



# 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, Gunnlaugsson G, Kleinman RE, Hibberd PL, Jonsdottir JM, Eiriksdottir I, Rognvaldsdottir AM, Thorsdottir I.  
Breastfeed Med. 2014 May;9(4):196-202. doi: 10.1089/bfm.2013.0094. Epub 2014 Mar 12.  
PMID: 24621390 [PubMed - in process]  
[Related citations](#)

[Exclusive breastfeeding and developmental and behavioral status in early childhood.](#)

**Jonsdottir OH**, Thorsdottir I, Gunnlaugsson G, Fewtrell MS, Hibberd PL, Kleinman RE.  
Nutrients. 2013 Nov 11;5(11):4414-28. doi: 10.3390/nu5114414.  
PMID: 24284608 [PubMed - indexed for MEDLINE] [Free PMC Article](#)  
[Related citations](#)

[Exclusive breastfeeding for 4 versus 6 months and growth in early childhood.](#)

**Jonsdottir OH**, Kleinman RE, Wells JC, Fewtrell MS, Hibberd PL, Gunnlaugsson G, Thorsdottir I.  
Acta Paediatr. 2014 Jan;103(1):105-11. doi: 10.1111/apa.12433. Epub 2013 Nov 11.  
PMID: 24117808 [PubMed - indexed for MEDLINE]  
[Related citations](#)

[Timing of the introduction of complementary foods in infancy: a randomized controlled trial.](#)

**Jonsdottir OH**, Thorsdottir I, Hibberd PL, Fewtrell MS, Wells JC, Palsson GI, Lucas A, Gunnlaugsson G, Kleinman RE.  
Pediatrics. 2012 Dec;130(6):1038-45. doi: 10.1542/peds.2011-3838. Epub 2012 Nov 12.  
PMID: 23147979 [PubMed - indexed for MEDLINE] [Free Article](#)  
[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.](#)

Wells JC, **Jonsdottir OH**, Hibberd PL, Fewtrell MS, Thorsdottir I, Eaton S, Lucas A, Gunnlaugsson G, Kleinman RE.  
Am J Clin Nutr. 2012 Jul;96(1):73-9. doi: 10.3945/ajcn.111.030403. Epub 2012 May 16.  
PMID: 22592102 [PubMed - indexed for MEDLINE] [Free Article](#)  
[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

## 12month old

Labeled water  
3 day weighed food records  
CEBQ

Body composition  
Breast milk and food intake  
Child eating score

Urine

Breast milk

Food records

Growth

