of the mother will be collected through food frequency questionnaire and a 24 h food recall interview. Weight, length, and head circumference of the infant will be measured.

Contacts

Public
61 Quality Rd
I.M.S. Tan-Khouw
[default] 618818
Singapore

+65 6419 8474
Scientific
61 Quality Rd
I.M.S. Tan-Khouw
[default] 618818
Singapore
+65 6419 8474

Eligibility criteria

Inclusion criteria

Malay mothers aged 20-40 yr of
Middle economic status who are
Breastfeeding infants (from 2 wks onwards)
Preferably exclusive breastfeeding

Exclusion criteria

Non-Malay
Ill during breastmilk collection
Mothers on a special diet

Study design

Design

Study type:	Observational non invasive
Intervention model:	Parallel
Allocation:	Non controlled trial

Control: N/A , unknown

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-09-2013

Enrollment:	40
Type:	Anticipated

Ethics review

Positive opinion Date:	21-01-2014
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	NL4268
NTR-old	NTR4404
Other	: P827776

Study results