Identifying the effects of a complementary feeding guideline which has an emphasis on meat consumption, growth and breast milk intake in infants in Bogota, Colombia

Submission date	Recruitment status No longer recruiting	Prospectively registered		
09/01/2012		Protocol		
Registration date 23/02/2012	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited 09/09/2015	Condition category Nutritional, Metabolic, Endocrine	[] Individual participant data		
09/09/2013	Nuclicional, Metabolic, Endocrine			

Plain English summary of protocol

Background and study aims

Complementary feeding is the addition of foods to a baby's diet after an initial period of exclusive breastfeeding. By the time the baby is about 6 months old, breast milk on its own may not always be able to provide enough protein, iron and zinc for normal growth and development, so a good 'complementary' or extra supply of these nutrients is needed. It is often difficult to provide enough iron and zinc, especially for babies living in poor environments. Poor complementary feeding can lead to stunted growth and iron deficiency anaemia, which can affect the baby's development. In our previous studies we recorded infant feeding practices of mothers living in poor socio-economic circumstances in Bogota, Colombia. The results suggested that the diets given to these babies were often not ideal, and that many babies were not getting enough iron and zinc. Based on these results, we developed new complementary feeding guidelines for babies aged 6-12 months. The guidelines aim to improve the nutrition of the infant and emphasise the use of red meat as a good source of iron, zinc and protein. The new guidelines take into account the foods that are available, affordable and acceptable to mothers in this setting. In our study we aim to test the new guidelines with 180 babies from Bogota, Colombia.

Who can participate?

Healthy babies born at term (at least 37 weeks gestation) who are exclusively breastfed at 4 months of age will be eligible to take part, if their mother plans to continue breastfeeding until the infant is around 12 months of age.

What does the study involve?

Before the baby is enrolled in the study, a blood sample will be taken to make sure he or she is not anaemic. Any baby who is found to be anaemic will get treatment, and will not take part in the study. The babies will be randomly allocated at age 6 months to follow either the current

standard feeding advice in Bogota, or to use the new complementary feeding guidelines. They will be followed-up after 8, 10 and 12 months in the hospital clinic that they normally attend for their regular health checks and growth monitoring.

What are the possible benefits and risks of participating? There are no likely risks or side effects from taking part in the study.

Where is the study run from?

The study will be run at two clinics in Bogota, Colombia (Suba and Fontibon). It is organised by investigators from the UCL Institute of Child Health, London and the Universidad Pontificia Javeriana, Bogota, Colombia.

When is the study starting and how long is it expected to run for? March 2010 to August 2011.

Who is funding the study?

The study is funded by the Childhood Nutrition Research Centre, UCL Institute of Child Health, London and the Universidad Pontificia Javeriana, Bogota, Colombia.

Who is the main contact? Dr Mary Fewtrell m.fewtrell@ucl.ac.uk

Contact information

Type(s)

Scientific

Contact name

Dr Mary Fewtrell

Contact details

University College London 30 Guilford Street London United Kingdom WC1N1EH

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
Version 1

Study information

Scientific Title

Randomised controlled trial to identify short-term effects of a complementary feeding guideline with an emphasis on meat consumption on iron and zinc status, growth and breast milk intake in infants aged 6-12 months in Bogota, Colombia.

Acronym

ComFeCol

Study objectives

A new complementary feeding guideline with an emphasis on increasing intake of red meat in infants living in poor socio-economic circumstances in Bogota, Colombia will result in improved iron and zinc status, improved linear growth, and improved development up to 12 months of age without adverse effects (decreased breast milk intake, excess weight gain, vitamin A excess); and the new guideline will be acceptable and affordable to families.

Ethics approval required

Old ethics approval format

Ethics approval(s)

- 1. University College London Research Ethics Committee, 29/09/2009, ref: 2114/001
- 2. Javariena University, Bogota, 13/04/2009

Study design

Randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Other

Study type(s)

Quality of life

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Nutrition in infants

Interventions

Randomised controlled trial of a new complementary feeding guideline compared to standard advice in healthy term infants living in poor circumstances in Bogota, Colombia.

Intervention group are asked to follow new guidelines for complementary feeding which incorporate written and oral advice to continue breastfeeding until at least 12 months, and for mothers to eat red meat at least 3 times per week. Advice is also given on other aspects of a healthy weaning diet together with suggestions on how to prepare and offer the foods.

Control infants receive the standard advice on breastfeeding and weaning provided by the usual healthcare team.

Intervention Type

Behavioural

Primary outcome measure

- 1. Iron and zinc status at 12 months
- 2. Growth between 6 to 12 months:
- 2.1. Change in weight for length
- 2.2. Change in length for age SDS
- 3. Motor development at 12 months based on the WHO children's motor development (six gross motor milestones)
- 4. Energy and nutrient intake, including breast milk intake from 6 to 12 months in a sub-sample (measured at 6, 8,10 and 12 months)

Secondary outcome measures

- 1. Mothers' opinions (in terms of acceptability and affordability) of the complementary feeding guidelines
- 2. Serum retinol as a safety outcome in the intervention group

Overall study start date

01/03/2010

Completion date

30/08/2011

Eligibility

Key inclusion criteria

- 1. Full term healthy children (>= 37 weeks)
- 2. Birth weight more than 2500g
- 3. Infant exclusively or predominantly breastfed at 4 months and planning to continue breastfeeding until 12 months

Participant type(s)

Patient

Age group

Child

Sex

Both

Target number of participants

Key exclusion criteria

- 1. Preterm children (gestational age <37 weeks)
- 2. Children with congenital and chronic diseases
- 3. Children with anaemia (Hb<110g/dl) or infections at the time of randomisation
- 4. Birth weight < 2500g
- 5. Children who are Human immunodeficiency virus (HIV) positive
- 6. Infants whose mothers are likely to move from the area of the study in the short term

Date of first enrolment

01/03/2010

Date of final enrolment

30/08/2011

Locations

Countries of recruitment

Colombia

England

United Kingdom

Study participating centre University College London

London United Kingdom WC1N1EH

Sponsor information

Organisation

University College London (UK)

Sponsor details

Institute of Child Health 30 Guilford Street London England United Kingdom WC1N 1EH

Sponsor type

University/education

Website

http://ucl.ac.uk

ROR

https://ror.org/02jx3x895

Funder(s)

Funder type

University/education

Funder Name

Childhood Nutrition Research Centre, University College London (UK)

Funder Name

Javariena University, Bogota (Colombia)

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/10/2013		Yes	No