

## Characteristics of ASD and problems with food and mealtime



As parents, teachers, and caregivers of children with Autism Spectrum Disorder (ASD), we know that problems with food are common, and mealtimes at home or in the community can be very stressful. We also worry about the quality of children's nutrition because of these issues.

Have you ever wondered which aspects of ASD contributed most to these problems? Are they related to the specific criteria defining autism itself, such as social/communication issues and restrictive or repetitive behaviors? Does it have anything to do with the severity, or "level" of autism a child may have? Perhaps it has to do with cognitive functioning? And lastly, do these mealtime challenges truly have an impact on the quality of our children's nutrition?

The authors of a 2014 study (Johnson, et al., 2014) wondered about all this as well, and looked at each of these questions in terms of how previous research has addressed them, then they took a look for themselves at 256 children with ASD ages 2 to 11 years who were participants at five Autism Treatment Network sites around the country.

They found that previous research has determined that children with ASD in general have more feeding problems, and eat a more narrow range of food than children without ASD. Among the general pediatric population, it is already known that feeding problems lead to poorer nutrition, growth, developmental outcomes, medical procedures, and social problems.

Most studies of various interventions for feeding problems of children with ASD, however, have not considered improvement of nutrition as an outcome. Most have looked for things that are easier to count, such as bites or weight of food increasing, or weight gain of the child, etc.

This study is unique in taking a deeper look at what features of ASD may or may not be associated with feeding problems, and whether or not feeding problems can be directly tied to the quality of nutrition in children with ASD who exhibit these problems. Those of us with daily contact with children with ASD know most of this by our own experience, but in order to help researchers and interventionists develop the knowledge and skills to address these issues effectively, certain gaps in research need to be addressed. This article is an attempt to begin that process.

So, what did they find?

- Parents of children with ASD who have high levels of repetitive and ritualistic behaviors are more likely to report feeding problems for their children, as well as related issues such as requiring certain plates or utensils, and other presentation needs, such as different foods not touching each other.
- Children who had more significant sensory problems were more likely to have feeding problems. The authors also found a relationship between sensory problems and repetitive and ritualistic behaviors, and concluded that children who show evidence of problems in both areas are at particularly high risk for problematic feeding behaviors. This is significant, in light of the addition to the new edition of the DSM-5\* of sensory challenges as one of the considerations in an ASD diagnosis.
- Children who had internalizing (such as anxiety and depression) and externalizing (disruptive) behaviors, were much more likely to also have feeding problems.
- Neither the level of severity of ASD nor level of cognitive functioning were associated with increased feeding problems. High-functioning children with ASD were just as likely to have problems as lower functioning children.
- When the authors looked at the association of feeding problems with quality of diet, they found a very strong relationship. The greater the problems with feeding and mealtime, the worse the quality of diet and nutrition became.

The authors call for research on effective interventions, saying very little has been done in this area so far. They recommend an interdisciplinary approach, bringing in the expertise of dietitians to assure that improvement in nutrition becomes one of the measures of success in any intervention targeting feeding behaviors of children with ASD.

#### ARTICLE SUMMARY BY CARD-USF STAFF

#### References

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- Johnson, C. R., Turner, K., Stewart, P. A., Schmidt, B., Shui, A., Macklin, E., ... & Hyman, S. L. (2014). Relationships Between Feeding Problems, Behavioral Characteristics and Nutritional Quality in Children with ASD. *Journal of autism and developmental disorders*, 1-10.