Feeding Disorders

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KEYWORDS

• Feeding disorders • Pediatrics • Interdisciplinary • Behavioral intervention
• Evidence-based treatment

KEY POINTS

- Pediatric feeding disorders are complex and require interdisciplinary treatment.
- Feeding disorders are unlikely to resolve without treatment, and early intervention prevents more severe feeding problems from developing.
- Feeding disorders among children with autism spectrum disorder are often overlooked because they usually do not present with impaired growth. However, they are at risk for significant nutritional deficits and potential long-term health issues resulting from extreme selective eating.
- There is significant empirical support for the use of behavioral therapy for pediatric feeding disorders.
- Other nonbehavioral treatments (eg, sensory integration, oral-motor exercises, play therapy, medication) currently lack empirical support.

INTRODUCTION

Feeding disorders, often seen in the first 1 to 3 years of life,[1] are multifaceted, frequently caused by a combination of medical, developmental, and behavioral factors. Although feeding disorders can vary in presentation, these difficulties significantly impact children's ability to grow and develop without intensive intervention. Prevalence estimates

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of feeding problems in the general population range from 3% to 10%,[2] but children most at risk are those who have experienced significant medical and developmental challenges. Up to 90% of children with an autism spectrum disorder (ASD)[3] and 70% to 90% of children who were born prematurely or have chronic medical issues[4] experience significant feeding difficulties. Feeding disorders have been associated with a variety of medical issues, including cardiac conditions, neuromuscular disorders, gastrointestinal disorders, chronic lung disease,[5–10] and food allergies.[5,11,12]

Some commonly reported feeding problems (**Table 1**) include a lack of independent self-feeding skills, limited intake related to food selectivity, disruptive mealtime behavior, and extreme food refusal.[1,13–15] For children with complex medical histories, extended physiologic discomfort and recurring medical procedures may be associated with painful eating or result in limited, delayed, or no early oral feeding experiences, thus hindering the child's opportunity to learn appropriate oral-motor skills required for eating. Children with such histories may engage in maladaptive feeding behaviors to avoid pain or discomfort. Other children may lack the appropriate oral-motor skills to efficiently accept, chew, and swallow food without gagging, choking, or vomiting—further reinforcing food refusal behaviors.[6,8] In many cases, even after the medical issue has been resolved, children may continue to refuse to eat because of the previous association between food and pain, resulting in a complex feeding presentation requiring intervention.

Children with ASD are 5 times more likely to have a feeding problem than those without ASD.[24] However, the feeding problems of many children with ASD are overlooked in light of their other developmental concerns and likely because selective eating patterns do not place the child at risk for compromised growth in the vast majority of cases (eg, failure to thrive, significant weight loss, and/or declining growth),[24] which typically initiates concern in traditional pediatric settings.[25–27]

Table 1
Common presentations of pediatric feeding disorders

Common Presentations	Examples
Lack of age-appropriate independent self-feeding skills and/or motivation to self-feed[1,13–15]	Unable to use utensils to scoop or pierce food Accepting food from caregiver but unwilling to eat if they have to self-feed
Extreme food selectivity that limits intake or nutrition[15–21]	Only eating certain foods that are a particular color, brand, temperature, shape, or texture
Extreme food refusal[1,15]	Extremely limited or no oral intake, sometimes requiring enteral feeding
Disruptive mealtime behavior[1,15]	"Need for sameness"—food prepared and presented in a specific way; refusing to sit at the table, throwing food,[22,23] crying, throwing tantrums, gagging, vomiting, hitting, spitting when presented with food
Inability to eat age-appropriate textures due to behavioral and/or oral-motor skill deficits	A 4-year-old who can only eat pureed foods A 2-year-old who only drinks formula and eats purees or dissolvable baby snack foods If presented with other textures, child might choke, gag, vomit
Inability to eat age-appropriate amounts of food (volume limiting)	Might request food, but only eat 1–2 bites despite not having eaten a significant amount of food all day
Only eating "snack foods"	Goldfish, pretzels, Cheetos, puffs, cereal