THE BEST PRACTICE GUIDE FOR
Early Childhood Education and Care Food Environment

Importance of Optimal Nutrition and Child Health, Development and Wellbeing

The early childhood years are one of the most remarkable and important windows for human growth and development. The food children receive during this time nourishes their growing bodies and minds, shapes their relationship with food, and lays foundations for a lifetime of health and wellbeing.

7 Reasons

why meeting children's nutritional needs matters

1. Brain development

A child's brain grows faster in the first five years of life than at any other point. Iron, unsaturated fats, and B vitamins are some of the essential nutrients the brain needs during this window. Every nourishing meal served in ECEC services is directly contributing to that process.

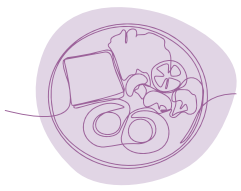
2. Physical growth

This is the most visible part – height, weight, bones, and teeth. Energy and protein drive overall growth, many other nutrients play an important role (for example, calcium and vitamin D build the skeleton; iron supports red blood cell formation). These are not subtle effects. A child who is getting enough of these nutrients will grow strongly and be physically ready for school. For children aged two to eight, the rate of growth is still rapid, and what they eat in ECEC services directly shapes it.

5. Meeting energy needs for play and learning

Relative to their size, young children need a lot of energy. Running, climbing, concentrating, and managing a full day in a busy environment all draw on the same energy supply. A child who arrives at the service hungry is not just tired: they are less able to engage/connect, participate, and learn. Regular meals that include a variety of food groups keep children's energy balanced across the whole day.

Two things can get in the way



Food groups that are under provided at ECEC services



What children actually eat

3. Cognitive development

Building a brain (point 1) is different from how well it works day to day. This is about function: a child's ability to concentrate, follow instructions, manage their feelings, and take in new information. Appropriate intake of energy and protein is crucial for children's growth, including cognition and behaviour. Iron deficiency, even without obvious signs, is associated with difficulties with attention and learning. These are nutrients that cooks and educators can directly influence through what is on the menu.

6. Hydration

Children's bodies are more sensitive to dehydration than adults', and even mild dehydration affects mood, concentration, and physical performance. Plain tap water, offered freely throughout the day, is the right choice for children over 12 months. For infants under 12 months, breastmilk or formula meets all fluid needs; small amounts of cooled boiled water can be offered from around six months.

4. Preventing short-term nutrient deficiencies

Young children have small stomachs, strong opinions about food, and variable appetites, which means gaps in their diet happen easily and quickly. Australian research shows that ECEC service menus frequently fall short on vegetables, meat and alternatives, and dairy, while discretionary foods appear more often than they should. ECEC services may be the most reliable nutritious eating opportunity many children have each day.

7. Building lifelong health

The first five years are different from every other period of life, including adulthood. Adult dietary guidelines are largely about managing health risks. Guidelines for young children are about something more fundamental: giving children the best possible start so that those risks are lower to begin with. The foods children eat now shape their nutrient status, their health trajectory, their food preferences for years to come, in addition to their ability to learn. What is served in ECEC services today is an investment in who these children will be as adults.

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A project funded by Healthway and delivered by Edith Cowan University.

Important nutrients for child health and development

What are the important nutrients and where do you get them?

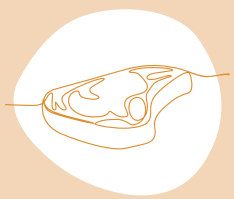
When menus broadly align with the five food groups across the day and week, children are more likely to meet their needs for key nutrients. For example, iron from meat and alternatives, calcium from dairy and alternatives, unsaturated fats from fish, eggs, and nuts, and fibre from vegetables, legumes, fruit and wholegrains.

In practice, two things can get in the way: some food groups are underrepresented on menus more often than others (meat and meat alternatives, dairy and vegetables), and even when food is served, what children actually eat can vary. The table below focuses on the nutrients most commonly at risk in ECEC settings, what they support, where to find them in food, and when it is worth discussing with families whether additional support is needed.



Nutrients most commonly at risk in ECEC settings

Iron

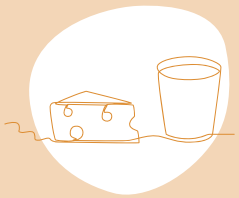


What it supports	Food sources	How needs for this nutrient are not met in ECEC settings
• Red blood cell formation (oxygen transport) • Immunity, and early brain development (attention, learning)	• Lean red meat, poultry, fish • Eggs • Legumes (lentils, chickpeas), tofu • Iron-fortified cereals • Leafy greens	• Meat/alternatives not offered often enough, or in large enough serves, or in child-accepted forms • Children may eat the rice/pasta and leave meat/veg • Reliance on discretionary foods can crowd out iron-rich foods **Tip:** Pairing plant-based iron foods with vitamin C foods (fruit/veg) can support absorption.

SCENARIOS/EXAMPLES/CONTEXTS WHERE YOU HAVE TO GET MORE INFORMATION AND ADVICE

- Diagnosed iron deficiency or anaemia; poor growth, fatigue, frequent infections.
- Vegetarian/vegan patterns, multiple food exclusions, or very limited variety/selective eating.
- Children who consistently leave protein-rich foods uneaten – consider support for menu planning and food acceptance strategies (dietitian/registered nutritionist).

Calcium



What it supports	Food sources	How needs for this nutrient are not met in ECEC settings
• Bone and teeth development during rapid growth • Muscle and nerve function	• Milk, yoghurt, cheese • Calcium-fortified soy milk/yoghurt • Tofu set with calcium • Some canned fish with bones (where appropriate)	• Dairy/alternatives not offered consistently across the week • Non-fortified plant milks used as a substitute; dairy serves are small or limited to some days only • Dairy/alternatives are commonly excluded for all children when a child with a dairy allergy is in attendance

SCENARIOS/EXAMPLES/CONTEXTS WHERE YOU HAVE TO GET MORE INFORMATION AND ADVICE

- Milk (dairy) allergy/intolerance, multiple exclusions, or families using plant milks (check calcium-fortified options).
- If dairy is excluded service-wide in a room/menu cycle – seek advice to ensure calcium adequacy.

Unsaturated fats

What it supports	Food sources	How needs for this nutrient are not met in ECEC settings
• Energy for growth; omega-3 fat for brain and eye development • Absorption of fat-soluble vitamins	• Olive/canola oils, avocado • Nut/seed pastes (where safe) • Oily fish (e.g. salmon/sardines) • Eggs • Chia/flax (used appropriately)	• "Fat" is sometimes avoided altogether so menus become very low in unsaturated fats • Fats come mostly from discretionary foods (often higher in saturated fat) rather than unsaturated sources • Limited inclusion of omega-3-rich foods across the menu cycle

SCENARIOS/EXAMPLES/CONTEXTS WHERE YOU HAVE TO GET MORE INFORMATION AND ADVICE

- Children with very restricted diets or low overall intake (may not get enough unsaturated fats in the diet).
- Food allergy considerations (nuts/seeds) or choking risk considerations – need safe, appropriate alternatives.
- If menus rely heavily on processed products (e.g. biscuits, muesli bars, etc), seek support to shift towards unsaturated fat sources.

Fibre



What it supports	Food sources	How needs for this nutrient are not met in ECEC settings
• Gut health and bowel regularity • Helps children feel they have 'had enough' • Supports balanced eating patterns	• Vegetables and legumes • Fruit • Wholegrain/high-fibre breads/cereals • Oats • Brown rice/wholegrain pasta	• Vegetables/legumes are under-provided or left uneaten • Refined grains dominate • Discretionary foods at morning and afternoon tea crowd out fibre-rich foods

SCENARIOS/EXAMPLES/CONTEXTS WHERE YOU HAVE TO GET MORE INFORMATION AND ADVICE

- Ongoing constipation, abdominal discomfort.
- Very low fruit/veg intake.
- Children with sensory/selective eating who avoid vegetables/wholegrains.
- If fibre intake increases, ensure children are encouraged to drink more water to support their digestion.

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This information has been sourced from the Best Practice Guide for Early Childhood Education and Care Food Environment.