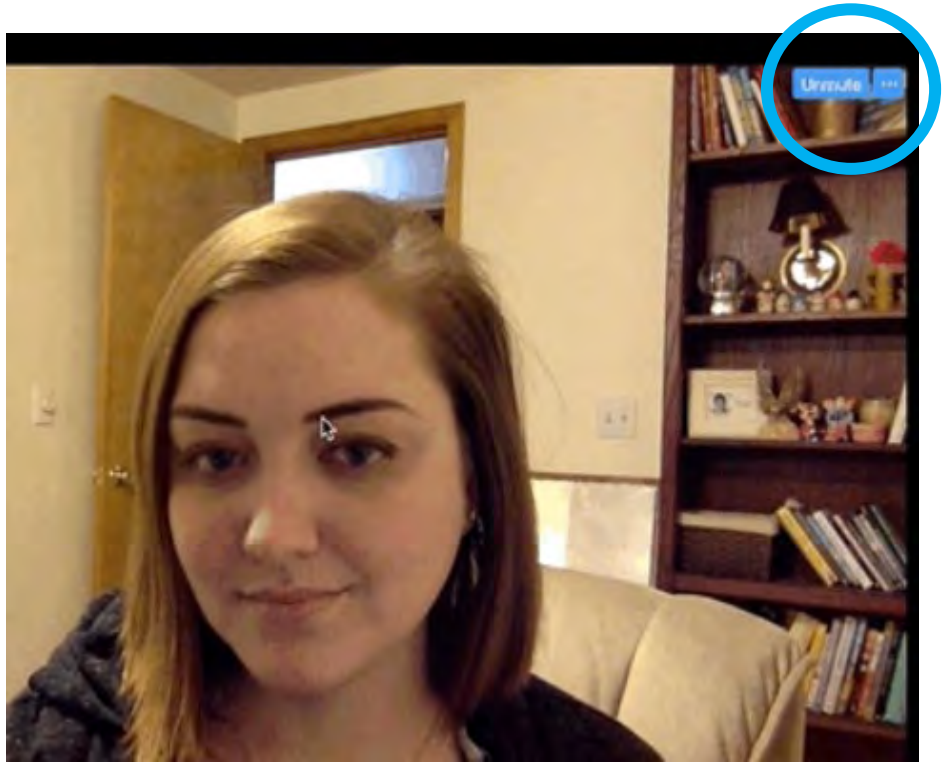
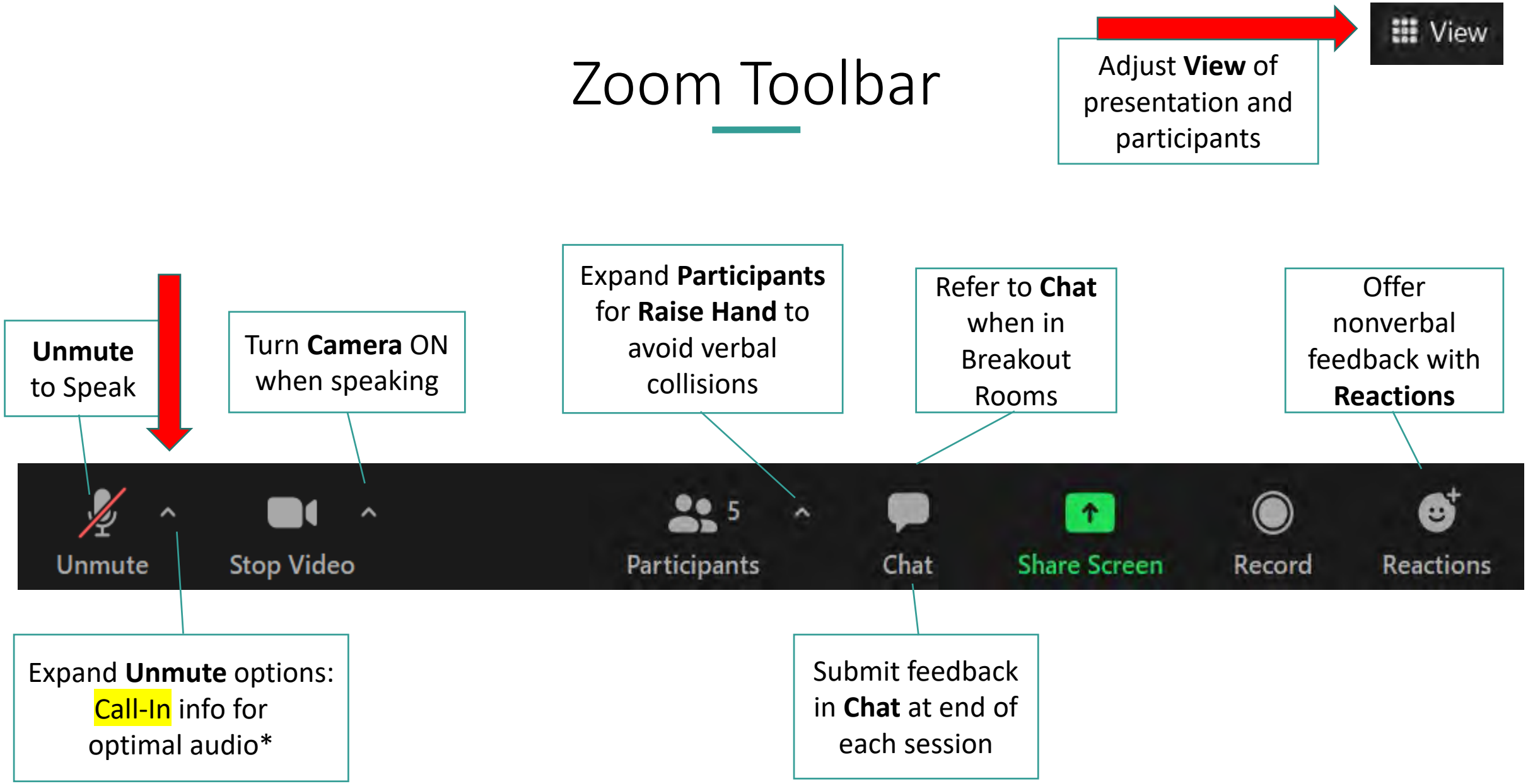
Welcome!

- **To the October 2021 COMM NET Meeting**
- **We are glad you are here!**
- **Once you get settled…**



- ✓ **Click the 3 dots in the top right of your image**
- ✓ **Select RENAME**
- ✓ **Enter…**
  - ✓ **First name,**
  - ✓ **Pronouns,**
  - ✓ **Your organization/agency name**
- ✓ If you don't see your image, check your view settings at the top of the bar and set to see all webcams or Side-by-Side Gallery View

Zoom Toolbar



*Call-in feature works best with cell phones (not compatible with soft phones)

Housekeeping Items

- Please list your name and affiliation in the chat
- If you are new, please add your email address in the chat so we can make sure you are added to our list
- This meeting will be recorded

Washington State Department of Health

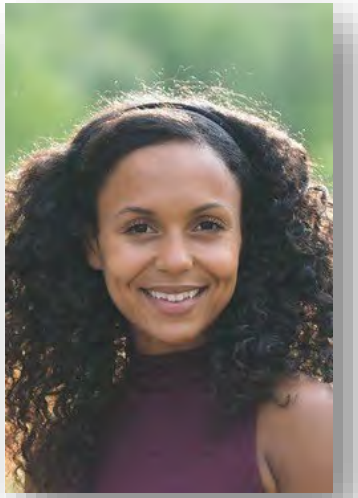
CHILDREN AND YOUTH WITH SPECIAL HEALTH CARE NEEDS

Communication Network Meeting – October 14, 2021

CYSHCN Team

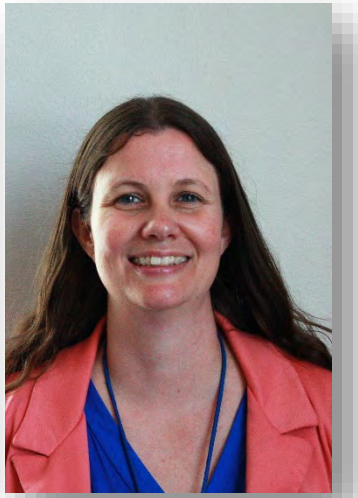
Monica Burke, PhD

CYSHCN Program Director



Sarah Burdette

CYSHCN Process Improvement Specialist



Bonnie Burlingham, MPH

CYSHCN Epidemiologist

Nikki Dyer

CYSHCN Family Engagement Specialist

Khimberly Schoenacker, RDN, CSP, CD

CYSHCN Nutrition Consultant

Land Acknowledgment

- Olympia rests on the ancestral territory of the Squaxin, Cowliltz, Coast Salish, and Nisqually People who have stewarded this land throughout the generations. We pay our respects to elders both past and present

Agenda

9:00-9:15	Introductions, welcome, and land acknowledgment
9:15-10:00	**Supporting Pediatric Feeding Teams in WA State by Mari**
10:00-10:30	**Parent Voice – Silas' Story by Blaire & Sam**
10:30-10:40	10-minute break
10:40-11:55	**A Community Approach to ARFID by Darren & Sarah**
11:55-12:00	Closing Remarks
12:10-1:00	Networking Lunch

Supporting Pediatric Feeding in Washington State

Mari Mazon, MS, RDN, CD

Title V Nutrition Contract

UW Center on Human Development & Disability

October 14, 2021

Communication Network Meeting

Roadmap

- What is Pediatric Feeding Disorder?
- What are Washington State Community Feeding Teams?
- Introducing updated Nutrition Network website

Pediatric Feeding Disorder

- Previously not well-defined

Pediatric Feeding Disorder

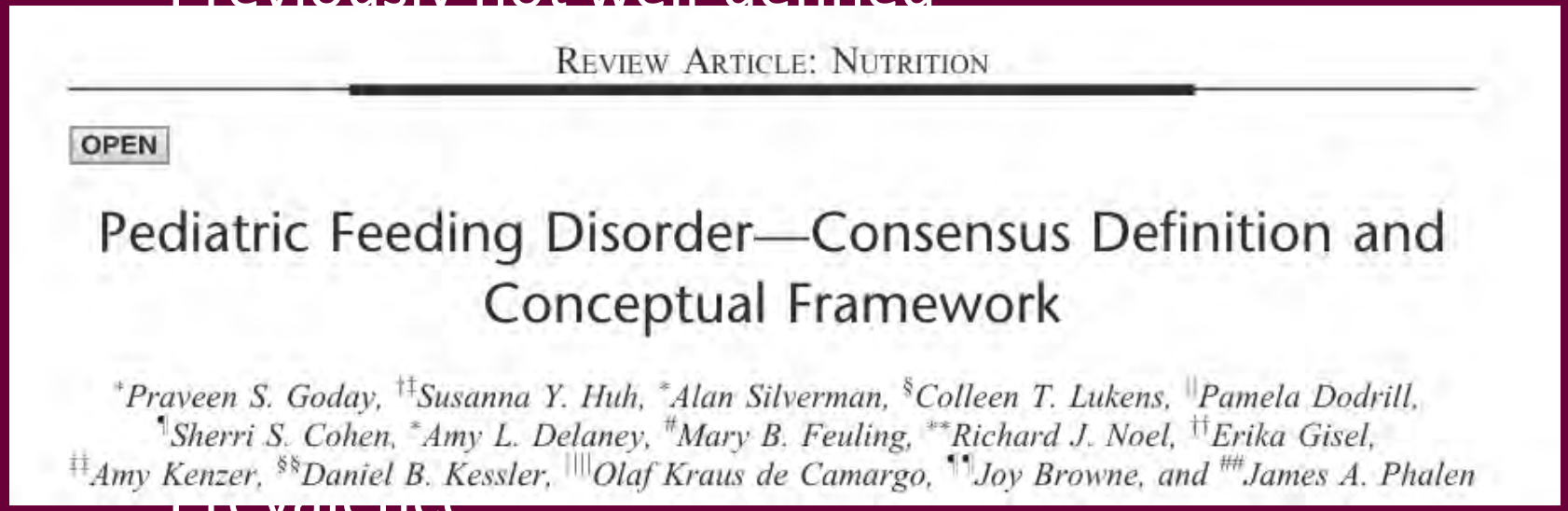
- Previously not well-defined
  - “Problem feeder”
  - “Extreme picky eating”
  - “Oral aversion”
  - “Sensory sensitivity”
  - “Feeding tube dependence”

Pediatric Feeding Disorder

- Previously not well-defined
  - “Problem feeder”
  - “Extreme picky eating”
  - “Oral aversion”
  - “Sensory sensitivity”
  - “Feeding tube dependence”
- Prevalence
  - 1 in 37 to 1 in 23 children under 5 years old in U.S. [Kovacic 2020]

Pediatric Feeding Disorder

- Previously not well-defined



REVIEW ARTICLE: NUTRITION

OPEN

Pediatric Feeding Disorder—Consensus Definition and Conceptual Framework

*Praveen S. Goday, †‡Susanna Y. Huh, *Alan Silverman, §Colleen T. Lukens, ||Pamela Dodrill, ¶Sherri S. Cohen, *Amy L. Delaney, #Mary B. Feuling, **Richard J. Noel, ††Erika Gisel, ‡‡Amy Kenzer, §§Daniel B. Kessler, ||||Olaf Kraus de Camargo, ¶¶Joy Browne, and ##James A. Phalen

- Prevalence
  - 1 in 37 to 1 in 23 children under 5 years old in U.S. [Kovacic 2020]

Pediatric Feeding Disorder

- Previously not well-defined

REVIEW ARTICLE: NUTRITION

OPEN

Pediatric Feeding Disorder—Consensus Definition and Conceptual Framework

*Praveen S. Goday, ††
¶Sherri S. Cohen, ‡‡Amy Kenzer, §§Daniel

- Prevalen
  - 1 in 3

AAP News

New ICD-10-CM codes for pediatric feeding disorder take effect Oct. 1

James A. Phalen, M.D., FAAP

September 01, 2021

Pediatric Feeding Disorder

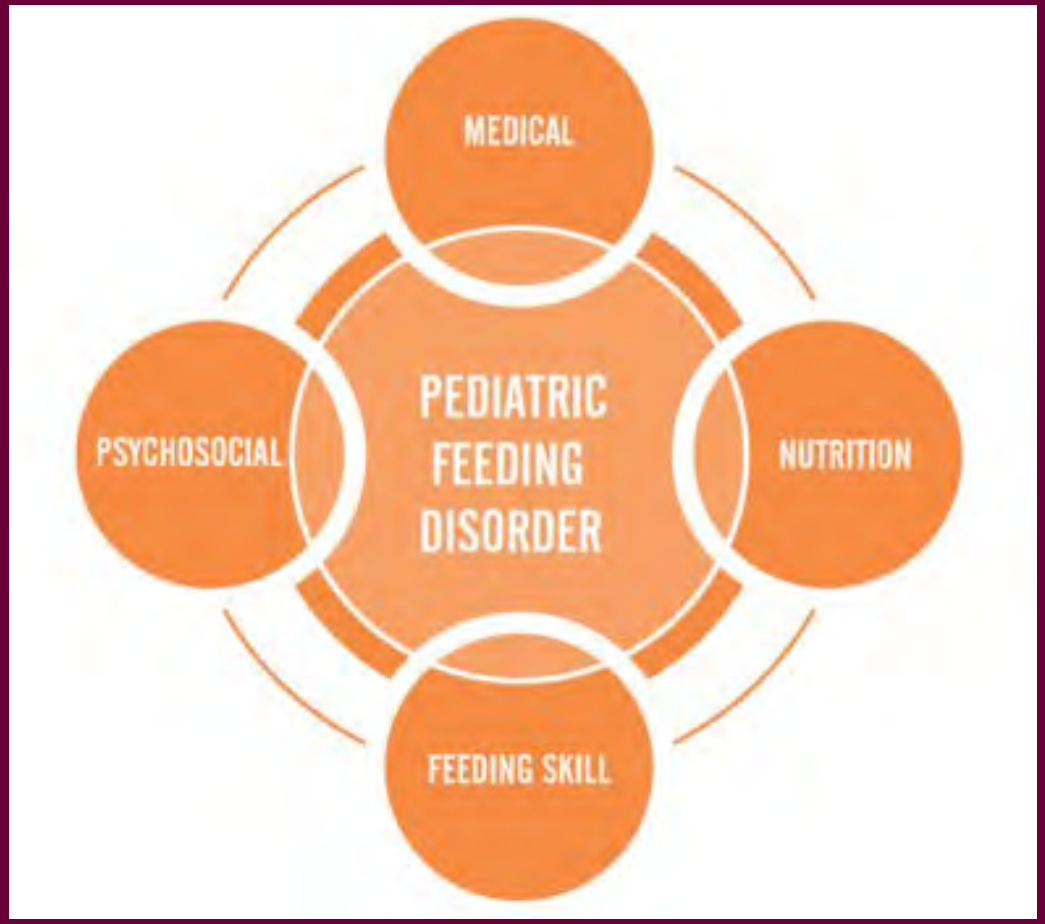
- Official ICD-10 code starting October 1, 2021
  - R63.31 Pediatric feeding disorder, acute (less than 3 months)
  - R63.32 Pediatric feeding disorder, chronic (3 months or more)

Pediatric Feeding Disorder

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

[Goday 2019]

Pediatric Feeding Disorder



www.feedingmatters.org

Pediatric Feeding Disorder

	Avoidant Restrictive Food Intake Disorder (ARFID)	Pediatric Feeding Disorder (PFD)	Eating Disorder (eg. Anorexia nervosa)
Age of onset	Generally younger	Generally younger	Generally older
Nutritional compromise	✓	✓	✓
Association with medical event		✓	
Dysphagia		✓	
Fear of gaining weight			✓
Disturbance of body image			✓

Adapted from 2020 IPFDC presentation *Update on a Screening Instrument for Feeding and Swallowing in the Pediatric Population* by Barkmeier-Kraemer et al.

Pediatric Feeding Disorder

- Diagnostic Criteria [Goday 2019]
  - A disturbance in oral intake of nutrients
  - Inappropriate for age
  - Lasting at least 2 weeks
  - Associated with 1 or more of the following

Pediatric Feeding Disorder

- Medical Dysfunction [Goday 2019]
  - Cardiorespiratory compromise during oral feeding
  - Aspiration or recurrent aspiration pneumonitis
- Primary care provider, developmental pediatrician, pediatric surgeon, allergist/immunologist, cardiologist, dentist, endocrinologist, gastroenterologist, geneticist, neurologist, nurse practitioner, otolaryngologist (ENT), pulmonologist, radiologist

Pediatric Feeding Disorder

- Nutritional Dysfunction [Goday 2019]
  - Malnutrition
  - Specific nutrient deficiency
  - Significantly restricted intake of 1 or more nutrients resulting from decreased dietary diversity
  - Reliance on enteral feeds or oral supplements to sustain nutrition and/or hydration
- Registered dietitian nutritionist (RDN)

Pediatric Feeding Disorder

- Feeding Skill Dysfunction [Goday 2019]
  - Need for texture modification of liquid or food
  - Use of modified feeding position or equipment
  - Use of modified feeding strategies
- Occupational therapist, speech language pathologist, physical therapist

Pediatric Feeding Disorder

- Psychosocial Dysfunction [Goday 2019]
  - Active or passive avoidance behaviors by child when feeding or being fed
  - Inappropriate caregiver management of child's feeding and/or nutrition needs
  - Disruption of social functioning within a feeding context
  - Disruption of caregiver-child relationship associated with feeding
- Psychologist, behavior analyst, counselor, social worker

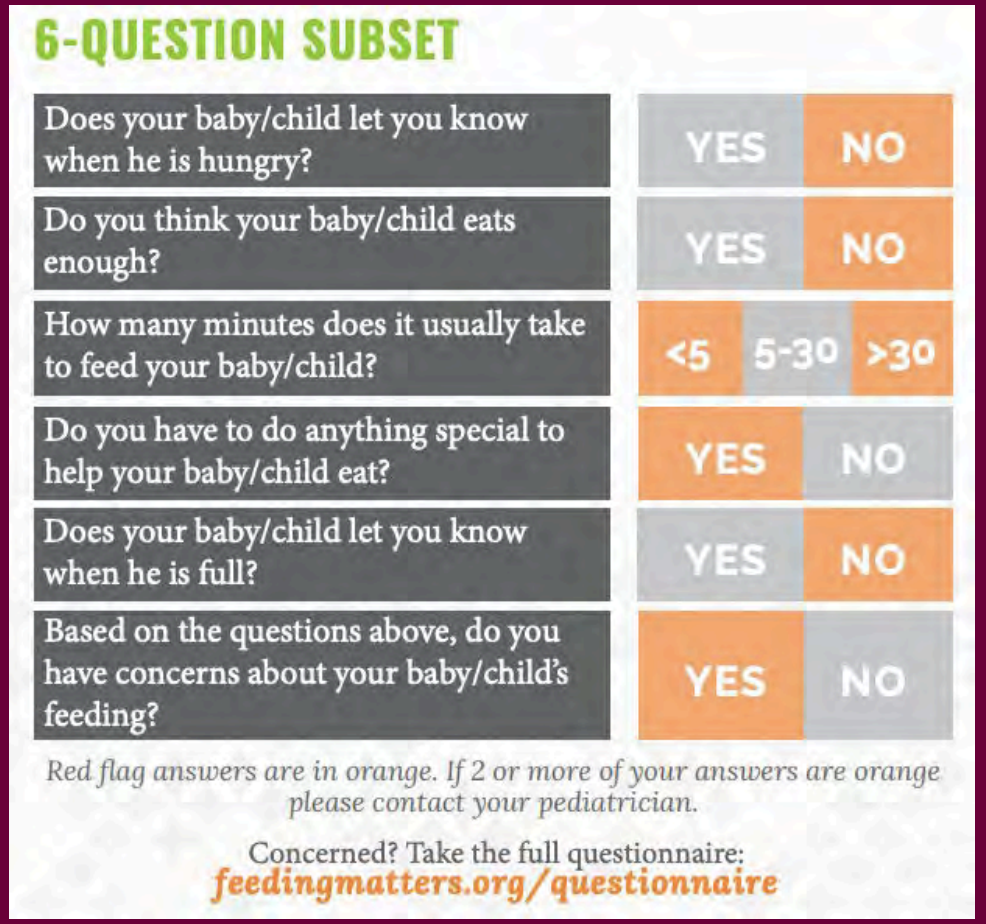
Pediatric Feeding Disorder

- Diagnostic Criteria cont'd [Goday 2019]
  - Absence of the cognitive processes consistent with eating disorders
  - Pattern of oral intake is not due to a lack of food or congruent with cultural norms

Pediatric Feeding Disorder

- Screening
  - Feeding Matters Infant and Child Feeding Questionnaire (ICFQ)©
  - Birth – 36 months
  - Adjusts for prematurity
  - Online
  - Available in Spanish

Pediatric Feeding Disorder



6-QUESTION SUBSET

Does your baby/child let you know when he is hungry?	YES	NO	
Do you think your baby/child eats enough?	YES	NO	
How many minutes does it usually take to feed your baby/child?	<5	5-30	>30
Do you have to do anything special to help your baby/child eat?	YES	NO	
Does your baby/child let you know when he is full?	YES	NO	
Based on the questions above, do you have concerns about your baby/child's feeding?	YES	NO	

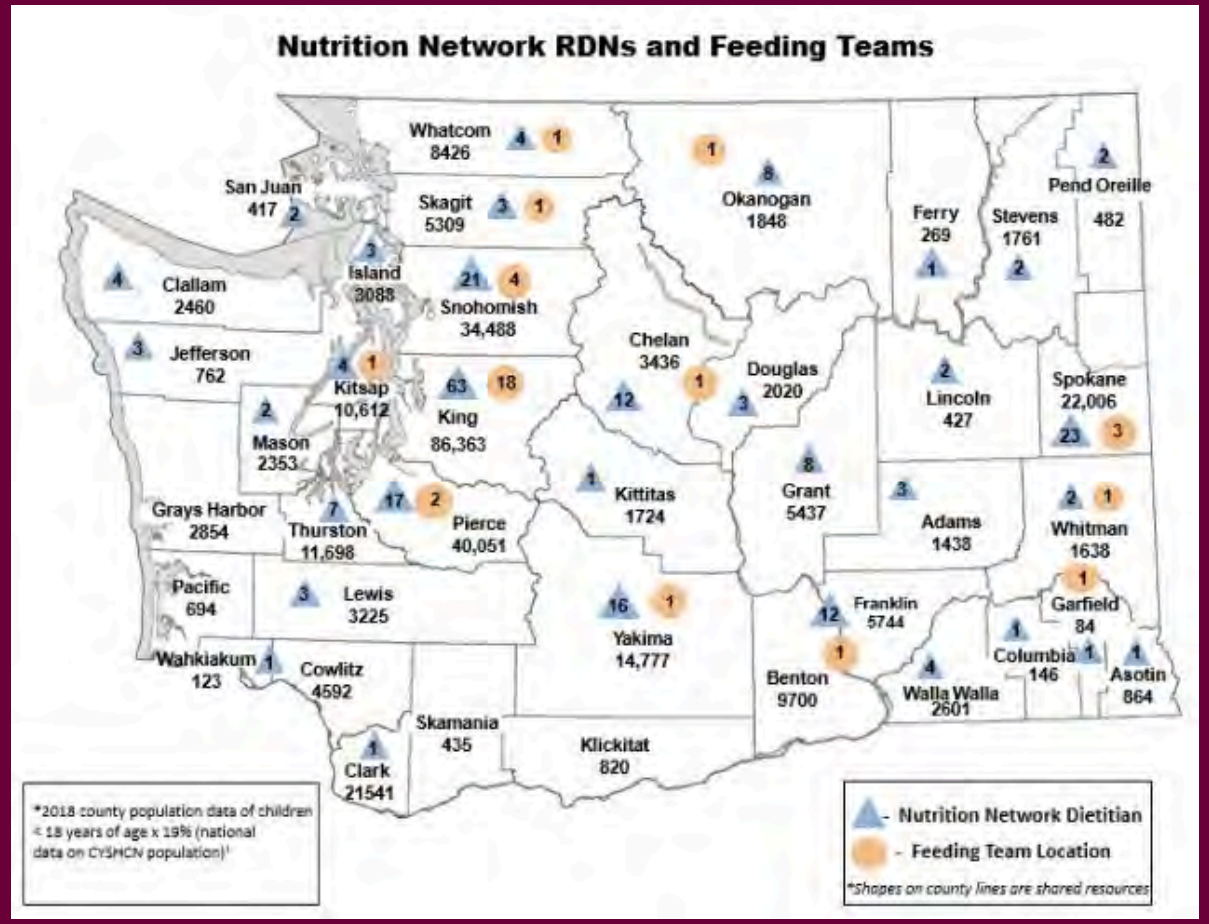
Red flag answers are in orange. If 2 or more of your answers are orange please contact your pediatrician.

Concerned? Take the full questionnaire:
feedingmatters.org/questionnaire

WA State Community Feeding Teams

- Interdisciplinary
  - Minimum of registered dietitian nutritionist (RDN) and a feeding therapist
  - Offered annual training by the Title V Nutrition contract
  - Various settings
    - Single agency (eg. Early intervention, hospital specialty clinic, private practice)
    - Interagency (eg. EI feeding therapist + WIC RDN, private practice feeding therapist + home infusion RDN)

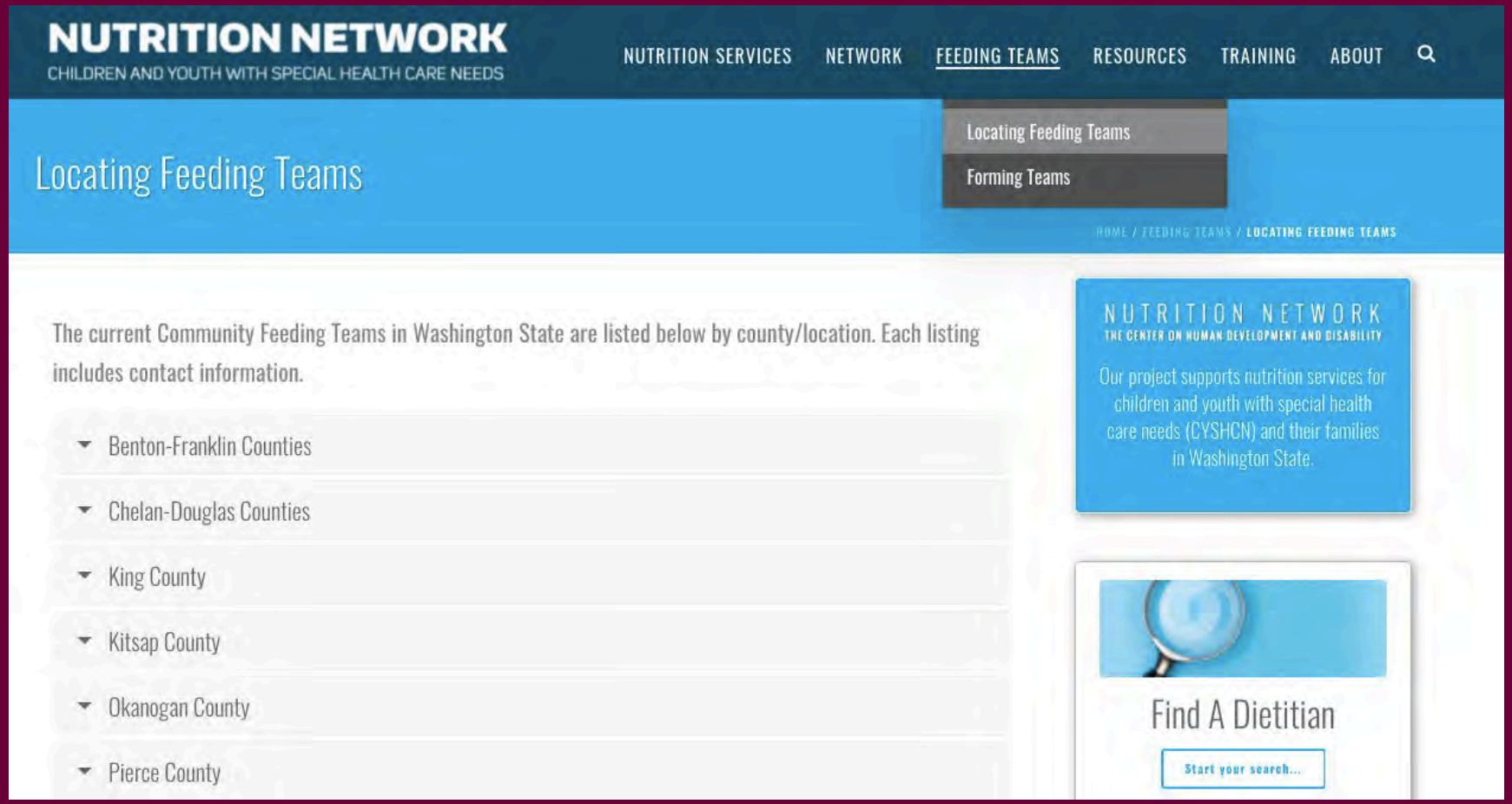
WA State Community Feeding Teams



[Washington State Department of Health Children & Youth with Special Health Care Needs Program 2021]

WA State Community Feeding Teams

https://NutritionNetworkWA.org



Resources

- Pediatric Feeding Disorder ICD-10 Toolkit (for providers)
  - https://www.feedingmatters.org/toolkit/?mc_cid=ec0307c1d7&mc_eid=16bf91478e
  - Pediatric Feeding Disorder fact sheet
  - Infant and Child Feeding Questionnaire 6 question screener
- Nutrition Network for Children & Youth with Special Health Care Needs
  - https://NutritionNetworkWA.org
  - Feeding Teams locator
  - Find a Nutrition Network dietitian

Reference

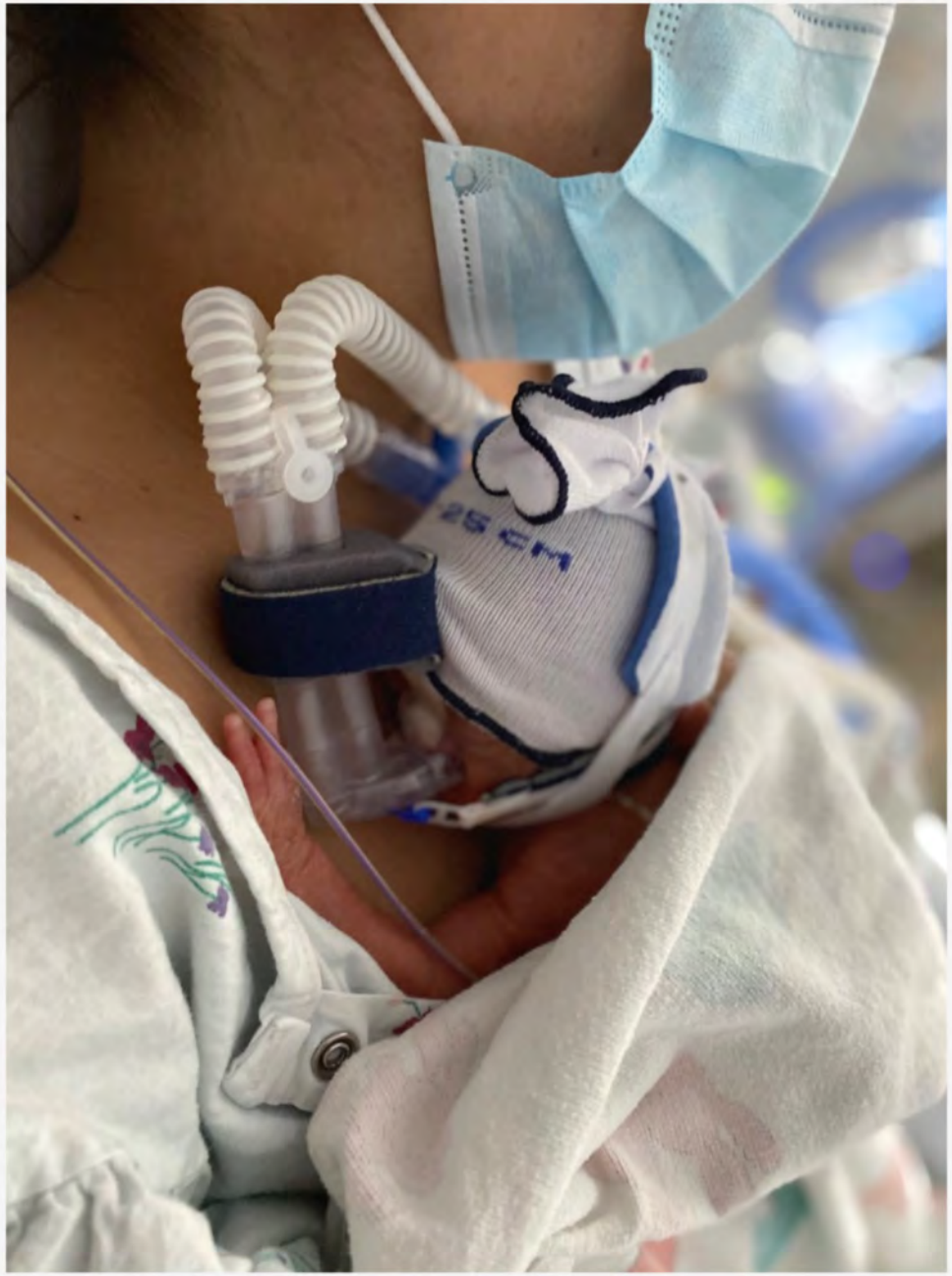
- Goday P, Huh SY, Silverman A, Lukens CT, Dodrill P, Cohen SS, Delaney AL, Feuling MB, Noel RJ, Gisel E, Kenzer A, Kessler DB, Kraus de Camargo O, Browne J, Phalen JA. Pediatric Feeding Disorder – Consensus Definition and Conceptual Framework. *JPGN*. Jan 2019.
- Kovacic K, Rein LE, Bhagavatula P, Kommareddy S, Szabo A, Goday PS. Pediatric Feeding Disorder: A Nationwide Prevalence Study. *J Pediatr.* Jul 2020.

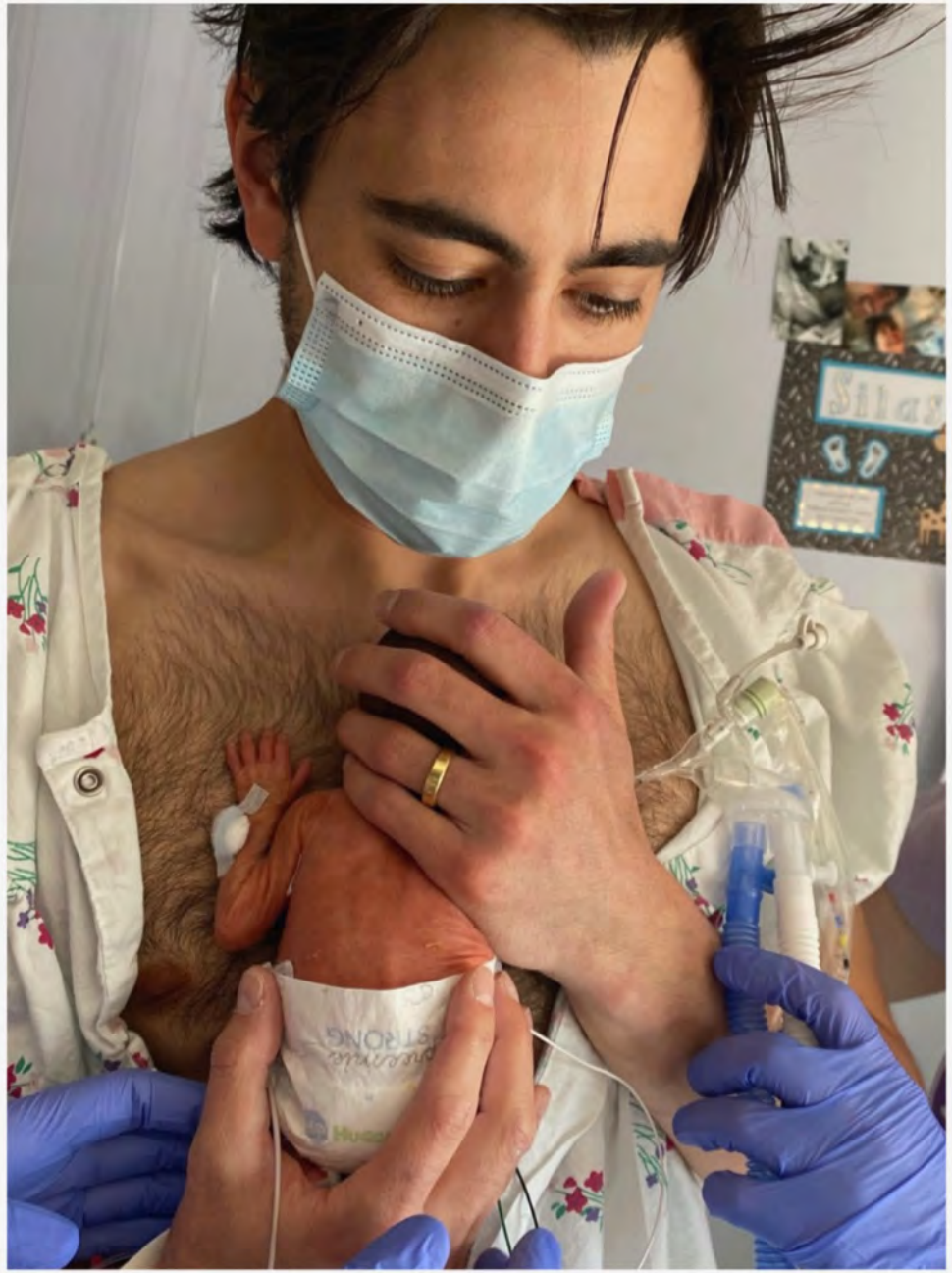
SILAS' STORY

October 14, 2021


Silas
ARNP
Giraffe
SensiCare


Giraffe


25 CM




THE NORTH FACE


BABYBJÖRN

Break time!

10 MINUTES

A Community Approach to Avoidant/Restrictive Food Intake Disorder

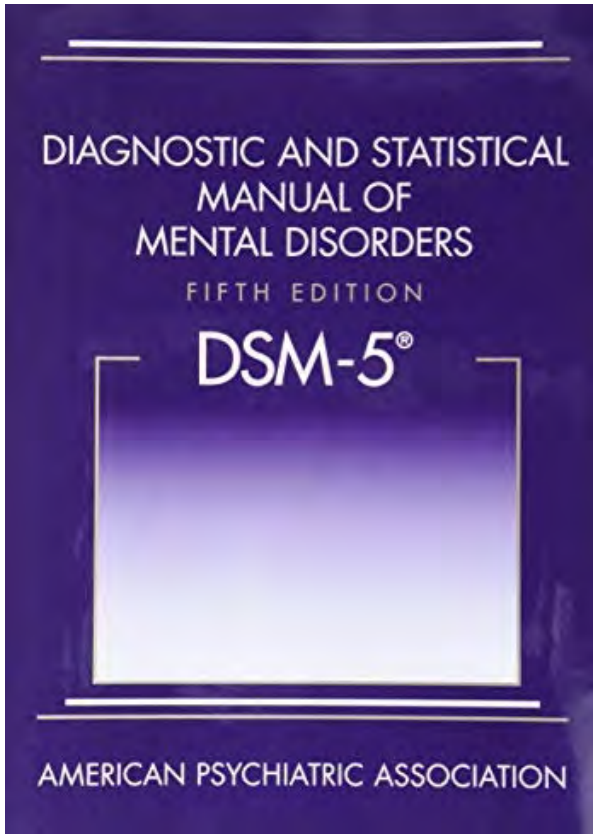
Darren Janzen, PsyD – Psychologist
Sarah Sahl, RDN, LD – Registered Dietitian

October 14, 2021

- Understand diagnostic criteria for ARFID
- Considerations for the community providers caring for kids with ARFID:
  - What are the red flags?
  - When to suggest a referral for therapy or medical work up?
  - What is my role?
  - What are appropriate measures and expectations for success?
- Review of case studies

Diagnostic and Statistical Manual of Mental Disorders

- The 5th edition was published by the American Psychiatric Association in 2013
- Gives common language and diagnostic criteria
- ARFID was defined and added for the first time.



Avoidant/Restrictive Food Intake Disorder

- Eating/feeding disturbance as manifested by persistent failure to meet appropriate nutritional needs associated with one (or more) of the following:
  - -Weight loss or unmet growth expectations
  - -Nutritional deficiency
  - -Dependence on nutritional supplements
  - -Marked interference with psychosocial functioning

- Exclusionary criteria: ARFID is *NOT*
  - -related to food scarcity or culturally sanctioned practices
  - -related to body image or weight concerns
  - -better explained by concurrent medical condition or another mental disorder

Pediatric Feeding Disorder (PFD)

A disturbance in oral intake of nutrients, inappropriate for age, >2 weeks + associated with 1 or more of the following:

1. Medical Dysfunction: Cardiorespiratory problems, aspiration, GI

2. Nutritional dysfunction: Malnutrition, nutrient deficiency, reliance on nutritional supplements

3. Feeding skill dysfunction: Required modification of texture, position, equipment, or feeding strategies

4. Psychosocial dysfunction: Active or passive avoidance by child, inappropriate caregiver management, disrupted caregiver-child relationship

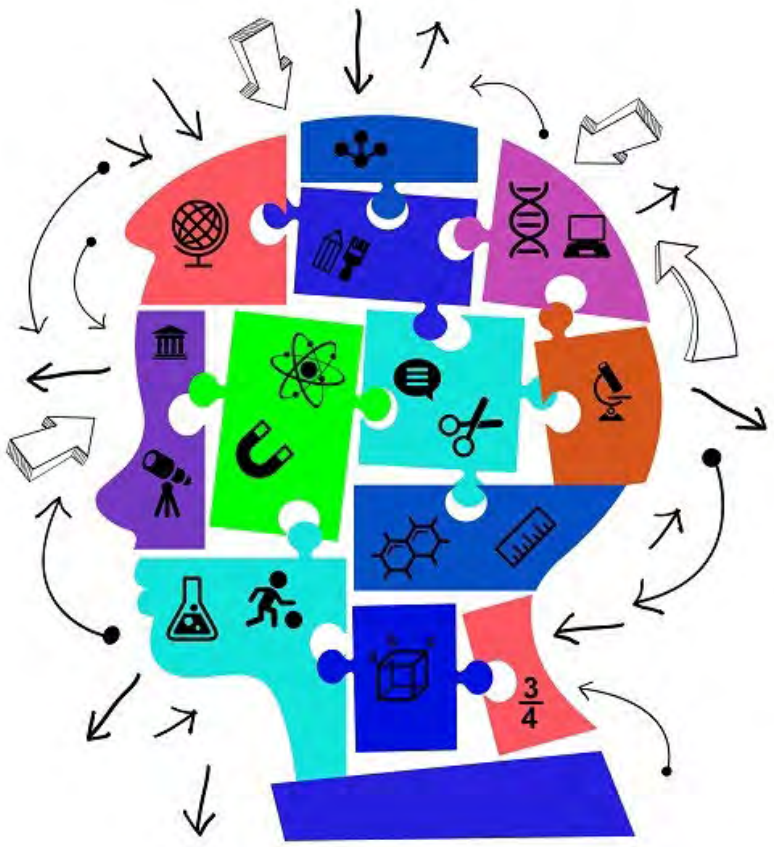
ARFID vs PFD

	ARFID	PFD
Disordered eating	Yes	Yes
Avoids/restricts food	**Yes**	Possible
Poor appetite	**Common**	Possible
Malnutrition	**Common**	Possible
Traumatic or chronic experience	Possible	Possible
Comorbid anxiety or other MH disorder	**Common**	Possible
Frame as a disability	No	**Yes**

Approach:

- The ARFID diagnosis is stems from the mental health arena.

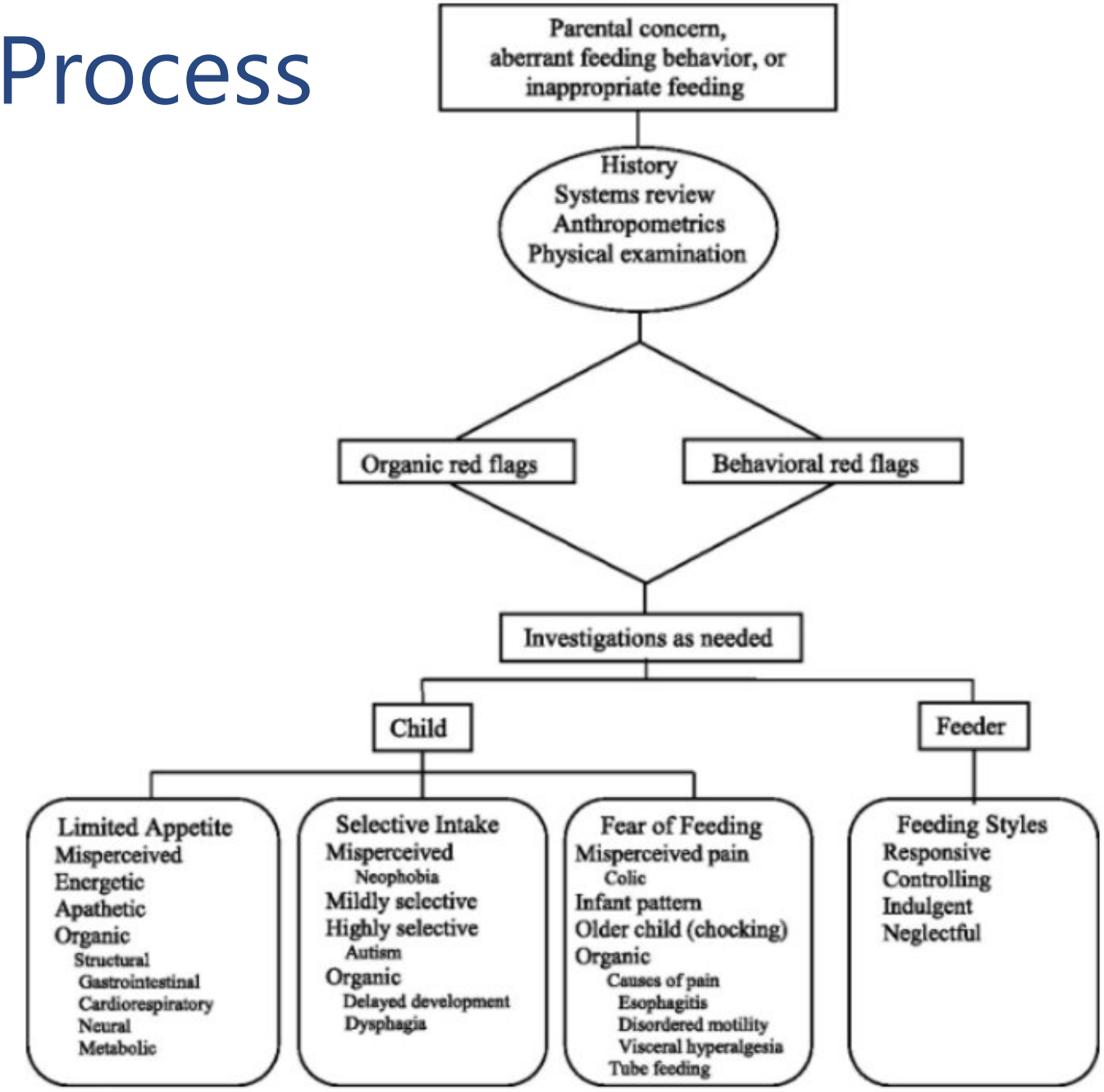
- Pediatric Feeding Disorder is rooted in medical and developmental realms.



How does this happen?

- Medical problems or dysfunctional feeding relationship promote conditioned food aversion.
  - Eating is associated with pain, nausea, fatigue, or worry.
- Once medical condition improves - aversion may not.
  - Infants and children will have persistent disruptive mealtime behaviors trying to avoid contact with food.

The Investigative Process



How does this happen?

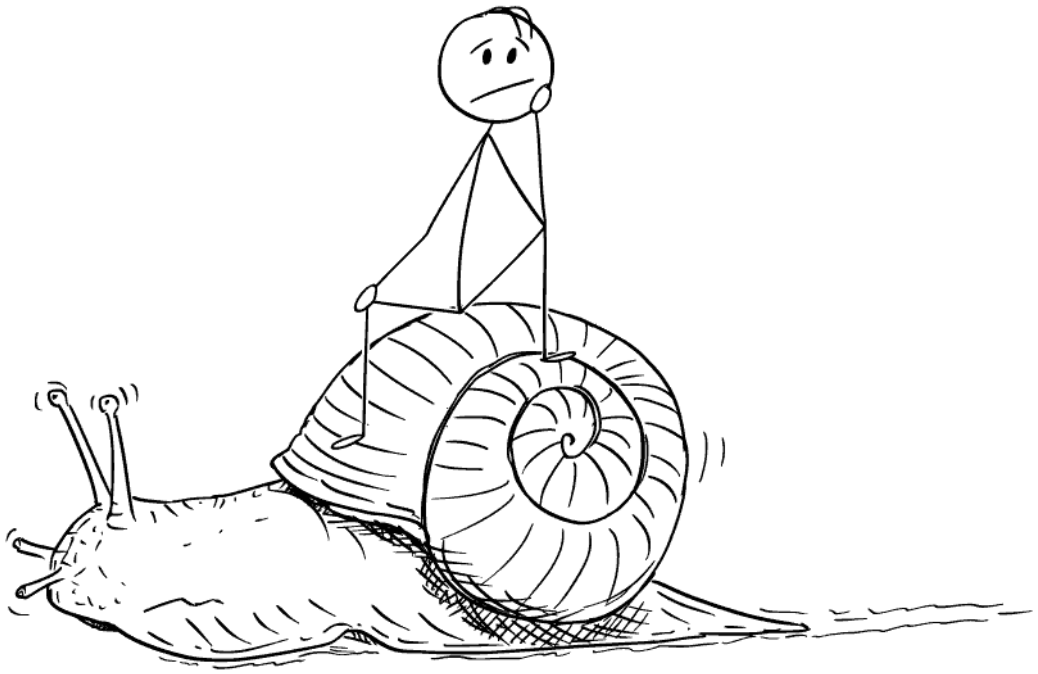
- Problem persist due to negative reinforcement
  - Parents remove feeding demands and end the meal early.
  - Behaviors are shaped and strengthened over time.
- Limited exposure → decreased sensory variability → developmental, physiological, social processes stunted → more stress when exposed
- Ultimately, the child needs major intervention or ongoing artificial support.

How does this happen?

Data from the *2018 Hospital for Sick Children Prospective Study* shows 46% of children experience a feeding disturbance for approximately ***2 years*** before having an evaluation.

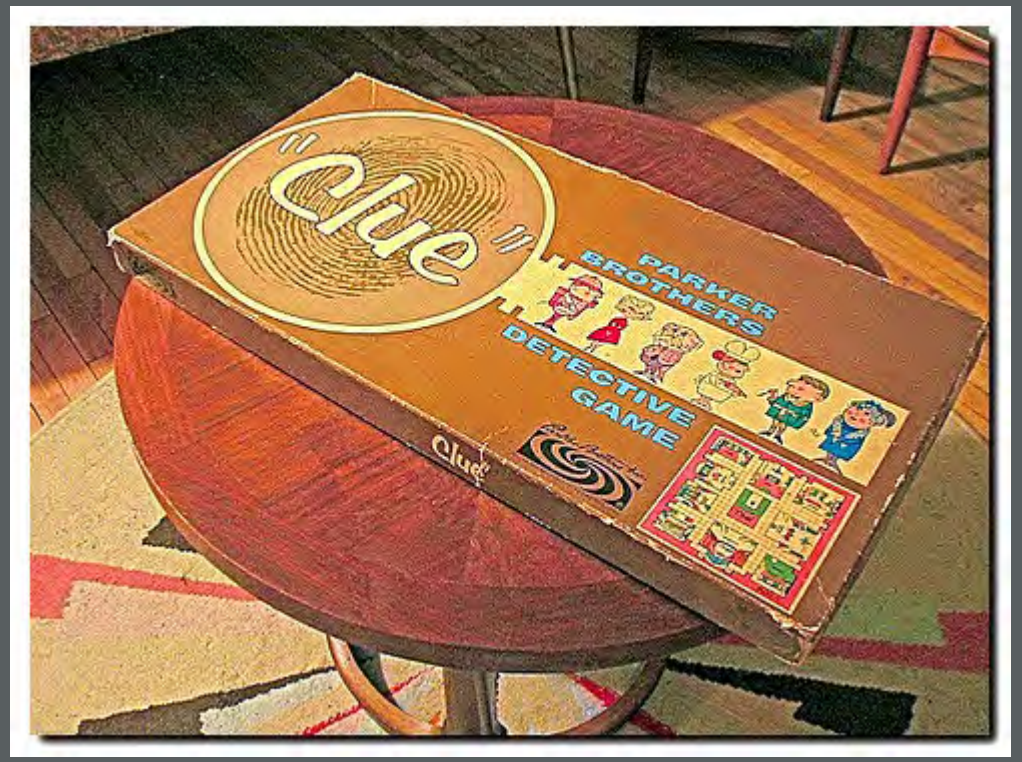
- There are 3-6 (or more) times to eat per day.
- This results in 2,190 - 4,380 stressful and/or difficult mealtimes while awaiting an evaluation.
- In trying to reduce the stress, they adapt and avoid – which can cause more long-term challenges in terms of feeding problems.

Why does it take 2 years?



- Pediatricians hear about feeding concerns frequently.
  - Over 50% of parents report feeding difficulties or challenges at least some of the time.
- Growth may be ok.
- Developmental screening tools are not sensitive to feeding difficulties.

Solving the Behavioral Mystery



…and Helping to Build Skills

OHSU

Who is vulnerable?

- Flavor preferences are partly genetic.
- “Supertasters” can be born with a high concentration of taste buds on the tongue and may be more prone to disliking bitter foods (e.g. vegetables).
- There may have been an evolutionary advantage to food preferences. *Foods like fruits, vegetables, and meats were more likely to be poisonous to our ancestors.*

Plus…

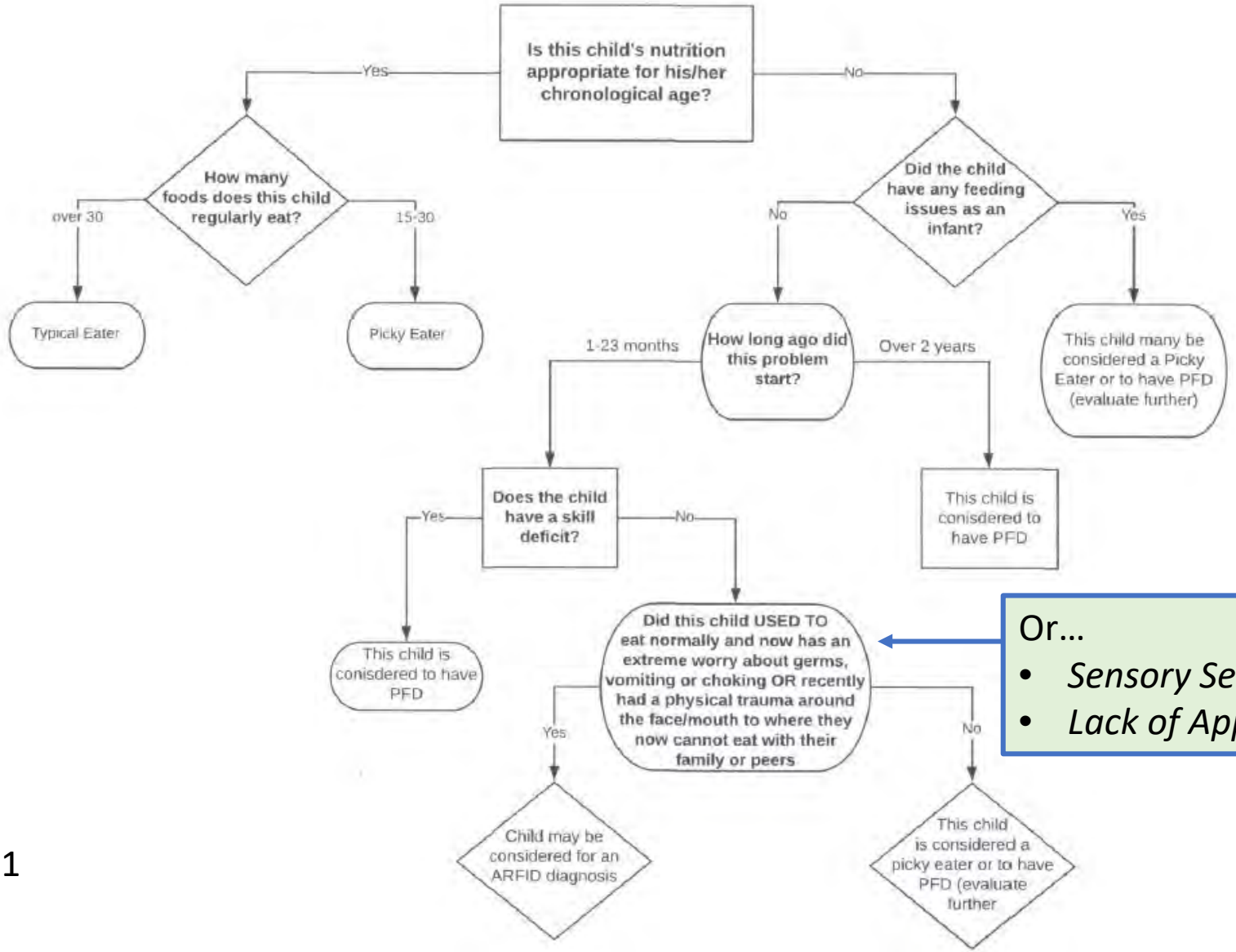
- Eating the same foods all the time makes new foods taste more unusual.
- Certain nutrition deficiencies can change the way foods tastes.
- Opportunities to learn about new foods is limited, if it’s hard to eat around others.

Thomas, J.J. and Eddy, K.T. (2019). *Cognitive-Behavioral Therapy for Avoidant/Restrictive Food Intake Disorder: Children, Adolescents, & Adults.* Cambridge: Cambridge University Press.

A Differential Diagnosis Decision Tree

Picky Eating, PFD, or ARFID?

"When the eating disturbance occurs in the context of another (medical or mental) condition or disorder, the severity of the eating disturbance exceeds that routinely associated with the condition or disorder"



Important Questions That Give Us Behavioral Clues

1) *How would you describe what happens during mealtimes?*
2) *What do you do when your child won't eat?*
3) *How anxious (or stressed) are you about your child's eating?*

These Q's can help to determine the parent's "feeding style":
Controlling - ***Responsive*** - Indulgent - Neglectful

OHSU

The Barriers that Keep Patients Stuck

Avoidant/Restrictive eating patterns are maintained by:

- Sensory Sensitivity (e.g. tastes, textures, smells, looks, sounds)
- Fear of aversive consequences (e.g. choking, vomiting, disgust)
- Lack of appetite or low interest in eating

Findings for Patients with ARFID

- A retrospective chart review of patients with ARFID (N=59) found a co-occurence of symptoms in over 50% of the sample. Patients with *sensory sensitivities* was the most common in the sample and frequently co-occurred with both *lack of hunger* and/or *fear of negative consequences*.

- Co-morbid conditions are often present… In reviewing these same Eating Disorders Day Treatment patients (N=59), it was found that:
  - 38.9% had *Autism Spectrum Disorder*
  - 10.17% had *Attention-Deficit/Hyperactivity Disorder*

(Reilly et. al., 2019)

OHSU

Goals of Psychological Therapy for ARFID

1) Sensory Sensitivity:

- Systematic desensitization following the “Steps to Eating”

2) Fear of Aversive Consequences:

- Psychoeducation about how avoidance maintains anxiety and exposure decreases anxiety over time.

- Development of fear hierarchy with graduated exposure to situations in which choking, vomiting, or other fears occur.

3) Lack of Interest in Food/Eating or Limited Appetite:

- Interoceptive exposure to feelings of fullness or nausea (*testing to see if negative predictions are really as bad as they seem – “We can do hard things!”*).

OHSU

Nutrition and ARFID

ARFID and Malnutrition

Nutritional Assessment in ARFID:

1. Description of mealtimes
2. Growth
3. Vitamin and mineral intake
4. Possible medical complications
5. Description of mealtimes

ARFID and Malnutrition:

Known:

-Diet quality is poor

-Preference for refined carbohydrates, sugars, highly processed foods

-Low or no consumption of meats, veggies, fruits

-Major changes in dietary intake are very hard to achieve

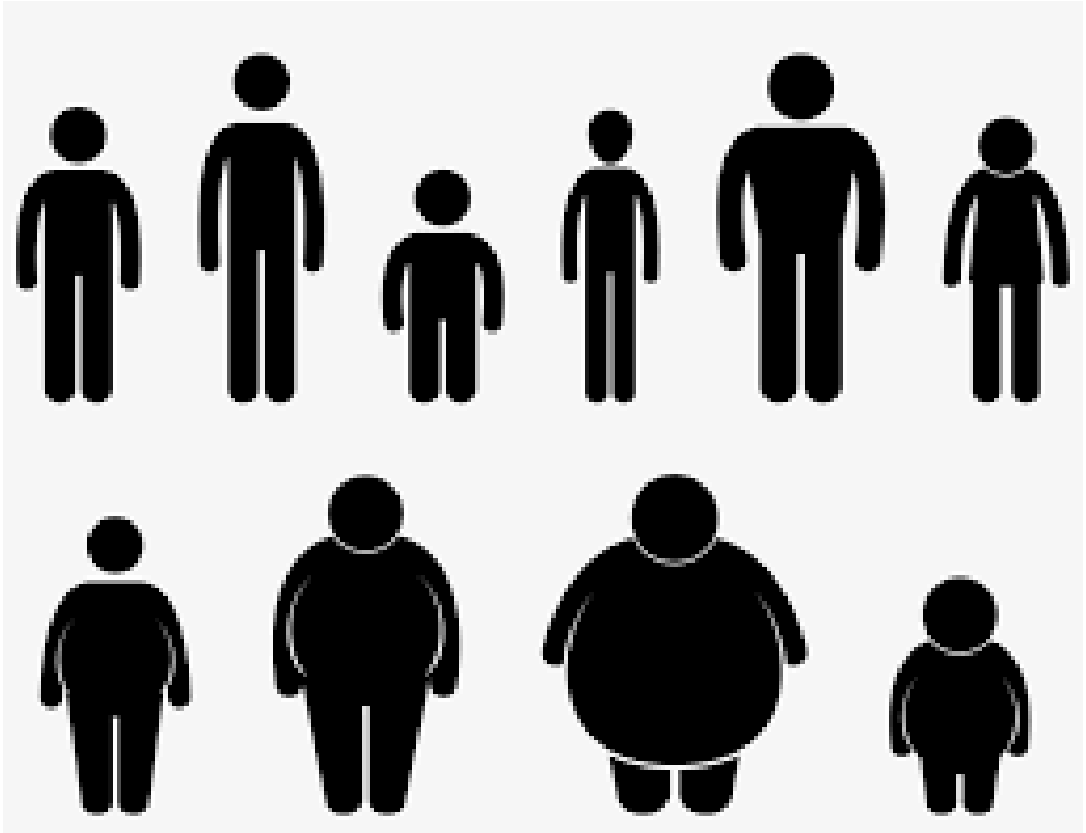
Unknown:

- Which tools help us assess nutritional status in ARFID?
- How prevalent are complications related to poor nutrition in ARFID?
- Which nutrients should we be most worried about?
- Are their acceptable ways to fill these nutrient gaps?

OHSU

ARFID and Malnutrition

Growth for people with ARFID looks like this:



ARFID and Malnutrition

- Variety restriction
  - Results in healthy weight or overweight status

- Volume and variety restriction
  - Low weight

- Post traumatic food restriction
  - Tends to result in rapid weight loss

A healthy BMI does not indicate whether or not feeding or behavioral supports will benefit a family.

ARFID and Malnutrition:

How does dietary intake in individuals with ARFID compare to same aged peers?

ARFID and Malnutrition:

Comparing Diets of Individuals with ARFID vs Controls

Population and Design:

- US, healthy weight individuals with ARFID, 52 4-day diet recalls compared to those of healthy controls

Findings:

Significant differences in intakes of :

- Vitamin K
- B12

Harshman, S. G., et al (2019). "A Diet High in Processed Foods, Total Carbohydrates and Added Sugars, and Low in Vegetables and Protein is Characteristic of Youth with Avoidant/Restrictive Food Intake Disorder." Nutrients **11**(9).

Population and Design:

- Germany, low to normal weight individuals with ARFID seeking treatment. 20 3-day diet recalls and food preference lists compared to healthy controls

Findings:

Significant differences in intakes of:

- Calories
- B vitamins (Riboflavin, Thiamin)
- Vitamin C
- Vitamin K
- Zinc
- Iron
- Potassium

Schmidt, R., et al (2021). "Macro- and Micronutrient Intake in Children with Avoidant/Restrictive Food Intake Disorder." Nutrients **13**(2).

OHSU

ARFID and Malnutrition:

Considerations:

- Comparative studies. How great were were the diets of the controls?

ARFID and Malnutrition:

Healthy Eating Index Score

- Data-driven assessment quantifying diet quality.
- Used to see how well the what we eat aligns with Dietary Guidelines.
- A score of 100 suggests *all* foods reported align with the Dietary Guidelines recommendations. A score of 0 indicates that none do.

Data source for Healthy Eating Index scores: What We Eat in America, National Health and Nutrition Examination Survey (undated data are from 2013-2014).

OHSU

	Mean Intake [a]			% (*n*) Not Meeting Dietary Reference Intakes [b]		
	Full or Subthreshold ARFID	Healthy Controls		Full or Subthreshold ARFID	Healthy Controls	
	n = 52	*n* = 52	*p*-Value	*n* = 52	*n* = 52	*p*-Value
Vitamin A (mcg) [c]	699 ± 32.5	807 ± 32.3	0.16	70 (37)	63 (33)	0.09
Vitamin C (mg)	348 ± 88.3	90.4 ± 4.8	0.45	62 (32)	49 (25)	0.08
Vitamin D (mcg) [d]	5.4 ± 0.2	6.2 ± 0.3	0.11	93 (48)	92 (48)	0.38
Vitamin E (mg)	10.0 ± 0.4	9.8 ± 0.4	0.65	86 (45)	84 (44)	0.95
Vitamin K (mcg)	55.8 ± 1.9	162 ± 12.3	0.01 *	78 (40)	55 (28)	<0.001 *
Vitamin B6 (mg) [e]	1.6 ± 0.04	1.9 ± 0.04	0.09	38 (20)	27 (14)	0.07
Folate (mcg) [f]	560 ± 17.2	569 ± 14.5	0.44	41 (21)	32 (17)	0.14
Vitamin B12 (cobalamin, mcg)	3.9 ± 0.1	4.7 ± 0.2	0.01 *	36 (19)	32 (17)	0.12
Calcium (mg)	1096 ± 29.1	1037 ± 26.7	0.78	63 (33)	72 (37)	0.75
Iron (mg)	14.5 ± 0.3	15.7 ± 0.4	0.14	45 (24)	46 (24)	0.38
Magnesium (mg)	248 ± 4.8	299 ± 6.6	0.05	90 (47)	76 (39)	0.002 *
Zinc (mg)	9.4 ± 0.2	11.0 ± 0.3	0.03	65 (34)	52 (27)	0.01 *

OHSU

ARFID and Malnutrition:

Comparing Diets of Individuals with ARFID vs Controls

Table 2. Achieved percentage of recommended vitamin and mineral intake in avoidant/restrictive food intake disorder (ARFID) and controls.

	Controls		ARFID	
	M ± *SD*	Range	*M* ± *SD*	Range
% of vitamin intake [1]				
B1	60.9 ± 52.4	14.6–238.5	19.4 ± 21.8	0–67.8
B2	41.5 ± 23.8	13.0–96.9	18.7 ± 18.6	0–67.8
B6	61.2 ± 48.0	11.1–199.7	24.3 ± 21.4	0–79.2
B12	42.7 ± 31.9	3.8–123.0	29.1 ± 62.8	0–269.2
C	143.6 ± 138.1	21.1–491.4	42.7 ± 36.1	0–133.4
D	5.3 ± 8.6	0.5–38.6	8.0 ± 17.1	0–67.1
E	33.6 ± 23.0	8.7–94.5	25.0 ± 28.8	0–101.2
K	64.5 ± 45.0	13.5–152.6	23.8 ± 18.6	0–65.1
Folate	39.7 ± 21.7	13.0–95.9	18.7 ± 27.0	0–118.7
% of mineral intake [1]				
Zinc	52.5 ± 28.7	11.4–122.6	21.1 ± 30.9	1.2–134.9
Calcium	47.4 ± 32.2	13.1–116.6	51.0 ± 60.3	3.0–210.5
Iron	30.6 ± 16.5	8.9–79.8	17.4 ± 22.8	0.2–102.2
Magnesium	71.5 ± 38.8	22.1–154.9	68.8 ± 70.1	11.8–251.2
Potassium	42.3 ± 24.3	13.1–116.6	20.3 ± 15.7	0.5–56.0

[1] Reference values are based on German age- and sex-specific recommendations for energy and nutrient intake.

Schmidt, R., A. Hiemisch, W. Kiess, K. von Klitzing, F. Schlensog-Schuster and A. Hilbert (2021). "Macro- and Micronutrient Intake in Children with Avoidant/Restrictive Food Intake Disorder." Nutrients **13**(2).

OHSU

ARFID and Malnutrition

What is the prevalence of severe medical complications related to self restricted eating?

ARFID and Malnutrition:

- Systematic review of Case Reports and Case Series from 1957-2019

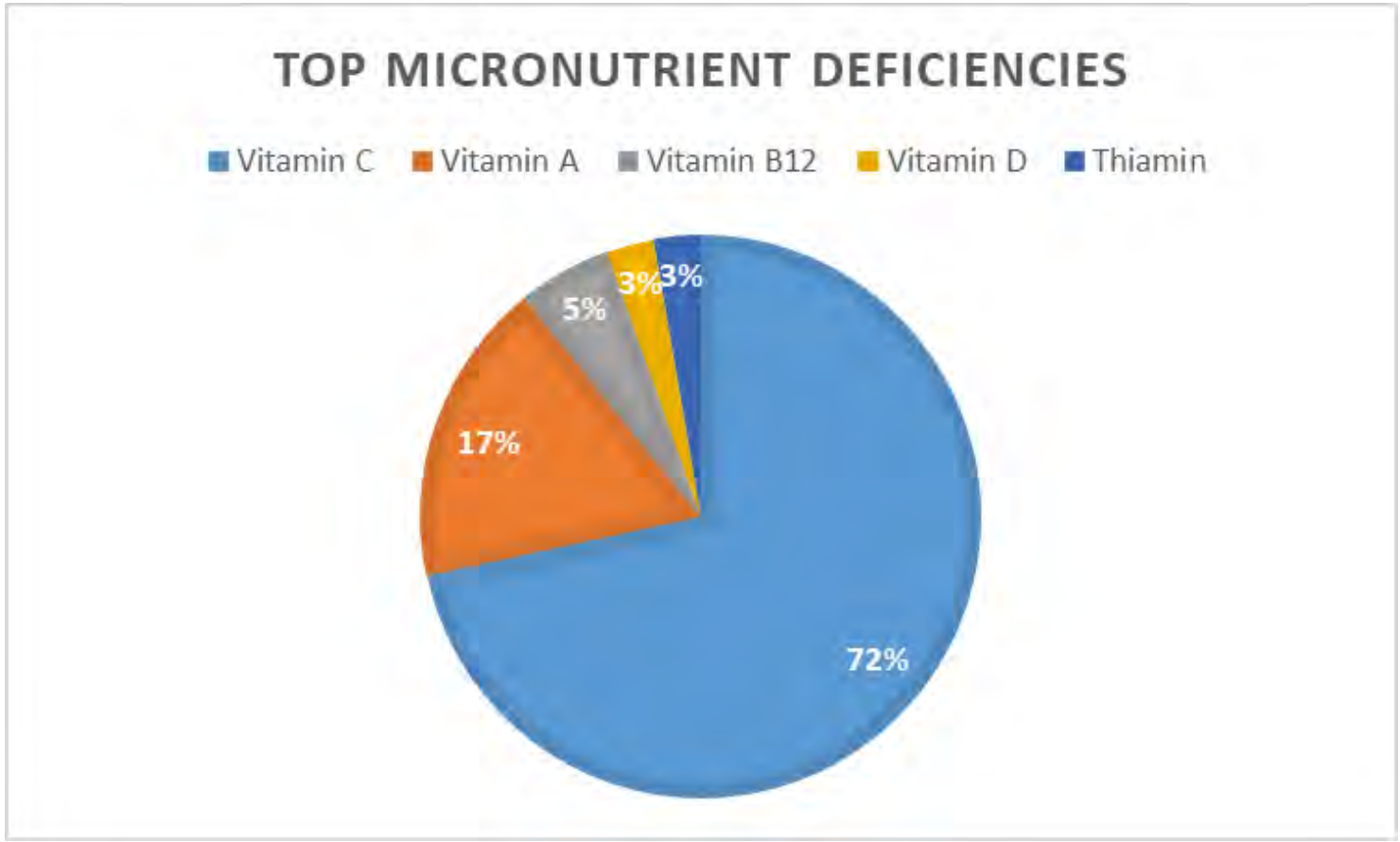
- 76 case studies from developed countries over 65 years.

  The majority were from 2009-2019

Yule, S., J. Wanik, et al (2021). "Nutritional Deficiency Disease Secondary to ARFID Symptoms Associated with Autism and the Broad Autism Phenotype: A Qualitative Systematic Review of Case Reports and Case Series." J Acad Nutr Diet **121**(3): 467-492.

OHSU

ARFID and Malnutrition



Yule, S., J. Wanik, et al (2021). "Nutritional Deficiency Disease Secondary to ARFID Symptoms Associated with Autism and the Broad Autism Phenotype: A Qualitative Systematic Review of Case Reports and Case Series." J Acad Nutr Diet **121**(3): 467-492.

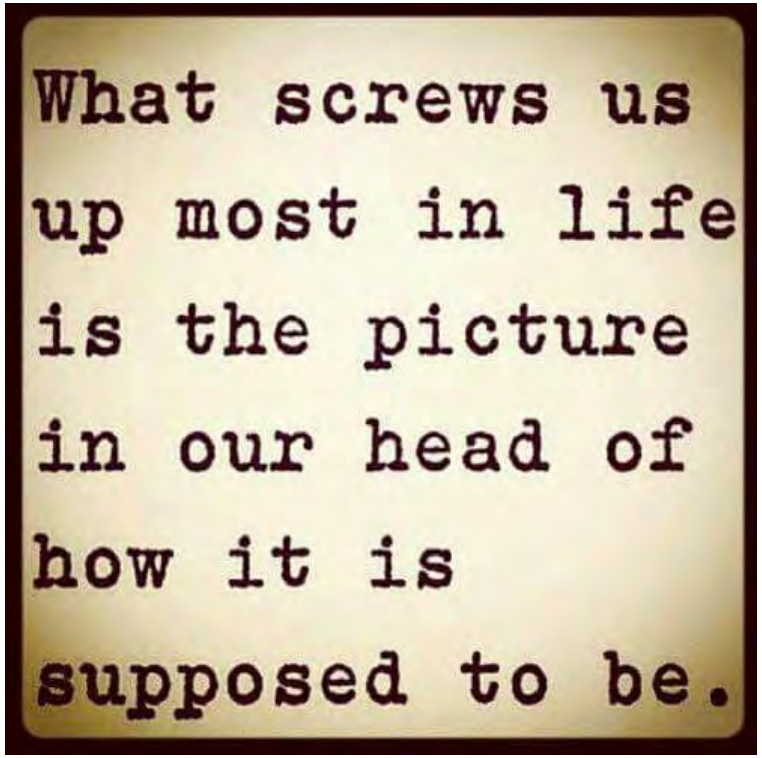
OHSU

ARFID and Malnutrition:

Considerations:

- Extreme cases involving hospitalization
- Remember common nutritional deficiencies:
  - Vitamin D
  - Iron
  - Calcium
  - Zinc

Interventions Nutrition and ARFID



Interventions Nutrition and ARFID

Interventions Nutrition and ARFID

Following *intensive* treatment findings include:

- Improved parent satisfaction and confidence
- Improved behaviors and interactions at mealtimes
- Very little change in dietary intake
  - Often no change or very insignificant change
  - Occasional reports of an increase of 20 foods

Zeleny, J. R., et al (2020). "Food preferences before and during treatment for a pediatric feeding disorder." J Appl Behav Anal **53**(2): 875-888.

Interventions Nutrition and ARFID

Medical:

- Consider lab work
- Consider functional or medical root causes for feeding challenge

Diet:

- Provide reassurance when possible
- Vitamin and mineral supplements, fortified foods
- Consider oral nutritional supplements if weight *and* micronutrient intake are poor

Goals:

- Refer to therapy
- Provide reassurance
  - Nutritional intake will not improve until medical contributors to ARFID, stress, and anxiety are addressed

What can you do?

ICFQ

- Free
- 36 months and under
- If over 36 months it will send families to another questionnaire
- Available online FeedingMatters.org

THE INFANT AND CHILD FEEDING QUESTIONNAIRE SCREENING TOOL

Feeding Matters' innovative Infant and Child Feeding Questionnaire® (ICFQ©) was authored in partnership with internationally renowned thought leaders representing multiple disciplines related to feeding. The ICFQ© is an age specific tool designed to identify potential feeding concerns and facilitate discussion with all members of the child's healthcare team.

According to a seminal study published in the 2020 Journal of Pediatrics*, the ICFQ© has been shown to accurately identify and differentiate pediatric feeding disorder (PFD) from picky eating in children 0-4 years of age based on caregiver responses to 6 specific questions. This 6-question quick screener continues to undergo research as Feeding Matters strives to promote the early identification of PFD.

6-QUESTION SUBSET

Does your baby/child let you know when he is hungry?	YES	NO	
Do you think your baby/child eats enough?	YES	NO	
How many minutes does it usually take to feed your baby/child?	<5	5-30	>30
Do you have to do anything special to help your baby/child eat?	YES	NO	
Does your baby/child let you know when he is full?	YES	NO	
Based on the questions above, do you have concerns about your baby/child's feeding?	YES	NO	

Red flag answers are in orange. If 2 or more of your answers are orange please contact your pediatrician.

Concerned? Take the full questionnaire:
feedingmatters.org/questionnaire

WHO IS FEEDING MATTERS

Feeding Matters, a 501c3 nonprofit, is the first organization in the world uniting families, healthcare professionals, and the broader community to improve the system of care for children with PFD through advocacy, education, support, and research. Use of this screener tool brings us one step closer to a world where children with PFD will thrive.

EARLY IDENTIFICATION

Expediting the identification of PFD may prevent the development of conditions that negatively impact a child's cognitive, physical, emotional and social development. Feeding is an intricate and complex skill that develops within a feeding relationship. Earlier detection and treatment of PFD also may reduce adverse effects on caregiver~ child relationships. By completing the ICFQ© screening, children can be directed to appropriate specialists for more formal assessments and management. The first step in reducing the risk of increased symptom severity is identification.

CONTRIBUTING AUTHORS

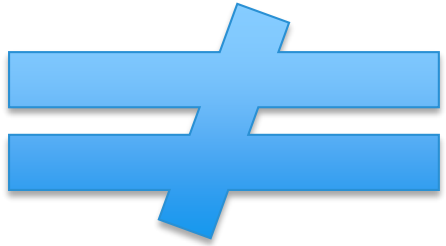
Joan C. Arvedson, PhD, CCC-SLP, BC-NCD, BRS-S ASHA Fellow Joy V. Browne PhD, PCNS-BC, IMH-E Amy L. Delaney PhD, CCC-SLP Mary Beth Feuling MS, RD, CSP, CD Elizabeth Fischer PhD Erika Gisel PhD, OTR, erg. Marsha Dunn-Klein OTR/L, Med, FAOTA Suzanne Evans Morris PhD Erin Sundseth Ross PhD, CCC-SLP Colin Rudolph MD, PhD Kay A. Toomey PhD, Alan H. Silverman*, PhD, Kristoffer S. Berlin, PhD, Chris Linn BS, Jaclyn Pederson, MS, Benjamin Schiedermayer, MS, Julie Barkmeier-Kraemer, PHD.

*Silverman AH, Kristoffer BS, Linn C, et al. Psychometric Properties of the Infant and Child Feeding Questionnaire. Journal of Pediatrics. 2020 August;223:81-86.e2. DOI: 10.1016/j.jpeds.2020.04.040.

OHSU

Consider:

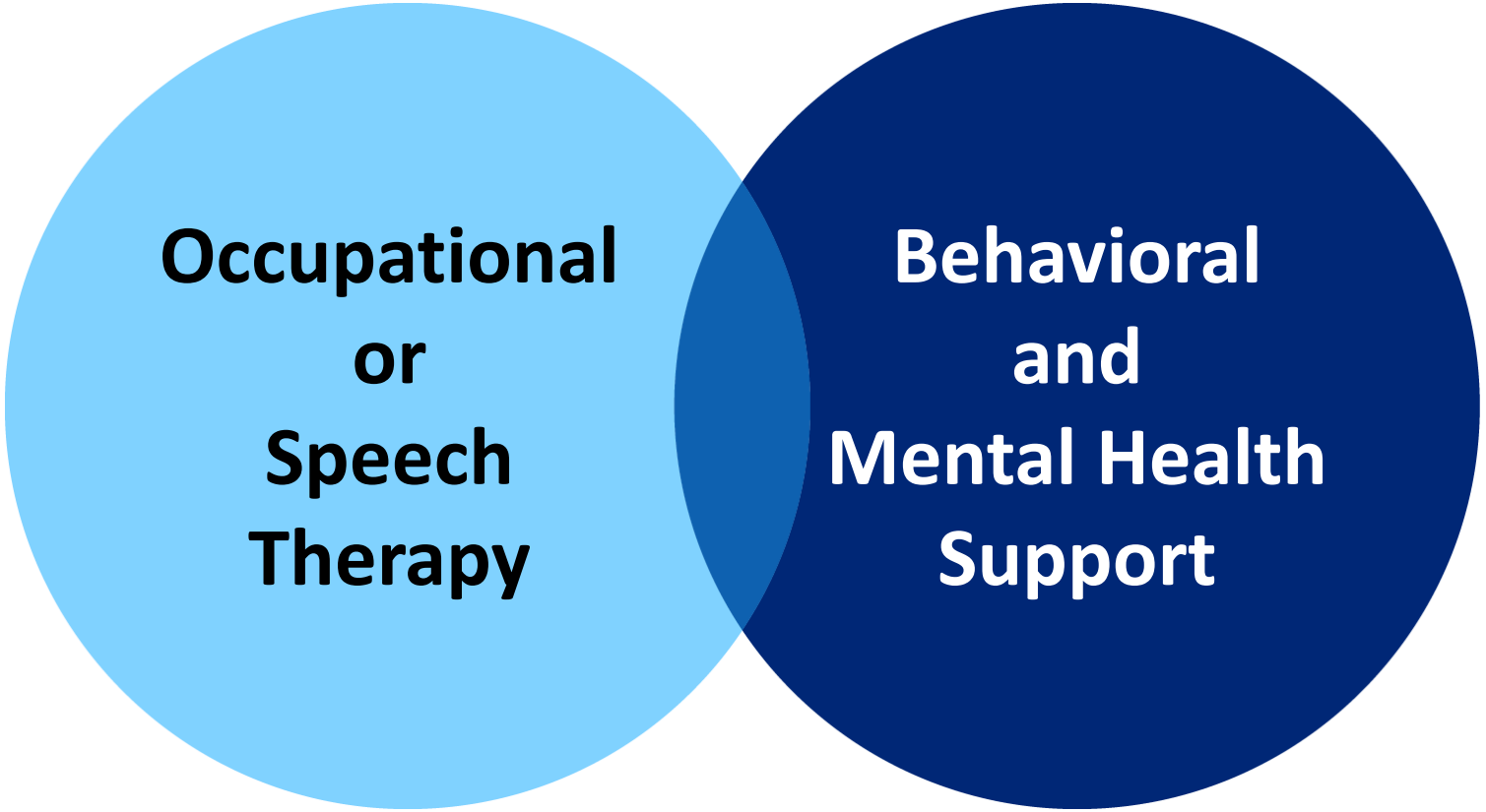
adequate weight gain and growth



functional eating patterns and mealtime participation

OHSU

Refer to Community Therapy



Management

- Priority is safe eating, proper nutrition, manageable behaviors
- No standard treatment for ARFID.

  - Medical: labs, disease screening, management. Possible appetite stimulation
  - RD: Provide reassurance. Supplements to avoid micronutrient deficiencies. Calorie deficits.
  - OT/SLP: Assess structures and skill. Then address behavior, interactions, sensory properties.
  - Psychology: recognize and treat co-morbid mental health conditions, like anxiety or depression. Support behavior modification and improved parent/child interaction.

OHSU

Management

- We should connect families with proper therapy.
- Support and reinforce recommendations of mental health specialists and feeding therapists.

"You can't go back and change the beginning, but you can start where you are and change the ending." –C. S. Lewis

Thoughts Into Action…

Best practices towards seeing improvements in our patients

OHSU

Case Study: 7-year-old Cisgender Male

History:

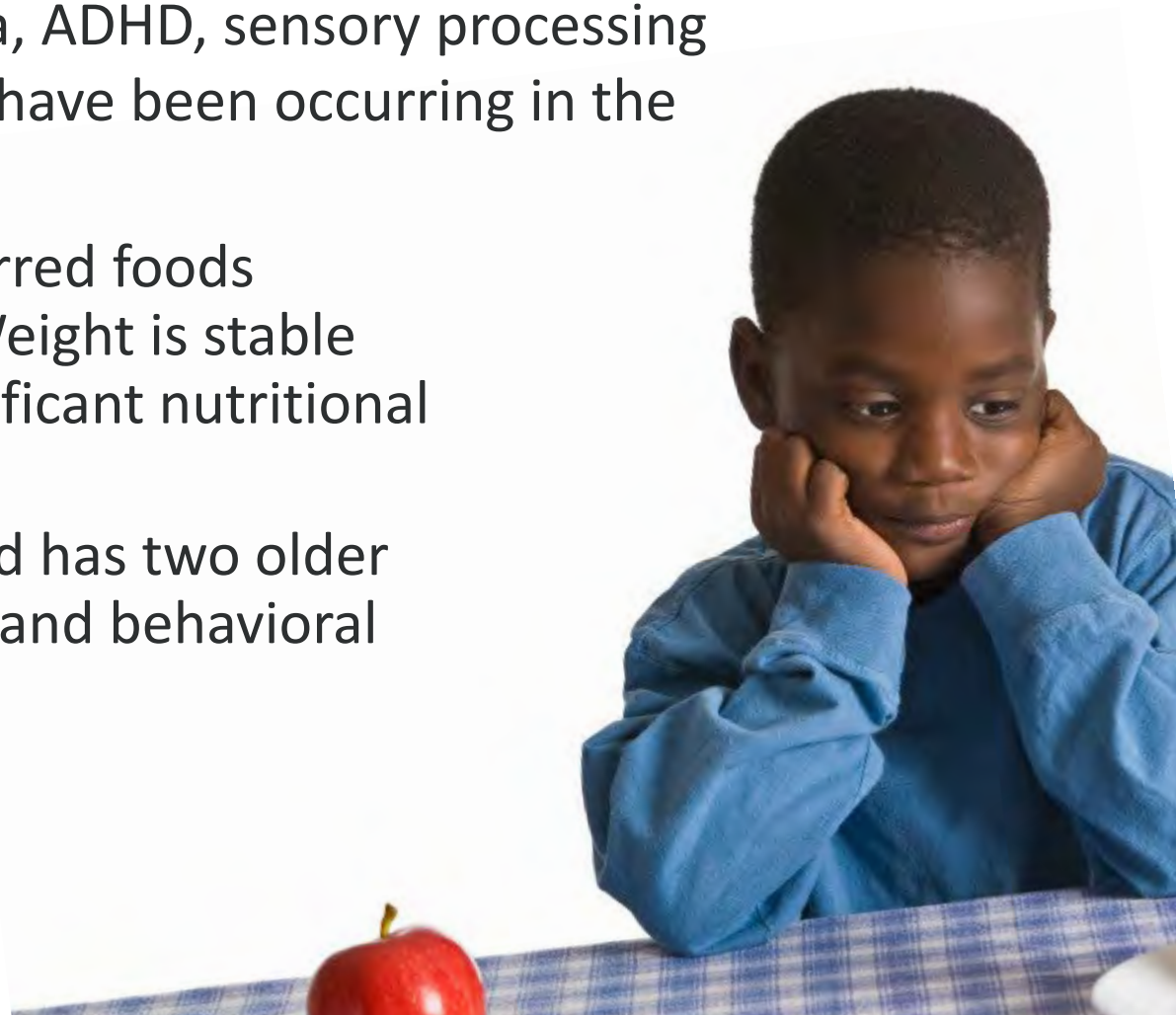
-He has been diagnosed with asthma, eczema, ADHD, sensory processing issues. More recently, anxiety and dysphagia have been occurring in the last 6 months.

-He has always been a picky eater, with preferred foods becoming more limited over the past year. Weight is stable (lower in BMI at 5.24%), but he relies on significant nutritional supplementation.

-Patient is from a single-parent household and has two older siblings with significant neurodevelopmental and behavioral differences.

Clinical Findings:

-Normal EGD and MBSS



Approaches to Help: 7-year-old Cisgender Male

Medical-

- Evaluate for co-existing or underlying medical etiology of feeding difficulty and refer to appropriate specialty services.
- Support and reinforce recommendations of mental health providers and feeding therapists.

Behavioral-

- Increase meal/snack structure (3 meals and 2-3 snacks with the same time, place, and routine), Follow the "Rule of 3", and Model pleasant/healthy eating behaviors.
- Establish a meaningful Positive Reinforcement system (consider the "Matching Law" in order to help their reason "*why to*" be higher than their "*why not*"). Also, help parents understand the importance of ignoring negative behaviors.
- Help the child to get involved with the selection and creation of family meals, even if they don't taste the final product. Becoming a "*food scientist*" can facilitate systematic and low-stress exposures. Exposure is the key!

OHSU

Approaches to Help: 7-year-old Cisgender Male

Nutrition-

- The growth chart isn't a very effective tool in identifying PFD or chronic ARFID.
- Micronutrient deficiencies can happen, but serious consequences are fairly rare.
- Well-balanced vitamin and mineral supplements, along with fortified foods such as breakfast cereal and milk are great at combatting serious nutrient deficiencies.
- Food variety and nutrient intake will not improve until medical conditions and stress contributing to ARFID are managed.

Feeding Therapy-

- Evaluation of oral motor and oral sensory processing skills.
- Evaluation of mealtime participation.
- Treatment - Family coaching to reduce stress for mealtime participation.
- Treatment - Sensory and play-based exploration of food to reduce worry and increase practice.

OHSU

References

- Cooney et al. Clinical and psychological features of children and adolescents diagnosed with avoidant/restrictive food intake disorder in a pediatric tertiary care eating disorder program: a descriptive study. Journal of Eating Disorders 2018
- Dubois, L., Farmer, A., Girard, M., Peterson, K., & Tatone-Tokuda, F. (2007). Problem eating behaviors related to social factors and body weight in preschool children: A longitudinal study. *International Journal of Behavioral Nutrition and Physical Activity*, *4*(1), 9. https://doi.org/10.1186/1479-5868-4-9
- Feillet, F., et al(2019). "Nutritional risks of ARFID (avoidant restrictive food intake disorders) and related behavior." Arch Pediatr **26**(7): 437-441.
- Goday PS, Huh SY, Silverman A, Lukens CT, Dodrill P, Cohen SS, Delaney AL, Feuling MB, Noel RJ, Gisel E, Kenzer A, Kessler DB, de Camargo OK, Browne J, Phalen JA. Pediatric feeding disorder: consensus definition and conceptual framework. JPGN 2019;68(1):124-129.
- Harshman, S. G., et al(2019). "A Diet High in Processed Foods, Total Carbohydrates and Added Sugars, and Low in Vegetables and Protein Is Characteristic of Youth with Avoidant/Restrictive Food Intake Disorder." Nutrients **11**(9).

OHSU

References

- Hay, P., Mitchison, D., Collado, A. E., González-Chica, D. A., Stocks, N., & Touyz, S. (2017). Burden and health-related quality of life of eating disorders, including Avoidant/Restrictive Food Intake Disorder (ARFID), in the Australian population. *Journal of Eating Disorders*, *5*(1). https://doi.org/10.1186/s40337-017-0149-z
- Kerzner, B. et al. A Practical Approach to Classifying and Managing Feeding Difficulties. Pediatrics 2015
- Magel, C. A., Hewitt, K., Dimitropoulos, G., von Ranson, K. M., & McMorris, C. A. (2020). Who is treating ARFID, and how? The need for training for community clinicians. *Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity*, *26*(4), 1279–1280. https://doi.org/10.1007/s40519-020-01007-1
- Motion, S., Northstone, K., Emond, A., & Team, the A. L. S. P. A. C. (2001). Persistent early feeding difficulties and subsequent growth and developmental outcomes. *Ambulatory Child Health*, *7*(3-4), 231–237. https://doi.org/10.1046/j.1467-0658.2001.00139.x

OHSU

References

- Norris, M., Spettigue, W., & Katzman, D. (2016). Update on eating disorders: current perspectives on avoidant/restrictive food intake disorder in children and youth. *Neuropsychiatric Disease and Treatment*, 213. https://doi.org/10.2147/ndt.s82538
- Schmidt, R., A. Hiemisch, W. Kiess, K. von Klitzing, F. Schlensog-Schuster and A. Hilbert (2021). "Macro- and Micronutrient Intake in Children with Avoidant/Restrictive Food Intake Disorder." Nutrients **13**(2).
- Sharp, W. G., V. Postorino, C. E. McCracken, R. C. Berry, K. K. Criado, T. L. Burrell and L. Scahill (2018). "Dietary Intake, Nutrient Status, and Growth Parameters in Children with Autism Spectrum Disorder and Severe Food Selectivity: An Electronic Medical Record Review." J Acad Nutr Diet **118**(10): 1943-1950.
- Sharp, W. G., Volkert, V. M., Scahill, L., McCracken, C. E., & McElhanon, B. (2017). A Systematic Review and Meta-Analysis of Intensive Multidisciplinary Intervention for Pediatric Feeding Disorders: How Standard Is the Standard of Care? *The Journal of Pediatrics*, *181*. https://doi.org/10.1016/j.jpeds.2016.10.002

OHSU

References

- Silverman AH, Kristoffer BS, Linn C, et al. Psychometric Properties of the Infant and Child Feeding Questionnaire. Journal of Pediatrics. 2020 August;223:81-86.e2. DOI: 10.1016/j.jpeds.2020.04.040
- Yule, S., et al(2021). "Nutritional Deficiency Disease Secondary to ARFID Symptoms Associated with Autism and the Broad Autism Phenotype: A Qualitative Systematic Review of Case Reports and Case Series." J Acad Nutr Diet **121**(3): 467-492.
- Zeleny, J. R., V. M. Volkert, V. F. Ibañez, J. G. Crowley, C. A. Kirkwood and C. C. Piazza (2020). "Food preferences before and during treatment for a pediatric feeding disorder." J Appl Behav Anal **53**(2): 875-888.
- Zimmerman J and Fisher M. Avoidant Restrictive Food Intake Disorder. Curr Probl Pediatr Adolesc Health Care 2017
- Zucker, Nancy PhD, LaVia, Maria MD, et al. Feeling and body investigators (FBI): ARFID division—An acceptance-based interoceptive exposure treatment for children with ARFID. International Journal of Eating Disorders. 2019 April; 52 (4):466-472

OHSU

Thank You

Final Reminders

- Please fill out our meeting evaluation on Survey Monkey
  - https://www.surveymonkey.com/r/DMCFKHH

- CYSHCN Communication Network 2021 Meeting Schedule
  - January 13th 9am-12pm, 12-1 networking lunch hour

- Please remain on zoom if you would like to network during lunch hour from 12-1:00

- Thank you for your participation today!

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email civil.rights@doh.wa.gov.