Addressing Diverse Feeding Difficulties in Pediatrics

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PILLER CHILD DEVELOPMENT

Objectives

1. At the conclusion of this presentation participants will be able to identify at least two main reasons children present for feeding therapy.
2. At the conclusion of this presentation participants will be able to apply comprehensive evaluation techniques to identify feeding difficulties and develop a plan for intervention.
3. At the conclusion of this presentation participants will be able to create an evidence-based intervention plan to address feeding difficulties in a case example from their own practice.

What is Feeding Therapy

- Performed by speech or occupational therapists
- Follows referral from physician (PCP, GI, ENT)
- Addresses areas of feeding difficulties- dysphagia (oropharyngeal, oesophageal), food sensitivities, food aversions, etc.
- Limited diet or nutritional concerns

Who Benefits from Feeding Therapy

- Children with:
  - Limited food intake
  - Food refusals
  - Food selectivity (limited food groups, textures, etc.)
  - Dysphagia
  - Oral motor deficits
  - Tantrums or decreased participation at meal time
  - Fear with feeding

Feeding Perspectives Occupational Therapy

- According to OTPF-4 (2020)
- Eating and Swallowing- “keeping and manipulating food or fluid in the mouth, swallowing it (i.e., moving it from the mouth to the stomach)”
- Feeding- “setting up, arranging, and bringing food or fluid from the vessel to the mouth (includes self-feeding and feeding others)”

Feeding Therapy

Simple definition- helping a child eat better

OT's Unique Role in Feeding Therapy

- Occupation of mealtime/snack time
- Behavioral, emotional, social, motor, sensory
- Understanding that eating and feeding are more than just calories and nutrition
- Understanding of co-occupations
- Role of the environment
- Understanding of adaptive response
- Role of interoception
- Habits and routines; body rhythms

Feeding Therapy Philosophy

- Feeding is complex: motor, sensory, behavioral, social, emotional
- Mealtimes are occupations; participation is the goal
- We eat for survival, but we also eat for other reasons
- Participation in eating and feeding is not just the act of eating

Food Sensitivities

- Frequent reason for referral to feeding therapy- limited diet
- Many reasons- may be medical (rule out), sensory, motor, emotional (negative experiences), behavioral (need for control over environment), or combination

Research

- Acknowledgement
  - Leslie Lamb OTD, OTR/L
  - Jenna Penning OTD, OTR/L
  - Taylor Tonks OTD, OTR/L

Intervention Guide- Development

- Review of literature- current evidence on feeding therapy practices
- Qualitative study of therapists- perception of therapists on current practices of feeding therapy and effectiveness of interventions
- Generate intervention protocol
- Provided therapist training- manual, video, competency-based training

Intervention Guide- Key Components

- Population
- Assessment
- Setup
- Intervention
- Outcomes

Effectiveness Research

- Retrospective pretest/posttest
- 41 participants
- Mealtime behaviors and number of foods eaten regularly
- Significant changes in both from pre intervention to post intervention

RESULTS

	BAMBIC	Food Preference Checklist
N	41	41
Mean (SD)		
Pretest	30.46 (5.78)	27.22 (12.10)
Posttest	27.71 (6.70)	36.32 (1.17)
Wilcoxon Signed Ranks Test		
Negative Results	25	12
Positive Results	14	24
Ties	2	5
Z-scores	-2.25	-3.41
P value	.024*	.001**

*P value significant at .05 level, **P value significant at .001 level

Intervention- Theoretical Base

Model of Human Occupation (MOHO)- Motivation, the routine of mealtime, and the physical and mental abilities that underlie skilled occupational performance are all interrelated parts that take place within one's environment and influence one another (Cole & Tufano, 2008).

Intervention- Population

- Children 3 and up
- No significant medical issues that interfere with eating and swallowing or these issues have been resolved
- No significant oral motor or swallowing issues; can eat by mouth
- Have limited food intake, limited food repertoire, decreased mealtime participation
- Excellent for kids with ASD, SPD, oral motor deficits

Evaluation

- Feeding history: initial latching, bottle/breastfeeding experience, transition to solids, current feeding patterns, swallow studies
- Medical history: includes all relevant medical history such as reflux, ear infections, major medical diagnosis, allergies, medications

Evaluation

- Mealtime
  - Seating arrangements
  - Description of environment including potential distractions/rewards
  - Who participates in mealtime
  - Length of mealtime
  - How many meals/snacks per day
  - Time of meals/snacks
  - Is mealtime enjoyable or stressful?

Eating Profile

- Preferences: Tastes, textures, temperatures
- Foods: favorite, number of meals per day, foods eaten by food group
  - Occasional foods, never foods, used to foods
- Liquids: favorite, number of oz per day, how often

Assessment of Skills

- Oral Motor
- Posture
- Behavioral observations
- Sensory processing (SPM2)
- Determine main reason for feeding difficulties to establish goals

Intervention

Table Rules

- Establish table rules and stick to them
  - Sit at table or in area of meal
  - Use the bowl rather than getting upset
  - Food can be on the table if a person at the table choses to have it there
  - Positive interaction with all foods
- Goal: decrease anxiety and promote positive experience
- External rewards

Adaptive Response

- Positive response to food with positive interactions
  - Sight
  - Proximity to body/mouth
  - In mouth
  - Eating and swallowing
- Internal motivation to initiate interaction
- External reward for initial motivation for change

Key Components

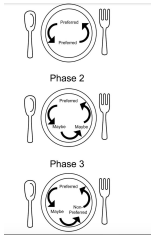
- Set up
- Plate
- Modeling
- Oral Motor
- Ways to interact
- Food chaining

Set Up

- Child helps with set up of plate—choose items on plate
- Food comes from home
- Mimic a mealtime (therapist and child participate)
- Quiet area with decreased items on table
- Items on table: 2 plates with food, bowl, reward

Plate

- Round- like a clock
- Preferred foods first
- Rotate preferred and non preferred
  a. Start with 2 preferred foods to establish table rules
  b. Move to one preferred and one sometimes
  c. Add in non preferred
  d. Move from try it strategies to eating



Modeling

- Eating is social
- Decreases anxiety
- Model various ways to interact with food
- Model positive experiences and what to do when food is not liked

Oral Motor

- Use food whenever possible
- Oral motor play with foods (hard mechanicals)
- Oral motor tools with foods (purees)
  - Know the reason for oral motor tool—if you can do the same thing with food, do it with food

https://docs.google.com/document/d/1U2qtwFYFUlXHqik9IEw2RmP5LXOw1xm7mxnKOiz89QA/edit#heading=h.72dcmcb40vcl

Decreasing Anxiety/Increasing Control

- Boundaries provide clear expectations
- Routine of the plate helps a child know what to expect
- Child knows there is no expectation to eat anything, only to interact with the item
- Child chooses items for plate
- Facilitate rather than force

Positive Interaction with Food

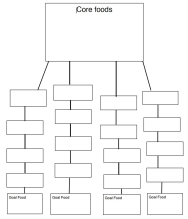
1. Move backwards until you get a positive interaction
2. Repeat
3. Model next step
4. Move to next step

Ex: Child does not want to touch food. Therapist puts food on fork and hold it several inches from the child's face and has them blow. Then the food is placed in the bowl. Repeat this until the child is doing so without prompting. Model keeping the food on the fork and kissing the item. Repeat until child kisses the item.

How to Choose Foods

Food Chaining- Cheri Fraker and Laura Wilbert

- Consider attributes of food- look, texture, taste
- Gradual changes can help a child be more successful when trying new foods
- Start with preferred and work towards goal foods



Role of Sensory

- Regulation- calm nervous system, decreased anxiety
- Increase oral motor awareness
- Address praxis issues using ASI approach

Family Involvement

- Determine if family involvement is barrier for facilitator
- If barrier- work with child alone. Have child choose foods to show to parents at the end of session. This indicates they are comfortable with those foods to use at home.
- Encourage mealtime routines at home and family mealtime participation.
- Decrease prompting.
- Teach methods of participation in the family mealtime.

Home Carry-over

- Food comes from home
- Child chooses which foods to practice at home
- Multiple exposures to foods- mealtime, preparation, etc.
- Change presentation of non preferred foods
- Ellyn Satter- Division of responsibilities

Case Study

- Jacob isa five year old boy who was referred due to limited food intake. Parents report he only eats carbohydrates. He has not history of reflux or other feeding difficulties. He latched well as an infant and had not difficulties transitioning to solid foods. However, he has always avoided fruits, vegetables and meats. Mealtime takes a long time and he refuses to eat anything until he can have goldfish or crackers. During the evaluation, you note low muscle tone in the cheeks. He is able to form a seal with his lips, but has weak jaw strength. He spills from the side of his mouth when drinking from and open cup. He uses a rotary chew but tends to munch the longer he eats. He bites off a cracker but when presented with lunch meat, he refuses to eat it.

Case Study 2

- Lily is an 8 year old girl with a diagnosis of Autism. She was referred to feeding therapy by her OT due to eating only McDonalds chicken nuggets, goldfish, Ritz crackers, and Little Caesar's cheese pizza. She will go without eating if she is not provided one of the four items listed. Mom reports that Lily is allowed to "graze" all day because she "just wants her to eat." She will not sit for a meal or snack. During the evaluation, Lily was observed to stuff her mouth with minimal chewing before swallowing. When presented with a non preferred food, Lily screamed and threw the plate off the table.

Questions

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