Baby-led weaning: what does the evidence say so far?

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Baby-led weaning

- Characterised by
  - Self feeding
  - No pureeering
  - Join in family meal times
  - Eating family foods
  - Responsive feeding
How many babies?

• Google search > 2 million
• Website membership
• Academic papers < 20

• Beliefs regarding impact – Need empirical support to develop policy

http://baby-led.rhgdsrv.co.uk/benefitsofbea
Baby-led weaning beliefs

- Promotes acceptance of food
- Regulates weight
- Enjoyment of food
- Learn to manage food
- Learn about the world
- Motor development
- Family mealtimes
- Confidence
- Social skills

Is there any evidence for this?
How does this fit with current weaning guidelines?
Fits with weaning recommendations

‘Practice exclusive breastfeeding from birth to 6 months of age, and introduce complementary foods at 6 months of age (180 days) while continuing to breastfeed’

WHO, 2003

BLW emerged partly in response to changes in weaning guidelines
WHO & Responsive Feeding

... being sensitive to their hunger and satiety cues

Feed slowly and patiently, and encourage children to eat, but do not force them

If children refuse many foods experiment with different food combinations, tastes, textures and methods of encouragement
NHS and Finger foods

‘Let your baby feed themselves with their fingers. This way they can show you how much they want to eat, and it gets them familiar with different types of food. It also makes eating more enjoyable. As a guide, the best finger foods are foods that can be cut up into pieces that are big enough for your baby to hold in their fist, and stick out of the top of it. Pieces about the size of your own finger work well.’
NHS: Readiness for solid foods

• They can stay in a sitting position and hold their head steady.

• They can co-ordinate their eyes, hands and mouth so that they can look at the food, pick it up and put it in their mouth, all by themselves.

• They can swallow food. Babies who are not ready will push their food back out, so they get more round their face than they do in their mouths.
Is it BLW anything different?

Sachs (2011) DOH recommendations v BLW

- Do recommend finger foods
- Do recommend responsive feeding
- Does the food really matter or the way it is given?

The evidence so far

Benefits, risks and limitations
Is baby-led weaning feasible?

- Only 6% had not reached for finger foods by 8 months

- Likely not to be suitable in failure to thrive

What do blw actually do?

Longitudinal study

Questionnaire based

Mothers baby 6 – 12 months

Comparison BLW and spoon fed
Phase one (6 – 12 months)

- 604 mothers
- Baby-led = using spoon feeding & puree use < 10%
  - 351 (BLW) & 253 (spoon-feed)
- Description of first solids
- Timing of first solids
- Experiences of introducing solids
- Breastfeeding duration
- Maternal Feeding style
- Maternal background
Baby-led mothers

• Later solids
• Earlier ‘finger foods’
• More likely to breastfeed
• Joined in family meals and ate family foods
• Lower anxiety regarding feeding and mealtimes
• Older & more educated (across BLW studies)

• These could affect any outcomes of method

Responsive feeding

Child Feeding Questionnaire

• Lower pressure to eat
• Lower restriction
• Lower monitoring
• Lower concern for child weight

Does BLW affect outcomes?
Phase two (18 – 24 months)

- 298 mothers
- 163 (BLW) & 135 (SW)

- Weight

Eating Behaviour: CEBQ
- Fussiness
- Food responsiveness
- Satiety responsiveness

- Maternal child feeding style
Infant weight

• No significant difference in weight at birth or at six months

• At 18 – 24 months, traditional group babies were significantly heavier \([F (1, 225) = 7.931, p = 0.005]\).

• BLW = 11.79 kg (SD: 3.53)
• Trad = 12.86 kg (SD: 3.73)

• Independent of birth weight, breastfeeding, age of introduction to solid foods and maternal control
<table>
<thead>
<tr>
<th>Weight Category</th>
<th>BLW</th>
<th>Traditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight &lt;5&lt;sup&gt;th&lt;/sup&gt;</td>
<td>5.4% (n = 7)</td>
<td>2.5% (n = 4)</td>
</tr>
<tr>
<td>Normal weight 5&lt;sup&gt;th&lt;/sup&gt; – 85&lt;sup&gt;th&lt;/sup&gt;</td>
<td>86.5%</td>
<td>78.3%</td>
</tr>
<tr>
<td>Overweight &gt; 85&lt;sup&gt;th&lt;/sup&gt;</td>
<td>8.1% (n = 11)</td>
<td>19.2% (n = 24)</td>
</tr>
</tbody>
</table>

\[ \chi^2 (2, 268) = 8.100, p < 0.017 \]
Independent of maternal demographic background and weight, infant weight, breastfeeding duration, timing of solids and fingers foods and maternal control.
Supports: Townsend & Pitchford (2012)

• Examined weight and dietary preferences of preschool children

• Less likely to be overweight
• More likely to like carbohydrate foods

BLISS Study: New Zealand trial

- ‘Baby-led’ rather than BLW itself
- Adherence
- Intake
- Weight

Why?

- Self feeding protective?
- Speed of self feeding?
- Speed of eating whole foods?
- Post ingestive learning?
- Meal time interactions?
- Food offered?
Health professionals concerns

- Choking
- Low nutrient intake
- Underweight
- Inappropriate foods
- Lead to fussiness?
- Lead to overweight?
- Inaccessible for some

Rowan, Lee & Brown (under review) UK Health and childcare professionals’ perceptions of the benefits and risks of a baby-led approach to introducing solid foods

Confounding factors?
Self selecting sample...

- Higher education & older
- Reasons behind weaning
- Infant traits
- Self reported data
- Maternal background

Further questions

• Is it safe?
• Is it sufficient?
• Family diet suitable?

• What is BLW?
• To what degree do you need to be BLW?
• How do different factors predict outcomes?

• What would happen in a trial – is it generalisable?

• Is BLW a specific method or feeding philosophy?
Current PhD Students

• What is the intake of babies following BLW and traditional weaning (Hannah Rowan)

• Growth of babies following BLW and traditional weaning (Sara Jones)