

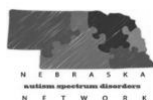
TRI-STATE WEBINAR SERIES

Picky Eaters: Facts and Interventions Part 1- Prevalence, Eating Challenges, Ethics, and Assessment

Presented by:
Melinda Henson, M.Ed., BCBA



COLORADO
Department of Education



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Tri-State Autism Spectrum Disorder Webinar Series



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Polling Questions

- Questions will be asked throughout the webinar
- When the poll opens on your screen respond by clicking on or filling in your answer

What is your role?

What is your role?

Administrator

Parent/Family Member

Related Service Professional

Teacher

Other

What state are you from?

What state are you from?

Colorado

Kansas

Nebraska

Other

No Vote

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Presenter Information




Speaker Bio: Melinda Henson, M.Ed., BCBA

- NE Autism Spectrum Disorders Network
- Masters degree in Special Education, autism emphasis
- Board Certified Behavior Analyst
- Career experiences include University, State Agency, home and school settings across lifespan

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Learner Objectives

1. **Identify estimated prevalence of feeding problems in children with ASD**
2. **Understand different examples of feeding & eating challenges**
3. **Recognize ethical considerations treating feeding issues in school settings**
4. **Identify behavioral assessment factors to emphasize or adapt for children with autism**

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Presentation Summary

Current identified prevalence of feeding concerns in children with an ASD

Types of eating challenges to rule in/out

- >Mechanics
- >Physiological concerns
- >Swallowing
- >Restricted food interests
- >Nutritional concerns

Ethical considerations related to treating feeding issues in schools

- >Scope of practice
- >Use of multi-disciplinary teams
- >IDEA and related services

Introduction to behavioral assessment

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PREVALENCE OF FEEDING & EATING CHALLENGES IN ASD

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Prevalence of Feeding & Eating Challenges in Autism

Autism is characterized by impairments in social interaction, communication deficits, and repetitive or stereotyped behavior.



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Prevalence of Feeding & Eating Challenges in Autism

The estimated prevalence of feeding problems in children with autism has been reported to be as high as 90% (Kodak & Piazza, 2008), with close to 70% of children described as “selective eaters” (Twachtman-Reilly, Amaral, & Zebrowski, 2008).



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Prevalence of Feeding & Eating Challenges in Autism

For example, up to 89% of children with autism spectrum disorders (ASD):

- Display strong preferences for certain foods (by type, texture, color, or packaging)
- Consume a narrower range and quantity of food when compared with peers
- And/or display elevated rates of disruptive behavior when presented with non-preferred food

(Ahearn et al., 2001; Bowers 2002; Collins et al., 2003; Cornish 1998, 2002; Field et al., 2003; Schreck et al., 2004)

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Prevalence of Feeding & Eating Challenges in Autism

- In 2003, Schwarz concluded that most of these problems in children with ASD can be categorized as behavioral feeding disorders, including aversive eating behaviors (food refusal, choking, gagging, and expulsion with no medical basis) and sensory-based feeding problems (textural aversions to specific kinds of foods, usually involving the refusal of foods with greater texture).
- Schwarz explained that feeding difficulties in children without ASD, on the other hand, are usually due to a medical condition, such as esophageal problems, swallowing disorders, and motor delays.

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Prevalence of Feeding & Eating Challenges in Autism

- For the purpose of the webinar, we will use a definition provided by Ledford & Gast, 2006 for *feeding problems* but will use the term “Picky Eating” to mean children with ASD with selective acceptance of food or refusal to eat many or most foods with no known medical explanation.
- This will eliminate the need to discriminate between the terms *aberrant feeding behaviors*, *maladaptive feeding behavior*, *problem feeding behavior*, and *problem feeders*.

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Prevalence of Feeding & Eating Challenges in Autism

Picky Eaters are considered to have a *feeding problem* when:

- Eat less than 20 foods
- Eat fewer and fewer foods over time until they are limited to about 5-10 foods they will eat
- Refuse foods of certain textures altogether
- Will eat one food over and over, but unlike mildly picky eaters they will eventually burn out and not go back to eating that food again
- Will not accept new foods on their plate and will not tolerate even touching or tasting a new food
- Cry, scream and tantrum when new foods are placed on their plate
- Are unwilling to try a new food even after 10 exposures
- Have a rigidity and need for routine/sameness during meals
- Are inflexible about certain foods

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Prevalence of Feeding & Eating Challenges in Autism

“The emergence and maintenance of severe feeding problems in ASD often has no identifiable organic factors or gastrointestinal etiology, leading to the hypothesis that aberrant feeding habits among those with ASD may be a manifestation of restricted interests, behavioral rigidity, and/or perseveration” (Ledford and Gast, 2006).

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Polling Question

In 2008, Kodak & Piazza reported the prevalence of feeding problems in children with autism as high as ____% ?

- a) 30%
- b) 50%
- c) 75%
- d) 90%



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Polling Question


In 2008, Kodak & Piazza reported the prevalence of feeding problems in children with autism as high as ____% ?

- a) 30%
- b) 50%
- c) 75%
- d) **90%**



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OVERVIEW OF FEEDING & EATING CHALLENGES

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Overview of Feeding & Eating Challenges

- Mechanical
- Physiological
 - Metabolic/Gastrointestinal/Structural
 - Swallowing/ Dysphasia
 - Sensory Processing
- Restricted Food Preferences
- Nutritional Concerns

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The Mechanics of Eating

Typical consumption involves a number of successive steps:

- Bringing a bite to the lips
- Accepting food into the mouth
- Chewing and forming a bolus
- Swallowing/clearing mouth



Problems may arise at different points along this chain of consumption. (Howe & Wang, 2013)

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Physiological Feeding and Eating Issues

A variety of organic factors that lead to difficult or painful eating may precipitate or play a role in the development of feeding concerns.

1. Metabolic abnormalities
2. Gastrointestinal issues
3. Structural or anatomical defects

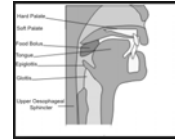


(Arvedson 2008; Babbitt et al., 1994; Sanders et al., 1993; Twachtman-Reilly et al., 2008)

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Physiological Feeding and Eating Issues

A variety of organic factors that lead to difficult or painful eating may precipitate or play a role in the development of feeding concerns.



4. Oral motor deficits (dysphagia)

Dysphasia is a severe and relatively rare swallowing deficit that is diagnosed via a swallow study conducted by a speech language pathologist.

(Arvedson 2008; Babbitt et al., 1994; Sanders et al., 1993; Twachtman-Reilly et al., 2008)

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Physiological Feeding and Eating Issues

A variety of organic factors that lead to difficult or painful eating may precipitate or play a role in the development of feeding concerns.

5. Hypersensitivity to food tastes, smells, and textures

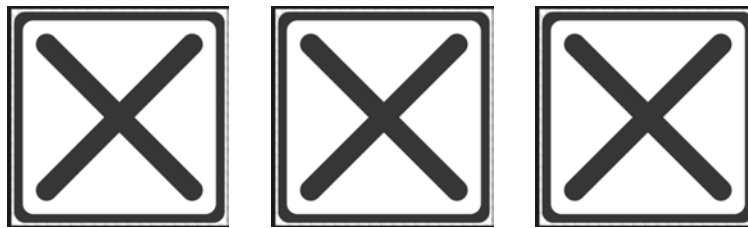


(Arvedson 2008; Babbitt et al., 1994;
Sanders et al., 1993;
Twachtman-Reilly et al., 2008)

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Restricted Food Preference

Food Selectivity: the limited consumption of foods based on **texture**, **taste**, and **familiarity** with close to 70% of children with ASD described as “selective eaters” (Twachtman-Reilly, Amaral, & Zebrowski, 2008).

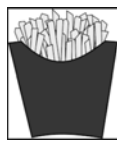


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Restricted Food Preference

Selectivity **by type or presentation** has been defined as “eating a narrow range of food that was nutritionally inappropriate...eating only a few different foods and often refusing to eat entire food groups”

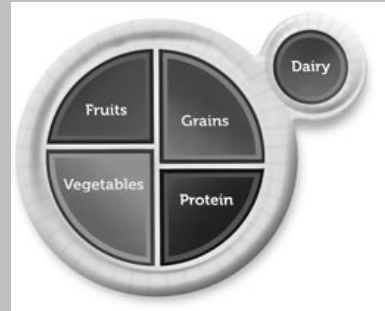
(Field et al., 2003)



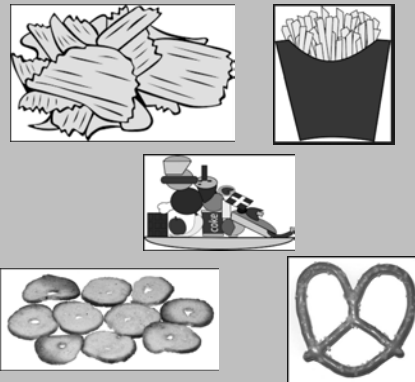
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Nutritional Concerns

• The Goal:



• The Challenge:



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Polling Question

A study by Twachtman-Reilly et al., in 2008, described close to _____% of children with ASD as “selective eaters”, defined as a limited consumption of foods based on texture, taste, and familiarity?

- a) 25%
- b) 40%
- c) 70%
- d) 80%
- e) None of the above



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Polling Question

A study by Twachtman-Reilly et al., in 2008, described close to _____% of children with ASD as “selective eaters”, defined as a limited consumption of foods based on texture, taste, and familiarity?

- a) 25%
- b) 40%
- c) 70%**
- d) 80%
- e) None of the above



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ETHICAL CONSIDERATIONS

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Ethical Considerations

- Scope of practice
- Multi-disciplinary teams
- IDEA and related services

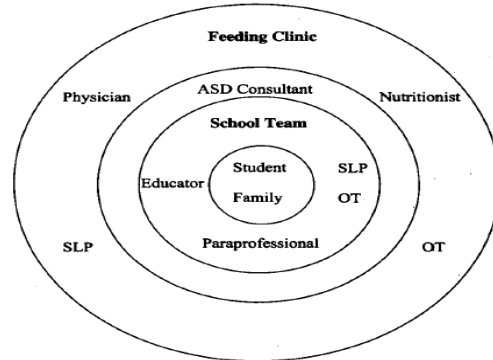
Scope of Practice

BACB Ethics Code 1.02:

- (a) All behavior analysts provide services, teach, and conduct research only within the boundaries of their competence, defined as being commensurate with their education, training, and supervised experience
- (b) Behavior Analysts provide services, teach, or conduct research in new areas (e.g., populations, techniques, behaviors) only after first undertaking appropriate study, training, supervision, and/or consultation from persons who are competent in those areas.

Multi-Disciplinary Team Approach

Figure 1. Team collaboration for the child with autism spectrum disorder and feeding difficulties.



Note. SLP = speech-language pathologist; OT = occupational therapist.

Twachtman-Reilly, et al., 2008

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IDEA and Related Services

Federal Law enacted:

“to assure that all children with disabilities have available to them...a free appropriate public education which emphasizes special education and related services designed to meet their unique needs” (20 U.S.C. 1401 (a) (9)).

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IDEA and Related Services

- The inclusion of feeding skills in an IEP can produce a variety of learning outcomes that go beyond oral intake and food preparation, including greater independence during mealtimes and increased opportunities for social interactions with others.
- Meaningful and functional outcomes come from integrating feeding goals and short term objectives into daily routines and activities.

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IDEA and Related Services

It is important to take into account the reason for including feeding goals in an IEP. As with targeting academic, social, and behavior goals, there must be a rationale. Feeding goals should include a brief explanation of its importance, such as “Max will increase self-feeding skills to prepare for kindergarten” or “Sophie will improve food preparation skills to be more independent.” (Bruns & Thompson, 2014)

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Polling Question

Many school-based professionals are governed by ethical guidelines which direct them to first consider their experience and ability to recommend, implement, and train on any proposed intervention model?

- a) True
- b) False



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Polling Question


Many school-based professionals are governed by ethical guidelines which direct them to first consider their experience and ability to recommend, implement, and train on any proposed intervention model?

- a) **True**
- b) False




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INTRODUCTION BEHAVIORAL ASSESSMENT

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Assessment

Assessment factors to emphasize for children with ASD:

- a) Direct assessment of food selectivity and/or food refusal, including functional assessment and behavior rating scales for eating and mealtime behavior.
- b) Assessment of unsafe eating behaviors (overstuffing food in mouth, swallowing food without chewing) that put the child at risk for choking even in absence of a physiologically based swallowing disorder.
- c) Assessment of patterns of consistency or inconsistency in performance. For example, a child may eat a particular food at school but refuse the same food at home, or vice versa. Similarly, a child may eat a cookie if it is whole but refuse to eat pieces of the same cookie. (Twachtman et al., 2008) 

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Assessment

Functional analysis or descriptive analyses of inappropriate mealtime behavior should be used to prescribe treatment for children with autism and feeding problems. Research has shown that functional analysis identified behavioral function for most children, with results indicating that food refusal was frequently maintained by escape (meal termination) and attention (coaxing). (Volkert & Vaz, 2010).

Assessment

Many longstanding feeding problems involve learned behaviors whose function is to escape unpleasant feeding experiences and/or to gain attention from caregivers (Piazza & Fisher, 2003).

Assessment

Behavioral mismanagement in the form of positive reinforcement (e.g., caregiver attention for inappropriate behaviors) and negative reinforcement (e.g., removing food and/or ending meals due to problem behaviors) may inadvertently shape and strengthen problem behaviors. When these behaviors are reinforced, they tend to become more frequent or intense. (Sharp et al., 2010)

Polling Question

Recent research on the functional analysis of inappropriate mealtime behavior in children with ASD identified the following behavioral functions as most common:

- a) Access to tangible and escape
- b) Escape and attention
- c) Automatic (sensory) and attention



Polling Question

Recent research on the functional analysis of inappropriate mealtime behavior in children with ASD identified the following behavioral functions as most frequently identified:

- a) Access to tangible and escape
- b) Escape and attention**
- c) Automatic (sensory) and attention



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Conclusion

- Eating is an essential human activity, necessary to sustain life and ensure growth, but it is also a common challenge for children and a source of stress for caregivers.
- The estimated prevalence of feeding problems in children with autism has been reported to be as high as 90%, with close to 70% of children with an ASD described as “selective eaters”

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Conclusion

Applied Behavior Analysis (ABA) has been effective in overcoming food selectivity.

- Consequence-based procedures such as positive reinforcement and access to preferred stimuli have been used to increase appropriate eating and escape extinction have been implemented to decrease mealtime problem behavior. (Knox et al., 2012)

Conclusion

Applied Behavior Analysis (ABA) has been effective in overcoming food selectivity.

- Antecedent-based procedures are implemented to promote acceptance of novel foods using such strategies as food blending, sequential and simultaneous presentation of foods, paced prompting, demand fading, and behavioral momentum. (Knox et al., 2012)

Conclusion

Recent research has emerged in which teachers and paraprofessionals have been successfully trained by professionals with experience in ABA procedures to implement interventions for food selectivity, even with no prior experience. It is suggested that similar ABA procedures for students who do not exhibit extreme problem behavior could be replicated to receive intervention at school as a component of their educational program. (Knox et al., 2012)

Conclusion

Because children spend significant time attending school, teachers can play a vital role intervening with a problem such as food selectivity. Similarly, there is a need to expand effective treatment beyond intensive clinical and inpatient programs to alternative settings such as public schools. (Knox et al., 2012)

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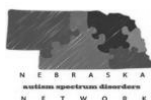
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THANK YOU!

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