

Food and Nutrition Guidelines for Healthy Infants and Toddlers (Aged 0-2): A background paper

Questions and Answers

1. Why has the background paper Food and Nutrition Guidelines for Healthy Infants and Toddlers (Aged 0-2) been revised?

The first background paper for healthy infants and toddlers was published in 1995 and revised versions were published in 1999 and 2000. This fourth edition updates the previous papers to provide current, evidence-based policy advice on nutrition and physical activity for achieving and maintaining the best possible health for infants and toddlers.

2. Who is the background paper for?

Health practitioners – including dietitians, nutritionists, doctors, nurses, well-child providers, lead maternity carers, midwives, primary health care providers, health promoters, educators and teachers. The background paper guides and supports health practitioners in the practice of healthy nutrition and provides them with a detailed information resource.

In addition the paper provides a basis for preparing policies on protection, promotion and support of breastfeeding, including implementing the Baby Friendly Hospital and Community Initiatives for health care facilities.

The background paper will also be available on the Ministry website for individuals who are particularly interested in the evidence base for the Ministry's nutrition policy for infants and toddlers.

3. What is difference in the background paper between the 2000 and 2008 versions?

A number of sections in the paper have been revised and strengthened and some new sections have been included.

Revised and strengthened sections are on breastfeeding; breastfeeding and obesity prevention; considerations for Māori and Pacific people and other population groups; vitamin D; physical activity; vegetarianism; ingredients in infant formula; handling and storage of infant formula; introduction of complementary foods (solids); and allergy.

New sections included in this background paper include: risks of late introduction of complementary foods; toddler milk; food security; overweight and obesity; and current dietary practices and nutrient intakes in New Zealand infants and toddlers.

The key policy advice is:

- a. that the recommended duration of exclusive breastfeeding be around six months; and the recommended age of continued breastfeeding to one year of age or beyond
- b. that the recommended age for introduction of complementary foods (solids) when the infant is developmentally ready, around six months of age
- c. that the new WHO growth standards be used in New Zealand
- d. that there be no delay in the introduction of common food allergens

4. What consultation was undertaken to prepare the revised background paper?

The Ministry published a draft for consultation in June with a submission period until September 2007. Ninety-six submissions were received from different sectors of the community including industry; those working specifically with Māori or Pacific people; non-government groups; not-for-profit agencies; the general public; public health practitioners; personal health practitioners; and academics. The largest number of submissions was received from health practitioners.

The Ministry also consulted with numerous Government agencies including the Ministries of Education, Social Development, Justice, Women's Affairs, Pacific Island Affairs; the Department of Labour; Te Puni Kokiri; the New Zealand Food Safety Authority; and the Department of Prime Minister and Cabinet. Revisions have been made to address issues that were raised in the consultation process, where appropriate.

5. What are the key messages for parents and caregivers of healthy infants and toddlers?

The New Zealand Food and Nutrition Guidelines Statements for Healthy Infants and Toddlers are the key principles and recommendations for feeding infants and toddlers to ensure their appropriate growth and development.

The guidelines statements are as follows:

1. Maintain healthy growth and development of your baby and toddler by providing them with appropriate food and physical activity opportunities every day.
2. Exclusively breastfeed your baby until your baby is ready for and needs extra food – this will be around six months of age.
3. When your baby is ready, introduce him or her to appropriate complementary foods and continue to breastfeed until they are at least one year of age, or beyond.
4. Increase the texture, variety, flavour and amount of food offered so that your baby receives a complementary intake of nutrients, especially iron and vitamin C, and is eating more family foods by one year of age.
5. For your baby, prepare or choose pre-prepared complementary foods with no added fat, salt, sugar, honey or other sweeteners.
6. If your baby is not fed breast milk, then use an infant formula as the milk source until your baby is one year of age.
7. Each day offer your toddler a variety of nutritious foods from each of the four food groups, which are:
 - vegetables and fruit
 - breads and cereals, including some wholemeal
 - milk and milk products or suitable alternatives
 - lean meat, poultry, seafood, eggs, legumes, nuts and seeds.
8. For your toddler, prepare foods or choose pre-prepared foods, drinks and snacks that:
 - are low in salt, but if using salt, use iodised salt
 - have little added sugar (and limit your toddler's intake of high-sugar foods).
9. Provide your toddler with plenty of liquids each day such as water, breast milk, or cows' milk (but limit cows' milk to about 500 ml per day).
10. Do not give your infant or toddler alcohol, coffee, juice, soft drinks, tea (including herbal teas), and other drinks containing caffeine.
11. Purchase, prepare, cook and store food in ways to ensure food safety.

These recommendations for healthy infants and toddlers are based on the New Zealand Food and Nutrition Guidelines for Healthy Adults.

6. Is there a way I can provide the key information in the background paper for my clients in a user friendly form?

The accompanying health education leaflets, *Eating for Healthy Infants and Toddlers (Aged 0-2)*, *Starting Solids and Breastfeeding – You can do it*, are a user friendly way to provide sound advice and support to parents and caregivers of healthy infants and toddlers. These leaflets have been reviewed in line with the revised guidelines. For those who are not breastfeeding the pamphlet *Feeding your Baby Infant Formula* may be useful. The leaflets can be ordered on www.healthed.govt.nz.

7. Why is breastfeeding recommended for infants and toddlers?

Breastfeeding is important for infants because it:

- provides optimum nutrition for infants
- assists the physical and emotional development of infants
- decreases the incidence and severity of childhood infectious disease
- is associated with decreased infant mortality and hospitalisation
- is associated with the decreased risk of chronic disease for infants.

8. Why does the paper only recommend breastfeeding to at least one year or beyond, not two years and beyond like WHO does?

In 2003 the World Health Organization (WHO) recommended in their Global Strategy for Infant and Young Child Feeding that in addition to six months exclusive breastfeeding, babies should be breastfed with appropriate complementary foods until two years of age and beyond. The Ministry of Health is supportive of the Global Strategy and uses it as a guiding document for its work on infant and young child feeding. Part of the reason for the revision of the *Food and Nutrition Guidelines for Healthy Infants and Toddlers (Aged 0-2): A background paper*, was to take account of the Global Strategy recommendations on the duration of exclusive and continued breastfeeding.

As part of the review process, the Ministry sought public consultation on the draft for consultation. In the draft for consultation the Ministry proposed that infants should be exclusively breastfed until around six months of age with continued breastfeeding up to two years of age or beyond.

Feedback on the draft challenged the recommendation to breastfeed up to two years of age or beyond, citing lack of evidence for this in the New Zealand context. The Ministry conducted a mini Health Impact Assessment on recommending breastfeeding for up to two years of age or beyond. The available evidence is strong for the importance of breastfeeding for the first 12 months of life, and breastfeeding does make a nutritional and health contribution beyond the first year of life. However, most of the studies on the reduction in risk of chronic disease have not considered breastfeeding beyond 12 months. The current prevailing social climate does not support breastfeeding to beyond one year of age as evidenced by the current breastfeeding rates in New Zealand particularly for Maori and Pacific. Setting the goal post at two years has a risk of making breastfeeding “too hard” with unrealistic expectations, and causing alienation and/or discouragement for women. The impact is likely to be more pronounced for Maori and Pacific women for whom the gap is greater.

Hence, the Ministry has revised its recommendation which now reads:

"Exclusively breastfeed your baby until your baby is ready for and needs extra food – this will be at around six months of age. When your baby is ready, introduce him or her to appropriate complementary foods and continue to breastfeed until they are at least one year of age or beyond".

These words have been carefully chosen to acknowledge the importance of breastfeeding

and to prevent the misconception that breastfeeding should stop at six months or one year of age.

The Ministry accepts the recommendations of the Global Strategy on the duration of exclusive and continued breastfeeding as a global public health recommendation, for both developed and developing countries. The Ministry's new policy position takes into account the New Zealand context. As we improve the breastfeeding rates, and it becomes more appropriate and achievable to recommend a longer duration of breastfeeding, and more evidence emerges, the Ministry will look at reviewing its position as part of its ongoing programme to regularly review and update the series of Food and Nutrition Guidelines background papers.

9. When should you introduce complementary foods to an infant?

The recommended age is when the infant is developmentally ready, around six months of age. Common signs of readiness include when a baby can hold their own head up, sit with less help, are putting their hands in their mouth and shows signs of chewing movements. This recommendation aligns with the *WHO Global Strategy for Infant and Young Child Feeding*, which states that infants should be exclusively breastfed until six months of age, at which time suitable complementary foods should be introduced

This recommendation has been updated from the 2000 background paper, which recommended introducing complementary foods from four to six months. Current New Zealand data indicated that infants are given complementary foods too early when the infant is not developmentally ready.

10. How does this background paper link to other strategies or policy documents?

Food and Nutrition Guidelines for Healthy Infants and Toddlers (Aged 0-2): A background paper supports three of the key population health objectives in the New Zealand Health Strategy, and along with the other background papers in the series of population group-specific background papers, forms an important technical basis for implementing the Healthy Eating – Healthy Action Strategy.

This document specifically supports the health target – improve nutrition; increase physical activity and decrease obesity – by promoting breastfeeding. Breastfeeding rates are one of the indicator measures for this target.

On an international level, the background paper is aligned with the World Health Organization (WHO) *Global Strategy for Infant and Young Child Feeding (WHO 2003)*. This strategy encourages governments to focus on nutrition and their role in achieving health for infants and young children.

The background paper is also an important part of how the WHO *International Code of Marketing of Breast-milk Substitutes (The International Code)* is implemented in New Zealand. The Ministry is responsible for implementing and monitoring the International Code in New Zealand.

11. What is a healthy diet for children aged 0 to 2 years?

A healthy diet is one that follows the Food and Nutrition Guidelines Statements (see question 5 on key messages). The food and nutrition needs of individual infants and toddlers and the rates at which they develop vary widely. Milk (either breast milk or infant formula) is the most important energy and nutrient source in the first year of life. Once complementary foods and family foods are introduced, the emphasis for this age group is on growth and development and on achieving a varied food intake, including food choice and texture, and appropriate eating behaviours and patterns.

There are two three-day meal plans included in the background paper that can be used as a guide to achieving the recommended nutrient intakes for infants and toddlers.

12. Why have the recommended intakes of some nutrients changed?

The revised background paper uses the 2006 Nutrient Reference Values (NRVs), which include the new recommended dietary intakes (RDIs) for New Zealanders. Since 1991, New Zealand had been using the 1990 Australian RDIs and these were used in the previous background papers.

For some nutrients the new RDI values are higher than the previous values, while others are lower.

The term Recommended Dietary Intake (RDI) refers to the average daily intake level of a particular nutrient that is sufficient to meet the requirements of nearly all healthy individuals in a particular life stage and gender group.

13. Why has the Ministry changed the type of growth charts it recommends for use for infants and toddlers?

The paper recommends that growth of term infants be monitored on the new WHO growth standards. These standards were developed from a significant international study that looked at growth data from around 8500 children from widely different ethnic and cultural backgrounds. These children were raised in environments thought to optimise growth. For example, these children were breastfed and their mothers did not smoke during pregnancy.

As a result the new WHO growth standards provide an optimum model of growth and development for infants. The recommendation to use the WHO growth standards reflect both WHO's and now the New Zealand Ministry of Health's recommendation to exclusively breastfeed infants to around six months.

Previously the Ministry had recommended the use of the New Zealand growth charts. These charts are based on New Zealand data collected in the 1980's using growth data from both breastfed and bottle fed infants.

14. How can I make up infant formula in the safest way for my baby?

Powdered formula, although manufactured to meet hygiene standards, is not sterile. It may, although rarely, contain bacteria which can cause serious food-borne illness, for example, *Enterobacter sakazakii* and *Salmonella*. To minimise the risk of food-borne illness care needs to be taken in the preparation, storage and use of infant formula.

Wash your hands thoroughly before starting to prepare infant formula. Check the 'use by' date on the can to make sure the powder is not too old. The formula must be made up according to the instructions on the container, taking care to measure the amount of infant formula powder carefully. For the first three months of your baby's life all feeding and preparation equipment needs to be sterilised. After three months thorough washing in hot soapy water, then rinsing is adequate.

For infants less than three months, formula needs to be made up with cooled, boiled water which has been stored in a covered sterilised container in the refrigerator for no longer than 24 hours. Once the baby is older than three months, town supply tap water can be used, after having run the tap for 10 – 15 seconds first. For those concerned about water contamination or who use bore or tank water, continue to use cooled boiled water until the baby is 18 months.

Prepare formula as close as possible to feeding time. If storing made-up formula is unavoidable it should only be kept in the refrigerator for a maximum of four hours past the time it was made up.

15. Recommending no delay in the introduction of common allergens for those infants with strong family histories of allergies is a significant change to previous 0-2 guidelines. Why has this change been made?

The previous edition of *Food and Nutrition Guidelines for Healthy Infants and Toddlers (Aged 0-2): A background paper*, published in 2000 recommended:

- For all infants to delay introducing egg white until 1 year of age
- If there is a strong family history of allergy the following foods should be delayed until 12 months of age:
 - cows milk, cheese, yoghurt, ice cream
 - fish
 - wheat cereal
- If there is a strong family history of allergy, peanut products should not be used until after three years of age.

Recent international guidelines from the American Academy of Paediatrics (AAP) and the European Society for Paediatric Gastroenterology Hepatology and Nutrition Committee for Nutrition (ESPGHAN) state that there is no convincing evidence to support delaying the introduction of common allergen foods to infants. This applies to infants thought to be at high-risk of allergies (defined as those infants with at least one parent or sibling with allergic disease namely eczema, asthma, hay fever and food allergy) as well as those not considered at risk.

The updated 2008 guidelines recommended no delay in the introduction of common allergens. It is recommended that new foods be introduced to an infant one at a time, allowing two to four days between each new food to establish that the infant does not have an allergy to the food. For those infants with a parent or sibling with a history of anaphylaxis or a severe food allergy or anyone wanting to know more about food allergies, further information is in the background document.

16. How can I get a copy of the background paper and health education resources?

You can download a copy of the background paper from the website:

www.health.govt.nz/publication/food-and-nutrition-guidelines-healthy-infants-and-toddlers-aged-0-2-background-paper

Or you can contact:

Wickliffe Press

PO Box 932

Dunedin

Phone: (04) 496 2277

Email: moh@wickliffe.co.nz

When ordering this book from Wickliffe, please quote HP 4570.

The health education leaflets *Eating for Healthy Infants and Toddlers (Aged 0-2) Starting Solids* and *Breastfeeding – You can do it*, can be downloaded from www.healthed.govt.nz and are available in hard copy from your local Public Health Unit.