

Speaker Disclosure

• I have no financial disclosures or conflicts of interest.

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Learning Objectives

- Define the most common behavioral differences in picky eating, eating oppositional behaviors or ARFID (Avoidant Restrictive Food Intake Disorder).
- Identify key history taking findings and physical assessment and diagnostic evaluations (including laboratory tests) that would provide necessary information to determine a diagnosis.
- Recognize normal and abnormal findings of assessment to assist in differentiating normal "picky eating" versus more concerning behavioral outcomes and nutritional disorders that result in poor weight and nutritional status.
- Describe key documentation to support diagnosis, coding and referral, if necessary.
- Identify necessary patient education and resources for best patient management for picky eaters, children using behavioral outcomes to manipulate the eating environment or children with ARFID;

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Important Definitions

- ARFID: feeding or eating disturbance characterized by avoidance or restriction of food intake and clinically significant failure to meet requirements for nutrition through oral food intake (DSM-5, 2013)
- Picky eating: common feeding difficulty behavior in early childhood characterized by strong food preferences and refusal to try new foods or even consistently eat familiar ones (Taylor et al., 2015)
- Behavioral food opposition: behavioral response using food as an oppositional factor in leverage to produce reciprocal responses from parental or adult caregivers

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What do we know about how our food preferences begin?

- Dietary habits reflect basic biology which predisposes them to prefer sweet tastes and to avoid bitter-tasting foods.
- Once adapted, the adoption of this food environment places them at risk for obesity and numerous other conditions.
- Flavors from the mother's diet are transmitted to amniotic fluid and breast milk.
- Children will have repeated and varied opportunities to learn to like the flavors' of healthful foods they will likely encounter after initial experiences.

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What do we know about how our food preferences begin? (cont.)

- Dietary habits reflect basic biology which predisposes them to
- \bullet After weaning, 8-10 exposures to food will increase intake even if the food is initially rejected.
- Further exposures may be required to increase liking.
- Exposing infants and young children to a variety of flavors promotes infants' willingness to consume novel foods.

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What does that mean for food adoption for infants?









What does that mean for food adoption as adults?



- Hunger
- Appetite
- Taste
- Cost
- Availability
- Culture
- Peers
- Media

Think back to childhood...Favorites?

Three different patients.....

- John is a 15-year-old male (full term, well nourished at birth)
- Unremarkable early eating behaviors
- 2–3-year history of declining dietary habits
- Poor weight gain, poor growth chart consistency
- Increasing social isolation related to food choices (or lack thereof)
- Increased stress in family dynamics related to mealtime

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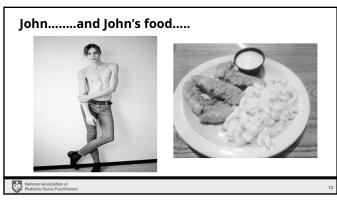
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John....

- Was within typical norms on growth curves, then plateaued..and has since fallen off growth curve
- Physical exam shows a very thin, pale, anxious male
- 24 hour food recall is about 50-75% of the ideal caloric intake
- Portion sizes are small
- He complains of early satiety
- He refuses to go to any sleep overs or birthday parties

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Three different patients.....

- Sammy is an 11-year-old male (full term, well nourished at birth)
- Unremarkable early eating behaviors when away from home
- Prefers proteins, will not drink any milk, will try to hide food to "get dessert"
- Good weight gain, growth chart consistency
- Increasing behavioral confrontations related to food choices (or lack thereof) at home
- Increased stress in family dynamics related to mealtime,



Sammy.....

- Was within typical norms on growth curves, but has been consistent at the 95% for the last 4 years
- Physical exam shows an overweight, interactive male
- 24 hour food recall is about 100-150% of the ideal caloric intake
- Portion sizes are adequate, not as many fruits and vegetables
- · Eats dessert at every meal
- Parents report that they frequently give in "to his tantrums" when trying to support healthy eating choices
- Will sometimes eat same (fight provoked) food when out with friends

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Sammy......and Sammy's food





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- Taylor is a 12 year old girl......
- Has a "slow to warm up" personality.....
- Eats slowly and methodically....meals can take a LONG time
- \bullet Will try new foods, but only after closely inspecting it
- Trying of new foods means only a nibble or two on initial introduction
- Finds it difficult to try "new" restaurants if she does not know the menu

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Taylor.....

- Full term, well-nourished at birth
- Is within the typical norms on growth curves
- Physical exam shows a smiling, interactive child
- 24 hour food recall is about 75-90% of the ideal caloric intake
- Portion sizes are small with frequent repeats of food
- Snacks twice daily
- Her nutritional bloodwork demonstrates mild IDA
- She attends social functions easily



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Taylor....and Taylor's food

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Thinking about picky eaters vs. ARFID? The picky child will eventually eat.... The ARFID child could starve to death....

Significant ARFID findings (Physical and Psychological)

- Significant weight loss
- Abdominal pain
- Fatigue

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- Cold intolerance
- No body image struggles
- No fear of weight gain

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Significant ARFID food and eating behaviors

- Worsening picky eating (caregivers are now noticing)
- Avoid or refuse entire food group
- Sensitive to smell, texture and temperature
- Only eating food of a similar color, brand or texture
- Severe anxiety around new foods
- · Lack of interest in food
- Fears around food: fear of vomiting, choking, allergies
- Avoid social events



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Differences Between ARFID and Picky Eating ARFID Picky Eating May require nutritional Does not usually require Feeding supplementation to meet their caloric needs and maintain typical supplements or feeding tubes/Nutritional tubes to be able to have supplements sufficient nutrition growth and development during treatment. **Psychosocial** Significant interference No significance Functioning with psychosocial interference with functioning psychosocial functioning

Differences Between ARFID and Picky Eating

	ARFID	Picky Eating
Treatment Priorities	Requires intensive, multi-disciplinary approach including family therapy, adjunct medications and additional psychotherapy.	Requires a less intensive approach. Uses parental or adult modeling, repeated exposures to unfamiliar foods. Promotes positive mealtime preferences and offers mealtime options when possible.

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What causes ARFID? (Not known, may be multifactorial)

- Child's temperament
- Genetic basis

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- Triggering events
- Concurrent medical/developmental/psychological conditions
- A child who is already predisposed to ARFID due to biological or genetic makeup may be triggered by environmental or psychosocial situations, such as a traumatic event

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Making an Eating Disorder Friendly Office...

- Consider getting "blind weights" in underwear or paper gowns
- Maintain a neutral demeanor when obtaining weight
- Do not talk about food in terms of "calories", consider exchanges
- Stress the importance of "exchanges" meeting the necessary nutrients and energy needs
- Providers should know the basic caloric requirements for each age group and have a "caloric blinded" template to offer the patient/family.



What can the PNP do to provide care for these patients and families?

Assessment

- VS including blood pressure, consider orthostatic measures
- Temperature
- EKG (may be done as an outpatient)
- Complete physical
- Screen for anxiety/depression

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Managing Initial Eating Disorder Assessments Lab work-Chemistry Main energy sources, lows may cause dizziness, seizure 70-100 (may be low) Glucose Albumin Longer term assessment of protein 3.4-5.4 g/dl (may be low) Prealbumin Better assessment of more recent protein intake 15-36 mg/dl 5-18 mg/dl, 10-20 mg/dl BUN Kidney function, low may indicate dehydration Creatinine Malnutrition may cause it to be low Vary with age, gender May be low if deficient 9-10.5 mg/dL

Test	Considerations	Norms (may vary by lab
Ionized calcium	Better indicator of calcium status	4.4-5.4 mg/dL
Sodium	May vary with hydration	135-145 mEq/l
Phosphorous	May drop early in refeeding, varies with fluid shifts	2.4-4.1 mg/dL
Potassium	May vary with hydration and activity level	3.5-5 mEq/L
Magnesium	May drop early in refeeding	1.7-2.2 mg/dL
Chloride	May vary with hydration	98-108 mmol/L

Test	Considerations	Norms (may vary by lab)
Hemoglobin	Protein carrying oxygen in blood	Norms based on age and gende
Hematocrit	Can be influenced by low levels vitamins/nutrients	Norms based on age and gend
Serum Iron	Low with lack of iron containing foods: red meat and green leafy vegetables	60-170 mcg/dL
Zinc	Supports the immune system	Can vary, 0.66-1.10 mcg/mL
Vitamin B12	Maintains nerve function, production of blood cells	200-900 ng/dL
Folate	High risk for deficiency in vegetarians and vegans	2.5-10 ng/ml
Vitamin D	Helps body absorb calcium	Greater than 30 ng/ml

Goals for ARFID and beyond....

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- Thinking of food for energy, acknowledge the role it plays in our
- Achieve and maintain a healthy weight and healthy eating patterns
- Increase the variety of foods eaten (no food deserts: social implications)
- Learn ways to eat without fear of pain, choking, allergies

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Managing Initial Eating Disorder Management from the PCP

- Food diary: What they eat, when, how much, with whom and how are they feeling, can be easier with pictures
- Food pictures are also great when they are attempting to meet food goals
- Food intake lists (can be fun...or overwhelming) pictures for interest ("ugly fruit")
- Setting food goals: 1 new food, bring back 1 safe food (put in chart," contract")
- Increasing intake (mechanical)Setting food goals: 3 extra sips, 3 extra bites of safe foods (need to increase stomach capacity)

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Food chaining (works for ARFID and picky eaters)

- Taking child's safe food and slowly introducing them to similar foods so they can start to increase their variety
- Only introduce one or two new foods at a time (it can be overwhelming and stressful for the patient AND family)
- · Food chaining links between food profiles
- Uses sensory measures like similar textures, colors, smells, or flavors
- Ex. Rice, couscous, stelline, orzo, ditalini, orecchiette, farfalle, rotini
- \bullet Ex. Butter, olive oil, parmesan, blush sauce, marinara, salsa
- Slow combining!!! (Casseroles can be scary!!!)

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Family Involvement in Treatment

- Be a role model. Support a variety of foods in family eating.
- Schedule regular meals and snacks. Every time is a new opportunity/exposure.
- Regular family meals in pleasant environment. Avoid battles!
- Encourage, support, do NOT force! (You cannot force feed your child...it is illegal ©)
- Reward positive eating behaviors! (Your child may have equaled or surpassed the achievement of honor roll or sports win)
- Find innovative ways to manage anxiety and stress around food (or anything)!
- Stay calm, avoid criticizing your child, avoid blame on them...or yourself!



Managing Initial Eating Disorder Management from the PCP

- Consider treating the anxiety (weight can impact response)
- Anxiety based psychotherapy referrals
- Parents/Caregivers/Sibs need support too!
- Respite care (Families should go eat out! And ...identify "safe" restaurants to re-introduce patient to that environment)
- Developmentally appropriate planning: birthday parties, sports team buses, school "pizza" parties, dating, COLLEGE (may need notes to prepare own food. Dining Hall is the goal!)

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Medications that may be used in ARFID (very few studies to support ⊗)

- Anxiety medications (Fluoxetine, Escitalopram): best option
- Cyproheptadine (off label)
- Mirtazapine (off label)
- Lorazepam (off label)
- Olanzapine (off label)
- Child may also be on additional medications: ADHD



Managing PCP visits for this complex eating disorder

- Usually an established patient
- Get 24 hour diet recall (weekday vs. weekend), duration, food refusals, % completed
- 99214 presenting problem(s) are of moderate to high severity
- Moderate level of medical decision-making
- 30-39 minutes of total spent day of encounter (caloric conversion)
- Problem focused history (4 items)
- Problem focused examination
- Moderate complexity decision-making

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Managing ARFID and complex eating disorders

- Dietician
- Speech-language pathologist (swallowing and feeding evaluation)
- Cognitive-Behavioral Therapy (specialized)
- Family-based therapy
- Occupational therapy

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Some interesting presentations in new patients

- A 10-year-old male patient in the 5th grade who heard about "good" food and "bad" food in health class.
- An 11-year-old male who saw his older brother "load on protein" to be a better "lifter" (decreased fruits, veggies and carbs)
- An 11-year-old female who gave up "sweets" for Lent...and went on to carbohydrates and grain-based foods
- A 15-year-old female who fixated on "healthy and organic" foods when the family food budget could not support that.

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Our work in Eating Disorders at Oishei Children's Hospital in Buffalo, NY



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My Favorite ARFID kiddo!





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