Cleveland Clinic Children's

Mealtime Challenges for Children with Autism

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Objectives

- Identify feeding patterns which may require further assessment and intervention among children with ASD.
- Discuss the impact of feeding problems on the child's overall health and daily functioning.

Objectives

- Understand how the problem feeding of the child with ASD affects the family/caregivers.
- Discuss strategies to address various feeding problems among children on the Autism Spectrum.

Developmental Considerations Regarding Oral Feeding

- Oral feeding is a complicated process that involves transfer of food from the oral cavity into the esophagus while protecting the airway.
- Feeding skills are learned in a developmental sequence.

Developmental Considerations Regarding Oral Feeding

- Oral feeding involves all five of the senses.
- Oral feeding involves a significant social/interpersonal component.

Prevalence of Childhood Feeding Disorders

- Estimates vary in general pediatric population - 30-40% - mild “pickiness”
- 33% of general special needs population
- 46-89% of Autism population

Medical and Developmental Conditions Often Co-occuring with Feeding Problems

- Premature Birth - can result in GI and/or respiratory difficulties
- GER or other GI issues
  - Chronic Constipation/Celiac Disease
- Neurological or Genetic Disorders
  - CP, hypotonia
  - Seizure Disorder
- Autism Spectrum Disorders
- Cardiac and/or Respiratory Disease

Medical and Developmental Conditions Often Co-occurring with Feeding Problems

- ENT issues – chronic congestion, enlarged tonsils/adenoids, snoring/sleep disturbance
- Food Intolerances/Allergies
- Psychological Trauma

Co-Occurring Mental Health Conditions

- Anxiety
- OCD
- Depression
- ADHD
- Note: Some children do meet criteria only for ARFID and are otherwise completely typical in their development and social and emotional functioning.

A Word About Autism as it Relates to Feeding

- DSM-V **Criteria # 3 - “restricted patterns of interest and need for sameness.”
  - May manifest in restriction of breadth of dietary choices.
  - Insistence on eating the same foods everyday and/or foods presented in the same way.
  - Brand specificity

A Word About Autism as it Relates to Feeding

- DSM-V **Criteria # 3 - “Hyper- or hypo-activity to sensory input”
  - Sensitivity to tastes, smells, and textures contributes to difficulties trying new foods.
  - May lead to gagging, vomiting, pocketing, isolating and expelling bites

Etiology of Feeding problems in Children With Autism

- **Etiology of food selectivity is unclear. Possibilities include:**
  - **Speculation that children with ASD may have greater taste acuity**
  - **Children with ASD have been found to be less accurate at identifying sour and bitter tastes vs. non- ASD peers**
  - **Seeking “sugar high” from high glycemic index carbohydrates.**

Etiology of Feeding problems in Children With Autism

- General restriction of range of interests and activities that are part of Autism diagnosis.
- Children learn to eat new foods by repeatedly tasting them, a process that is reinforced by social and environmental cues (i.e., caregiver prompts, peer modeling, exposure to foods in multiple settings). The language and social skills deficits inherent in Autism may result in these cues being ineffective in helping children build variety in their diet.

Typical Presenting Feeding Problems

- Avoidant/refusal behavior at mealtimes
  - head turning
  - crying, fussing, tantrums
  - lip pursing/teeth clenching
  - spoon batting/hitting, kicking
  - talking/singing, etc. for distraction
  - throwing food/utensils
  - falling asleep
  - operant gagging/vomiting
  - tantrums/combative behavior

Typical Presenting Feeding Problems

- Faltering growth
- Primary source of nutrition and calories is from milk or formula (well past age 12 months)
- Dependence on oral supplements
- Dependence on supplemental tube feeds

Typical Presenting Feeding Problems

- Inability to chew or adequately chew textured solids (i.e., on pureed solids well past expected age)
- Gagging with non-preferred foods/non-preferred textures
- Difficulty pacing/overstuffing the mouth when eating
- Difficulty controlling the flow of fluids when drinking

Typical Presenting Feeding Problems

- Significant anxiety when presented with new or non-preferred foods
- Anxiety can manifest in a variety of avoidant/refusal behavior to escape the expectation of eating new/non-preferred foods (i.e., talking/singing, negotiating, sleeping, head turning, batting, self-stim, crying, tantrums, aggression)

Most Common Presenting Feeding Problems Among Children with Autism

- Self limited/restricted diet
- “Brand specificity”
- Significant rigid/inflexible behavior regarding the process and environment (i.e., utensils, location, etc.) related to eating

Unique Behavioral Challenges and the Impact on Feeding

- "Insistence on sameness"
- Minimal tolerance for variation in food packaging design, or food color, taste, or smell.
- Accept no substitutes
- Refusal behaviors can quickly escalate to tantrums and aggression

Unique Behavioral Challenges and the Impact on Feeding

- Severe anxiety results in extreme rigidity and can manifest as aggression when challenged.
- Communication skills deficits limit ability of child to express anxiety and limit ability of caregivers to reason/rationalize with child to work through and alleviate anxiety verbally.

Impact of Feeding Problems on the Child

- Does not meet dietary/nutritional needs
- Disruptions in attention in academic setting due to poor diet
- Physical discomfort due to constipation

Impact of Feeding Problems on the Child

- Mood swings/irritability/agitation
- Increased episodes of acting out behavior in eating situations
- Difficulty with social interactions, specifically surrounding meal times, parties, and other food-related events

Impact of Feeding Problems on the Family and Caregivers

- Disruptions in family events, special considerations for vacations/travel, outings, family meals, and parties
- Challenges for Day Care, full-day school
- Disruption in family dynamic and bond with parents

Impact of Feeding Problems on the Family and Caregivers

- Challenges with setting limits and expectations
- Managing resistant behavior that may quickly escalate to aggression
- Varying opinions among caregivers regarding how best to approach the child's feeding difficulties which complicates family dynamics

Medical Considerations

- Psychotropic Medications to address rigid/inflexible behavior, ADHD, severe anxiety, or significant aggressive behavior (can also impact appetite)
- GI medications to address symptoms of chronic constipation or GE reflux
- Medical consults as needed for symptoms of food allergies or enlarged tonsils/adenoids that are impeding swallow

Medical/Nutritional Considerations

- Food Allergies
- Growth status (includes weight gain trend on standard growth curves)
- Nutritional Status
  - protein needs
  - fluid needs
  - possible vitamin and mineral deficiencies

Oral Sensory Issues

- All sensory systems need to be organized and are constantly shifting with each chewing motion (i.e. sight of food, feeling of food, sound of food in mouth, taste and smell, adjustments to movement/balance, location of food, pressure exerted)
- Oral Hypersensitivity and oral hyposensitvity can both be present

Oral Motor Issues

- Oral motor incoordination – may be due to:
  - Lack of experience with eating overall
  - Impact of oral sensory issues which "shuts down" the oral motor system
  - Actual oral motor skill deficits
    - Poor tongue lateralization
    - Inability to demonstrate lip closure
    - Difficulties biting/chewing
- Aspiration risk

Oral Motor and Oral-Sensory "Behaviors"

- Oral motor fatigue
- Pocketing/packing
- Overstuffing the mouth
- Inability to transition from purees to textured table foods
- "Holding" bites and delaying swallow
- Spitting out bites or parts of bites
- Gagging and/or vomiting

Behavioral Considerations

- Mealtime behaviors (Spitting, Operant gagging and vomiting, Tantrums) – includes assessment of what precipitates these behaviors
- Determination of what may be reinforcing for the child (i.e., preferred foods, videos, toys, etc.) to be used during potential treatment
- Developmental Level (including child's need for independence and autonomy, ability to understand contingency, etc.)
- Past experiences related to feeding/medical procedures (relevant for family, too).

Behavioral Considerations

- Family/Caregiver Issues
  - Family Dynamics
  - General level of family stress
  - Social Supports
  - Cultural Barriers
  - Parent understanding/expectations of child's developmental issues and overall feeding problem and process

Therapeutic Interventions

- **Nutritional/Environmental Interventions**
  - **Scheduled, time-limited meals and snacks**
  - **Use hunger to advantage – eliminate grazing**
  - **Limit “filler empty calories”; serve appropriate portion sizes**
  - **Limit water if appropriate and replace with nutritive beverages**
  - **Monitor level of sensory stimuli at meal time**
  - **Appropriate and safe seating**
  - **Rotation calendar of foods**

Therapeutic Interventions

- Oral Motor/Oral Sensory Interventions
  - Prioritize nutrition over “developmentally appropriate” textures
  - May introduce new foods in pureed form
  - Systematic oral desensitization
  - Non-nutritive oral stimulation as appropriate

- Use of Feeding tools
  - Selecting the appropriate spoon or drinking system based on the child’s oral-motor and oral sensory needs

Therapeutic Interventions

- **Behavioral Strategies**
  - **Chaining – present "just noticeable difference" with regards to taste, texture**
  - **Contingent use of preferred foods and/or toys or activities**
  - **Alternate bites of preferred and non-preferred foods - to re-set sensory system and/or as a behavioral contingency**

Therapeutic Interventions

- Behavioral Strategies
  - Positive Reinforcement
  - Visual supports to structure expectations
  - Creating manageable expectations, start slowly
  - Working through tantrums and dealing with “cant’s vs. won’t” - Microdots x 5 until behavior improves, then increase to dots, tastes, spoons, ounces, servings

Basic Strategies For Home

- Implement rotation menu of all preferred foods; prevents further restriction of food repertoire
- Present all meals/snacks on a consistent schedule; Eliminate grazing
- Child should be seated for all meals/snacks
- Assist with pacing as needed

Basic Strategies For Home

- To introduce new/non-preferred foods
  - Begin with 1 food at a time
  - Start with very small tastes
  - Alternate with a highly preferred food
  - Distraction with something highly preferred may be helpful (ie, toy, music, video, coloring, puzzle, etc)
  - Begin with a few tastes and work up slowly
  - Be very patient! It may take weeks until a child becomes comfortable eating a new food (especially the first few new foods).

When is Treatment Needed

- When child's diet puts him/her at nutritional risk
- When growth/health is negatively impacted
- When diet is impacting child's behavior and attention in school or other settings
- When child's overall quality of life and or level of family stress is effected

When is Treatment Needed

- When strategies implemented at home are not working effectively
- When the child is demonstrating significant/ongoing gagging, choking, coughing, and/or swallowing foods whole
- When the child's level of resistant behavior and/or anxiety are increasing

Therapeutic Considerations

- Expanding the accepted diet repertoire – tasting, licking, kissing is not eating
  - Goal is for foods to be reliably incorporated into the diet in volume
  - Most children with Feeding Disorders have strong tendency to “regress back” with regard to food preferences – require ongoing attention to maintain expanded repertoire

Therapeutic Considerations

- Treatment process should be fluid, but not random
- THERE IS NO MAGIC for treating feeding disorders – be prepared to work long and hard
- Parental commitment is very important

Keys to Success

- Earlier treatment intervention carries better prognosis
- Integrated treatment approach to address behavioral, nutritional, and oral motor/oral sensory components to feeding is most optimal

Helpful Resources

- **Feeding Your Child with Autism: A Family Centered Guide to Meeting the Challenges by Mark J. Palmieri PsyD., BCBA-D & Kristen M. Powers, MS, OTR/L (2013)**
- **Broccoli Boot Camp: Basic Training for Parents of Selective Eaters by Keith E. Williams, PhD, BCBA & Laura Seiverling, PhD, BCBA (2018)**

Questions and Answers

Contact Information

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