REFEREED ARTICLE

Feeding Problems: Autism Spectrum Disorder

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Abstract

It is common for children with autism spectrum disorder to experience feeding problems that develop at an early age and include picky eating, food refusal, and rapid eating. This can lead to medical complications such as gastrointestinal issues or nutritional deficiencies. Feeding problems in children with autism can result in social-emotional implications. Children with autism may also experience oral sensitivities linked to feeding problems. Parents, doctors, and educators can use early interventions and behaviour therapy to support each child and improve feeding behaviour. More research in this area is required to support future learning in autism feeding problems.

Autism feeding problems develop early in life and include food sensitivity, food selectivity, food refusal, and rapid eating that can lead to medical complications and nutritional deficiencies. Although roughly a quarter of parents report feeding problems during their children's development, the occurrence of feeding problems in children with autism is notably higher (Aponte et al., 2018). Feeding problems are defined as a disorder in which the inability or refusal to orally consume adequate nutritional, hydration, or caloric intake results in negative nutritional developments that are associated with medical complications (Leader et al., 2020). Although research in feeding problems in children with autism is relatively new, there are interventions, strategies, and techniques that parents and caregivers can access to support their child's feeding problems.

Feeding Problems and Associated Health Concerns

Multiple feeding problems occur in children with autism, the most common being food selectivity, followed by food refusal, and then rapid eating (Leader et al., 2020). People with autism spectrum disorder can be rigid in their routine and will often exhibit repeat behaviours that narrow their eating habits and food choices, which can lead to health concerns (Ansel, 2021). Children with autism can be very selective in their food choices, resulting in a limited food repertoire (Peterson & Ibañez, 2018).

Many children with autism have sensitivities or allergies linked to poor digestion, imbalances in gut flora, and problems breaking down and eliminating certain substances (Muller, 2016). Food issues can have negative impacts on the general health of the child with autism and can lead to medical complications. This could potentially lead to deficiencies in micronutrients, putting the child at risk for medical complications (Peterson & Ibañez, 2018).

In addition to nutritional deficiencies, children with feeding problems can experience gastrointestinal symptoms. Although research of feeding problems and gastrointestinal symptoms is limited, there is evidence that links children with autism to having at least one GI symptom (Leader et al., 2020, p. 1402). Children with autism will limit food selection, not eat enough food, or experience health conditions such as constipation (Ansel, 2021). As a special education resource teacher, I have seen firsthand that students with autism can be quite particular when it comes to their food choices and how much they choose to eat. Parents appear to pack the same food each day, and students refuse to eat anything else with the exception of two or three familiar foods. Many of my students with autism engage in rapid eating and experience issues with constipation, diarrhea, or excessive to the norm bowel movements

per day. In many instances, support staff spend a large part of their day helping students in the washroom. Issues surrounding child feeding problems have become a challenge for me, my colleagues, and parents when encouraging children to try new things for the sake of added nutrition or, in some cases, getting children with autism to eat at all. This issue can be considered a disorder called Avoidant Restrictive Food Intake Disorder (ARFID), which resembles an extreme version of picky eating or restrictive food intake and is thought to be over-represented in people with autism (Baraskewich et al., 2021). The rigidity of the lunch routine of children with autism feeding problems continues to pose a challenge for all staff involved at my school. Some will only consume their lunch during the designated allotted time, and many habitually eat only the same familiar food items sent from home. In some instances, a few of our children with autism exhibit severe anxiety surrounding lunch time and will consistently refuse to eat at school.

People with autism can have difficulties in social situations. As children become older, more pressure is placed around social eating and some may require added support (Baraskewich et al., 2021). Feeding problems in social eating situations can directly result in social emotional consequences for both the child and family, and can interfere with inclusion in social community opportunities (Aponte et al., 2018). In my experience, some students with autism downright refuse to eat with their peers or in the same room where there is ample adult supervision. This becomes exceptionally challenging when it means that the child will not consume any food all day. Some students eat very quickly with their entire meal fully consumed in a matter of minutes. which often results in GI symptoms such as a stomach ache, nausea, or diarrhea, which can lead to the child exhibiting negative behaviours due to not feeling well. On any given day at my school, it would be typical to see a student with autism who prefers to eat alone with no one in sight for a variety of reasons, or on the contrary, integrated with peers. Some of my students will eat an entire meal in a matter of seconds, which in an elementary integrated setting often will go unnoticed by others, but I do worry about the social implications for my students in the future. My biggest concern is with the higher functioning students with autism who express the desire to fit in, and the possibility of rejection or ridicule due to odd behaviour or socially unacceptable eating behaviour.

People with autism often have unique sensory needs, including oral sensitivity. Chistol et al. (2017) found that children with autism had significantly higher oral sensory sensitivity, or over sensitivity and other factors linked to food selectivity, such as issues with colour, taste, smell, and texture. Children with atypical oral sensitivity refused more foods and displayed a narrower food repertoire. In my years of working with students with autism, I have witnessed a child prefer to chew on a playground pebble and refuse to spit it out, yet tantrum when asked to try yogurt or an unfamiliar nutritional food item. I have also seen a student gag after touching lettuce when making salad in our food experience class, even though he had never actually tasted lettuce. On the contrary, I have a student with autism who eats mainly whole foods, including a wide variety of fruits and vegetables; however, he is seemingly far from the norm. It leads me to question how each child developed their feeding problems, and what we as educators can do to support the family and child as they navigate through the complexities surrounding oral sensitivities and food selectivity in children with autism.

Interventions and Strategies To Address Autism Feeding Problems

Although research in autism feeding problems is relatively new, there are resources and strategies that parents can access to support their child's feeding concerns. Behavioural treatments are the most commonly used intervention for addressing feeding issues which may have been reinforced by parents and families from an early age and over a long period of time (Ledford et al., 2018). Restrictive behaviours are often used, which include limiting a child's movement during mealtime, prompting of a set amount of bites, and non-removal of the spoon until a bite is taken. These types of interventions can result in significant improvements for

children and families (Seiverling, 2019). Although success is reported, parents have indicated that they prefer a less intrusive treatment (Ledford et al., 2018).

It is important for parents and caregivers to seek additional understanding and knowledge about autism feeding problems. Parent training as an intervention model has been successful with autism behaviours (Johnson et al., 2018). Techniques that parents can use to help with feeding issues involve prioritizing goals, starting small, meeting the children where they are, setting clear expectations, offering plenty of praise and encouragement, and staying consistent and patient (Garey, 2021). Providing parents with videos highlighting techniques, teaching concepts, keeping a diary of food intake, and involving a registered dietician can result in a reduction in parent-reported feeding problems (Johnson et al., 2018). For the most impact, the recommendation is to designate one parent to be the primary person to prepare and give meals to the child (Johnson et al., 2018). In my role, staying consistent with expectations and routine appears to have a direct link to improving autism feeding problems. When students with autism know what to expect, there is less negative behaviour and an increased accomplishment of whichever goal we set out to achieve. For parents, using the appropriate techniques for each child may help with the success of feeding time.

Health care professionals should be alerted to detect feeding problems in early childhood, especially when it comes to children with autism. Early detection is critical, because the prevalence of feeding problems is well known in children with autism, which can result in a timely diagnosis and treatment (van Dijk et al., 2021). Using screening questionnaires during routine checkups can help to identify feeding problems. For example, the Montreal Children's Hospital Feeding Scale (MCH-FS) is a screening instrument based on caregiver reports and can help with early identification of feeding problems (van Dijk et al., 2021). Parents should seek out medical professionals who can rule out biological causes when a child is dealing with eating issues (Garey, 2021). In consultation with medical professionals early in a child's life, parents and caregivers will have the opportunity to obtain appropriate interventions to support their child.

Conclusion

Feeding problems in children with autism are complex and multifaceted. Early identification and intervention for sensory processing abnormalities are critical for addressing food problems in children with autism (Chistol et al., 2017). Thus, parents and educators need to work together as early as possible when it comes to food and their children. Early intervention at doctors' appointments will be key in alerting the medical professionals and gaining access to treatments. Incorporating a balanced eating plan can also make a difference emotionally and can affect learning (Ansel, 2021). If early intervention does not occur, feeding problems involving food sensitivity, food selectivity, food refusal, and rapid eating could result in long-term medical complications and nutritional deficiencies in people with autism.

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