

# Nutrition for healthy term infants, birth to six months: An overview

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## Abstract

Nutrition for healthy term infants is a joint statement by Health Canada, the Canadian Paediatric Society, Dietitians of Canada and the Breastfeeding Committee for Canada that was most recently updated in September 2012 with recommendations from birth to six months of age. This practice point outlines the development process, principles of infant feeding, and recommendations for clinicians. Health professionals involved in counselling families about infant nutrition are advised to read the statement in its entirety, because the underlying discussions expand upon and clarify the advice summarized in the principles and recommendations. The complete statement is available on Health Canada's website ([www.hc-sc.gc.ca/fn-an/nutrition/infant-nourisson/recom/index-eng.php](http://www.hc-sc.gc.ca/fn-an/nutrition/infant-nourisson/recom/index-eng.php)).

**Key Words:** Breastfeeding; Evidence-based; Feeding; Growth; Infants; Nutrition; Vitamin D

In 2009, a formal review of nutrition for healthy infants was initiated by the collaborating organizations of the Infant Feeding Joint Working Group, consisting of representatives of the Canadian Paediatric Society's Nutrition and Gastroenterology Committee, Dietitians of Canada, the Breastfeeding Committee for Canada, the Public Health Agency of Canada and Health Canada. The review is divided into two parts, birth to six months of age and six to 24 months. The document covering birth to six months of age was released in September 2012, and is available online in English and French on Health Canada's website (<http://www.hc-sc.gc.ca/fn-an/nutrition/infant-nourisson/recom/index-eng.php>).

Development of this practice point involved extensive review of the scientific evidence in peer-reviewed literature. Guidance on content was provided by the Infant Feeding Expert Advisory Group, with broad stakeholder and public consultations. It is anticipated that the updated guidance on nutrition for infants from six to 24 months will be available in 2014.

This practice point provides health care professionals with evidence-based information basic to communicating accurate and consistent advice to Canadian parents and caregivers. It is not intended to be an all-encompassing practical guide to infant feeding. While the recommendations are based on available scientific evidence, it is important to note that many infant nutrition studies are not randomized trials. Such research is neither possible nor ethical in many circumstances.

This practice point recognizes the importance of breastfeeding for infants' short- and long-term health.<sup>[1]-[3]</sup> For example, breastfeeding is associated with enhanced cognitive development and protection against gastrointestinal infections, acute otitis media, respiratory tract infections and sudden infant death syndrome.<sup>[2],[4]-[6]</sup> The World Health Organization (WHO) states that "breastfeeding is an unequalled way of providing ideal food for the healthy growth and development of infants."

## Principles of infant feeding

[Nutrition for healthy term infants: Recommendations from birth to six months of age](#) is organized around seven principles, each of which contains a number of underlying recommendations, rationales and references. The first five principles and recommendations are summarized below. Clinicians should read the statement in its entirety, because the underlying discussions expand on and clarify the

advice summarized in the principles and recommendations.

1. Breastfeeding is the normal and unequalled method of feeding infants.

- Recommend exclusive breastfeeding for the first six months.

The rationale notes, “Exclusive breastfeeding during the first six months is accepted as the nutrition standard for infants according to the Dietary Reference Intakes,<sup>[7]</sup> and is promoted by the WHO as a global public health recommendation.<sup>[8]</sup> Exclusive breastfeeding from birth is recommended except in very few medical situations, and is important for the healthy growth and development of infants and toddlers.”<sup>[8]</sup>

“Exclusive breastfeeding for six months continues to be the target for the implementation of the WHO/ UNICEF Baby-Friendly Initiative (BFI) and Global Strategy for Infant and Young Child Feeding.<sup>[8]</sup> However, in individual practice, guidance on the appropriate time to introduce complementary foods should also be led by the infant’s signs of readiness and may be a few weeks before or just after the sixth month. Beyond six months, further delay increases risk of iron deficiency.”

2. Breastfeeding initiation and duration rates increase with active protection, support and promotion.

- Implement the policies and practices of the Baby-Friendly Initiative for hospitals and community health services.

3. Supplemental vitamin D is recommended for breastfed infants.

- Recommend a daily vitamin D supplement of 10 µg (400 IU) for breastfed infants.

4. First complementary foods should be iron-rich.

- Recommend meat, meat alternatives and iron-fortified cereal as an infant’s first complementary foods.

5. Routine growth monitoring is important to assess infant health and nutrition.

- Use the WHO Growth Charts for Canada for optimal monitoring of infant growth.<sup>[9]</sup>

Further recommendations and information are provided under the remaining two principles regarding unnecessary feeding changes (eg, managing infantile colic, gastroesophageal reflux and acute gastroenteritis) and rare contraindications for breastfeeding (eg, advising mothers with infections, or who are using medications or illicit drugs).

The statement “recognizes that some infants may not be exclusively breastfed for personal, medical or social reasons”. A separate section addresses recommendations on the use of breastmilk substitutes, including commercial infant formula choices, safe preparation and storage, and supervising a feeding infant. The statement says: “Families need support to optimize the infant’s nutritional well-being. The International Code of Marketing of Breast-milk Substitutes<sup>[10]</sup> advises health professionals to inform parents about the importance of breastfeeding, the personal, social, and economic costs of formula feeding, and the difficulty of reversing the decision not to breastfeed. Families who have made a fully informed choice not to breastfeed should be individually counselled on the use of breastmilk substitutes”.

The statement concludes with questions and answers to help health professionals communicate with families about infant nutrition, with information on topics such as jaundice, allergenic foods and textures.

It is important to emphasize that additional research is needed in many areas of infant nutrition. These guidelines are based on current evidence, however, secondary to incomplete data, significant controversy exists in many areas. As further data become available from well-designed and well-conducted studies in both developed and developing countries, it is expected that these recommendations can be further validated and/or refined.

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