# First food for infants

Submission date	Recruitment status	Prospectively registered	
09/05/2016	No longer recruiting	☐ Protocol	
Registration date	Overall study status	Statistical analysis plan	
20/05/2016	Completed	[X] Results	
Last Edited	Condition category	Individual participant data	
30/11/2020	Nutritional, Metabolic, Endocrine		

## Plain English summary of protocol

Background and study aims

Although many parents try to ensure that their children have a healthy and balanced diet, it is not always the case. Cooking skills, time spent on cooking and intake of homemade food have all decreased in recent years, leading to lack of diversity in some children's diets. Some researchers suggest that the lack of cooking skills, lack of diversity in the diet and the replacement of fruit and vegetables with unhealthy processed food may be a factor contributing to the increase in childhood obesity. "First food for infants" is a new program aiming to provide new knowledge on how to promote a healthy and varied diet among infants by improving parental cooking skills and knowledge. The aim of this knowledge is to find out whether this program can help to improve infant diet, improve parental cooking skills, and to promote a healthy cholesterol and vitamin D-status in children.

## Who can participate?

Parents of children aged 5-6 months old who attend public health clinics in Kristiansand and Arendal, Norway.

#### What does the study involve?

Participants are randomly allocated to one of two groups. Parents in the first group take part in a two day cooking course to learn about how to prepare a variety of baby food and to improve general cooking skills. The course involves learning about important foods for infants, as well as learning how to make fruit purées, porridges, breads, and nutritious toppings and dinner meals, such as vegetable purées and chicken and tuna bowls with pea purée. At the sessions, parents are encouraged to have their infant try as many new foods as possible. Those in the second group are given a brochure containing recipes for homemade foods for infants only. All parents fill in a number of questionnaires at the start of the study (6 months of age), and when the infant is 15 and 24 months of age, to measure the food intake of their infant and their own cooking skills and knowledge. A finger prick blood test is taken from the infants at 15 and 24 months of age in order to measure the cholesterol and vitamin D levels.

What are the possible benefits and risks of participating?

Participants may benefit from imp[roved cooking skills (parents) and improved diet, growth and cholesterol levels (children). There are no notable risks involved with taking part in this study.

Where is the study run from? University of Agder (Norway)

When is the study starting and how long is it expected to run for? October 2011 to September 2015

Who is funding the study? Norwegian Women's Public Health Association (Norway)

Who is the main contact? Professor Nina Cecilie Øverby nina.c.overby@uia.no

## Study website

http://old.uia.no/div/prosjekt/mat\_for\_smaa\_mager

## Contact information

## Type(s)

Scientific

#### Contact name

Prof Nina Cecilie Øverby

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# Additional identifiers

EudraCT/CTIS number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

# Study information

#### Scientific Title

Randomized controlled trial evaluating a cooking intervention to improve parental cooking skills and thereby improve dietary intake in infants aged 6- 12 months

## **Study objectives**

Children in the intervention group will have a more healthy and varied diet, a better lipid profile and vitamin D status, have healthier growth curves and have parents with better cooking skills and knowledge than those in the control group.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Starting the study was recommended started by the Norwegian Social Science Data Service 12.06.2012. Previous to that, the study was submitted to the Regional Ethics Committees, however since they did not find that the project was within the Health Research Law, and recommended it submitted to the Norwegian Social Science Data Service.

## Study design

Randomized controlled trial

## Primary study design

Interventional

### Secondary study design

Randomised controlled trial

### Study setting(s)

Community

#### Study type(s)

Prevention

#### Participant information sheet

Available in Norweigen via http://old.uia.no/div/prosjekt/mat\_for\_smaa\_mager/informasjon

## Health condition(s) or problem(s) studied

Nutritional intake

#### **Interventions**

Participants are randomly allocated to one of two groups.

Control group: Parents receive a booklet containing recipes for homemade foods for infants and are not given access to the practical courses or the recipes presented there.

Intervention group: The intervention group is invited to a two-day-course including some theory of infant nutrition, and a main focus on increasing practical food cooking skills (i.e. how to prepare and cook the first food for infants). They are also taught how to store food and how to be confident in making infants' food themselves. Five groups of participants attend the course on two different days. Each of the two course days lasts four hours, and parents are given theoretical knowledge about the infants first food as well as practical knowledge on how to

make nutritious and varied food.

The first course day focuses on the introduction of the first solid food for infants. The theory refers to regular meals, using water when child is thirsty, iron-rich food, nutritious fruit purées, porridges, bread and toppings. The participants are informed about the importance of letting infants taste many new food items before the age of two, to avoid food neophobia and picky eating. The participants then make various kinds of fruit purées, porridges, breads, and nutritious toppings. They produced fruit purées of fresh fruit and berries as raspberries, blackcurrant, pears, apples, apricots (without preservatives), prunes and nectarines, according to season and time of the year, and porridges from millet, oats, spelt and whole wheat flour. They also produce home-made porridge powder from millet bread for travelling. They taste homemade bread and various toppings as broccoli, salmon, humus and roast beef with chickpeas. On the second course day, nutritious dinner meals were in focus. Participants make purées of carrots, potatoes, broccoli, cauliflower, avocado and rutabaga. They also make purées of vegetables with tomatoes and cheese, as well as chicken and tuna bowls with pea purée. The participants let their infants taste as many various new vegetables as possible.

All participants fill in questionnaires at baseline (6 months of age), and at 15 and 24 months of age. A finger blood test was taken of the infants at 15 and 24 months of age.

## Intervention Type

Other

#### Primary outcome measure

Food intake is measured using food frequency questionnaires when infants are 6 (baseline), 15 and 24 months of age

## Secondary outcome measures

- 1. Levels of HDL, LDL and total cholesterol and vitamin D are measured using finger stick blood tests at when infants are 15 and 24 months of age
- 2. Parental cooking skills and knowledge is measured using questionnaires when infants are 6 (baseline), 15 and 24 months of age
- 3. Child growth from 6 to 24 months of age is measured using self reported weight and height when infants are 6 (baseline), 15 and 24 months of age

# Overall study start date

01/10/2011

## Completion date

01/09/2015

# Eligibility

## Key inclusion criteria

Children inclusion criteria:

Children aged 5-6 months, attending the selected public health clinics.

#### Parent inclusion criteria:

Having child aged 5-6 months attending the selected public health clinic

## Participant type(s)

Healthy volunteer

## Age group

Mixed

#### Sex

Both

## Target number of participants

160

### Total final enrolment

110

## Key exclusion criteria

Not meeting inclusion criteria

## Date of first enrolment

20/06/2012

## Date of final enrolment

19/12/2014

## Locations

## Countries of recruitment

Norway

# Study participating centre

University of Agder

Gimlemoen 25 Kristiansand Norway 4630

# Sponsor information

## Organisation

University of Agder

## Sponsor details

Gimlemoen 25 Kristiansand Norway 4630 +47 38 10 00 post@uia.no

## Sponsor type

University/education

#### Website

http://www.uia.no/

#### **ROR**

https://ror.org/03x297z98

# Funder(s)

## Funder type

Charity

#### **Funder Name**

Norwegian Women's Public Health Association

# **Results and Publications**

## Publication and dissemination plan

Planned publication of three papers in peer reviewed journals:

- 1. Effect of cooking intervention on young children's lipid and vitamin D status
- 2. Effect of cooking intervention on child food intake and parental cooking skills
- 3. Effect of cooking intervention on child growth

# Intention to publish date

31/10/2016

Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not expected to be made available

## **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	21/11/2017	30/11/2020	Yes	No