



Tri-State 2016-2017 Webinar Series













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).





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 sensorybased 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.











OVERVIEW OF FEEDING & EATING CHALLENGES

Overview of Feeding & Eating Challenges Mechanical

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









Restricted Food Preference

<u>Food Selectivity:</u> 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).







Polling Question	
A study by Twachtman-Reilly et al., in 20 close to% of children with ASD as defined as a limited consumption of food texture, taste, and familiarity?	08, described "selective eaters", s based on
 a) 25% b) 40% c) 70% d) 80% e) None of the above 	
	Tri-State 2016-2017 Webinar Sevies

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











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.





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?

Tri-State 2016-2017 Webinar S



b) False



INTRODUCTION BEHAVIORAL ASSESSMENT



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

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)







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

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)



References

- Bruns, D., & Thompson, S., (2014). Turning Mealtimes into Learning Opportunities: Integrating Feeding Goals into IEPs. *Teaching Exceptional Children, 46,* 179.
- Chung, K.M., Kahng, S.W., (2006). Pediatric Feeding Disorders. In Fisher, J., & O'Donohue, W. (Eds.), *Practitioner's Guide to Evidence-Based Psychotherapy*, *514-523*, Springer US.
- Howe, T., Wang, T. (2013). Systematic review of interventions used in or relevant to occupational therapy for children with feeding difficulties ages birth-5 years. *American Journal of Occupational Therapy*, 67, 405-412.

Tri-State 2016-2017 Webinar Series

References	
 Huffman, N., Owre, D. (2008). Ethical Issues in Providing Services in Schools to Children with Swallowing and Feeding Disorders. <i>Language, Speech, & Hearing</i> <i>Services, 39,</i> 167. 	
 Knox, M., Rue, H., Wildenger, L., Lamb, K., Luiselli, J. (2012). Intervention for Food Selectivity in a Specialized School Setting: Teacher Implemented Prompting, Reinforcement, and Demand Fading for an Adolescent Student with Autism. <i>Education and Treatment of</i> <i>Children,</i> 35, 407-417 	
Tri-State 2016-2017 Webinar Series	

References

- Ledford., J., Gast, D. (2006). Feeding Problems in Children With Autism Spectrum Disorders: A Review. *Focus on Autism and other Developmental Disabilities, 21,* 153-166.
- Power-deFlur, L., Alley, N. (2008). Legal and Financial Associated with Providing Services in School with Swallowing and Feeding Disorders. *Language, Speech, & Hearing Services in Schools, 39,* 160.
- Sharp, W., Jaquess, D., Morton, J., Herzinger, C. (2010). Pediatric Feeding Disorders: A Quantitative Synthesis of Treatment Outcomes. *Journal of Clinical Child and Family Psychology, 13,* 348-365.

Tri-State 2016-2017 Webinar Series





What is sequential presentation?

Sequential presentation is a highly preferred food is delivered as a consequence for acceptance and consumption of non-preferred foods. So, the student eats the non-preferred food. Once it is swallowed the student receives the preferred edible, tangible, etc.

What is paced prompting?

Paced prompting is prompting someone every few minutes. For example, prompting the student every minute to take a bite.

What is demand fading?

Demand fading is where the prompt/demand is faded. So, in the beginning if there was a prompt/demand every minute it made be faded to every 2 minutes, then 3 minutes, etc. until the prompt/demand is gone.

Resources for more detailed information on the evidence based intervention procedures Searching research articles is best to find evidence based intervention. If you don't have access to research articles looking at evidence based interventions for autism or feeding interventions. <u>http://www.nationalautismcenter.org</u> <u>http://www.interventionsunlimited.com/editoruploads/files/Iowa%20DHS%20Autism%20Interventions%20</u> <u>6-10-11.pdf</u> <u>https://www.pbis.org/Common/Cms/files/Forum14_Presentations/D15_NAC_Ed_Manual_FINAL.pdf</u> <u>http://www.autismguidelines.dmh.mo.gov/documents/Interventions.pdf</u>

Picky Eating Webinar- Part 1 References

- 1. Bruns, D., & Thompson, S., (2014). Turning Mealtimes into Learning Opportunities: Integrating Feeding Goals into IEPs. *Teaching Exceptional Children, 46,* 179.
- Chung, K.M., Kahng, S.W., (2006). Pediatric Feeding Disorders. In Fisher, J., & O'Donohue, W. (Eds.), *Practitioner's Guide to Evidence-Based Psychotherapy*, 514-523, Springer US.
- 3. Howe, T., Wang, T. (2013). Systematic review of interventions used in or relevant to occupational therapy for children with feeding difficulties ages birth-5 years. *American Journal of Occupational Therapy*, *67*, 405-412.
- 4. Huffman, N., Owre, D. (2008). Ethical Issues in Providing Services in Schools to Children with Swallowing and Feeding Disorders. *Language, Speech, & Hearing Services, 39,* 167.
- Knox, M., Rue, H., Wildenger, L., Lamb, K., Luiselli, J. (2012). Intervention for Food Selectivity in a Specialized School Setting: Teacher Implemented Prompting, Reinforcement, and Demand Fading for an Adolescent Student with Autism. *Education and Treatment of Children, 35*, 407-417
- 6. Ledford., J., Gast, D. (2006). Feeding Problems in Children With Autism Spectrum Disorders: A Review. *Focus on Autism and other Developmental Disabilities, 21,* 153-166.

- 7. Power-deFlur, L., Alley, N. (2008). Legal and Financial Issues Associated with Providing Services in School with Swallowing and Feeding Disorders. *Language, Speech, & Hearing Services in Schools, 39,* 160.
- 8. Sharp, W., Jaquess, D., Morton, J., Herzinger, C. (2010). Pediatric Feeding Disorders: A Quantitative Synthesis of Treatment Outcomes. *Journal of Clinical Child and Family Psychology*, *13*, 348-365.
- 9. Schwarz, S. M. (2003). Feeding disorders in children with developmental disabilities. *Infants and Young Children, 16,* 317–330.
- 10. Twachtman-Reilly, J., Amaral, S., Zebrowski, P. (2008). Addressing Feeding Disorders in Children on the Autism Spectrum in School Settings. *Language, Speech, & Hearing Services in Schools, 39,* 261.
- 11. Volkert, V., Vaz, P. (2010). Recent Studies on Feeding Problems in Children with Autism. *Journal of Applied Behavior Analysis*, 155-159.

Picky Eaters Part 2 References and Resources

- 1. Ahearn, W.H. (2003). Using simultaneous presentation to increase vegetable consumption in a mildly selective child with autism. *Journal of Applied Behavior Analysis*, *36*(3), 361-365.
- 2. Ahearn, W. H., Castine, T., Nault, K., & Green, G. (2001). An assessment of food acceptance in children with autism or pervasive developmental disorder-not otherwise specified. *Journal of Autism and Developmental Disorders*, *31*(5), 505-511.
- 3. Barahona, C., DuBard, M., Luiselli, J., & Kesterson, J. (2013) School-based feeding intervention to increase variety and quality of foods consumed by an adolescent with autism. Clinical Practice in Pediatric Psychology, 1, 361-368.
- 4. Kahng, S., Boscoe, J. H., & Byrne, S. (2003). The use of an escape contingency and a token economy to increase food acceptance. *Journal of Applied Behavior Analysis*, *36*(3), 349-353.
- Kerwin, M. E., Ahearn, W. H., Eicher, P. S., & Burd, D. M. (1995). The costs of eating: A behavioral economic analysis of food refusal. *Journal of Applied Behavior Analysis*, 28, 245-260.
- 6. Kern, L., & Marder, T. J. (1996). A comparison of simultaneous and delayed reinforcement as treatments for food selectivity. *Journal of Applied Behavior Analysis*, 29(2), 243-246.

- Knox, M., Rue, H. C., Wildenger, L., Lamb, K., & Luiselli, J. K. (2012). Intervention for food selectivity in specialized school setting: Teacher implemented prompting, reinforcement, and demand fading, for an adolescent student with autism. Education and Treatment of Children, 35 (3), 401-417.
- 8. Levin, L., & Carr, E. G. (2001). Food selectivity and problem behavior in children with developmental disabilities: Analysis and intervention. *Behavior Modification*, *25*(3), 443-470. doi: 10.1177/0145445501253004
- 9. Sharp, W. G., & Jaquess, D. L. (2009). Bite size and texture assessments to prescribe treatment for severe food selectivity in autism. *Behavior Interventions*, *24*, 157-170.
- Sharp, W. G., Jaquess, D. L., Morton, J. F., & Herzinger, C. V. (2010). Pediatric feeding disorders: A quantitate synthesis of treatment outcomes. *Clinical Child Psychology Review*, 13, 348-365.
- 11. Sira, B. K. & Fryling, M. J. (2012). Using peer modeling and differential reinforcement in the treatment of food and selectivity. *Education and Treatment of Children 35*, 91-100.
- 12. Tiger, J. H., &Hanley, G. P. (2006). Using reinforcer pairing and fading to increase the milk consumption of a preschool child. *Journal of Applied Behavioral Analysis, 39,* 399-403.
- VanDalen, K. H. & Penrod, B. (2010). A comparison of simultaneous versus sequential presentations of novel foods in the treatment of food selectivity. Behavior Interventions, 25, 191-206.
- 14. Volkert, V. M., & Vaz, Petula, C. M. (2010). Recent studies on feeding problems in children with autism. Journal of Applied Behavior Analysis, 43, 155-159.
- 15. Wilder, D. A., Normand, M., & Atwell, J. (2005). Noncontingent reinforcement as a treatment for food refusal and associated self-injury. *Journal of Applied Behavior Analysis, 38*, 549-553.