Background
Breastfeeding is the foundation of lifetime nutrition to optimise health, wellbeing and life expectancy. The WHO’s International Code of Marketing of Breast-Milk Substitutes (WHO Code 1981), was developed in response to concerns over the effects on infant health of the unregulated promotion of infant formula, particularly in developing countries. Australia supported the WHO Code and our response included the Marketing in Australia of Infant Formula (MAIF) agreement, the National Breastfeeding Strategy and the development of the NHMRC Infant Feeding Guidelines. It is planned to release a new edition of the Infant Feeding Guidelines in 2011. Dietary Guidelines, including the Infant Feeding Guidelines are based on systematic literature reviews, umbrella reviews (consolidation of major international reviews of breastfeeding) and expert opinion. This paper will review some of the major issues that may be considered in the forthcoming Infant Feeding Guidelines.

Objective
Current issues in nutrition include factors associated with the initiation and duration of breastfeeding, definitions of breastfeeding and the collection of data, early nutrition and later disease (epigenetics), prelacteal feeds, the new WHO growth reference and its potential impact on breastfeeding, allergy and breastfeeding and the continuing implementation of the WHO “International Code of Marketing of Breast-milk Substitutes”. Infant feeding is closely linked to culture and one of the important factors is whether the infant’s parents were breastfed. For this reason it is important to also consider infant feeding practices in the countries of origin of mothers giving birth in Australia. The overall aim of this paper is to review studies related to the issues central to developing the new guidelines.

Design
Infant feeding is integral to the culture of the country of birth of the mother (and other family members) and the country in which the birth occurs. In Australia the birthplaces of mothers delivering infants in 2008 were Australia NZ 77.8%, United Kingdom 3.3%, India 1.6%, Vietnam 1.6% and China 1.5%. But Australia has citizens from many countries and mothers from other countries contributed 14.2% of births. This makes developing guidelines that are inclusive difficult, but in seeking to promote breastfeeding and the appropriate introduction of complementary foods.

One of the most difficult features of discussion of infant are the definitions used for breastfeeding. The definitions used will be taken from the NHMRC Infant Feeding Guidelines, which in turn are consistent with the WHO Code. More specifically breastfeeding is defined as:

Exclusive Breastfeeding “the infant has received only breast milk from his/her mother or a wet nurse, or expressed breast milk, and no other liquids or solids with the exception of drops or syrups consisting of vitamins, mineral supplements or medicines”

Full Breastfeeding “infants who are receiving almost all of their nutrients from breastmilk but take some other liquids such as water, water-based drinks, oral rehydration solutions, ritual fluids, and drops or syrups.

Any Breastfeeding. The infant is receiving some breastmilk.

Unfortunately many potentially useful studies use methods (such as feeding method in the past 24 hours) that do not permit their inclusion in systematic reviews.

Outcomes
There have been many recent reviews documenting the importance of breastfeeding for optimal growth and development. It is now known that impact of early development persists into influencing chronic disease rates in adult life. In the shorter term breastfeeding minimises morbidity and mortality, reduces obesity optimising cognitive development.

Infant feeding studies using the same methodology have been undertaken in Australia (several locations, including an indigenous sample, and in several time periods), China (several locations), Vietnam, Japan and Malaysia. Breastfeeding initiation rates remain above 90% in all of these countries. However the UK initiation rate is currently 73%. There is a high, and probably, increasing rate of prelacteal and complementary feeding while in hospital in all of these countries, which contributes to low rates of exclusive breastfeeding.

In all of the countries to be included in the review support by the father and other relatives and making an early decision to breastfeed had a positive influence. Smoking by either parent and the use of prelacteal feeds had a negative impact. Factors that had a varying impact depending on the country included education, c-section, rural or city location and birthweight.

Australia will also have to consider the impact on breastfeeding if the new WHO growth reference is adopted in this country. The new reference is heavier than the old in the first year of life and may misclassify infants as having growth deficits leading to declines in breastfeeding rates.

Conclusion
The revision of the Infant Feeding Guidelines will require the careful compilation of systematic literature reviews that will address all of these issues. Draft copies will be released in early 2011 with the final version finished in mid year.

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