Research infrastructures and evidence based guidelines on child nutrition

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Objectives

1. Utilization of data from the Icelandic infant and child cohort study 2005-2011
   – Modifiable determinants of vitamin D status at 12 months and six years of age (presented last year)
   – Food allergy at six years of age (breastfeeding, introduction of solids, dietary patterns)

2. “Iceage 2”
Iceage 2: Introduction

- Independent sequel to the Iceage “1” RCT on 4 vs. 6 months exclusive breastfeeding
- Observational study with two groups of 6 month old infants:
  A: Exclusively breastfed (like before)
  B: Complementary fed (less breastfeeding, more formula and/or food)
- Approved by VSN, HH, HVE. Registered at PV.
- Aim: To study growth and energy metabolism in the first year of life
  - Additional analyses: iodine in urine, heavy metals in breast milk

Papers from the Iceage “1” study:

Initiation of complementary feeding and duration of total breastfeeding: unlimited access to lactation consultants versus routine care at the well-baby clinics.
Jonsdottir OH, Fewtrell MS, Guinnaugsson G, Kleinman RE, Hibberd PL, Jonsdottir JM, Eiriksdottir I, Rognvaldskjol AM, Thordsdottir I.
PMD: 24621390 [PubMed - in process]
Related citations

Exclusive breastfeeding and developmental and behavioral status in early childhood.
Jonsdottir OH, Thordsdottir I, Guinnaugsson G, Fewtrell MS, Hibberd PL, Kleinman RE.
Related citations

Exclusive breastfeeding for 4 versus 6 months and growth in early childhood.
Jonsdottir OH, Kleinman RE, Wells JC, Fewtrell MS, Hibberd PL, Guinnaugsson G, Thordsdottir I.
PMD: 24117005 [PubMed - indexed for MEDLINE]
Related citations

Timing of the introduction of complementary foods in infancy: a randomized controlled trial.
Jonsdottir OH, Thordsdottir I, Hibberd PL, Fewtrell MS, Wells JC, Patison GI, Lucas A, Guinnaugsson G, Kleinman RE.
Related citations

Randomized controlled trial of 4 compared with 6 mo of exclusive breastfeeding in Iceland: differences in breast milk intake by stable-isotope probe.
Related citations
Iceage 2: Methods

**5.5-6 month old**
- Labeled/doubly labeled water
- 3 day weighed food records
- Breast milk samples (fore and hind milk)
- Parental questionnaires (background, BEBQ, IBQ)
- Body composition
- Breast milk intake (+ breast milk energy content)
- Total energy intake
- Leptin, ghrelin, iodine, heavy metals in breast milk
- Background info, baby eating and behaviour scores

**9 month old**
- 3 day weighed food records
- Breast milk and food intake

**12 month old**
- Labeled water
- 3 day weighed food records
- CEBQ
- Body composition
- Breast milk and food intake
- Child eating score

**Growth**
- Urine
- Breast milk
- Food records