



# The Root of the Problem: Supporting Pediatric Feeding Disorders

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DATE: November 13<sup>th</sup>, 2020 Presented by Sarah Sahl, RDN, LD; Kristin Mangan, MA, CCC-SLP;  
Darren Janzen, PsyD

A vertical photograph on the left side of the slide. It shows a cable car suspended from cables against a clear blue sky. Below the cable car, there are green trees and a large, modern building with a glass facade, which is part of the OHSU campus. In the foreground, there is a metal railing and a sloped, textured surface, possibly a roof or a walkway.

# Introductions:

We are members of the Pediatric Feeding and Swallowing Disorders Program at the Childhood Development and Rehabilitation Center (CDRC) at OHSU.

# Introductions:



Sarah Sahl,  
RDN, LD  
Feeding Program  
Director



Kristin Mangan,  
MA, CCC-SLP



Darren Janzen,  
PsyD

Other disciplines on our team include:

Developmental Pediatrics, Gastroenterology,  
Nurse Practitioner, Occupational Therapy and Lactation Consultants.



# Objectives:

1. Define Pediatric Feeding Disorder (PFD).
2. Understand impact of early medical and GI processes on later feeding.
3. Practical tips for medical providers to use when seeing feeding problems vs PFD in clinic.

# Pediatric Feeding Disorders (PFD):

Prevalence: 25%-50% of neurotypical children and up to 80% of kids with developmental differences have **feeding problems**.

1-5% meet diagnostic criteria for **pediatric feeding disorder**.

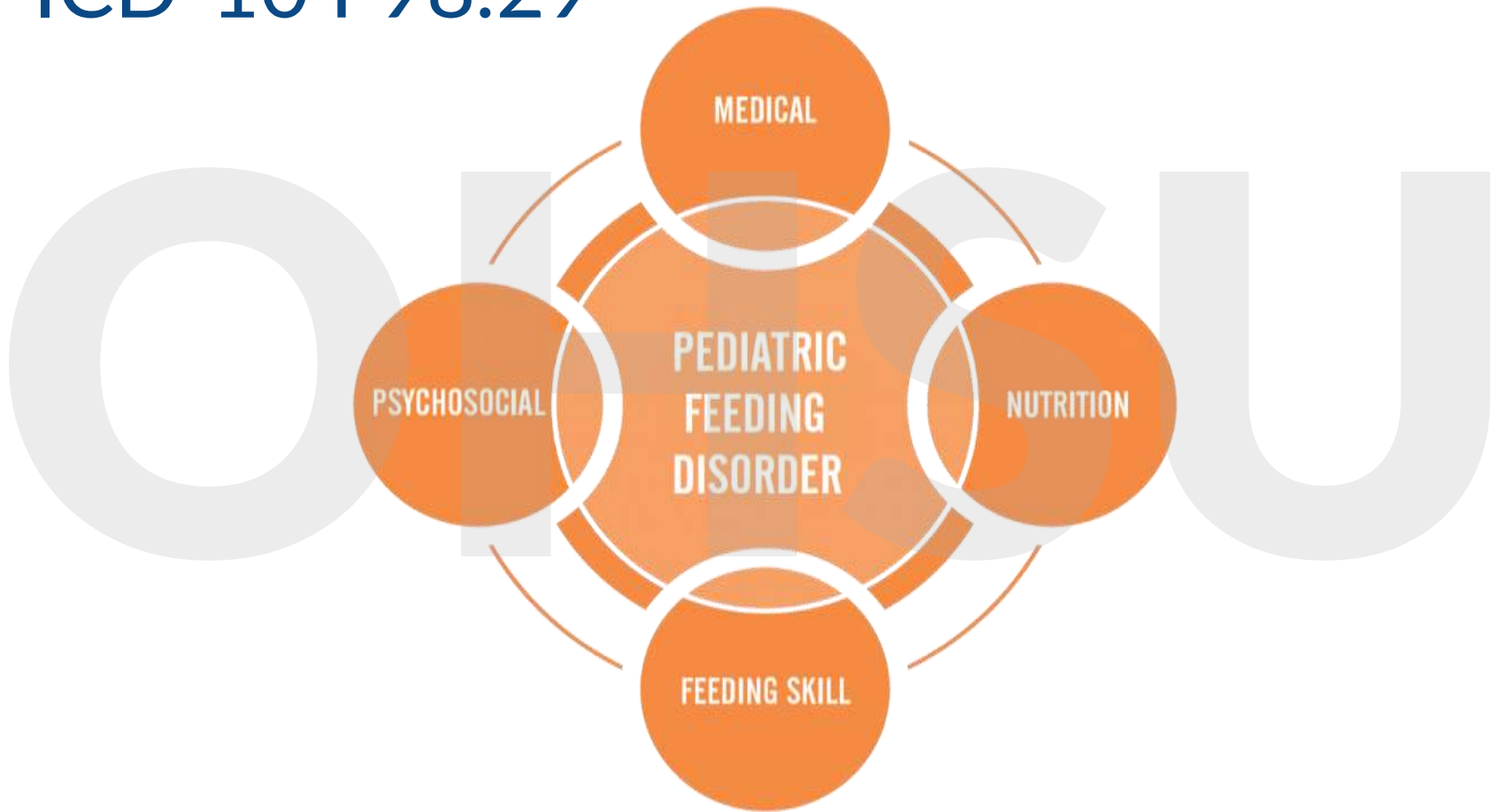
Definition: Impaired oral intake that is not age-appropriate, and is associated with medical, nutritional, feeding skill and/or psychosocial dysfunction.

Criteria: A disturbance in oral intake of nutrients, inappropriate for age, lasting > 2 weeks, not due to the cognitive process consistent with eating disorders, a lack of food or normal cultural practices that is associated with 1 or more of the domains we will discuss.

Goday PS, et al. Pediatric Feeding Disorder: Consensus Definition and Conceptual Framework. JPGN 2019;68(1):124-129.

Kerzner B, et al. A Practical Approach to Classifying and Managing Feeding Difficulties. Pediatrics February 2015, 135 (2) 344-353

# Pediatric Feeding Disorders (PFD): ICD-10 F98.29



# Medical Contributions to PFD:



**GI:** GERD, constipation, diarrhea, food allergy, EoE

**Cardiorespiratory:** cardiac abnormalities (most commonly VSDs, ASDs), pulmonary hypertension, need for supplemental O<sub>2</sub>

**Neurodevelopmental Disorders:** seizures, Down Syndrome, CP, Autism, global developmental delay, intellectual disability

**Anatomical abnormalities:** cleft lip and/or palate, tongue tie, dental malocclusions, retracted and/or small jaw

**Other:** history of prematurity, genetic and chromosomal differences, craniofacial anomalies, orofacial trauma

Goday PS, et al. Pediatric Disorder: Consensus Definition and Conceptual Framework. JPGN 2019;68(1):124-129.

# Feeding Skill Contributions to PFD:



**Unsafe oral feeding- Pharyngeal function:** Choking, cardiorespiratory events during feeds, recurrent respiratory infections. Suspicion of lack of or incomplete airway protection during swallowing. Consideration of an MBSS or FEES.

**Delayed/Impaired feeding skills- Oral function:**

Unable to consume age-appropriate food or liquid textures by traditional oral meals. Often related to delayed or impaired oral motor function or structure.

**Inefficient oral feeding- Oral, sensory, and behavioral components:** prolonged meal time, food refusal, and/or inadequate intake. Oral, pharyngeal, digestive, sensory and behavioral factors to be considered.

# Assessment/s for Unsafe Eating

## Criteria for Referral for Instrumental Assessment:

- Risk for aspiration by history or observation
- Prior aspiration pneumonia, recurrent respiratory illnesses, chronic cough, baseline wheezing, etc
- Suspicion of pharyngeal/laryngeal problem on basis of etiology (multiple midline deficits?)
- Reports or observations of gurgly/wet vocal quality or breath sounds during or following feed

*\* Remember that MBSS and FEES are complimentary and should not be viewed as “one or the other.”*

# Tips for Feeding Skill Contributions:

- Consider developmental age when considering feeding goals, appropriate foods and expected skills
- Dysphagia does not mean "aspiration"
- MBSS and FEES are not pass/fail
- Order MBSS's sparingly-considering radiology safety protocols, clinical findings, and need
- New IDDSI (International Dysphagia Diet Standardization Initiative) - new terminology and objective measurement standards (2013/2017) for both food and liquids viscosities
  - Prepare for new "thickening" terms
- Thickening is not the only option
  - Flow rate
  - Position
- Tongue mobility is essential in (infant) feeding

# Nutritional Contributions to PFD:



Limited quality, quantity and variety of food intake that results in:

- Malnutrition
- Overnutrition
- Vitamin or mineral deficiency or toxicity
- Dehydration

# Nutritional Contributions to PFD: TIPS

**Fluids:** Beyond 12 months of age, kids may displace food calories with excessive fluid intake.

- 0-4 oz juice 24 hours. 12-24 ounces milk
- Does a product like Pediasure address the root of the problem?

**Schedule:** Grazing decreases caloric intake for kids who are in tune with appetite

- 3 meals, 1-3 snacks per day. Include caloric beverages only at mealtime.
- Minimum of 2 hours between meals.
- 15-30 minute meals.
- Seek a calm, positive environment. No bribes, fights, or distractions.

**Mealtime environment and supports:**

- Match texture to skill. Not age or desired skill.
- Are feeders attending to the child as recommended?
- Eating is social! Even when kids become independent.
- How pressured is mealtime? Stress response decreases appetite.

**Appetite:** Are there changes in appetite or tolerance that should be addressed?

- New meds? New GI process? Stress response? Increased distractibility?

**Growth:** Malnutrition is not always a simple caloric deficit.

- Underlying medical condition? Need work up?
- Does the growth chart make sense? Does it represent what I'm seeing with my eyes?
- Is weight proportional to height? Does it match family growth pattern?

# Psychosocial Contributions to PFD:



## Mental and Behavioral Health Differences:

- Development delay, dysregulated temperament, or anxiety leads to disruptive feeding.
- Caregiver stress or mental health impacts their ability to remain calm, to feed the child appropriately, and note hunger/satiety cues.
- Disruption of the caregiver-feeder relationship can result from feeding challenges and stress.

## The Family's Food Culture and Beliefs:

- Family member mismatch? Vegan family with a child wanting only chicken nuggets and Cheetos.
- Social calendar may not align with child's inability to eat in a variety of locations
- Disruption of social engagement resulting from feeding

## Environmental Factors:

- Distractions used during meals (TV, phones, or tablets)
- Inadvertent reinforcement of avoidance behaviors (e.g. allowing child to leave the table after a tantrum; serving preferred food after refusing others)
- Food insecurity
- Caregiver lack of knowledge in food selection and preparation

# Psychosocial Contributions to PFD:

Feeder ↔ Eater

## **Learned Aversion:**

- Difficult medical history involving pain and/or fear
- Negative emotions associated with mealtimes

## **Disruptive Behavior:**

- Pushing/throwing food
- Leaving the table
- Aggression
- Using distraction

## **Food Over-selectivity:**

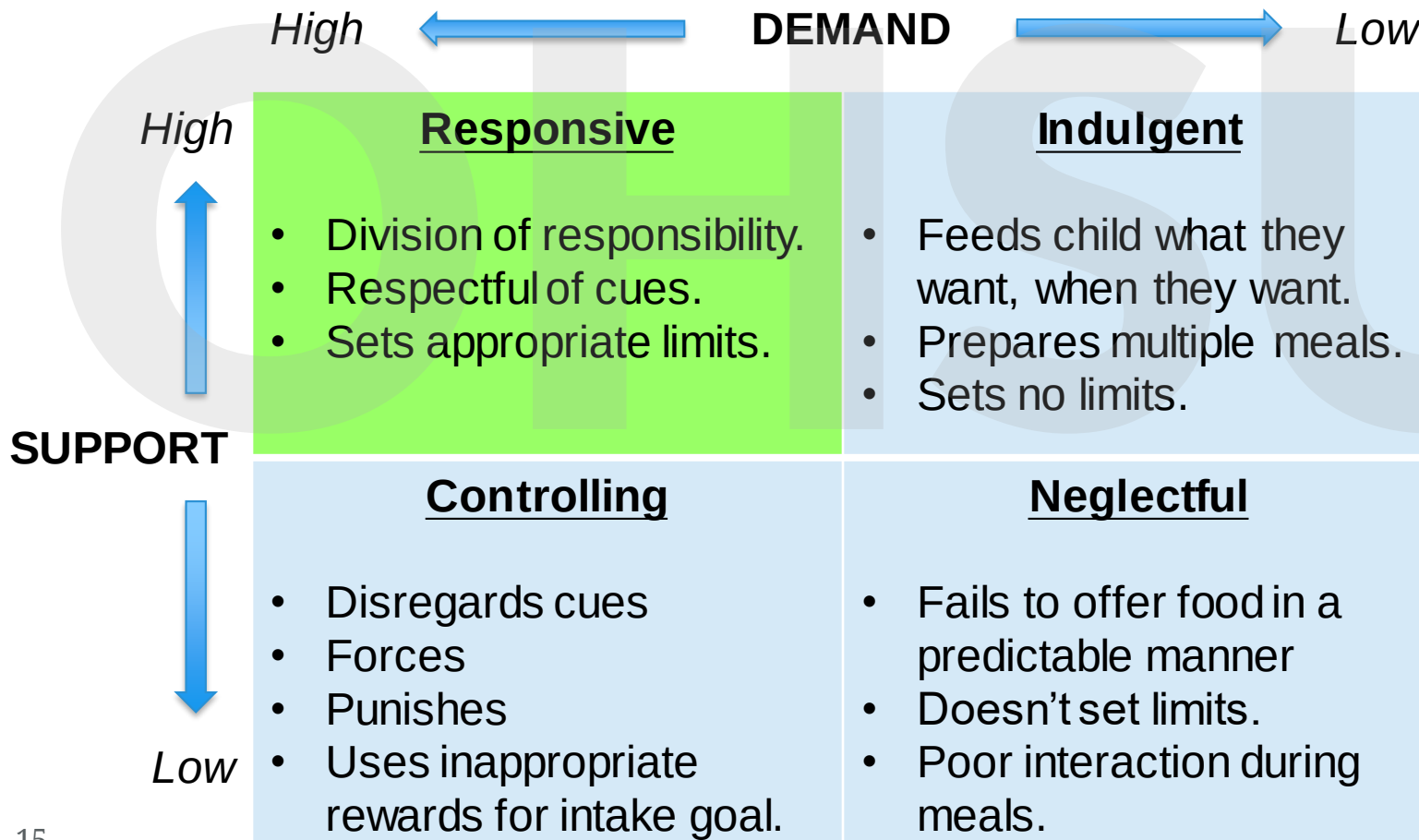
- Refusal to try new foods
- Grazing
- Not following an age appropriate diet (despite having skill to do so)

## **Using Short-term Strategies for Improved Nutrition:**

- Forcing
- Only preferred foods
- Feeding a child (who can self-feed)
- Extended bottle feeding (When able to use cups)

# Psychosocial Contributions to PFD:

## Parent Feeding Styles



# Interventions for Psychosocial Contributions to PFD:

## Increase Mealtime Structure and Routine:

- *Avoid all day eating* or grazing.
- *Encourage the Division of Responsibility in Feeding*, but parents should follow the “Rule of Three”
- *Minimize distractions* at meals and snacks

## “Shape” Behaviors Using Effective Reinforcements:

- *Reward positive behaviors* – specific verbal praise, immediate rewards (such as a sticker chart or access to privileges).
- *Ignore negative behaviors* - things such as spitting, gagging, or refusing food. Parents don’t want to encourage these behaviors by paying attention to them.

## Improve Family Communication Dynamics:

- *Get everyone involved* - allow the child to help with the selection and creation of meals, even if they don’t taste the final product.
- *Practice pleasant and healthy eating behaviors* – model good eating behavior, don’t over focus on the child’s eating, and avoid repeatedly prompting, coaxing and begging.
- *Be predictable* - continue to offer declined foods and have a “no thank you” bowl available (to allow for exposures to occur).

# Summary:

- Pediatric Feeding Disorders are a complex interplay between a child's medical condition, their feeding skills, their nutritional status, plus environmental and behavioral factors.
- PFD's involve skills and attitudes of both the child's eating and the caregiver's feeding.
- The majority of reported feeding concerns are not a threat to health, nor or they indicative of a larger medical issue.
- For the small percentage of true PFD's a multidisciplinary thought process should be applied to find the root(s) of the feeding difficulty and best tailor treatment.



# Thank You

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