

# Supporting Autistic Children with Feeding Challenges using a caregiver-mediated approach



# Brittany St. John

PhD, MPH, OTR/L



# Overview

- **OT's and feeding-intervention**
- **How do feeding challenges present for autistic children?**
  - Literature summary
  - Findings from my own work
- **Caregiver-mediated intervention approach**
- **Case Studies and Discussion**
- **Questions & Discussion**

# OT's and Feeding

- **Experts in daily activity and routine**
- **Skilled activity analyst**
- **Feeding is a complex activity of daily living**
  - Child regulation +
  - Family context +
  - Parenting style:
  - Fine motor skills +
  - Positioning and oral motor skills +
  - Sensory tolerance and needs +
  - Properties of the foods
- **Team Treatment is key**

# Autism & Feeding Challenges in the Literature

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- Up to 84% of autistic children
- Complex and heterogeneous
  - Challenges include: food selectivity, sensory aversions to food properties, rigid mealtime routines, distressing mealtime responses, disruptive mealtime behaviors, and or difficulty participating in family mealtimes.
- Current published studies are focused on behavioral or sensory factors
- Impacts on development, nutritional deficiencies, and health
- Differential trajectories

**Many improve with age**

**Clinically important group with severe and chronic challenges**



# Feeding Challenges & Families

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## Mealtime

- Context + needs of family members
- Structured for the needs of autistic child
- Limited family meal participation

## Caregivers

- ↑ stress and risk for poor health and wellbeing
- Mealtime is stressful and burdensome
- Actual mealtime vs. desired mealtime routine
- Also joy and meaning

## Families

- Decreased social participation
- Limited choices for other family members



# FEAST-US Survey

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## FEAST-US Survey

**Online National Survey**

**Feeding and Eating in Autism Together (FEAST) Assessment**

**Additional Measures:**

**Autism traits, sensory processing, mealtime behavior, caregiver stress, child adaptive skills**

## Participants

Caregivers (n=427) of autistic children

Average Age: 8.42 years

Range: 2 to 12 years

82.9% male

88.52% white

31.6% >\$100,000 Household Income

61.4% Bachelor degree +

# FEAST Assessment

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## Feeding and Eating in Autism Together (FEAST) Assessment

### Part 1: FEAST Scores (items 1-34)

**Total Score: Feeding Challenge Severity**

#### Feeding Challenge Classification Subscales

Sensory

Behavior

Oral Motor

Gastrointestinal

### Part 2: Clinical Utility questions (items 35-86)

**Early Feeding Challenges**

**Independent Feeding**

**Family mealtime Routine**

**Caregiver Strategies and Responses**

**Mealtime Schedule and Length**

**Reported Sensitivities**

**Caregiver Feeding Priorities**



# Key Findings from the FEAST Survey

## Feeding Challenges are Developing Early



33 % of families reported their child had at least one early feeding challenge.

Early feeding challenges predicted more severe feeding in later childhood.

## For Many - Feeding Challenges Get Worse



44.5% of families report their child has continued to restrict their diet over time

## Family Mealtime is Impacted



66% of caregivers reported they need to prepare a separate meal for their autistic child.

## Sensory Matters but is Not the Whole Story



Reported sensitivities to the food and the mealtime environment were common (82% at least one)

Behavioral, oral motor, and gastrointestinal feeding challenges were also high among the sample.

# Overlap between Feeding Challenges & ARFID

## Significant Weight Loss or Faltering Growth



40.3% of caregivers report concerns about growth  
18.0% report child has difficulty gaining weight

## Significant Nutritional Deficiency



Diet is missing entire food groups  
Primary concern for caregivers is nutritional variety

## Dependence on Enteral Feeding or Oral Nutritional Supplements



Unknown overlap

## Marked interferences with Psychosocial Functioning



Disrupted Family Mealtimes  
Decreased Social Participation  
Mealtime Distress and Dysregulation  
Difficult School Eating Experiences

# Summary

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## Feeding challenges are:

Complex and heterogeneous

Emerging early

Presenting across the family system and mealtime routine

Overlap significantly with ARFID criteria



# Caregiver-mediated feeding intervention

- Families as partners
- Intervention in home context
- Strategies carried over during the week to increase consistency
- Mix of coaching, caregiver-education, collaboration, problem solving, intervention modeling

# Engaged Eaters Program

## Key Components:

- Ages 2 to 7 years old
- Direct intervention, modeling of techniques, caregiver-therapist collaboration, & caregiver coaching
- Collaboratively set functional goals

Pre-Intervention  
Assessment

**EPP Intervention (~6 months)**  
**24 intervention visits & 8 caregiver modules**

Post-Intervention  
Assessment

- Intake Assessments (stress, efficacy, feeding challenge, demographics)
- Family mealtime observation
- Lab-based caregiver-child feeding interaction
- Caregiver interview
- Collaboratively set goals

- Repeat all assessments
- Evaluate progress on goals



# Setting Goals

- Affirming of neurodiversity and child needs
  - Consider sensory needs and goals that might get you stuck
- Meaningful to the family
- Achievable based on child presentation and history
  - Ask about the child's history and set realistic goals and family expectations
- Zoom out from bite acceptance
  - Functional long term change (expanded diet, enjoyment during mealtime, increased skills)

# Setting Goals

Child will accept 80% of new foods when presented



Child will demonstrate increased exploration of new foods (sight, touch, smell, etc) with necessary sensory supports available

Child will add broccoli to their diet



Child will add 3 new family foods to their diet  
OR  
Child will identify 3 new foods that they enjoy eating to expand their diet

Child will sit at the table with family for dinner



Child and family will develop a consistent mealtime routine that supports child participation in eating and family engagement during mealtime.

# Supporting Families



# Get Regulated

Mealtimes should be regulated and relaxed

Regulation happens across a day and not only during mealtimes.

Build regulation routines as a part of mealtime routines.

# Replace “Trying” Foods with “Exploring” Foods

Exploration  $\neq$  Eating

Encourage:

Describing, touching, smelling, stirring, preparing, serving to others, drawing, talking about, etc.



# Be Flexible in What is Offered

Everyone has red foods (foods they will never eat)

**The goal is to find more foods your child enjoys, not make them learn to eat the foods they hate.**

Stay flexible in what you offer to allow your child to explore and experience a wide variety and find the foods they like to eat.

# Spark Curiosity

Curiosity is the best motivator for exploring foods.

Tie special interests to food exploration to bring in enjoyment and curiosity

Get curious about small changes to favorite foods

# Lower the Pressure

Kids thrive with choice and control

Pressure to try foods will often backfire

Rewards/punishments tied to food exploration should be avoided

Increase choice by:

- Family style serving
- Child chooses how to explore food
- Children involved in meal prep/selection





# Predictable Mealtime Routines

Family defines the mealtime structure and style

Encourage predictability through timing, practices, or other methods.

Predictability supports regulation



# Set the Plate for Success

Consistent foods available, largest portion, close to child

Sometimes foods next largest portion

Small portions of new things

- Consider using separate small container or single bite on fork or toothpick to introduce a food

Child chooses what they eat on the plate







# Play

Kids are more willing to explore and eventually try new foods when food exploration is playful

Examples:

- Pretend you are different animals and take bites in character
  - Tiny mouse bite, big tiger bite, bird peck, snake lick, etc.
- Mix favorite toys and foods
  - Use clean toys as utensils, decorate toys with foods, pretend a toy is eating with you and share foods together
- Use foods in new ways to make art or include in pretend play
  - Paint with yogurt or pudding on a plate, build a pokemon habitat in a pile of mashed potatoes, cut up vegetables to look like roblox characters



# Considerations

- Families have likely tried many things - ask them about what has worked
- Consider the food security of the family before recommending practices that increase food waste
- Many caregivers also have specific or selective eating preferences

# Rory



**6 yrs**

**Selective eater since ~2**

**Diet:**

Fruit/Veg: Strawberries, raspberries, blackberries

Protein: raw almonds, occasionally peanut butter

Grain: crackers

# Rory

## Goals:

- **Comfort with food exploration**
- **Same room as family for meals**
- **Adding to her diet variety**

## Key strategies:

- Attending to regulation in every session
- Low pressure
- Imaginative play
- Sensory safety and clear expectations
- Curiosity for exploration without expectation of tasting

## Hurdles

- Anxiety
- Illness





# Liam



4 years

Unable to transition completely off milk bottle to solid foods

**Diet:**

- Milk in a bottle (1-1.5litre daily)
- nutter butter cookies
- pretzel sticks

# Liam

## Goals

- Transition to a new cup/drink vessel to drop the bottle
- Add foods
- Mealtime routine for mom and Liam

## Key strategies:

- Following his sensory cues
- Reducing milk while offering alternatives
- Visual supports and variety
- Autonomy

## Hurdles

- Detail specificity
- Sickness
- Mom's mealtime routines





# Finley

**4.5 years**

Always had difficulty with foods, big sensory and emotional responses to any food that is not highly preferred. Continues to drop foods as she ages.

## **Diet:**

orange juice, cheese toastie with a specific ratio of cheese to bread and cooked so the bread is crunchy, pretzels, one brand of chocolate chip cookies.

# Finley

## Goals:

- **Comfortable exploring foods to find new foods she likes**
- **Adding new foods to diet**
- **Communicating her food preferences to mom using her assistive communication device**

## Key Strategies

- Low pressure matched with highly preferred sensory experiences
- Regulating before mealtimes
- Cold & Pink foods

## Hurdles

- Variable sensory regulation throughout the day
- interrupted sleep
- Availability of family time for meal prep or expanded exploration





# Discussion & Questions

## Research Funding:

Wisconsin Alumni Research Foundation (Project ID: MSN PRJ89QZ, AAD3591 & AAH9891), University of Wisconsin Institute for Clinical and Translational Research (Project ID: AAA2543) and a core grant to the Waisman Center from the National Institute of Child Health and Human Development (P30 HD03352, U54 HD090256).

## Fellowship Funding:

Fulbright Future Scholar Postdoctoral Fellowship

Wisconsin Distinguished Graduate Fellowship, Waisman Center

Morse Society for Training and Research in Childhood Mental Health and Developmental Disabilities

Fellowship

UW-Madison School of Occupational Therapy Caroline G. Thompson Fellowship





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