

# How to support positive food environments in early childhood settings



ECE resources

**Early childhood is a window of opportunity to support children to develop a positive relationship with food and their bodies. This review summarises a number of research-based recommendations to support positive food environments in early childhood settings.**

Research shows that our mealtime and food experiences as children translate to our relationship with food as adults<sup>1</sup>. For example, if you enjoyed sweet foods for breakfast when you were a child, chances are you gravitate towards enjoying sweet foods for breakfast now. Similarly, if your parents encouraged you to finish your plate, chances are you may now find it difficult to leave food on your plate, even if you are feeling full. These eating behaviours and preferences were shaped by the ‘feeding practices’ that our parents and caregivers engaged in to influence what, when, and how much we ate as children<sup>2</sup>.

Feeding practices that provide structure and support body autonomy support children to develop a positive relationship with food. These practices include allowing children to regulate the amount of food they eat, familiarising and fostering children’s interest in a variety of foods, role-modelling, and providing a positive, pressure-free mealtime environment<sup>3</sup>. Feeding practices that pressure children to eat, restrict access to certain foods, and use food as a reward or bribe, may exacerbate ‘fussy’ or ‘picky’ eating behaviours and food aversions, and disrupt a child’s ability to self-regulate their appetite<sup>4</sup>.

While ‘picky eating’ can be challenging for parents and caregivers, it is part of normal development for children to sometimes be picky about the foods they eat, to enjoy a food one day but dislike it the next, or refuse to try new foods<sup>5</sup>. This all happens because choosing what to eat – or what not to eat – is a way of exploring their environment and asserting their independence. It is also natural for children to be suspicious about new foods – just like adults. Think back to a time where you were given an opportunity to try a food you had never eaten before. Chances are you took some time to scope it out before putting it in your mouth – maybe you smelt it? Touched it? Or tried a very small bite first? These are experiences children have every time they are introduced a new food. Children’s appetites also fluctuate depending on their growth cycles and how active they are. This means they may be very hungry one day and eat barely anything the next. For this reason, it is important to consider a child’s nutritional intake over a week rather than day to day<sup>6</sup>.

Many children will eat at least one third of their weekly meals at an early childhood setting. This places teachers in an important role to engage in feeding practices that support the development of children’s eating behaviours<sup>7</sup>. The Division of Responsibility (DoR) in Feeding is the gold-standard feeding model for supporting children to develop into confident and competent eaters. The DoR was developed by Ellyn Satter who is both a registered dietitian and family and child therapist, and can be applied in early childhood settings as follows<sup>8</sup>:

Adults' responsibilities in feeding	Children's responsibilities in feeding
<ul style="list-style-type: none"> <li>• Parents are responsible for what food is in the lunchbox</li> <li>• Early childhood settings are responsible for what is food is provided by the centre (following healthy eating guidelines)</li> <li>• Teachers decide when children will be offered food to eat (a set mealtime routine)</li> <li>• Teachers decide where children will have their food at mealtimes</li> <li>• Teachers help children practice new food skills and role-model good table manners</li> </ul>	<ul style="list-style-type: none"> <li>• Children decide what they will eat out of the food that is offered</li> <li>• Children decide how much they will eat</li> <li>• Children decide whether they will eat anything at all</li> </ul>

The following sections detail how early childhood settings can work with parents and families support children's eating behaviours and the development of their relationship with food.

### Allowing children to trust their body and manage their own eating

Children are born intuitive eaters, which means that they instinctively know how much food they need to eat for their growth, learning, and play. If fostered by parents and caregivers, the strength of this intuitive self-regulation of food remains and supports mindful eating practices into adulthood<sup>9</sup>. Often unconsciously, and motivated by good intentions for children to be nourished, adults pressure children to eat by using verbal cues such as 'finish your plate' or 'just have one more bite', by using food as rewards or bribes, such as 'if you finish your sandwich you can go play', or by making comments about how much the child has eaten, such as 'you haven't eaten much today'<sup>10</sup>.

However, when adults pressure children to eat, it teaches children to override their body's messages that they are full. This may result in children losing their intuitive ability to self-regulate their own hunger and fullness cues. When children are given the opportunity to make the decision for themselves about what food they choose to eat and how much they choose to eat from what is available, they start to develop a sense of body autonomy<sup>11</sup>.

The same applies if the child is a 'picky' eater. For picky eaters, mealtimes can be a stressful environment as they learn to accept and eat new foods. In this case, pressure to eat often increases anxiety and stress at mealtimes. Physiologically, this activates a child's fight or flight response, increases cortisol (a stress hormone), and as a result reduces their appetite<sup>12</sup>. Taking the pressure off the child to eat creates a calmer mealtime environment and supports the child to learn to eat.

There are a number of phrases that teachers can use to support children to trust their bodies at mealtimes. If the child is not hungry for lunch but it is lunchtime, teachers can say 'You don't have to eat right now, but come to the table, mealtimes are a social time when we all sit together to chat', or 'That's okay, you don't have to eat right now if you're not hungry. We will offer you your lunchbox again at afternoon tea'. Teachers may also like to remind children when the next time to eat will be. To support children to check in with their hunger and fullness signals, teachers can say 'How is your tummy feeling?', 'Is your tummy feeling hungry?', or 'Is your tummy feeling full now?'. There is a chance children will eat so much at a mealtime that they develop a tummy ache, but this a valuable teaching moment

which allows children to learn how their body communicates and how to listen when they have had more to eat than their body needed. Encourage the child to be inquisitive about their body by asking, 'Are you okay? What do you think happened?' Reassure the child, saying 'Your body will take care of it with a little time'<sup>13</sup>.

It also keeps the pressure off children when mealtime conversations are about a range of topics and not focused on the food. Teachers could talk about things children are interested in or activities that children have done that day. If conversations about food come up, talk about the senses of the food, such as 'this mandarin is juicy and sweet' or 'these crackers are salty and crunchy'.

## Setting a structured mealtime routine

Early childhood settings are able to establish a set meal routine by offering children food at predictable and regular intervals<sup>14</sup>. A meal routine helps children get into a rhythm that builds the hunger for mealtimes while keeping them sufficiently full until the next eating opportunity. This helps them notice their body's hunger and fullness messages, both during and in between meals and snacks<sup>15</sup>. Research shows that children will naturally eat more to make up food they missed in an earlier meal, and eat less when they have eaten too much for their body in a previous meal. Therefore, when there is a meal routine, a child can also be confident about eating or declining food when they know from experience that food will be offered at predictable intervals<sup>16</sup>.

Increasingly, ECE settings are implementing progressive mealtimes. Progressive mealtimes allow children to choose when they want to eat within a certain timeframe, instead of eating at a set time<sup>17</sup>. Some ECE settings may also refer to 'rolling lunch boxes' as a similar concept, whereby children are able to eat their food from their lunchbox freely (with teacher support) throughout the day. While use of progressive meals appears to be increasing<sup>18</sup>, no known evidence-based research has been conducted to examine the effect of progressive mealtimes. In addition, while progressive mealtimes allow children the freedom of continuous play and, in theory, the space to eat according to their internal cues of hunger and fullness, they transfer the responsibility of when to eat to the children. Most children benefit from structured meal and snack routines, especially if they tend to be distracted by play and learning about the world around them<sup>19</sup>. They may also create a burden for teachers to implement safely, especially given the need to monitor children while eating to minimise the risk of choking.

The following mealtime routines support children's eating behaviours:

- Setting an age-appropriate activity to indicate when mealtime begins and ends, such as preparing children for mealtime by encouraging them to wash their hands. At the end of the mealtime, allow children to empty their food scraps into a bin.
- When [age-appropriate](#), supporting children to self-serve and use cutlery.
- Encouraging teachers to sit down to eat with the children to role-model good manners and eating habits, and allowing mealtimes to be social time.
- Where the setting provides meals, serving a new food with other familiar foods to reassure children that, at mealtimes, there will always be something they like to eat. For this reason it can be helpful to serve sauces separately (such as serving pasta sauce separately from the pasta) so that children can choose if they want to try the sauce.

## Fostering food explorers

Children need nutritious foods for strong bodies and brains. Different foods provide different nutrients for the body, which is why adults are responsible for providing children a variety of food. It is important to remember that young children are 'eaters in learning' as they are introduced to new shapes, colours, textures, and flavours of food. It is well-documented that repeated exposure and familiarisation supports a child's willingness to accept new food and flavours<sup>20</sup>. This is based on developmental theories that individuals learn to like what becomes familiar. Early childhood settings are well placed to support children to grow familiar to new foods during and outside of mealtimes, as they may be served different foods from home, and they are able to learn by observing other children eat around them.

Using the five senses of sight, sound, smell, touch, and taste is an effective way to help children learn about food<sup>21</sup>. Teachers can support children to engage their senses at mealtimes (and when exploring food outside of mealtimes) by asking the following questions:

- What colour is it? Size? Shape?
- Is it loud? Quiet? Crunchy? Squeaky?
- Is the smell big? Small? Strong? Sweet? Sour?
- Does it feel wet? Dry? Soft? Hard? Cold? Hot? Smooth? Bumpy?
- Is the taste big? Small? Sweet? Sour? Salty? Spicy?

Outside of mealtimes, teachers can use creative methods to support children to explore food through play. The key is to support children to familiarise themselves with food before it ends up on their plate, which improves their food acceptance<sup>22</sup>. For example, teachers and children might:

- Engage with nature by growing food. Ask children: Which foods come from the sea? Which foods grow on trees?
- Reading picture books about food, including growing and cooking food, and foods from a range of countries and cultures.
- Include cooking and baking activities in the curriculum. Talk to children about the senses of the food while cooking or baking.
- Drawing and colouring in activities. Ask children to paint a rainbow of different fruit and vegetables.

## Children under 5 do not need to learn about 'healthy' food

It can feel tempting to teach children facts about food and nutrition, but while young children may be able to regurgitate nutrition facts, this does not necessarily equate to learning. Young children (aged 2-5 years) are in the preoperational development stage and best understand concrete information<sup>23</sup>. Nutrition concepts are abstract, as we cannot see, touch, or taste the nutrients in food, and therefore are difficult for children to interpret<sup>24</sup>. Studies also show that when we tell a child that a food is 'healthy', they are less likely to eat it! They interpret this to mean that it will not taste very good, as often vegetables are bitter and children tend to prefer sweet flavours<sup>25</sup>.

It is problematic to teach children about 'good' versus 'bad' or 'healthy' versus 'unhealthy' foods for a number of reasons. For example, different families define 'healthy food' differently, and different children have different dietary needs due to allergies or other health reasons. Labelling foods that children may commonly eat at home as 'unhealthy' has the potential to undermine the parent in the eyes of the child. Children need to trust that their parents feed them properly. The same applies for removing 'unhealthy'

foods from lunchboxes. What is more, many of the foods we tell children are 'bad' and 'unhealthy' are also foods we eat when we celebrate, which can lead to confusion for children.

Similarly, when children eat and enjoy a food that has been labelled 'bad', a child may interpret eating a 'bad' food that they enjoy as being 'bad' themselves. Thus, feelings of guilt and shame are associated with eating and enjoying these foods. As eating behaviours and preferences towards food are set in the early years, associations of guilt or shame with certain foods may be carried into adulthood and can manifest as disordered eating (including dieting) or the development of a serious diagnosed eating disorder<sup>26</sup>.

It is important to acknowledge that discussions about food are closely tied with thoughts and feelings about body weight. Children as young as three years old are aware of weight bias and by age five children are aware of exercise and dietary restriction as a means to lose weight<sup>27</sup>. We cannot judge a child's state of health from their body shape or size, and a healthy weight for one child may be quite different for another. A healthy body is one that, whatever shape, size, or weight, is in a state of wellbeing and has enough energy and strength to do the things the person loves. This is true for both children and adults<sup>28</sup>. Early childhood settings play a pivotal role in supporting children's body image, and can support children to develop a positive relationship with food and their bodies by using creative methods to explore food outside of mealtimes as detailed above. For more information about the development of body image in children, visit [Confident Body, Confident Child](#) and [Embrace Hub](#).

## Next steps for teachers

Reviewing feeding practices and working to implement positive mealtime practices in early childhood settings is a valuable process that should involve all staff as well as parents and families. Below is some advice for next steps:

- Reflect on your individual relationship with food and experiences of mealtimes as a child
- Reflect on your mealtime practices as a team. Take note of behaviours (in both adults and children) you would like to change, and how you may implement these strategies.
- Invite a paediatric registered dietitian to present to parents and teachers to learn more about positive feeding practices
- Remember the division of responsibility in feeding, and allow children to trust their own bodies.

## Recommended further reading

Brooks, S., & Severson, A. (2022). *How to Raise an Intuitive Eater*. Great Britain: Yellow Kite.

For more information visit:

- [The Ellyn Satter Institute](#)
- [Feeding Bytes](#)
- [Confident Body, Confident Child](#)
- [The Embrace Hub](#)

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## Endnotes

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- 15 The Ellyn Satter Institute. *The division of responsibility in feeding*.
- 16 The Ellyn Satter Institute. *The division of responsibility in feeding*; Brooks & Severson, 2022.
- 17 Byrne, R. A., Baxter, K., Irvine, S., Vidgen, H., Gallegos, D., Martin, E., et al. (2022). Feeding practices in Australian early childhood education and care settings. *Public Health Nutrition*, 25(2), 303–311.
- 18 Byrne et al., 2022.

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