Weaning onto solid food in Ireland: Some of the challenges

Annemarie Bennett
Putting infant feeding into context

A. Iron & commercial infant foods in the infant diet

B. Diets of infants during the first 6 months of life

Summing it up
Putting infant feeding into context
Weaning onto Solid Food

• **Definition** of Weaning onto Solid Food *(COMA, 1994)*
• Commence this process at **6 months** *(WHO, 2001; DOHC, 2005)*
• Iron:

  - Commercial Infant Foods: *(1924/2006; 2006/125/EC)*
    - Composition of commercial infant foods
    - Marketing of food
    - Protect the consumer

Iron Stores ↓↓

Iron Deficiency & Iron Deficiency Anaemia

Birth 4 months 6 months

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Achieving Good Health in Infants

Adapted from the National Health Promotion Strategy 2000-2005.

AE Bennett, November 2012
A. Iron & commercial infant foods in the infant diet
Methodology

- **Purpose**: assess presence of iron-containing foods in the infant diet
- **Piloted, scripted & coded**
- **15 days in 5 shopping centres**
- **3 centres of deprivation** (Haase & Pratschke, 2008)
- **Inclusion criteria**: Youngest child was under 30 months of age

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Introduction of iron-containing foods

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Giving RED MEAT to your baby

Used with questions on considerations regarding meat introduction

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Scan of Commercial infant foods

• **Purpose**: an insight into the branded infant foods available commercially in Ireland

• **Macro- & micro- nutrient content from labels**

• Information from:
  – *Supermarket multiples*
  – *Manufacturer’s website*
  – *Customer Care*

• Compared with European Union (EU) **Legislation**
Describing the Cohort

- 86% \((n=168)\) on solid food
- 14% \((n=27)\) not on solid food
- Mean age solid food first given: 5 months
First Red Meat

The average age (months) of actual and planned introduction of recommended red meats beef, lamb & pork

Age of infant in Months

- Total Group (n=165)
  - Actual Age: n=124
  - Planned Age: n=41

- Disadvantaged City Area (n=35)
  - Actual Age: n=29
  - Planned Age: n=6

- Affluent City Area (n=62)
  - Actual Age: n=43
  - Planned Age: n=19

- Socioeconomically Mixed Rural District (n=68)
  - Actual Age: n=52
  - Planned Age: n=16

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No Recommended Red Meat

Proportion of infants who had none of the recommended red meats in the first 12 months of life

- 25% Had Recommended Red Meat (n=73)
- Had No Recommended Red Meat (n=24)

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Exploring the Pattern: Late introduction of Meat

Percentage of mothers who delayed the introduction of recommended red meats due to the perception that these meats were inappropriate foods for infants

<table>
<thead>
<tr>
<th>Meat</th>
<th>Percentage of mothers (%)</th>
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<tbody>
<tr>
<td>Beef</td>
<td>75% (n=21)</td>
</tr>
<tr>
<td>Lamb</td>
<td>77% (n=13)</td>
</tr>
<tr>
<td>Pork</td>
<td>47% (n=7)</td>
</tr>
</tbody>
</table>

Percentage of mothers who avoided meat at 6 months of age (n=93) due to the perception that meat was an inappropriate food for infants (n=76)

<table>
<thead>
<tr>
<th>Meat in General (Data of Tarrant, 2008)</th>
<th>Percentage of mothers (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>82%</td>
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</table>

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Exploring the Pattern: **Late introduction of Meat**

Relationship between the number of considerations a mother had regarding red meat introduction and the age of red meat introduction.

\[ r = 0.224, p = 0.012 \]
Exploring the Pattern: Late introduction of Meat

Knowledge of the Age at which Iron is more important in the infant diet amongst mothers in each of the centres surveyed

<table>
<thead>
<tr>
<th>Percentage of Mothers (%)</th>
<th>Total Group (n=195)</th>
<th>Disadvantaged Inner City Area (n=44)</th>
<th>Affluent City Area (n=71)</th>
<th>Socioeconomically Mixed Rural District (n=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aware of Correct Age</td>
<td>31%</td>
<td>20%</td>
<td>48%</td>
<td>22%</td>
</tr>
<tr>
<td>Unaware of the Correct Age</td>
<td>69%</td>
<td>80%</td>
<td>52%</td>
<td>78%</td>
</tr>
</tbody>
</table>
Commercial infant foods: **Numbers & Types**

Categories of 448 infant foods from 7 infant food manufacturers

- **Breakfasts** (n=65)
- **Dinners** (n=204)
- **Desserts** (n=114)
- **Biscuits & Snacks** (n=27)
- **Gravies & Sauces** (n=17)
- **Juices** (n=19)
- **Bedtime Cereals** (n=2)
Commercial infant foods: Compliance

- Foods at variance with EU legislation (1924/2006; 2006/125/EC)
  - Bedtime Cereals ($n=2$)
  - Products containing cured meats ($n=11$)

- Foods at variance with Best Practice Guidelines (FSAI, 1999)
  - Certain Desserts & Snacks
  - Products containing gluten marketed from 4 months of age

- A third of mothers (33%, $n=62$) use commercial infant foods as a guide for homemade meals
• Inclusion of haem iron foods into the infant diet:
  – Average age of red meat introduction = 8 months
  – Up to a quarter of infants not having any red meat in the first 12 months of life
  – Non evidence-based perceptions play a role in timing
  – Less than a third of mothers aware of the age at which iron is more important for infants

• Database of commercial infant foods:
  – Compliance issues
  – Discrepancy between best practice and foods available
B. Diets of infants during the first 6 months of life
Methodology

• **What**: Observational study

• **Who**: 401 Irish national mothers

• **How**: Third trimester
  
  : 6 weeks
  
  : 6 months

• **Why**: Breastfeeding initiation & prevalence rates
  
  : Weaning and dietary patterns
Introduction of solid food

Proportion of infants introduced to solid food

≤ 12

23%

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Main meals and snacks at 6 months

Proportion of infants (%)

96

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Summary

• Time of weaning:
  – Median age of weaning = 16 weeks
  – Influences ≤ 12 weeks: Antenatal reporting, formula feeding & maternal grandmother
  – Influences ≥ 12 weeks: PHN

• Dietary patterns:
  – Non-recommended snacks
  – Food textures
  – Additions to food

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Summing it up
To come full circle...Summing it up

Adapted from the National Health Promotion Strategy 2000-2005. AE Bennett, November 2012
References


