# WHY TODDLERS REFUSE FOOD

www.infantandtoddlerforum.org



### LEARNING POINTS

- Food refusal is a normal part of toddler development.
- Toddlers develop a fear of new foods (neophobic response) in their second year.
- This peaks around 18 months, and can be more extreme in some children than in others.
- Toddlers might also refuse foods that they ate before if it changes in presentation.
- 5 Refusal of new foods is more common in toddlers who were not offered a variety of tastes and textures during weaning.
- 6 Refusal of new foods is more common in toddlers who are more sensitive to tastes, smell and touch.
- 7 The neophobic response diminishes over time and this is often helped by eating with adults and other children.
- 8 Toddlers may keep refusing a food until they have been offered it several times.
- Distaste, disgust and contamination fears also influence what foods toddlers start to refuse from around two years.

- Toddlers eat less if they are tired, distracted, anxious, or feeling unwell.
- Most children normally self-regulate the amount of food they eat so that they eat enough for growth and development.
- Excess fluid intake such as milk, juices or squash can suppress appetite.
- Parents can create or exacerbate food refusal by expecting their toddlers to eat more than they need.
- Parents can make the problem worse by giving more attention to toddlers when they are refusing food than when they are eating well.
- 15 Most fussy eating and food refusal resolves with time.
- Poor oral-motor skill development may be a factor in food refusal.
- Constipation, anaemia or other medical problems such as gastro-oesophageal reflux can also cause food refusal.

#### WHY MOST TODDLERS ARE FUSSY EATERS

Parents will report different behaviours when they say that their toddler is fussy. Some will say that their child doesn't eat enough food, but most will say that their child eats too few foods, or will refuse new foods when offered them. Why do toddlers do this?

Babies are born liking a sweet taste but they have to learn to like other tastes. During the second half of the first year, this learning occurs, and most babies are willing to try many different foods, flavours and textures. See Factsheet 3.5 In this way they learn to like foods that those around them like and know to be safe. By about a year, infants already have ideas about what foods they like, and what those foods look like. Those infants who have not been offered a wide variety of tastes and textures are more likely to be fussy eaters<sup>1</sup>.

Young toddlers (over twelve months) begin to develop a neophobic response to food<sup>2</sup>, which means they become wary of trying new foods. This may be a survival mechanism to prevent the increasingly mobile toddler from poisoning him or herself through eating anything and everything. At this stage toddlers may reject a food on sight without tasting it, which is sensible as it would not be safe to taste an unknown and possibly poisonous substance. Toddlers may also reject foods that look slightly different from those that they usually eat (a different brand of biscuit or yogurt in a different carton, for instance)<sup>3</sup>.

The neophobic response is stronger in some toddlers than others<sup>2</sup>, and parents often become very concerned when their toddlers eat only a small range of foods.

Toddlers learn by copying their parents<sup>4</sup>, siblings and peers<sup>5,6</sup>. Most toddlers eventually grow out of this neophobic phase in a few years or so<sup>7</sup> if they see other people around them eating a wide range of foods. However, they may reject a food if a sibling or parent has rejected it<sup>8</sup>.

See Factsheet 2.2



Toddlers often need to try new foods several times before learning to like them. Some may need to be offered a new food ten or more times before they really like it<sup>9</sup>. At this stage just getting toddlers to taste the new food is enough; they do not need to eat a lot of it. If a toddler will not even try the new food, then parents should wait and offer it when they, the parents, are next eating it. Make sure that the family are eating the new food, so that the child can see that it is safe to try.

## DISTASTE, DISGUST AND CONTAMINATION FEARS

Distaste, disgust and contamination fears influence what toddlers eat from around two years<sup>10,11</sup>. Food will be rejected because it has a taste that the toddler does not like or is not used to. But children will also refuse food if it doesn't look like a food that they already accept, or because it has a texture that they know they will not like<sup>12</sup>.

Toddlers at this age are very sensitive to the way that a food looks. They will refuse a food just because it looks slightly different from usual. A biscuit might be rejected because it is broken or toast refused that has burnt or brown patches. Mixed foods are also more likely to be rejected because they never quite look the same each time they are served and the child can't always work out what is in them<sup>3</sup>.

Just as a child eventually realises that a new biscuit is probably okay to eat because it is similar in appearance to other biscuits, a child may reject a food that looks the same as 'disgusting' things around them. For instance, spaghetti might suddenly look like worms. They may also refuse food if it has been touched and contaminated by another food that they find disgusting<sup>13</sup>.

A child who develops a disgust or a distaste reaction to the sensory qualities of a food (taste, texture, appearance and smell) should not be forced to eat it. The disgust response may make the reaction worse and in some cases cause retching or vomiting.

If a disliked food is put on the plate next to a liked food<sup>13</sup>, toddlers may not eat the liked food. So it is not a good idea to give a child a plate full of new foods or disliked foods, mixed with liked foods. Toddlers need to be able to identify the way a food looks and tastes in order to develop a real preference for it. A small amount of one new food should be offered at any one time. New food should never be hidden in accepted foods. Children can detect a new taste mixed with other tastes, or a new texture hidden among other textures. When this happens children will usually reject both the new food and the accepted food, and become wary of any foods that are given to them. In this way the toddler's trust can be lost.

Of course, children differ in how much they react to disliked foods. Some children have more problems with food than others. Some children are more sensory reactive to smell, taste and touch and these children are more likely to have problems accepting new foods, or eating foods with a more varied texture, such as fruit and vegetables 14.

### Toddlers may also be reluctant to eat well if they are:

- tired
- distracted by toys, games, TV, a new environment
- anxious, sad, lonely or insecure
- not hungry because they have already had enough either at that meal or from eating or drinking before it
- not hungry because they have drunk too much fluid as milk, juices or squashes or have been grazing too frequently on high energy snack foods
- feeling unwell toddlers may refuse food if they have a sore throat, are getting a cold or are fighting an infection. Appetite is often reduced when a child has a temperature. Toddlers with sore gums who are teething may be reluctant to eat
- constipated
- anaemic

#### and if:

- there isn't a routine to mealtimes
- the experience around mealtimes is stressful
- they have medical problems such as gastro-oesophageal reflux



### PARENTS CAN UNWITTINGLY **EXACERBATE FOOD REFUSAL**

- By giving more attention when the toddler does not eat this can encourage the child to refuse food in order to get the parent's attention. Even the attention of a cross parent is better than no attention at all.
- By expecting their toddlers to eat more than they need and coercing or force-feeding them when they are no longer hungry. Children can regulate their appetite to meet their growth needs from as early as a few weeks after birth. This means that most toddlers will be hungry only for the amount of food that they need to eat. They are better at knowing how much they need to eat than are their parents. But there can also be day-to-day variations in a child's appetite<sup>15</sup>.
  - Parents may overestimate how much food their toddlers need by expecting them to eat the same quantity as another toddler of a similar age but with a bigger appetite – toddlers who are growing and developing normally are eating enough, whatever the quantity of food they consume. There is also a decrease in growth velocity after one year of age, and this means that the toddler's appetite seems to decline anyway<sup>16</sup>.
  - When parents over-estimate how much toddlers need, or do not take into account the day-to-day variation in their appetite, meals can become a battleground between them. If this happens frequently, toddlers will become anxious as mealtimes approach and lose their appetite, and this anxiety will reduce their appetite even further<sup>17</sup>.



- Northstone K, Emmett P, Ethersole F. The effect of age on introduction to lumpy solids on foods eaten and reported feeding difficulties at 6 and 15 months. Journal of Human Nutrition and Dietetics.

- 2001; 14: 43: 54.

  Cooke L, Wardle J, Gibson EL. Relationship between parental report of food neophobia and everyday food consumption in 2-6-year-old children. Appetite. 2003; 41: 205-206.

  Brown S, Harris G. Rejection of previously accepted foods during early childhood: An extension of the neophobic response. Appetite. 2012; 58,3,991-996.

  Harper KU, Sanders KM. The effect of adult's eating on young children's acceptance of unfamiliar foods. Journal of Experimental Child Psychology. 1975; 20:206-214.

  Hendy HM. Effectiveness of trained peer models to encourage food acceptance in preschool children. Appetite. 2002; 39(3), 217-225.

  Hendy HM, Raudenbush B. Effectiveness of teacher modeling to encourage food acceptance in preschool children. Appetite. 2000; 34(1), 61-76.

  Nicklaus S, Boggio V, Chabane C, Issanchou SA. Prospective study of food preferences in childhood. Food Qual Pref. 2004; 15, 805-18.

  Addessi E, Galloway AT, Visalberghi E, Birch LL. Specific social influences on the acceptance of novel foods in 2-5-year-old children. Appetite. 2005; 45: 264-71.

  Birch LL, Marlin DW. I don't like it, I never tried it: Effects of exposure to food on two-year-old children's food preferences. Appetite. 1982; 3: 353-60.

  Koivisto UK, Sjöden PO. Reasons for rejection of food items in Swedish families with children aged 2-17. Appetite. 1996; 26: 83-103.

  Brown S, Harris G. A theoretical proposal for a perceptually driven, food-based disgust that can influence food acceptance during early childhood. International Journal of Child Health and Nutrition. 2012. 1, 1-10. 12. Nederkoorn C, Jansen A, Havermans R. HYPERLINK "http://www.sciencedirect.com/science/article/pii/S0195666314004577" Feel your food. The influence of tactile sensitivity on picky eating
- in children. Appetite. 2015. 84: 7-10.
  Brown S, Harris G. Disliked food acting as a contaminant during infancy; a disgust based motivation for rejection. Appetite. 2012. 58,2, 535-58

- Brown S, Harris G. Disliked food acting as a contaminant during infancy; a disgust based motivation for rejection. Appetite. 2012. 582, 535-58.
  Farrow CV, Coulthard H. Relationships between sensory sensitivity, anxiety and selective eating in children. Appetite. 2012. 58(3):842-6.
  Birch L, Johnson SL, Andreson G. The variability of young children's energy intake. New England Journal of Medicine. 1991. 324: 232-235.
  Rogol A, Clark P, Roemmich J. Growth and pubertal development in children and adolescents: effects of diet and physical activity. The American Journal of Clinical Nutrition. 2000; 72: 522-528.
  Powell F, Farrow C, Meyer C. Food avoidance behaviours in children. The influence of maternal feed of diet and physical activity. The American Journal of Clinical Nutrition. 2000; 72: 522-528.
  Coulthard H, Harris G. Early food refusal: the role of maternal mood. Journal of Reproductive and Infant Psychology. 2003. 21, 8, 335-345.
  Johnson R, Harris G. An investigation of the predictors of feeding problems in late infancy. Journal of Reproductive and Infant Psychology. 2004. 22, 3, 183-188.
  Harris G. Food refusal and the sensory sensitive child. Paediatrics and Child Health. 2009. 199, 433-6.
  Harris G. The psychology behind growth faltering. European Journal Clinical Nutrition. 2010. 64;14-16.

### THE DEVELOPMENT OF LONG-TERM PROBLEMS

Although most fussy eating and food refusal issues resolve with time and on their own, some may not. Occasionally a long-term problem can develop and this might affect growth. This can happen for a variety of reasons including:

**Parental anxiety** – parents may be overly anxious <sup>17,18</sup>, either about how much the child eats, or the range of foods taken. Parents do not always have the confidence to allow children to eat the amount of food that they need, and the range of foods that they will accept. Once parents start to turn mealtimes into stressful situations then food refusal will often follow. In such families children might often eat better at snack times than they do at mealtimes, and this means that they become more reliant on snack foods than on prepared meals.

#### Medical and psychological problems -

in addition to constipation and anaemia other medical conditions can cause food refusal. Occasionally fussy eating is linked to a memory associated with discomfort on eating (possibly due to severe gastro-oesophageal reflux as a baby)19. Very rarely, fussy eating is linked to an ongoing medical problem that causes discomfort or pain on eating. In this case, the child is likely to grow less well than might be expected from the growth chart. If parents or carers suspect this then they should ask their GP to assess the toddler and refer him/her to a paediatrician if necessary. Toddlers who have difficulty in accepting a wide range of foods, and who cough and gag on more difficult textures may have an oral-motor dysfunction or delay and should be referred to a speech and language therapist for assessment.

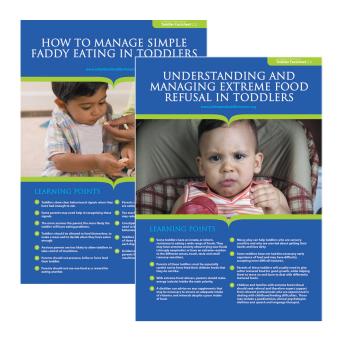
Extreme sensory sensitivity – if the GP or paediatrician thinks that there is nothing medically wrong with a toddler who is an extremely fussy eater, then it may be because the toddler is extremely sensory-sensitive with a very strong neophobic response. Such toddlers quite often get much worse at around 18 months, although they may have had problems with lumpy foods when these were first introduced<sup>1</sup>. These children usually dislike getting their hands and face dirty, and are often sensitive to sound, touch or smells<sup>20</sup>. Usually, children grow out of this and start to improve their eating at around five years of age. It is especially important that these toddlers are not forced to eat foods that they dislike. This may lead to vomiting and growth faltering<sup>21</sup>.

Quite often the feeding problem develops as a result of an interaction of these factors. A child might be reluctant to try new foods; parents become very anxious and then start to control the child's intake.

Sometimes explaining to parents why the food refusal is happening and suggesting changes to the way they manage mealtimes may be all that is needed to resolve the problem.

Factsheet 2.2 'How to manage simple fussy eating in toddlers', outlines the best approaches for healthcare professionals to help parents to deal with simple fussy eating and food refusal.

Factsheet 2.3 'Understanding and managing extreme food refusal in toddlers', has been written for those dealing with extreme food refusers and gives advice on how to handle children who have eating problems related to sensory sensitivity.



The guidance and content in this Factsheet is based on a combination of evidence based research and practical clinical experience.

# WHY TODDLERS REFUSE FOOD GUIDANCE & TIPS FOR PARENTS





Food refusal is a normal phase that most toddlers pass through.

- Fear of new foods in the second year may be a survival mechanism to prevent increasingly mobile toddlers from poisoning themselves through eating anything and everything.
- Toddlers may limit the variety of foods they eat. This phase will normally pass without any problems but remember this phase may last for a few years and will be more evident in some toddlers than in others.
- Your toddler may refuse a food if it is new to him or her. They need to taste it a few times to learn to like it, so always offer it the next time you are eating it. They may also refuse a food that they have eaten before, if it doesn't look right.
- Some toddlers are more likely to refuse foods than others, even in the same family.
- Toddlers refuse extra food when they have eaten enough. Your toddler may eat less food than other toddlers of the same age. If your toddler is growing and developing normally then he or she is taking the right quantity of food for his or her own needs.
- Remember that the quantity of food toddlers eat may vary from day-to-day. Some parents get anxious about this and toddlers then tend to react to parental anxiety by reducing intake.



Toddlers may also lose their appetite if they are:

- tired
- not feeling well
- · shouted at
- pressured to eat more food when they have had enough
- pressured to eat food they dislike
- frequently offered foods that they dislike or find disgusting
- continually offered food and drinks throughout the day
- · rushed at mealtimes
- · feeling sad, lonely, anxious or insecure
- constipated
- anaemic



- For most toddlers fussy eating is just a phase that they eventually pass through. However if the problem persists or you have some concerns, speak to your health visitor or GP. They will be able to check your child's growth and development.
- Very occasionally fussy eating is linked to medical problems or a memory associated with discomfort on eating. Your GP may be able to assess this and can refer your toddler to a paediatrician, or a speech and language therapist for oral-motor dysfunction, if necessary.
- There are some toddlers who are extremely fussy eaters but have nothing medically wrong with them. Such toddlers quite often get much worse at around 18 months, although they may have had problems with lumpy foods when these were first introduced. These children usually dislike getting their hands and face dirty, and are often sensitive to sound, touch or smells. Sometimes children grow out of this and start to improve their eating at around five years of age. It is especially important that these toddlers are not forced to eat food that they dislike as this may cause them to vomit and may eventually affect their growth.



Practical advice for healthy eating habits from pregnancy to preschool

Supported by an unrestricted educational grant from Danone Nutricia Early Life Nutrition