

Addressing Picky and Disordered Eating in Young Children within Primary Care

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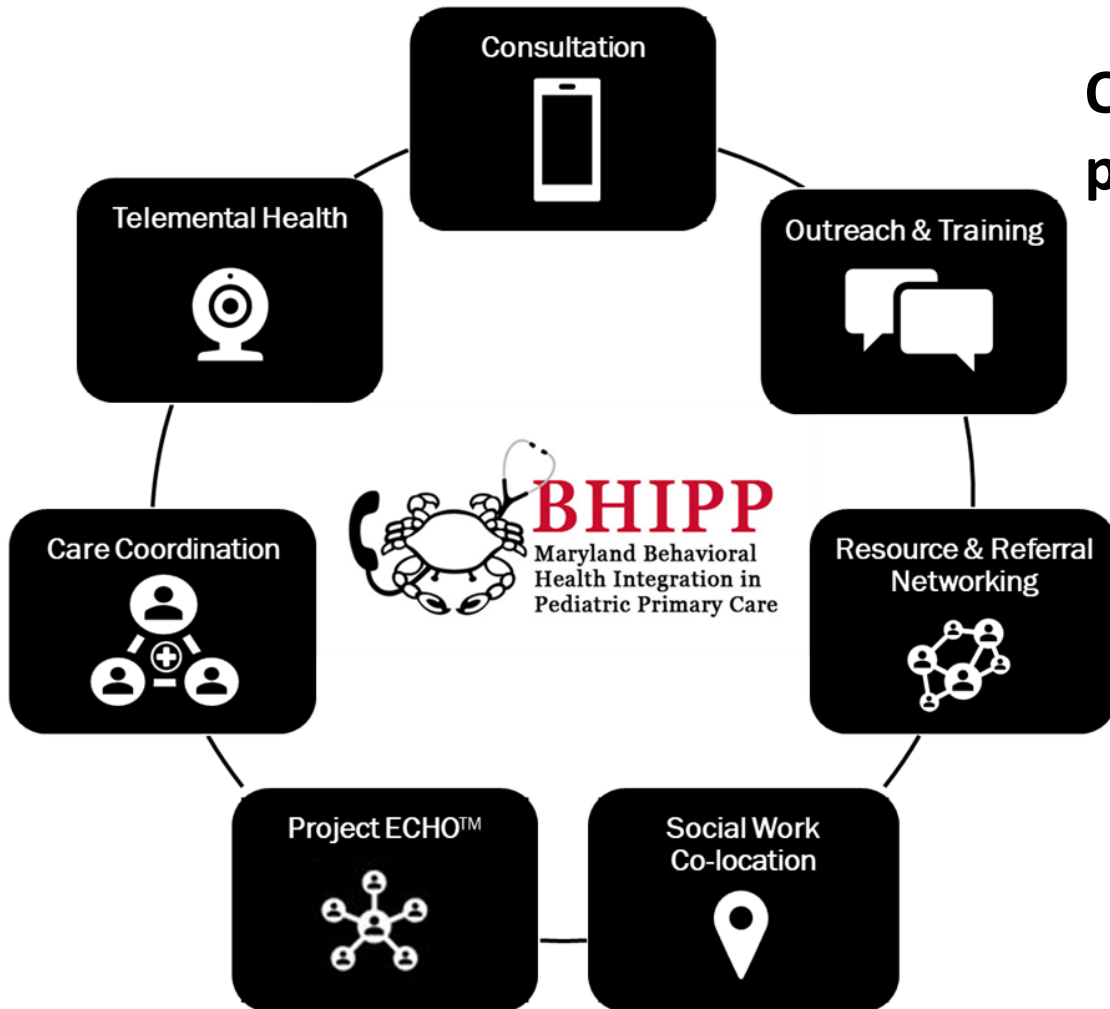


Maryland BHIPP Resilience Break Presentation

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Meet The Presenter



Shauna P. Reinblatt, MD is a Clinical Assistant Professor at the University of Maryland School of Medicine (UMDSOM), Department of Psychiatry, Division of Child and Adolescent Psychiatry. She is Board Certified in General Adult, Child & Adolescent, and Consultation Liaison Psychiatry. Prior to her becoming a psychiatrist, Dr. Reinblatt worked as a family doctor in Canada.

Dr. Reinblatt was a member of the full-time faculty at the Johns Hopkins University School of Medicine in the Department of Psychiatry for over a decade. During this time, she developed specialized clinical expertise working with children, adolescents, and adults with eating disorders in addition to her clinical child psychiatric work with youth.

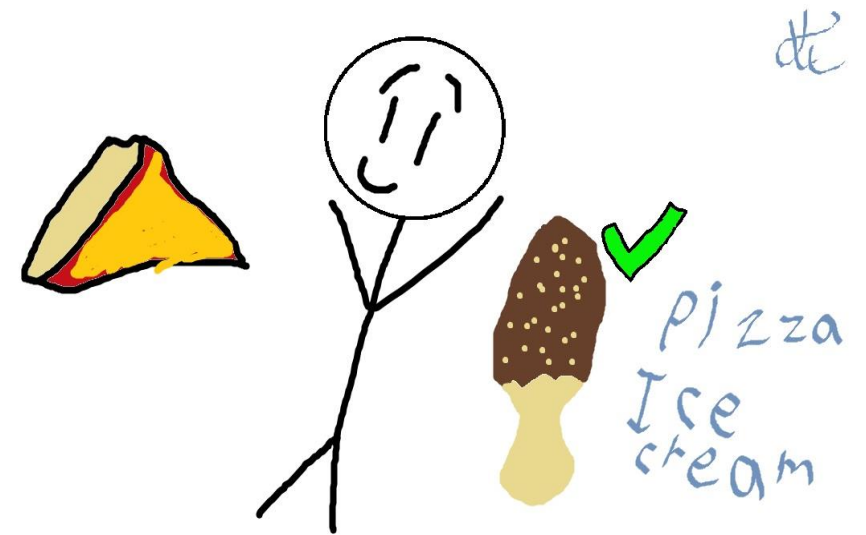


Disclosures

- Dr. Reinblatt has no financial relationships with ineligible companies (either individually or as a group)

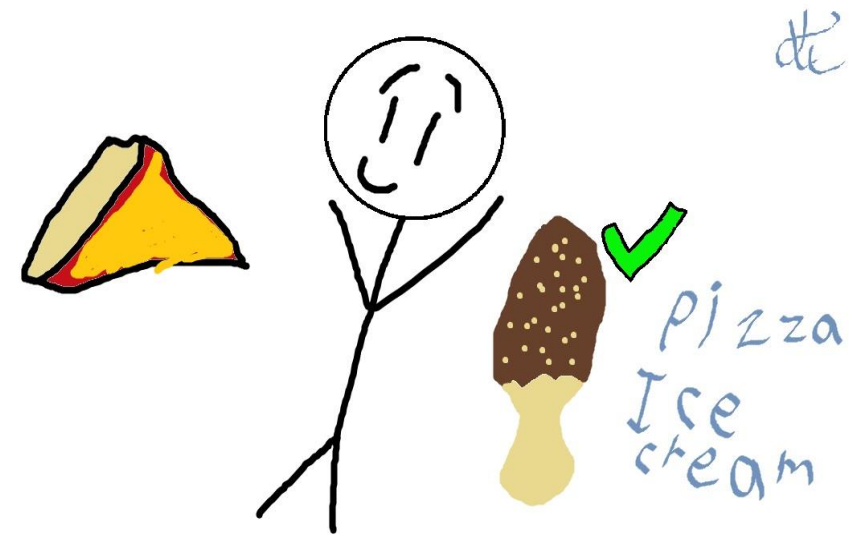
Addressing Picky and Disordered Eating

- Identify clinical features of picky eating in younger children
- Expand your knowledge of Avoidant/Restrictive Food Intake Disorder (ARFID)
-
- Learn some preliminary management strategies for eating disorder symptoms (including ARFID)



Addressing Picky and Disordered Eating

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Fictional Case 1- Ashley

- Ashley is a 3-year-old girl who loves attending preschool and seeing her friends. She likes to direct the games that she plays with her friends, but she is redirectable. She does not eat any of the food provided at the preschool and says she will eat when she gets home.
- However, she also does not eat many of the food items mom feeds her at either snack or mealtime. She pushes away leafy greens in particular and mom has unsuccessfully attempted to feed her several new foods.
- She has met her developmental milestones as expected and is growing well without any significant past medical or psychiatric history reported.



Picky Eating (or Selective Eating) Characteristics

- Developmentally normal picky eating phase from around 18 months to age 3-4 years (up to 6 years of age maximum)
- Rejection of novel food
- Strong food preferences
- Reflects control of choice
- Does not affect growth and are not underweight
- Do not typically need supplements to keep growing
- Not a psychiatric disorder (may have behaviors like tantrums)
- No significant decline in psychosocial function
- No sensory symptoms or fear of eating





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Prevalence Picky Eating

- Prevalence of Picky Eating : 8 to 50% (variable)
- Prevalence (prospective study 120 youth aged 2-11 years):
 - 13-22% prevalence at any given age (Mascola Eat Behav. 2010 Dec ; 11(4))
 - 40 % had duration over two years
 - Incidence declined as youth aged
 - More likely chronic (“trait like”) with stronger food dislikes, less variety of foods & more tantrums and struggles around eating
- Prevalence (large population-based study):
 - 27 % at age 1.5 years,
 - 28% at 3 years,
 - 13% at 6 year of age
 - 4% Late onset at 6 years or more
 - (Cardona Cano IJED 2015)



Addressing Picky Eating (or Selective Eating)

Parental /Behavioral Management:

- Using positive rewards for positive behaviors (like trying a new food)
- Decreasing attention for negative behaviors (like food refusal tantrums)
- Mealtime exposures (multiple exposures to new foods)
- Establish routine mealtimes with spacing from snacks
- More severe picky eating may need more structured professional approach with the behavioral plan.



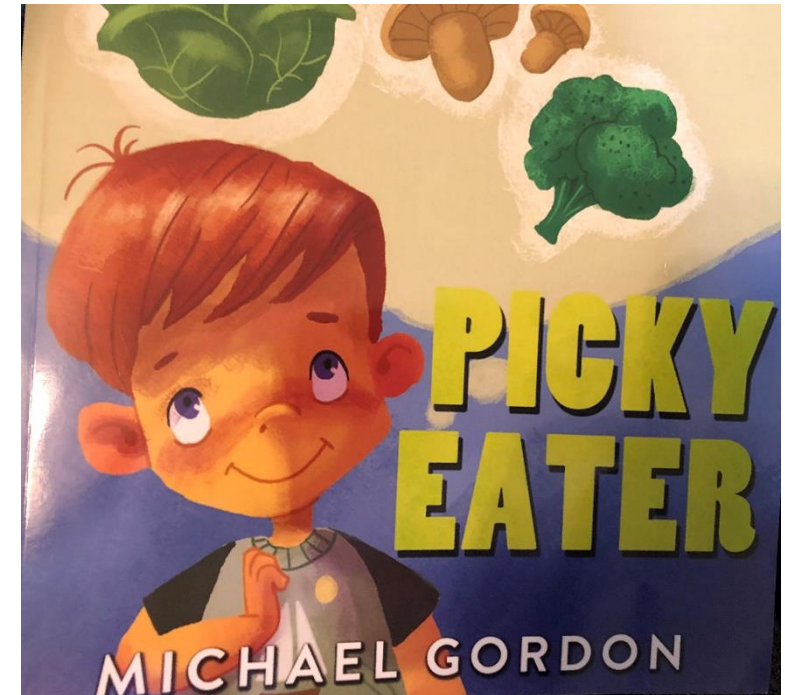
Addressing Picky Eating

Modeling Positive Eating behavior

- Family meals, modeling behavior (varied diet)

Involving child in food-related activities

- Grocery shopping and cooking
- Gardening re: veg?
- Reading books
- Using special dishes to progress to preferred foods



Longitudinal Course of Picky Eating?

- Difficult to compare trajectory between studies (definitions of picky eating, duration differ)
- Two-year longitudinal follow-up of young children with picky eating in Quebec Canada found picky eating persisted from early to late childhood (5.5% had picky eating from age 2.5 to 4 years) (Dubois 2007 Int J Beh Nutrition & phys activity)
- Picky eating remained stable in another study from early to late childhood but there were more non-eating behaviors (internalizing and externalizing) (Jacobi C et al. IJED 2008; 41)

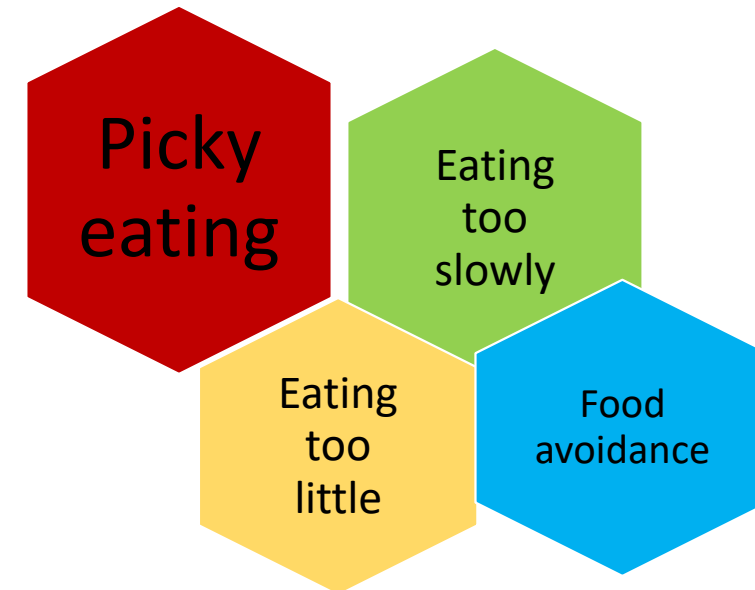


Longitudinal course of picky eating...?

- Early childhood picky eating, eating too slowly, eating too little and food avoidance reported to be stable until late childhood.

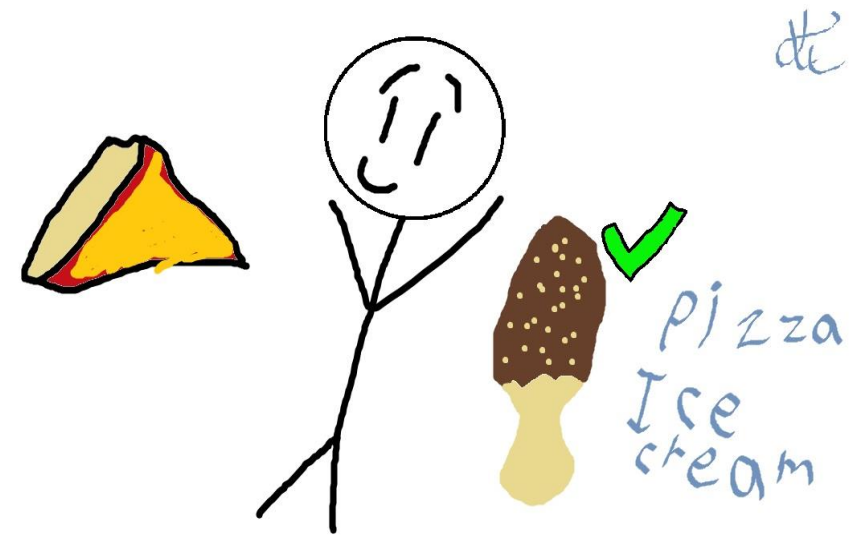
Early childhood eating concerns (particularly picky eating) may increase risk of eating problems in adolescence but the trajectory later in life is still unclear. (no ARFID dx then complicates conclusions) (Marchi, M. and Cohen P. JAACAP 1990 Jan 29(1))

- 32% Picky Eating remission in epidemiologic study remitted by age 4 years (Cardona Cano IJED 2015)
- Trajectories of Picky Eating in Low-Income US children: Picky eating remained stable, established by 4 years; Higher picky eating (“trait like”) → associated with lower BMI (Fernandez et al. June 2020 Ac Peds)



Addressing Picky and Disordered Eating

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- **Expand your knowledge of Avoidant/Restrictive Food Intake Disorder (ARFID)**
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ARFID & PRIMARY CARE PEDIATRICS

- Pediatricians are often the first to encounter youth with symptoms of ARFID.
- American Academy of Pediatrics suggests screening for eating disorders *; When do yearly follow up of growth curve, might raise flags?
- Survey of pediatricians found that only 37% were familiar with ARFID and only a third correctly applied the diagnostic criteria (Katzman 2014; Ped Child Health Oct 14)
- Up to half of the children with ARFID have medical and psychiatric comorbidities and may be seen in pediatric specialists' offices as well (Grubb Jama Peds 2021)
- Decreased energy and growth occurs at an important time developmentally when the child needs it in preadolescence/adolescence (not just picky eating)

*AAP Policy statement Jan 2003 Pediatrics



Fictional Case 2- Lori

- Lori is a 5-year-old girl with ADHD on Ritalin 5 mg BID. She attends Kindergarten. Her BMI % is at low end of the curve now.
- Although always a rather picky eater, about 6 months ago, a piece of the apple she was eating felt like it got stuck in her throat. After coughing a lot, seeing the school nurse, she felt improved enough to return to class. Although there were no medical sequelae, she then stopped eating apples.



(CONTINUED CASE 2- Lori)

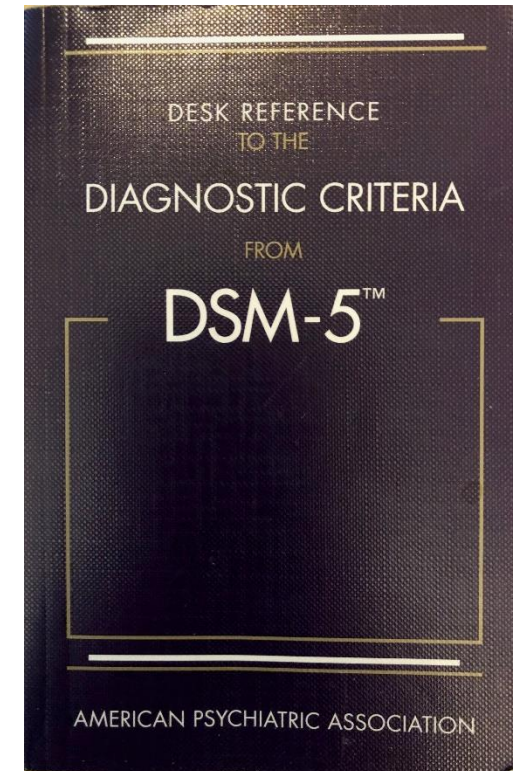
“Lori” previously ate 7 items including orange Kraft mac and cheese, hamburger (only frozen of a certain brand), orange, fast food chicken nuggets, orange baby carrots, orange juice, fries.

When Lori was ill recently, she vomited after mac and cheese and now is avoiding that food as well.



DSM/ History ARFID

- **DSM IV:**
- Feeding disorder of infancy and childhood & Eating disorder Not otherwise specified
- Age onset criteria (up to age 6)
- **DSM-5**
- **Avoidant/Restrictive Food Intake Disorder (ARFID)**—no age restriction ; nutritional qualifiers
- Unspecified Eating Disorder
- Other Specified Eating Disorders (OSFED)

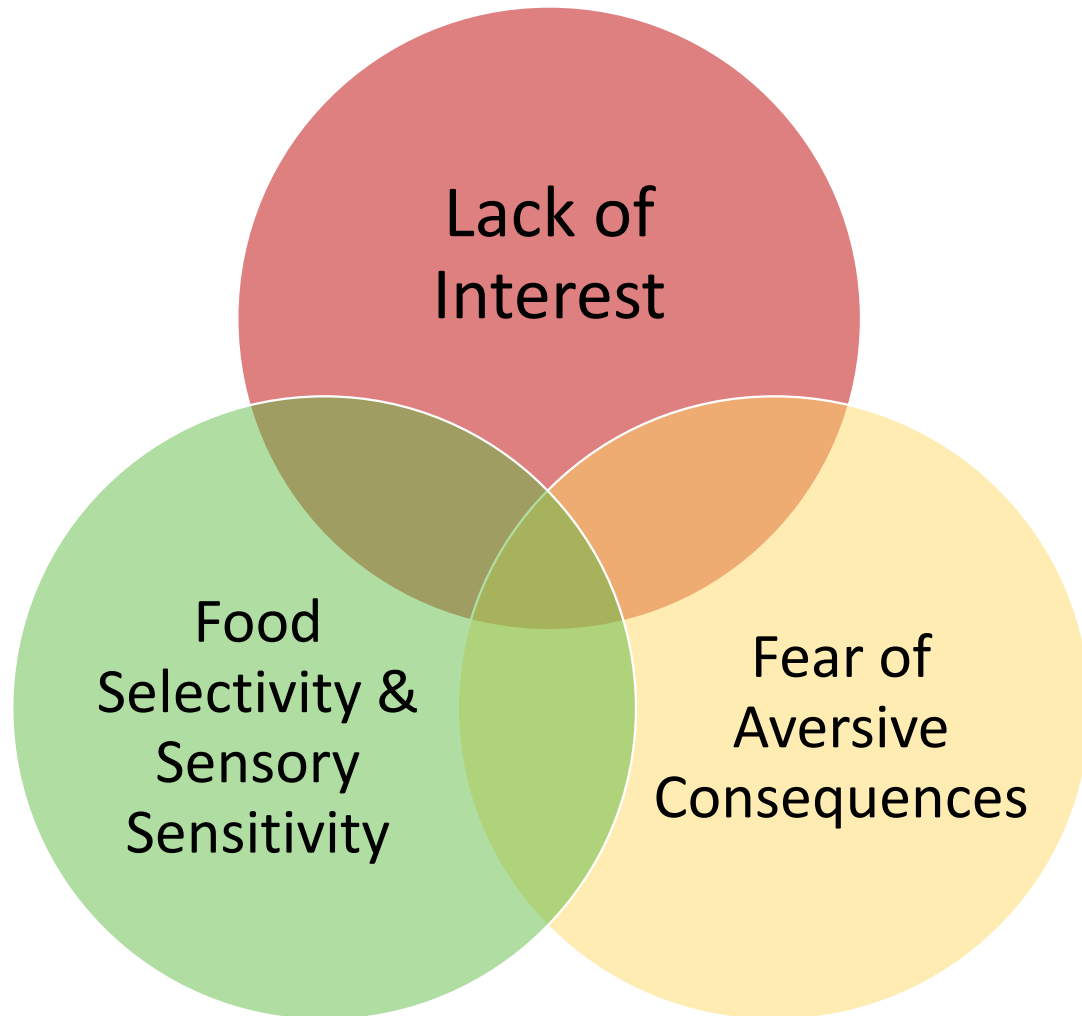


Avoidant/Restrictive Intake Disorder (ARFID)

- ***Pattern of eating limited in variety and/or amount***, which is often associated with *medical and psychiatric sequelae*.
- Not just occasional picky eating.
- Not due to lack of available food
- Not motivated by fear of weight gain nor shape concerns.
- If co-occurring with a medical or psychiatric problem must be severe enough to require attention in and of itself.



ARFID Dimensional Model –



1. Lack of Interest (LOI):

Forgets meals, appetite difference
Visceral hypersensitivity?

2. Food Selectivity / Sensory Sensitivity:

“Supertaster”?

Smell or Feel (texture) /sensory sensitivity

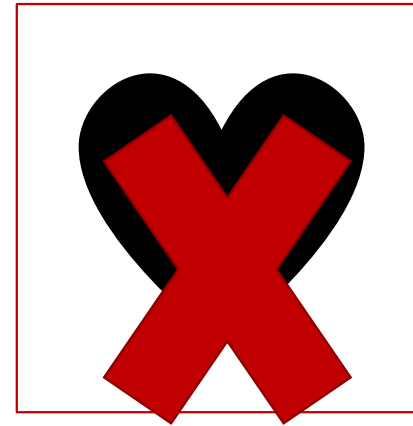
3. Fear of Aversive consequences:

Fear of something happening like
Vomiting or choking

Differentiation from other eating disorders:



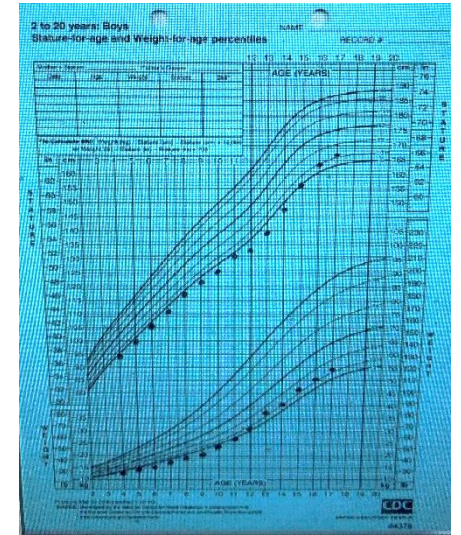
Weight



Shape

ARFID associated with one or more of associated symptoms:

- 1. significant weight loss or failure to achieve expected growth (or weight gain)
- 2. Nutritional deficiency (significant)
- 3. Dependence on enteral feeding or oral supplements
- 4. Marked interference for psychosocial functioning



ARFID-Lack of interest (LOI)

Does your child/Do you:

- forget to eat a meal or skip them?
- Have less of an appetite than friends/ peers?
- get full more quickly than others? (Early satiety or cues to eat may be affected?)

Leads to lower BMI > peers

Typically, slightly younger than fear of adverse consequence group (may start a bit earlier)

Unclear if different physiology (Visceral hypersensitivity?)



ARFID- Fear of Adverse Consequences

Does your child or do you:

- Have a fear of choking, gagging or vomiting? (if so, is it on purpose?)
- Recall an event where (you or your child) unexpectedly choked, gagged or vomited?
- Worry about an allergic reaction?
- Prefer puree, soft or liquid food?
- Have any comorbid anxiety diagnosis or problems?



ARFID- Food sensitivity

Is your child /are you:

- Much more sensitive to taste texture, color or to the smell of foods than friends? (not just mild picky eating or a developing palate)
- More likely to reject non-preferred foods , which are perceived as extra-sensitive.
- Have rituals--- like food should not touch.
- Have had symptoms a longtime,(i.e. since toddlerhood)
- Have other psychiatric disorders comorbidly such as Autism Spectrum Disorder; OCD, ADHD or oppositional behavior.



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- Although always a rather **picky eater**, about 6 months ago, a piece of the apple she was eating felt like it got **stuck in her throat**. After coughing a lot, seeing the school nurse, she felt improved enough to return to class. Although there were no medical sequelae, she then stopped eating apples.



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When Lori was ill recently, she **vomited** after mac and cheese and now is avoiding that food as well.



PREVALENCE Rates ARFID



Population-based survey Swiss schools (aged 8-13) prevalence 3% ARFID. (Kurtz 2015)

Three-month prevalence in of 0.3% ARFID Australian self-report study of age 15 and up ; prevalence (3 month) 0.3% (95%CI 0.1,0.5) (Hay 2017)

Equal prevalence male to female (both above studies) .

Largest community based prospective study of ARFID 24 months (Canadian) : 2.02/100,000 prevalence (Katzman JAMA Peds 2021)

23% ARFID in Partial Hospital eating disorder program (retrospective chart review) (Nicely et al. IJED 2014 (21)



Assessment

Safety -(medical and behavioral)

BMI; growth curve

Hydration ; vital signs

Suicidal ideation screen

Labs – *nutritional indices* (vitamins, iron levels...)

[vit C (scurvy), vit A (ocular), B12, folate, Vit D, thiamine, K, PO4 albumin etc.]

CBC (anemia), TSH

Other- EKG ? if electrolytic or cardiac concerns

Physical exam- if low weight may be malnourished and overlap of those symptoms with any malnutrition cause (ex like AN).

Nine Item Avoidant/Restrictive Food Intake Disorder SCREEN (NIAS)

nine item Avoidant/Restrictive Food Intake disorder screen (NIAS) - Child

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1	I am a picky eater	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	I dislike most of the foods that other people eat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	The list of foods that I like and will eat is shorter than the list of foods I won't eat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	I am not very interested in eating; I seem to have a smaller appetite than other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	I have to push myself to eat regular meals throughout the day, or to eat a large enough amount of food at meals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	Even when I am eating a food I really like, it is hard for me to eat a large enough volume at meals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	I avoid or put off eating because I am afraid of GI discomfort, choking, or vomiting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	I restrict myself to certain foods because I am afraid that other foods will cause GI discomfort, choking, or vomiting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	I eat small portions because I am afraid of GI discomfort, choking, or vomiting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Range of scores for subscales (0 to 15):
 Picky eating (cutoff 10)
 Lack of appetite (cutoff 9)
 Fear (cut off 7)

Zickgraf, Hana F., and Jordan M. Ellis. "Initial validation of the Nine Item Avoidant/Restrictive Food Intake disorder screen (NIAS): A measure of three restrictive eating patterns." *Appetite* 123 (2018): 32-42.



NIAS (Continued)

Add to NIAS score ; Criteria for ARFID (Any of the 4 below answered as a YES):

Underweight/recent weight loss/stunted growth	YES or NO
Nutritional deficiency	YES or NO
Dependence on supplements	YES or NO
Difficulty with social situation/ school or work	YES or NO

Differential Diagnosis?

- Medical causes of weight fluctuation
- Medical causes of purging or other symptoms
- Food insecurity
- Eating disorders (Anorexia Nervosa or Bulimia Nervosa)
- Developmental picky eating
- Comorbid psychiatric illness
 - Autism
 - OCD
 - Anxiety
 - ADHD
 - Depression

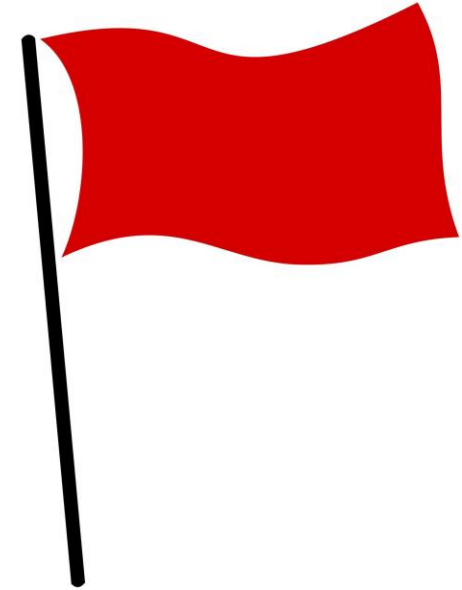
Psychiatric Comorbidity

- Clinical experience suggests common with up to 40% of kids with ARFID having comorbid psych dx
- Screen for ADHD and other comorbidities like anxiety
- Behavioral changes?
- *Comorbid psychiatric symptom exacerbation*
- Neuropsychiatric Disorders such as ASD-rigidity, rule bound; ritualistic eating. (food touching etc.)?
- History of autism or developmental history of social and other deficits?



RED FLAGS

- Longer duration or a history of picky eating (reinforces avoidance behavior)
- New, dramatic weight loss
- New lab work findings
- New physical exam findings
- New comorbid psychiatric complaints
- New comorbid medical (GI in particular) complaints



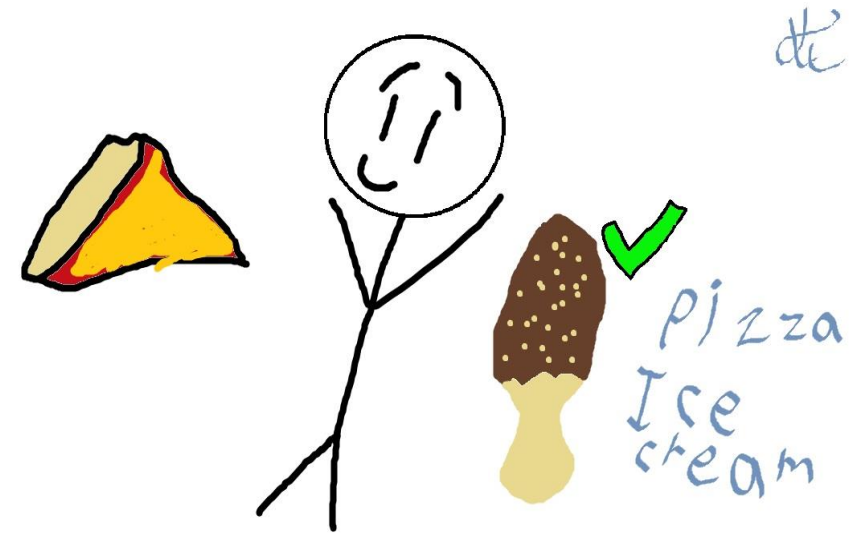
Summary of main behavioral screening questions for ARFID:

- *What reason does youth give for not eating (r/o shape and weight concerns)*
- *What does youth think of weight loss?*
- Food avoidance
- Neophobia (fear of new foods)
- Nausea or early satiety/abdominal pain
- Fear of choking, vomiting when eat or having an allergic reaction



Addressing Picky and Disordered Eating

- Identify clinical features of picky eating in younger children
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TREATMENT and REFERRALS

- Pediatricians have a role to play in treating the patient and monitoring refeeding– but also communicating with the team --- the nutritionist and therapist (and possibly psychiatrist).
- Need for a multidisciplinary approach (with PCP, parents and mental health therapist, psychiatrist and dietician etc.).
- Explore family’s concerns about treatment with specialists...
- Nutritionist
- Therapist with eating-disordered experience
- Psychiatrist..
- Occupational therapist for sensory subtypes?



What LEVEL OF CARE?

1. Outpatient
2. Intensive Outpatient
3. Day Hospital
4. Residential
5. Inpatient Psychiatric
6. Inpatient Medical



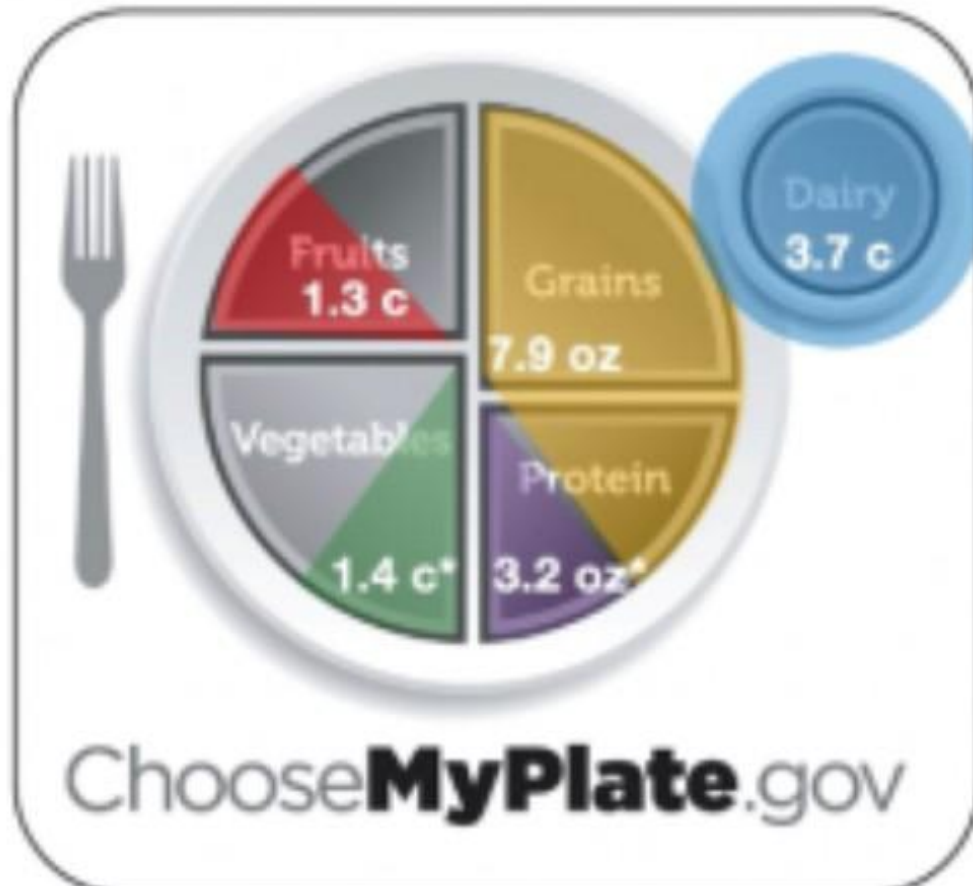
INDICATIONS FOR HIGHER LEVEL OF CARE / HOSPITALIZATION

- Failure of outpatient treatment
- Weight loss (extreme or rapid)
- Acute food refusal
- Arrested growth and development
- Acute medical safety concern → electrolytes, low sugar, Vital signs (HR<40, Orthostasis, hypotension, long Qtc or EKG abnormalities)
- Acute psychiatric safety concern → suicidal thinking, depression, obsessions)



Nutritional Referral

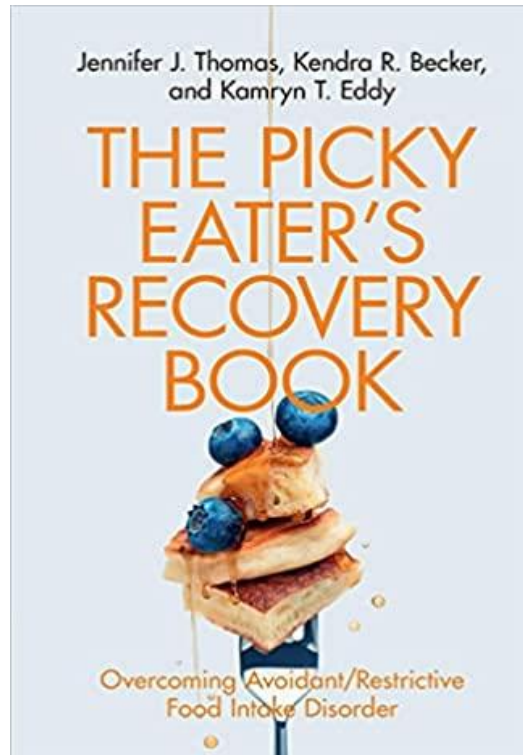
Full or Subthreshold ARFID



- Refeeding as an outpatient
- Malnutrition
- Later focus on variety
- Medical comorbidities with dietary treatment

OUTPATIENT TREATMENT GOALS:

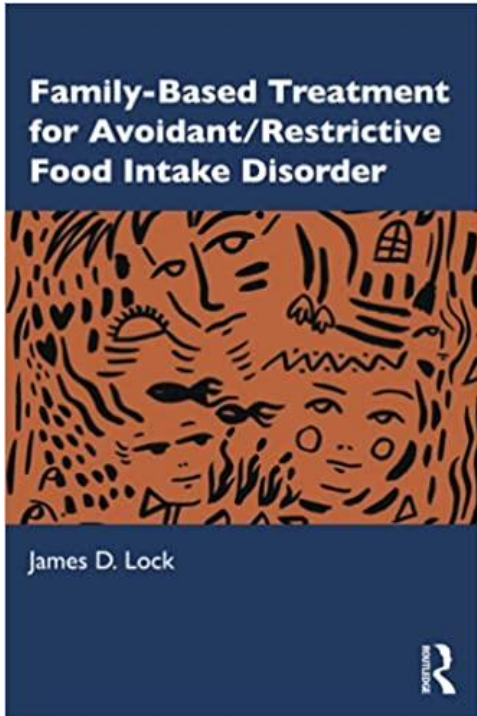
- Helping the family
 - Regular meals, snacks (routine mealtimes)
 - Weight restoration first if underweight (safe refeeding); then increase variety
 - Meds for psychiatric comorbidities?
(once refeed if low weight especially)
- Self-help book (esp for adults)



Manualized Therapy for Youth with ARFID...?

TYPE	TARGETS	EVIDENCE SUMMARY	RECS
FAMILY-BASED TREATMENT (FBT)	Supports parental management of behaviors	Pilot; based on evidence of RCT in other Eds.	USEFUL FOR ARFID
COGNITIVE BEHAVIORAL THERAPY (CBT)	Manage distorted cognitions, fear of eating or new foods	Pilot as well.	May be useful for ARFID

FBT for ARFID



← FBT Manual (James Lock 2022)

- **3 phases of FBT**; based on FBT-AN
- PHASE 1: Parents are tasked with renourishing child. Nutritionist consults to parents.
- Weekly sessions with all family members who must be aligned. Family meals

PHASE 2: The child begins to eventually regain some independence..

PHASE 3: Focus is recovery . Returning to developmental norms.

Lock J. et al. 2019 IJED 52(746)

Lock J. et al. 2019 IJED 52:439

Family-Based Treatment

- A behavioral “real world” treatment
- Parental involvement and empowerment
- Educate regarding ambivalence and relapse
- Limit setting with patient
- Charge parents with structuring mealtimes
Consider a treatment contract as needed

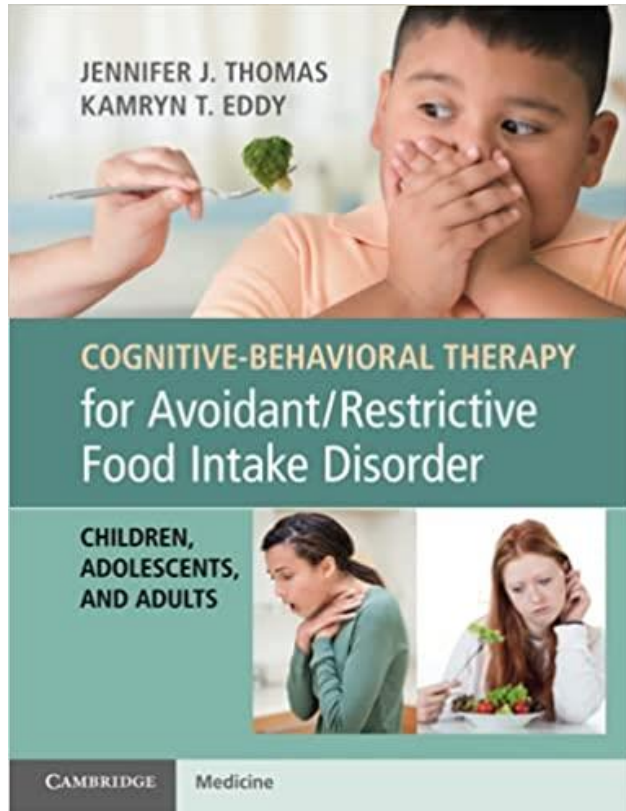


FBT (continued)

1. **Externalization:** The illness is responsible not the child.
2. **Focus:** Not on causation; focus on symptoms.
3. **Caregiver:** Responsible for supervising.
4. **Monitor:** Warning signs for the eating disorder.

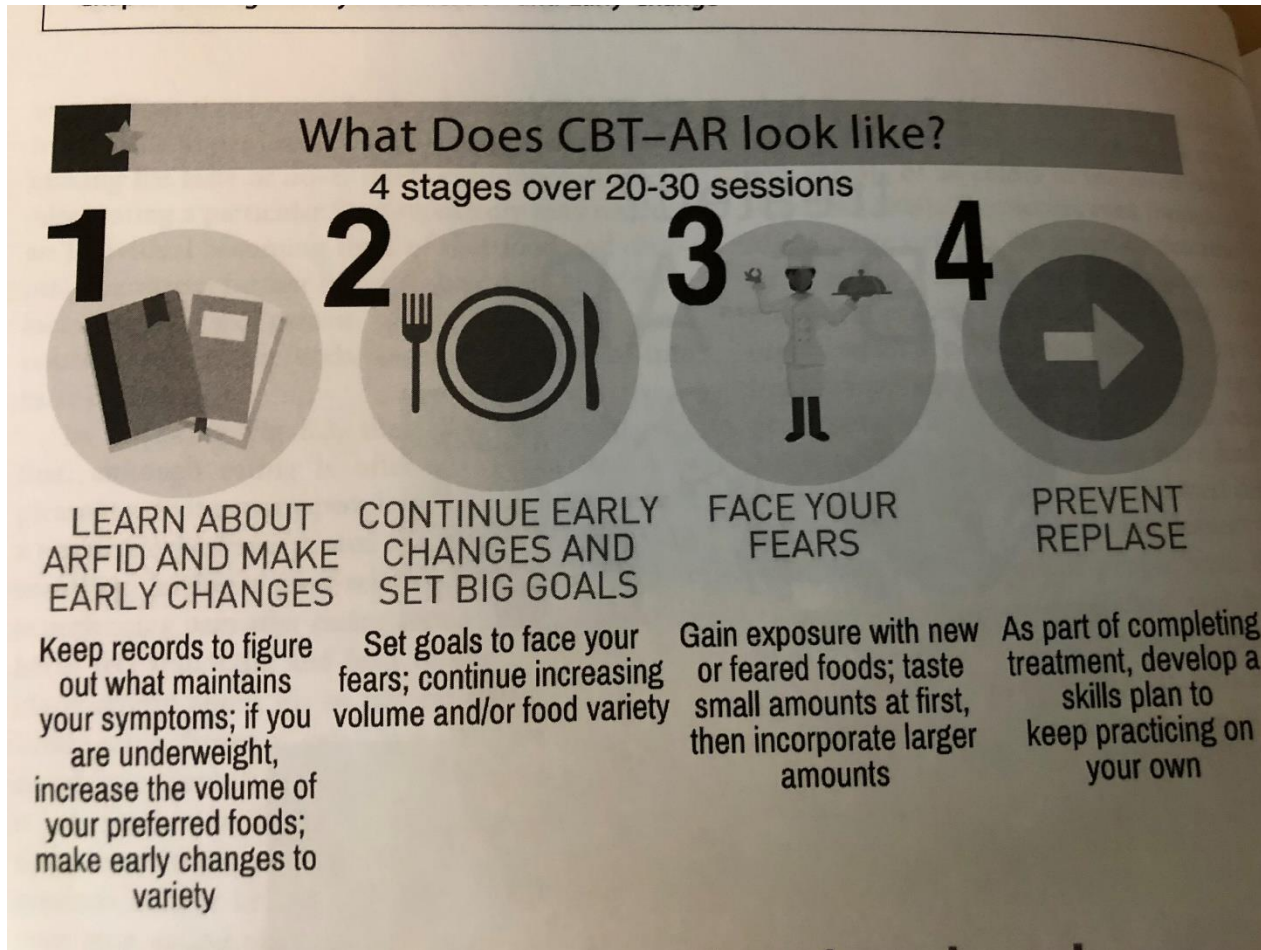


CBT-AR (Cognitive Behavioral Therapy)



- 20-30 sessions over 4 stages
- Two forms (individual and family), with individual being best for adult or older adol without much weight to gain). Regular meals with family
- Modules depending on the type of ARFID (during stage 3)

CBT-AR (Continued)



- 1. Psychoeducation
- 2. Early changes (increase volume then increase variety)
- 3. face your fears exposure
- 4. wrap up/prevention .

What about psychotropic medications?

- Little data so far; not RCT. Mainly retrospective case series or reports.
- **MIRTAZAPINE (Remeron)** : SNRI. Little data; case series N=14 (mean dose 25.5 mg daily dose). (Gray 2018)
- **Cyproheptadine**: Antihistamine, increases appetite.
- **Olanzapine**: goal is to decrease early satiety. N=6 cases of SSRI for anxiety augmented by olanzapine (Spettigue2018)
 - N=9 olanzapine with co-occurring depression or anxiety. Up to max of 2.8 mg +/- 1.47 (Brewerton 2017)
- **SSRI with or without hydroxyzine** may be helpful (study done in PHP) (Mahr F. JCAP Oct 2021)

Treat comorbid psychiatric illness-- keeping in mind
malnutrition status & weight



In sum,

- PCPs play an important role to screen for picky eating, and ARFID.
- Picky eating trajectory is variable; when it persists may need early intervention.
- Establishing medical safety and renourishing the patient is the first step, and then deciding the level of care. (later increase variety as need be).
- FBT-AR and CBT-AR manualized treatments are being investigated for use in ARFID. Research ongoing.
- Limited evidence for medication use in children; treat
Psychiatric comorbidity.

Thank you!

Questions?



Thank you!

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*For resources related to the COVID-19 pandemic,
please visit us at [BHIPP Covid-19 Resources](#).*

