

PICKY EATING (PE)

INFORMATION FACTSHEET FOR HEALTHCARE PROFESSIONALS (HCPs)

Picky eating (PE) is also known as fussy, faddy, choosy or selective eating.

DEFINITION AND CHARACTERISTICS

There is no universally recognised definition for picky eating; it is an umbrella term for a spectrum of behaviors perceived by the caregiver. It is characterized by an unwillingness to eat familiar foods or to try new foods, as well as strong food preferences.

SPECTRUM

There is a spectrum of characteristics within picky eating, ranging from mildly selective (most common) to highly selective (least common). The spectrum can be illustrated according to the degree of impact on growth, together with quality of the diet, shown in figure 1^{1,2}. In children aged 1-12 years, up to 60% are picky eaters, of which up to 20% may have faltering growth (FG)^{1,2}.

Spectrum of Characteristics within picky eating







Growing well – following growth centiles

- Poor variety and quality of food.
- Caregiver concern about diet and health.
- Risk of micronutrient and fibre deficiencies.

Growth flattening – crossed 1 centile

- Poor variety, quality and quantity of food.
- Caregiver concern about diet and health.
- Risk of FG, micronutrient and fibre deficiencies.

Faltering Growth (Losing weight) - crossing > -2 centile

- •Poor variety, quality and quantity of food.
- Caregiver concern about diet and health.
- FG with risk of micronutrient and fibre deficiencies.



PREVALENCE

Picky eating is seen internationally and its prevalence varies widely $(5-60\%)^{1,3}$. This is due to variations in definitions and the age ranges studied as well as heterogeneity in methods of assessment. There is no consensus in the change in prevalence over time, although data suggests prevalence peaks in children around 3-4 years of age³.



CAUSES

The causes of picky eating in children can be split into three main categories (see table 1). Multiple factors may cause picky eating as opposed to one factor individually.

Causes of picky eating



Factors related to child

- Reduced duration of breastfeeding⁴
- Late introduction of solids^{5,6}
- Late or poor texture development^{5,6}
- Fear of new foods, known as neophobia
- Genes; food fussiness and neophobia were both shown (in part) to be heritable⁷



Factors related to caregiver

- Parenting style⁸
- Pressure to eat⁹
- Maternal anxiety and depression during pregnancy¹⁰
- Maternal healthy eating is associated with lower prevalence of picky eating¹¹



Factors related to relationship between caregiver and child

- Parenting style⁸
- Pressure to eat⁹
- Maternal anxiety and depression during pregnancy¹⁰
- Maternal healthy eating is associated with lower prevalence of picky eating¹¹



CONSEQUENCES



GROWTH: Growth can be affected in picky eating, although research is inconclusive. Health Care Professionals (HCPs) should assess a child's growth status by taking anthropometric measurements as opposed to relying on parental opinion alone. Research has shown that it is common for parents to perceive underweight status in children with picky eating when the objective prevalence is low¹².



NUTRIENTS: Picky eating is not strongly associated with having a significant impact on children's macronutrient intake^{13,14}. Although protein intake has been found to be lower in picky eating versus non-picky eating, it is considered adequate^{13,14}. Zinc and iron are more likely to be deficient in picky eating, which may affect the brain, as key brain development occurs between the ages that picky eating is most common (3-4 years old). Fiber intake is also more likely to be low as fruit and vegetable intake is often reduced in picky eating. ^{13,14}



SOCIAL/PHYSICAL BEHAVIOR: It is too early to draw firm conclusions on how picky eating affects behavior. However, emerging research has shown picky eaters have a lower level of physical activity than non-picky eaters and lower social developments^{15,16}.

MANAGEMENT

The two main aims of picky eating management are to improve eating patterns and to support appropriate growth and weight gain. This can be achieved as follows:



Behavioral strategies may include encouraging caregivers to eat the same food as the child, as this has been shown to increase children's likelihood to try different foods and eat more, as well as eating with less delay¹⁷. HCPs should encourage parents to trial a food-first approach alongside behavioral strategies to improve eating habits. If a food-first approach alone does not work, nutritional counselling together with oral nutritional supplements (ONS) is an effective way to meet a child's nutritional requirements, reassuring the caregiver and aiding weight gain (where indicated) in children^{18,19}.

Enriching home-made food with ONS is another option to fortify the child's diet to meet their nutritional needs. Duration of ONS needs to be determined by the HCP based on the child's individual requirements. For children with FG, this could be until the child achieves catch up growth. For children with suboptimal food intake related to poor dietary variety and quality, this could be until their oral dietary intake has improved to meet their nutritional needs.



5 TOP TIPS FOR HCPs - HANDLING PE DURING A CONSULTATION WITH A CAREGIVER/PARENT Chris Smith, Senior Pediatric Dietitian



SUMMARY

- Picky eating encompasses a broad spectrum and there is no one size fits all approach to management.
- Picky eating can impact nutrient intake and growth.
- HCPs play an important role in the management of picky eating, including the assessment and

management of growth, nutritional intake and eating behavior.

• HCPs should provide evidence-based and patient-centered advice which educates, reassures

and empowers the caregiver/parent.

References:

- 1. Samuel T et al. Nutrients. 2018;10(12):1992
- Ekstein S et al. Clinical Pediatrics. 2009;49(3):217-220.
 Taylor C et al. Appetite. 2015;95:349-359.
- 4. De Barse L et al. Appetite. 2017;114:374-381. 5. Schwartz C et al. Appetite. 2011;57(3):796-807.
- 6. Emmett P et al. Appetite. 2018;130:163-173.
- Smith A et al. Journal of Child Psychology and Psychiatry. 2017;58(2):189-196.
 Shloim N et al. Frontiers in Psychology. 2015;6.
- 9. Gregory J et al. Appetite, 2010;54(3):550-556
- 10. De Barse L et al. Archives of Disease in Childhood. 2016;101(6):533-538.
- 11. Gregory J et al. International Journal of Behavioral Nutrition and Physical Activity. 2010;7:55
- 12. Li Z et al. Appetite. 2017;108:456-463. 13. Taylor C et al. The American Journal of Clinical Nutrition. 2016;104(6):1647-1656.
- 14. Xue Y et al. PLOS ONE. 2015;10(4):e0123664.
- Chao H. Frontiers in Pediatrics. 2018;6(22).
 Yaqob Qazaryan K et al. Neurology and Neuroscience Reports. 2019;2:1-8.
- Addessi E et al. Appetite. 2005;45(3):264-271.
 Sheng X et al. Nutrition and Metabolic Insights. 2014;7:85-94.
- 19. Alarcon P et al. Clinical Pediatrics. 2003;42(3):209-217.

