Feedback on *Feeding in the First Year of Life*
BDA Paediatric and Food Allergy Specialist Groups

**Introduction**

The BDA welcomes this report, which gives a clear health promotion line to promote breastfeeding, and identified the need to support continuation of breastfeeding through the first year. We also strongly support the call for the reinstatement of the infant feeding surveys, which we considered essential.

However, we remain concerned that the document appears to be biased toward reiterating or supporting the view that breastfeeding should be exclusive to around 6 months. We do not believe it has critically reviewed and appropriately recognised the more recent evidence that there is no harm in the earlier introduction of solids.

We have made a number of general comments and then more specific comments relating to individual chapters.

**General comments**

**Non-breastfed babies**

Consideration needs to be given to the appropriate age for introduction of solid foods to mixed and formula fed infants as well as those exclusively or predominantly breastfed. The report considers complementary feeding only in relation to the breast fed infant. However, based on the breastfeeding rates reported from the last UK infant feeding survey (2010), most infants will receive some infant formula during the first six months of life. Therefore complementary feeding recommendations cannot be focused only on breastfed infants.

**Promotion of breastfeeding**

Breastfeeding could be more strongly promoted as the method of choice for all infants. While most (~80%) mothers initiate breastfeeding in the UK, this proportion rapidly declines until only half of mothers are breastfeeding at all by the time their infant is 6 weeks old and only a third by 6 months. Exclusive breastfeeding rates are low with only 1% of mothers doing this by 6 months. The benefits of breastfeeding could be highlighted and recommendations updated on the basis of new information e.g. from the recent Lancet series. \(^1\)

Breastfeeding support organisations (e.g. La Leche League, NCT) have reported a high demand from mothers for support to breastfeed and highlight the lack of provision by the NHS. Steps to redress this could help improve breastfeeding rates in the UK and therefore nutrition in the first year of life. Actions to support sustainable breastfeeding are urgently needed in the UK including educational interventions and increased provision of breastfeeding facilities in the workplace and public spaces.

We further support a joined up approach to supporting mothers to breastfeed. All HCPs working with mothers should be up-skilled and able to provide appropriate advice and support. Understanding early growth and weight fluctuations in the very early post-natal period is central to avoid unnecessary ‘top up’ formula feeding. Practical support to breastfeed is key and increased provision of lactation counselors is highly desirable. The aim should be to encourage all mothers to initiate breastfeeding and maintain *any* breastfeeding for the longest period possible. The strong available evidence on the protective effect of breastfeeding on child and maternal health should be used to encourage this.
Support for qualitative research to assess mothers' attitudes to breastfeeding and identify barriers and facilitators to this would be highly recommended.

**Exclusive breastfeeding to around six months**

Evidence to support the recommendation to exclusively breastfeed for the first six months of life is not strong as stated in the report. Whilst several observational studies have reported exclusive breastfeeding to 6 months to be safe for most infants others have shown no harm in introducing solids between 4 and 6 months. RCT data in particular does not strongly support exclusive breastfeeding to 6 months. A study in Honduras reported superior iron status in infants introduced to solids between 4 and 6 months compared with those introduced at around 6 months. This was later confirmed in an RCT from Iceland.

In view of this, rather than setting hard goals that may be difficult to attain for many mothers, e.g. to breastfeed exclusively for 6 months, a more relaxed approach to infant feeding guidance e.g. encouraging to breastfeed for as long as possible, may encourage more mothers to continue for longer.

**Comments specific to sections**

**Chapter 1 - Introduction**

- The wider role of complementary feeding could be addressed i.e. developmental as well as nutritional factors
- A risk benefit analysis concerning the introduction of allergenic foods is needed in light of new evidence from RCTs since previous reports
- Micronutrient status, in particular iron, should also be considered. Complementary feeding is needed not only to accustom the infant to solid foods but has an important role in bridging the gap in nutrient provision from breast or formula milk
- With respect to the WHO growth standards, the mean age at introduction of CF was 5.4 months but has been reported as around 6 months. The mean age at CF could equally be reported as around 5 months perhaps reflecting more accurately what is actually done.
- Evidence for the optimal duration of breastfeeding to protect against infections in developing countries is strong but not so convincing for developed countries such as the UK. Most studies have compared shorter versus longer durations rather than specifically comparing 4-6 with 6 months of exclusive breastfeeding. Therefore the optimal duration is unknown.

**Chapter 2 – Policy background**

- Paragraph 31 states that more than one definition of complementary foods exists. It needs to be made clear at this point what definition is used in the report.
- There is no provision of the vitamin D supplements that are recommended. Their lack of availability at this time should be a policy consideration.

**Chapter 4 – Infant Feeding, Growth and Health**

Breastfeeding and Health Outcomes

- The introduction of infant formula, rather than CF, has been associated with an increased likelihood of hospital admission in the UK.
- The report does not fully address the benefits of exclusive breastfeeding to 6 months against the risks of not introducing allergenic foods alongside breastfeeding.

**Chapter 5 - Energy Requirements**

- Evidence to support that 6 months of exclusive breastfeeding is able to meet energy requirement for most infants is lacking (Reilly et al). Findings of previous research may not be generalizable (Neilson et al).
- Complementary feeding does displace breastmilk. However, growth of infants introduced to CF at 4-6 or 6 months has not been reported to differ significantly in studies.
The role of responsive feeding in the prevention of childhood overweight and obesity could be considered here. A large number of observational studies support this. Animal protein is more strongly associated than plant protein.\textsuperscript{7,10}

**Chapter 7 - Micronutrients**
- Advice on specific foods and amounts to be provided is currently lacking in UK government advice (i.e. NHS choices website). In particular iron rich foods are not advised until 8-9 months of age when they can be safely given earlier. Whilst some infants may be replete in iron up to 6 months of age this is variable and others may benefit from earlier introduction of iron-rich foods. A review of this is needed.
- Vitamin D continues to be a problem nutrient for infants and young children according to the last UK infant feeding survey and the Diet and Nutrition Study in Infants in Young Children DNSIYC. Uptake of supplements should be addressed and how this can be improved.

**Iron Deficiency Anaemia**
- IDA was reported to be low prevalence in the DNSIYC. However, this may reflect intake of iron fortified formulas. Extended duration of breastfeeding would reduce formula intake so may impact on iron status.

**Chapter 8 – Eating and Feeding of Solid Foods**
- The focus is mainly on when CF is introduced rather than what and how much is given.
- Protein is a particular concern. A growing body of evidence reports that energy from protein increases significantly during CF and exceeds recommendations. High protein intake in infancy has been associated with increased risk of obesity in many observational studies.\textsuperscript{5-7} A causal relationship is reported from several RCTs in infants.\textsuperscript{8,9}
- The authors of this document eloquently discuss all of the studies by Manella who identified a window of opportunity for the introduction of protein hydrolysate formula (PHF), i.e. earlier exposure for a longer duration was associated with greater acceptance in formula fed infants. However, the conclusion of the SACN does not include this. It is important that the conclusion reflects the data that for PHF there is a window of taste acceptance that may be earlier than 6 months. This may go against the recommendation of exclusive breast feeding for 6 months, but is an evidence based practical fact that is important for HCPs working in allergy.

**Chapter 9 - Oral Health**
- Advice on oral health is needed to include reducing consumption of free (non-milk) sugars and appropriate cleaning once the first teeth appear.

**Chapter 12 - Atopic and Autoimmune Disease**
- Comments on peanuts and egg are as below in the commissioned section on this specific topic
- The authors have included this statement: “Based on evidence relating to the consequences of reduced breast milk feeding, on the basis that complementary foods displace breast milk, introduction of complementary foods including peanut and hen’s egg earlier than around six months of age presents risks that are not outweighed by any potential benefit.” This statement is unclear as the EAT study (commissioned by FSA) reported that breast feeding rates in the intervention group were higher than the UK average and did not differ from the control group. Suggest this is reworded to reflect that whilst some displacement of energy/nutrients from breastmilk occurs evidence (from limited studies) indicates that breast feeding is maintained when solids are commenced.
- In addition, it is unclear what “risks” the report refers to? In the EAT study no harm was associated with the early introduction (from 3-4 months) of peanut and egg and children continued with breast feeding. Therefore, this statement does not reflect the study findings. Whilst breast feeding has a clear advantage for developing countries with regard to infections, the EAT study did not find an increased risk with earlier introduction except for URTI.
Chapter 13 - Conclusions and Recommendations

- Current evidence does not support that exclusive breastfeeding to 6 months is the physiological norm for all infants. Research has found that some infants will need complementary foods before this. Responsive feeding is key here as infants will signal developmental and nutritional needs to their mother.
- Standard and follow on formulas could account for the low prevalence of ID reported in the DNSIYC
- It is unclear where evidence reviewed for the report strengthens the recommendation to breastfeed exclusively to 6 months. Recent evidence from RCTs supports that there is no harm in introducing allergenic foods from 4 months.
- Suggest that current recommendations should reflect this by stating that mothers should be supported to exclusively breastfeed for the first 6 months. No infant should be introduced to CF before 4 months but all should be given these by 6 months of age.

References


(10) Gunther AL, Remer T, Kroke A, Buyken AE. Early protein intake and later obesity risk: which protein sources at which time points throughout infancy and childhood are important for body mass index and body fat percentage at 7 y of age? Am J Clin Nutr 2007; 86(6):1765-1772.