

Fostering healthy dietary habits through a mobile-health intervention targeting toddlers' food and eating environment

Submission date 31/07/2017	Recruitment status No longer recruiting	☐ Prospectively registered ☒ Protocol
Registration date 13/09/2017	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 18/10/2022	Condition category Nutritional, Metabolic, Endocrine	☐ Individual participant data

Plain English summary of protocol

Background and study aims

The aim of this study is to develop and assess the effect of an e-health intervention, Food4toddlers ("Mat til Minsten" in Norwegian), that aims to promote healthy dietary habits in toddlers by targeting parents' awareness of their child's food and eating environment.

Who can participate?

Children aged from 12 to 18 months and their parents

What does the study involve?

Participants are randomly allocated to the intervention group or the control group. The intervention group get access to the Food4toddlers website for 6 months with weekly updates. Participants in the control group receive their usual treatment at community child health centres and do not have access to the website. The intervention group and the control group fill in surveys before and after the intervention. The child's diet and self-feeding skills and the parents' feeding practice, food planning skills and shopping behaviour are all assessed.

What are the possible benefits and risks of participating?

Benefits of participating in the intervention group include being updated on information regarding healthy food and eating environment, and the possibility of improving child diet and health. There are no risks related to participating.

Where is the study run from?

University of Agder (Norway)

When is the study starting and how long is it expected to run for?

March 2015 to June 2022

Who is funding the study?

University of Agder (Norway)

Who is the main contact?

1. Mrs Margrethe Røed
2. Prof. Nina Cecilie Øverby

Contact information

Type(s)

Scientific

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Additional identifiers

Protocol serial number

Project number from NSD: 48643

Study information

Scientific Title

Fostering healthy dietary habits through a mobile-health intervention targeting toddlers' food and eating environment: a randomized controlled trial

Acronym

Food4toddlers

Study objectives

The intervention children compared to the control children:

1. Will have a more healthy and varied diet at ages 18, 24 and 48 months
2. Will have parents who are more responsive in their feeding practice
3. Will have more frequent planned and shared family meals, and less frequent meal distractions
4. Will have parents who are more aware of the food environment and make healthier choices at both in the grocery and at home
5. Will have healthier growth trajectory at ages 18, 24 and 48 months
6. Differences in diet between children with parents of low SES compared to high SES will be smaller in the intervention compared to control group

Ethics approval required

Old ethics approval format

Ethics approval(s)

Norwegian Centre for Research Data, 29/06/2017, ref: 48643

Primary study design

Interventional

Study design

Randomized controlled trial

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Healthy dietary habits and long-term health and wellbeing

Interventions

The overall objective of this study is to develop, implement, and evaluate the effect of a e-health intervention, Food4toddlers, that aims to promote healthy dietary habits in toddlers through targeting parental awareness of child food and eating environment. The participants will be randomised to either the control or the intervention group based on a computer-generated list of 500. Participants will be randomized consecutively, based on the time of completion of the first questionnaire. The intervention group get access to the website for 6 months, with weekly updates. The information given on the website relates to healthy food and eating environment (including choices made in grocery shopping). Participants in the control group will receive their usual treatment at the community child health centres, and do not have access to the web intervention. Among the participants in the control group three participants will be selected who will receive a reward. The intervention group and the control group answer surveys before and after the intervention.

The intervention will run when the child is from 12 to 18 months and measurements will be performed at ages 12, 18, 24 and 48 months.

Intervention Type

Behavioural

Primary outcome(s)

Child diet quality and food variety, assessed using food frequency questions regarding core- and non-core food at inclusion, 18, 24, and 48 months

Key secondary outcome(s)

1. Eating environment (two levels):

1.1. Parental feeding practices (under/over-eating, hunger, infant cues, feeding attitudes, practices, perceptions/concern regarding weight), assessed using closed form survey at inclusion, 18, 24, and 48 months

1.2. Family meal setting (frequency of meals, meal distractions), assessed using closed form survey at inclusion, 18, 24, and 48 months

2. Food environment (two levels):

2.1. Food choice and awareness of food environment (planning, doing groceries, what influences food choice), assessed using closed form survey at inclusion, 18, 24, and 48 months

2.2. Availability and visibility of food in the home (availability and visibility of non-core and core foods), assessed using closed form survey at inclusion, 18, 24, and 48 months

3. Food preparation and planning, assessed using closed form survey at inclusion, 18, 24, and 48 months

4. Weight and length assessed using closed form survey at inclusion, 18, 24, and 48 months

Completion date

30/06/2022

Eligibility

Key inclusion criteria

1. Children aged from 12 to 18 months during the intervention period

2. Parents of these children

Participant type(s)

All

Healthy volunteers allowed

No

Age group

Mixed

Sex

All

Total final enrolment

148

Key exclusion criteria

Parents who cannot speak and write Norwegian

Date of first enrolment

15/08/2017

Date of final enrolment

31/01/2018

Locations

Countries of recruitment

Norway

Study participating centre

University of Agder

Boks 422

Kristiansand

Norway

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Sponsor information

Organisation

University of Agder

ROR

<https://ror.org/03x297z98>

Funder(s)

Funder type

University/education

Funder Name

University of Agder

Results and Publications

Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	06/07/2020	08/07/2020	Yes	No
Results article	results	16/02/2021	17/02/2021	Yes	No
Results article	results on parental phone use	20/04/2021	22/04/2021	Yes	No
Protocol article		14/05/2019	18/10/2022	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes