SECTION 4

Introduction of Solid Foods (First Foods)



Introduction of solid foods (first foods)

This guide will use the term "introduction of solid foods" as the period between 6 and 12 months where infants are being introduced to foods whilst still being offered breastmilk or formula. The Australian Infant Feeding Guidelines and the WHO Guideline for complementary feeding recommends introducing solid foods at around six months and not before four months of age.[5,17]

Why are solid foods introduced at around 6 months?

By around 6 months of age breastmilk or infant formula will no longer provide enough energy and nutrition to support normal growth and development, and solid foods need to be introduced. Between 6 and 12 months of age, breast milk or formula continues to be a major source of nutrition alongside solid foods.

"Introducing solid foods at around 6 months of age is necessary to meet an infant's increasing nutritional and developmental needs"[5]

At around 6 months of age, most infants are ready to be introduced to different foods including different textures. At this age:

- Nutritional requirements are no longer met from breastmilk or infant formula alone. Iron is a particular concern after 6 months.
- Hunger cues will show that an infant is no longer satisfied by breast milk or infant formula on its own.
- The tongue-extrusion reflex (which makes babies push food out of their mouth) has disappeared. As they also become able to sit without much support, babies can move food around in their mouth more easily before swallowing. This means they can manage thicker foods and varied textures.
- Their digestive system has matured, and they can digest starchy foods (like bread, rice, potato).
- They are interested in their environment and will be willing to accept new flavours and textures.
- Most infants are chewing by 7–9 months of age and can manage finger foods at around 8 months of age.

Problems that may occur when solid foods are introduced too early

- Could cause issues with breastfeeding (e.g. reduction in maternal milk production).
- Can cause digestive issues for the infant.

Problems that may occur when solid foods are introduced too late

- By around 6 months of age breast milk and infant formula is not enough to support a baby's growth, therefore growth can falter.
- Nutrient deficiency, especially iron and zinc can develop. Iron stores are likely to become depleted if iron from solid foods are not provided at this age.
- Optimal development and motor skills such as chewing may be delayed and the baby may become unwilling to accept new textures and tastes.

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Section 4: Based on material provided by the National Health and Medical Research Council

First foods

Prioritising iron rich foods

As long as **iron-rich foods** are included in first foods, food can be introduced in any order at a rate that suits the infant. Iron-rich foods include pureed meat, poultry, fish, cooked tofu or legumes, iron-enriched infant cereals, or iron-fortified cereals (e.g. Weet-Bix™).

All solid foods introduced should be high in nutrients and include a variety of foods from each of the five food groups – meat / alternatives, fruit, vegetables, grains (including wholegrains) & dairy (e.g. cheese, yoghurt). A variety of culturally appropriate foods and food preparation methods should be encouraged.

Texture and consistency

Foods offered should be of an appropriate **texture and consistency** for each individual infant to suit their developmental stage, rather than their age. It is important that infants learn to manage a range of foods of different textures, from smooth, to soft lumps, to mashed foods, to finger foods.

Safety – choking hazards

Small, hard pieces of food should be avoided as they can cause choking. Foods should be modified to suit developmental stage: e.g., hard fruits/vegetables (such as carrots, apples and celery) are softened or grated; grapes / cherry tomatoes are quartered lengthwise; and choking-risk foods like popcorn and whole nuts are not offered. Staff should be trained in the recognition and first aid management of choking.

Continued breastfeeding or infant formula

Until 12 months of age breast milk or infant formula is still important for nutrition. Continue to provide expressed breast milk or infant formula as often as the infant desires. Other drinks (including cow's milk) and sugar-sweetened beverages (e.g. fruit juices, cordial) should be avoided.

Communication with families can support an understanding of why infants and toddlers may be consuming less breast milk, infant formula, or solid food at ECEC. For example, if overnight feeds become more or less frequent, this could impact their hunger levels at ECEC.

Safety – allergy

Systems should be in place to ensure that infants with diagnosed food allergies are offered foods and drinks (expressed breast milk, infant formula) that are suitable for their food allergies, in line with the child's individualised allergy care plan. For more information visit:

- National Allergy Council (2026) Allergy Aware
- National Allergy Council (2026) All About Allergens for CEC Kitchen Handbook

Staff who are caring for infants with food allergy should complete anaphylaxis first aid training, and anyone who is making decisions about, preparing food or supervising mealtimes should complete:

- All About Allergens for CEC food allergen management training

⚠ **Be aware that children can be allergic to any food and may have their first food allergy while they are at an ECEC. Just because a child has previously consumed a food without an allergic reaction, there is still a potential for an allergic reaction to occur on future exposures.**

Transition from infancy to toddler (12-24 months)

By 12 months of age toddlers should be eating a **modified version of what the family / older children in ECEC are eating**. It is important to ensure that toddlers are exposed to a wide **variety** of food from all five of the food groups. Continue to offer iron-rich foods – the iron in meat is bioavailable and meat is also a source of zinc and vitamin B_{12}. Plant-based iron rich foods include legumes (e.g. lentils, chickpeas) and dark, leafy green vegetables (e.g. spinach).

From 12 months, pasteurised full-fat cow's milk can be offered as a drink at the end of mealtimes. Offer cow's milk (or alternative milk if necessary, see over page for more information), expressed breast milk (for as long as the mother and child desire) and water – all in a cup rather than a feeding bottle.

When an infant moves into a toddler or older room, the main change that occurs is a transition from being fed on demand to following the set mealtimes of the service. Toddlers moving into a room with more set mealtimes should be supported through a gradual introduction to participation in shared meals. At this age group, children should be offered regular meals, based on their **hunger and 'had enough' cues**.

See Mealtime Environment and Practices, Section 2, page 20

Foods and beverages not suitable for infants or that should be used with care

Whole nuts and other hard foods

Some foods have a high risk of choking. This includes whole nuts, popcorn, corn chips, seeds, raw carrot, celery sticks, chunks of apple, whole grapes, blueberries (which should be cut in half or squashed), and cherry tomatoes. These should be avoided up to 3 years of age.

Honey

Honey can contain spores of Clostridium Botulinum, which can cause botulism and should not be given to infants under the age of 12 months. This includes all forms of honey, including in cooked recipes or products.

Added salt

Salt should not be added to food as the kidneys of infants are immature and unable to process excess salt. When purchasing ingredients for cooking, choose low salt options (e.g. 'no added salt', 'low sodium', 'low salt').

Added sugars

Consuming added sugars is associated with increased dental caries. Minimise the amount of sugar and other sweeteners (e.g. honey, syrups, intense sweeteners, etc) added to food when cooking. When purchasing ingredients for cooking, choose low or no added sugar options. Check the ingredient list to see if sugar or other sweeteners have been added.

Infants given salty or very sweet foods may develop lasting preferences for these tastes, which can influence food choices later in life. These foods should not be offered.

Deep-fried foods

When fried in large amounts of oil, foods are changed physically, chemically, and nutritionally. These deep-fried foods (e.g. potato chips, chicken nuggets) are linked to long-term health issues such as heart disease or Type 2 diabetes and should not be offered at ECEC.[29]

Infant food pouches

These commercially made products are widely available and are often promoted as convenient and healthy options for young children. However, Australian research has found that many of these products, including squeeze pouches, are high in sugar, low in iron, and carry packaging claims that do not align with infant feeding guidelines.[30,31,32] Consuming foods directly from a pouch spout can also interfere with oral motor development, which relies on chewing and managing foods of increasing texture, and has been linked to selective eating patterns over time.[33]

Milk and milk substitutes

Under 12 months of age, breastmilk or infant formula are the only recommended milk drinks. Milk from other sources, such as cow's, goat's, and sheep's milk, is not suitable as a **main drink**. Plant-based milks, including soy, rice, almond and oat milks, are also not an appropriate source of nutrition as an alternative to breastfeeding or infant formula for infants under the age of 12 months.[5] However, small quantities of milk and milk substitutes can be introduced as part of solid foods, such as on cereal or in custards, or in an open cup for practice.

After 12 months of age, cow's milk can provide nutrients such as protein and calcium and can be introduced. Full fat milk should be offered until 2 years of age, after which reduced-fat milk can be offered if the family chooses. Cow's milk as a drink should be limited to approximately 250 ml during the time a child is in ECEC (assuming an 8-hour day at ECEC). This is around half of the recommended maximum amount of milk they should drink in a whole day (including what they drink at home). Any milk that is offered needs to be pasteurised. Raw, unpasteurised milk must not be used. Calcium-enriched plant-based milk can be used after 12 months of age, as long as a full-fat variety is used, and alternative forms of protein and vitamin B_{12} are included in the diet. The use of plant-based milks as drinks are suitable when used under the supervision of a health professional as they are not nutritionally equivalent to cow's milk.

Non-milk beverages

Whilst the Australian Dietary Guidelines does list half a cup of juice as a serve of fruit, fruit juice should not be given to infants under the age of 12 months, and should be avoided or limited in ECEC services.[5] Additionally, sugar-sweetened beverages should be avoided for all children (e.g. fruit drink, cordial, soft drink, etc).

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Types of specialist support

The following provides an overview of the roles of Australian health professionals involved with the introduction of solid foods:

- **Child Health Nurse:** Can support families to introduce solid foods and provide practical guidance, information and resources, and monitor development and growth.
- **Paediatric Dietitian:** Can provide practical advice about how and when to introduce solid foods, including information about foods to offer. Able to assess intake of solid foods against nutritional requirements. Able to measure growth and compare with standard growth charts. Provide practical information about how to modify a diet if the child has special dietary needs.
- **Paediatrician:** Provide individualised medical advice on introducing solid foods, particularly for babies with health conditions or developmental concerns that may affect feeding.

- **General Practitioner (GP):** Identify and treat medical concerns, and refer families to specialist support.

NATIONAL QUALITY STANDARD
QA6

Responsive feeding practices for the introduction of solid foods

As infants grow, responsive feeding continues, but the way it looks in practice changes. From around six months, when solid foods are introduced alongside breast milk or formula, the responsive feeding guiding principles remain the same: the infant leads, the educator responds, and mealtimes stay calm and free from pressure. This can be summarised in three key steps:

1. **The child signals hunger or 'had enough'** (the satisfied feeling when a child has 'had enough food') through motor actions, facial expressions, or vocalisations.
2. **The educator recognises the cues and responds** promptly in a manner that is emotionally supportive, in response to the signal, and developmentally appropriate, e.g. helps the child access another helping if they are still hungry.
3. **The child experiences a predictable response** to signals. This last step is important for building trusting relationships as well as supporting individual cues. For example, not pressuring a child to eat more, or to eat anything they don't want to eat.

Responsive feeding styles are recommended for all children from birth, including when they are introduced to solid foods (around 6 months).[17] In simple terms, responsive feeding means the adult notices hunger, interest and if the child has 'had enough', offers safe and nutritious food, and changes support to match the infant's cues and skills. In ECEC, responsive feeding does not mean stepping back completely. It means being present, watching closely, and helping when needed.

- The educator provides the food (including what, when and how food is offered).
- The infant decides whether to eat and how much to eat.
- Mealtimes stay calm, social and free from pressure.

The educator supports changes with the infant's cues, skills and readiness.

See Mealtime Environment and Practices, Section 2, page 20

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QA2, QA5

Baby-led weaning is a feeding approach in which infants self-feed finger foods of appropriate texture from the start of solid foods being introduced at around six months, where the caregiver stays present and responsive but does not spoon-feed.

Baby-led weaning has features that align with responsive feeding principles, including supporting infant autonomy and participation at mealtimes. However, some studies have found that strict baby-led weaning is associated with lower iron intake compared to approaches that include spoon-feeding, particularly when iron-rich foods are not prioritised from the start.[34,35,36]

A responsive feeding approach that incorporates both supported self-feeding and assisted spoon-feeding is recommended, with iron-rich foods offered as a priority from the beginning of complementary feeding.[5,17]

If families are using or planning to use baby-led weaning, services should support them to discuss this with their maternal and child health nurse or a dietitian to ensure iron and other nutritional needs are met, and choking risks are considered.

Reflective questions

- *How do we work in partnership with families to ensure solid foods are introduced at a developmentally appropriate time and in accordance with each infant's individual needs and family preferences?*
- *How do our mealtime practices support children's agency, autonomy and positive relationships with food from the earliest stages of life?*
- *How do we ensure our food preparation and service practices minimise choking risks while still supporting infants to experience a progression of age and developmentally appropriate textures?*