Demystifying Eating and Feeding Disorders

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Children's National

Disclosures

The author guarantees that there are no conflicts of interest and nothing to disclose.

Learning Objectives:

- 1. Differentiate between eating and feeding disorders.
- 2. Review the basics of eating disorders – diagnosis and treatment.
- 3. Review the basics of feeding disorders – diagnosis and treatment.

But first… Why does any of this matter?

- Eating disorders are the 3rd most common chronic illness of childhood (after asthma and diabetes mellitus).
- 9% of the US population will have an eating disorder in their lifetime. That is 28.8 MILLION people.
  - Deloitte Access Economics. *The Social and Economic Cost of Eating Disorders in the United States of America: A Report for the Strategic Training Initiative for the Prevention of Eating Disorders and the Academy for Eating Disorders.* June 2020.
- A person dies as a direct result of an eating disorder every 52 minutes.
  - Deloitte Access Economics. *The Social and Economic Cost of Eating Disorders in the United States of America: A Report for the Strategic Training Initiative for the Prevention of Eating Disorders and the Academy for Eating Disorders.* June 2020.
- Eating disorders have among the highest mortality rates of any psychiatric illness, second only to opioid abuse.
  - Arcelus, Jon et al. "Mortality rates in patients with anorexia nervosa and other eating disorders. A meta-analysis of 36 studies." *Archives of general psychiatry* 68,7 (2011): 724-31.
- 0.5% - 5% of adults and children in the general public suffer from ARFID (Avoidant Restrictive Food Intake Disorder).
  - Kennedy, H. L., Dinkler, L., Kennedy, M. A., Bulik, C. M., & Jordan, J. (2022). How genetic analysis may contribute to the understanding of avoidant/restrictive food intake disorder (ARFID). Journal of eating disorders, 10(1), 53.

More than meets the eye…

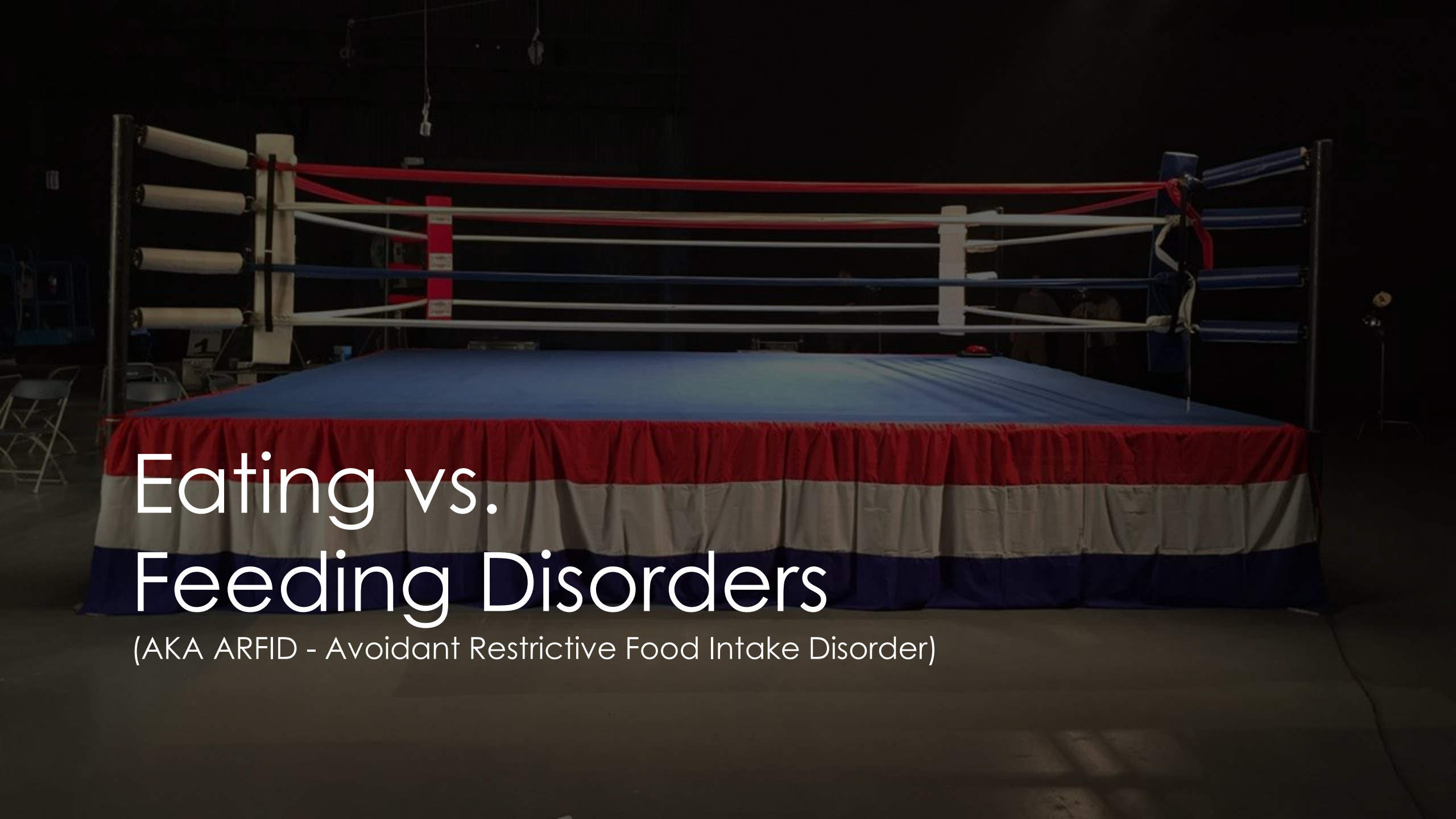
- Black teenagers are 50% more likely to engage in bingeing and purging behaviors than white teenagers are.
  - Goeree, M.S., Ham, J.C., & Iorio, D. (2011). Race, social class, and bulimia nervosa. Goeree, Michelle Sovinsky and Ham, John C. and Iorio, Daniela. Race, Social Class, and Bulimia Nervosa. *IZA Discussion Paper No. 5823*.
- Youth of color are <2/3 as likely to receive treatment for their ED than are white youths.
  - Moreno, R., Buckelew, S. M., Accurso, E. C., & Raymond-Flesch, M. (2023). Disparities in access to eating disorders treatment for publicly-insured youth and youth of color: A retrospective cohort study. *Journal of Eating Disorders*, *11*(1).
- In early adolescence, food insecurity is associated with 1.67 higher odds of BED (Binge Eating Disorder, clinical or sub-clinical) and 1.31 higher odds of binge eating than those with food security.
  - Nagata, J. M., Chu, J., Cervantez, L., Ganson, K. T., Testa, A., Jackson, D. B., Murray, S. B., & Weiser, S. D. (2023). Food insecurity and binge-eating disorder in early adolescence. *International Journal of Eating Disorders*, *56*(6), 1233–1239.
- LGBTQ youth with a diagnosis of an eating disorder (lifetime) are almost 4X more likely to have attempted suicide in the past year.
  - The Trevor Project. (2022). *Research Brief: Eating Disorders among LGBTQ Youth*.

Just a few more reasons…

- In the US military, there is a 2.7% incidence of EDs, most commonly OSFED (Other Specified Feeding or Eating Disorder) – 46.4%, followed by Bulimia Nervosa (BN) – 41.8% and Anorexia Nervosa (AN) - 11.9%.
  - Williams, V. F., Stahlman, S., & Taubman, S. B. (2018). Diagnoses of eating disorders, active component service members, U.S. Armed Forces, 2013-2017. *MSMR*, *25*(6), 18–25.
- In a study of competitive athletes, >86% met criteria for or were subthreshold for an ED.
  - Flatt, R. E., Thornton, L. M., Fitzsimmons-Craft, E. E., Balantekin, K. N., Smolar, L., Mysko, C., Wilfley, D. E., Taylor, C. B., DeFreese, J. D., Bardone-Cone, A. M., & Bulik, C. M. (2021). Comparing eating disorder characteristics and treatment in self-identified competitive athletes and non-athletes from the National Eating Disorders Association online screening tool. *The International journal of eating disorders*, *54*(3), 365–375.
- The caregiving burden is higher among those caring for pts with EDs than among those caring for pts with depression or schizophrenia!
  - Martín, J., Padierna, A., van Wijngaarden, B., Aguirre, U., Anton, A., Muñoz, P., & Quintana, J. M. (2015). Caregivers consequences of care among patients with eating disorders, depression or schizophrenia. *BMC psychiatry*, *15*, 124.
- Suicide is one of the leading causes of death in those with EDs, Suicide attempts by diagnosis: AN 31%, BN 23%, BED 23%.
  - Goldstein, A., & Gvion, Y. (2019). Socio-demographic and psychological risk factors for suicidal behavior among individuals with anorexia and bulimia nervosa: A systematic review. *Journal of affective disorders, 245, 1149–1167*. & Udo, T., Bitley, S., & Grilo, C. M. (2019). Suicide attempts in US adults with lifetime DSM-5 eating disorders. *BMC medicine*, *17*(1), 120.

Functional Consequences of Feeding and Eating Disorders

- May fail to attain full academic/career goals
- Miss out on social engagements/become socially isolated
- The focus on food/body image/weight can overwhelm other thoughts/desires
- Thinking is impaired when the brain is starved
- Repeat hospitalizations interfere with school/work (for the patient and their families)
- Failure to attain expected growth
- Family distress
- Secondary depression/anxiety
- Emotional stunting at the age of onset
- Speech delays

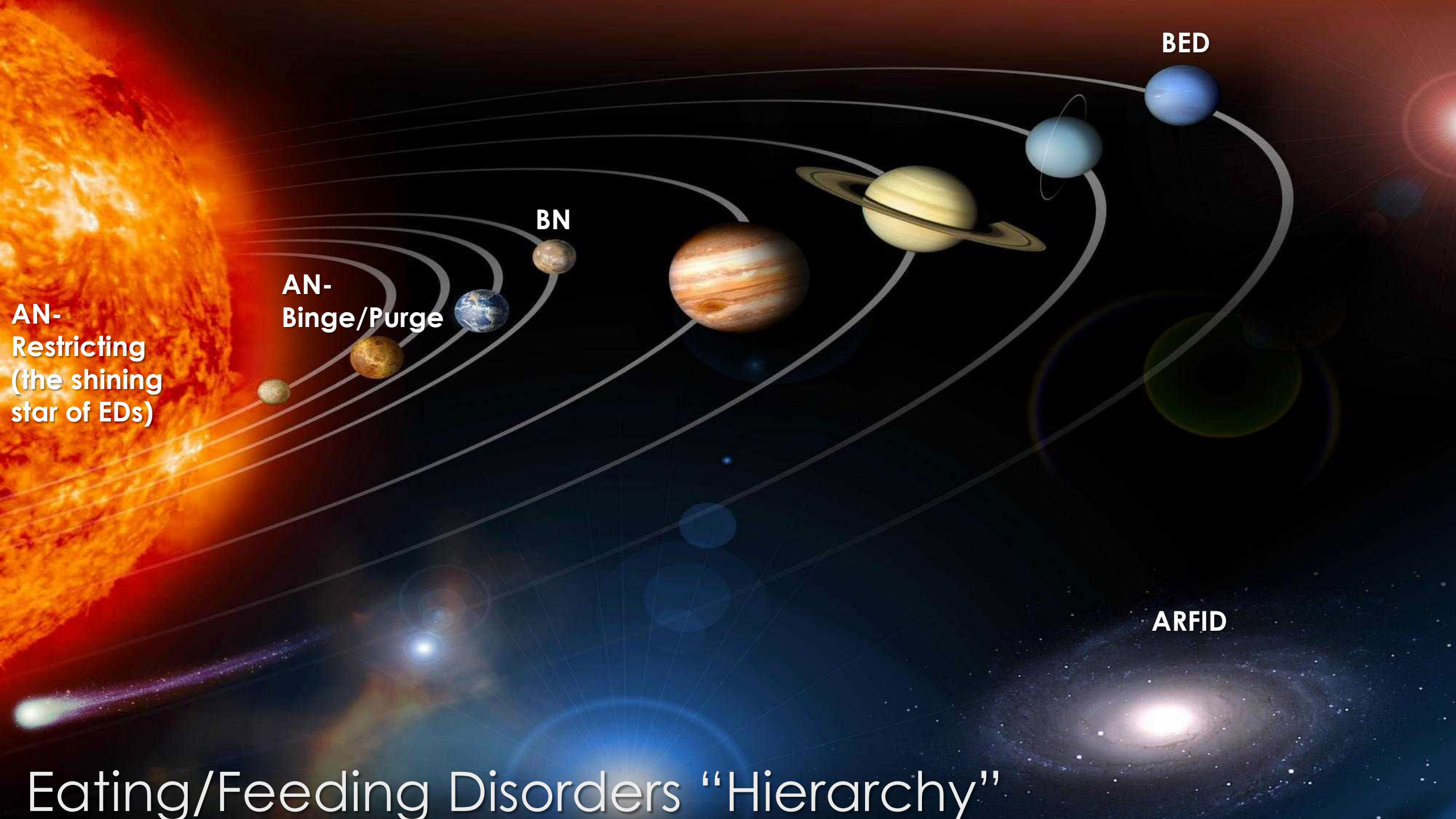


Eating vs. Feeding Disorders

(AKA ARFID - Avoidant Restrictive Food Intake Disorder)

	Eating Disorders	Feeding Disorders (ARFID)
Most Common Subtypes	Anorexia Nervosa (AN), Bulimia Nervosa (BN), Binge Eating Disorder (BED), Other Specified Feeding and Eating D/O (OSFED)	Infantile Anorexia (AKA- lack of appetite or interest in food), Sensory Food Aversions (AKA- food avoidance based on taste/texture/smell), Post-traumatic (AKA- fear of an aversive consequence f/eating)
Onset	Teenage years +/-	Infancy – preschool age (trauma-anytime)
Triggers	Stressful life events. Ie: GI illness, trauma, family conflict, school stress, food insecurity	Maladaptive caregiver-child bond, oropharynx instrumentation or deformation (ie: intubation, lip tie, etc.), GI illness, allergic reaction, anything that inhibits typical feeding development (ie: broken arms, enlarged tongue, poor tone, etc.)
Comorbidities	Depression, Anxiety, Bipolar D/O, PTSD, OCD, Personality D/O (esp cluster B), Substance abuse	ASD, ADHD, Anxiety, Depression, Sleep Dysregulation, Enuresis

	Eating Disorders	Feeding Disorders
Those at risk	Athletes, models, perfectionists, high or low expressed emotion	Severe picky eaters, sensory aversions (ie: ASD), infants of caregivers who are easily overwhelmed or have MH issues (-> poor bonding/attachment; ex: depression & decrs eye contact), oral-motor impairments, oro-pharynx instrumentation, developmental or physical conditions making eating uncomfortable (ie: severe GERD, etc.)
Nature vs. Nurture	Yes, Both Nurture- Western media, social media, thinspiration influencers, the thin ideal, pro-ana/pro-mia websites, etc.	Yes, Both Nurture- parent-child dyad, struggle for control, medical trauma, etc.
Characteristics/Temperaments	Perfectionistic, volatile	Rigid, difficult to soothe, elevated sympathetic drive
Underlying drives	The thin ideal (ie: weight loss), to appear undesirable	No concerns about body image or weight.
Ego-syntonic	Yes	No



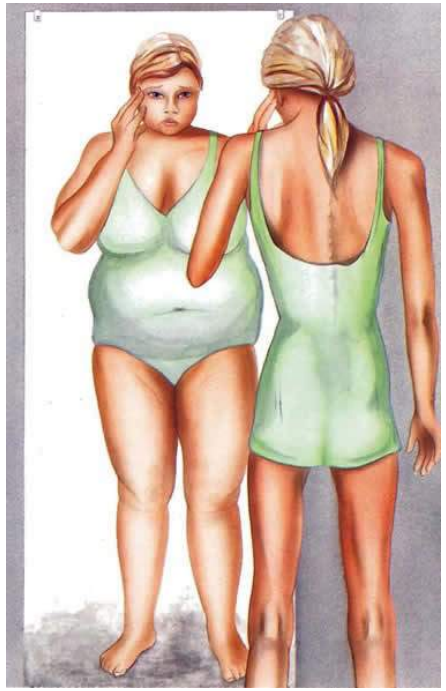
Eating/Feeding Disorders "Hierarchy"

DSM-V Criteria: Anorexia Nervosa

A. Restriction of food intake leading to 'significantly' low body weight.
   - Normal weight is a moving target in children and adolescents.
   - In adolescents, BMI for age < 5th percentile (medical guideline for underweight)

B. Intense fear of gaining weight/becoming fat (commonly not reported by youth) or behavior that interferes with weight gain (restricting, purging, over-exercising, pill abuse)

C. Body image distortion, lack of recognition of seriousness of low weight



AN - Diagnosis Cont'd

- Specifier of subtype: Restricting subtype vs. Binge-eating/Purging subtype
- Specifier of remission: partial or full (or not at all)
- Specifier of severity:
  - Mild: BMI >/= 17 kg/m^2
  - Moderate: BMI 16-16.99 kg/m^2
  - Severe: BMI 15-15.99 kg/m^2
  - Extreme: BMI < 15 kg/m^2

BMI is NOT a good indicator of health for individuals!

Especially in children.

Anorexia Nervosa – the Highlights

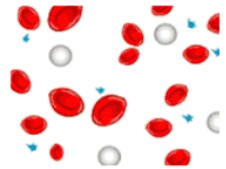
- Perfectionistic, rigid, Type-A, determined, and underweight individuals (even physically rigid – upright posture)
- In Atypical AN, pt is not underweight, but has lost significant weight in a short time
- For genetically F individuals of childbearing age, they may or may not have their menstrual cycle (& OCPs can mask this)
- Body dissatisfaction and body image distortions (baggy clothing, long-sleeves – even in summer)
- Highly fearful of gaining weight and deny hunger, but also highly focused on food and/or excessive baking/cooking w/o eating
- Calorie counting & restricting intake (sometimes to a few hundred kCal/day)
- May restrict +/- exercise only, or also binge and/or purge
- They are fatigued, but still driven to succeed, isolative, often no longer in touch with the reality of their appearance, and dismissive of adverse health consequences/risk of death related to their ED behaviors
- Similarities between addiction and eating disorders
- Harm-averse (especially Restrictive subtype)
- Ego-syntonic disorder – it feels good to act on the ED urges, feels like control
- The Eating Disorder (ED) becomes like an abusive significant other – controlling, degrading, restrictive, but also praises for and encourages acting on ED urges

ANA'S TEN COMMANDMENTS

1) If you aren't thin, you are ugly and worthless.
2) Fasting and praying to Ana are true signs of control and power.
3) You can never be too thin.
4) No one can know you worship me.
5) You will count calories.
6) Being thin is more important than being healthy.
7) You will do anything to look thinner.
8) If you eat you will feel guilty.
9) If you eat you will punish yourself.
10) The scale is the truth: trust it.

Anorexia

Complications



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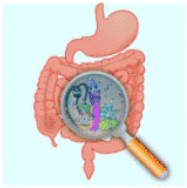
Anemia



Gastrointestinal disorders like nausea, constipation, bloating, etc

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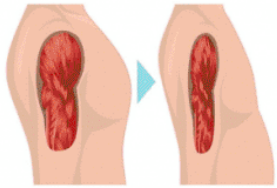
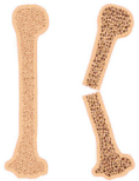
Loss of muscle





Osteoporosis

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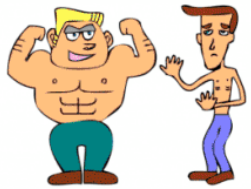
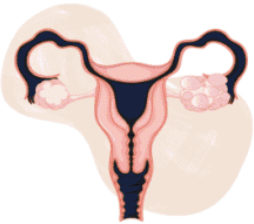
Decreased testosterone levels in males





Amenorrhoea in females

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Sudden death- Due to abnormal heart rhythm (arrhythmia) or an imbalance of electrolytes and minerals

NIRUJA HealthTech

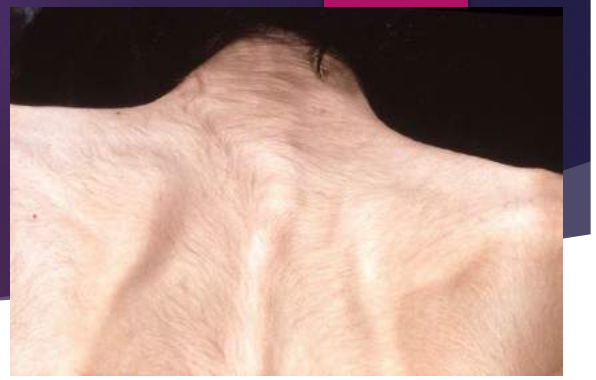
#becauseyourhealthmatters

Signs & Symptoms of AN

System	Symptoms	
Fluids/Electrolytes	Hyponatremia, Hypophosphatemia	Hypomagnesemia, Dehydration
Cardiovascular	Bradycardia, Hypotension, Orthostasis, abnml EKG	Syncope, Systolic murmur (MVP), Pretibial edema (esp w/wt restoration or when ceasing laxative/diuretic abuse)
GI	Hypomotility (constipation), Abdominal pain, Vomiting 2/2 Superior Mesenteric Artery Syndrome	Scaphoid abdomen (stool palpable in LLQ), Elevated hepatic enzymes
Metabolic/Endocrine	Cold intolerance/hypothermia, Fatigue, Amenorrhea (OCP can mask), Growth retardation, Delayed puberty	Decreased libido, Low hormone levels overall, Hypercortisolism, Hypoglycemia (esp. post-prandial)

Signs & Symptoms of AN Cont'd

System	Symptoms	
Musculoskeletal	Muscle wasting, Loss of SQ tissue	Low weight, Osteo-penia/perosis & pathologic fractures
CNS	Seizures, Cognitive & memory dysfxn, Depression, Anxiety, Sleep disturbance	Cortical atrophy, Ventricular enlargement, Abnml EEG
Hematology	Easy bruising, Petechiae or ecchymosis (rare), Thrombocytopenia	Leukopenia, Anemia
Skin/Hair/Teeth/ Other	Lanugo, Hair loss, Brittle hair, Yellowing of the skin (hypercarotenemia), Dry skin	W/purging: Parotid enlargement, Dental enamel erosion, Scars/calluses on the hand (f/SIV)



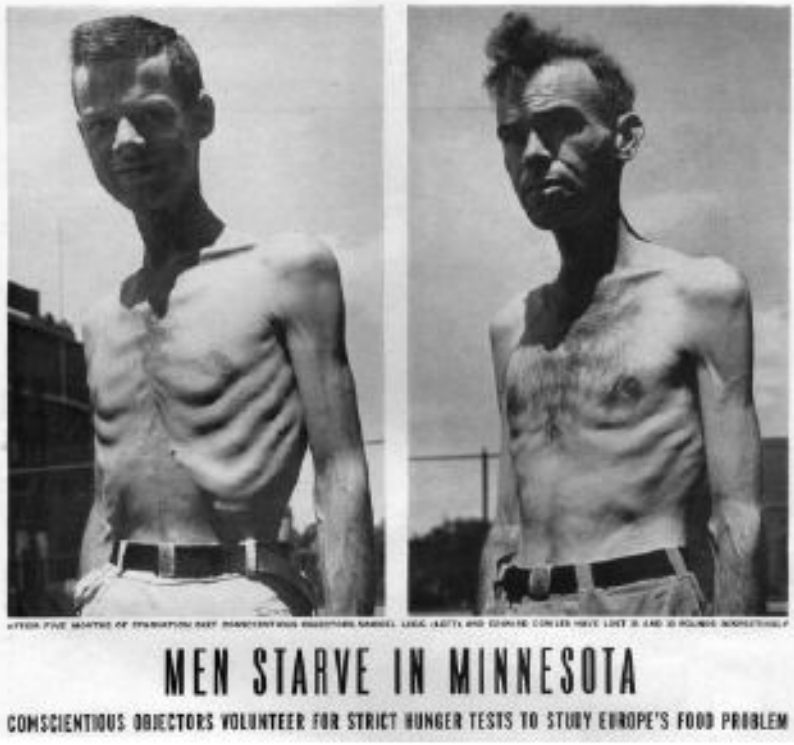
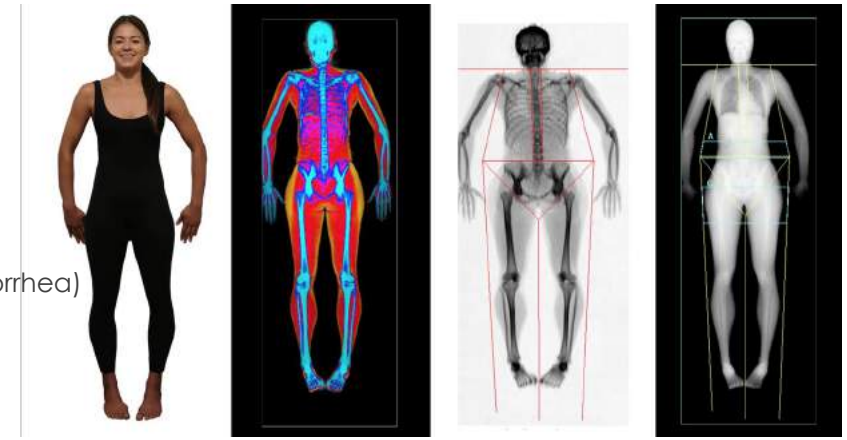


FIGURE 2 *Life* magazine photograph of conscientious objector during starvation experiment. July 30, 1945. Volume 19, Number 5, p 43. Credit: Wallace Kirkland/Time Life Pictures/Getty Images.

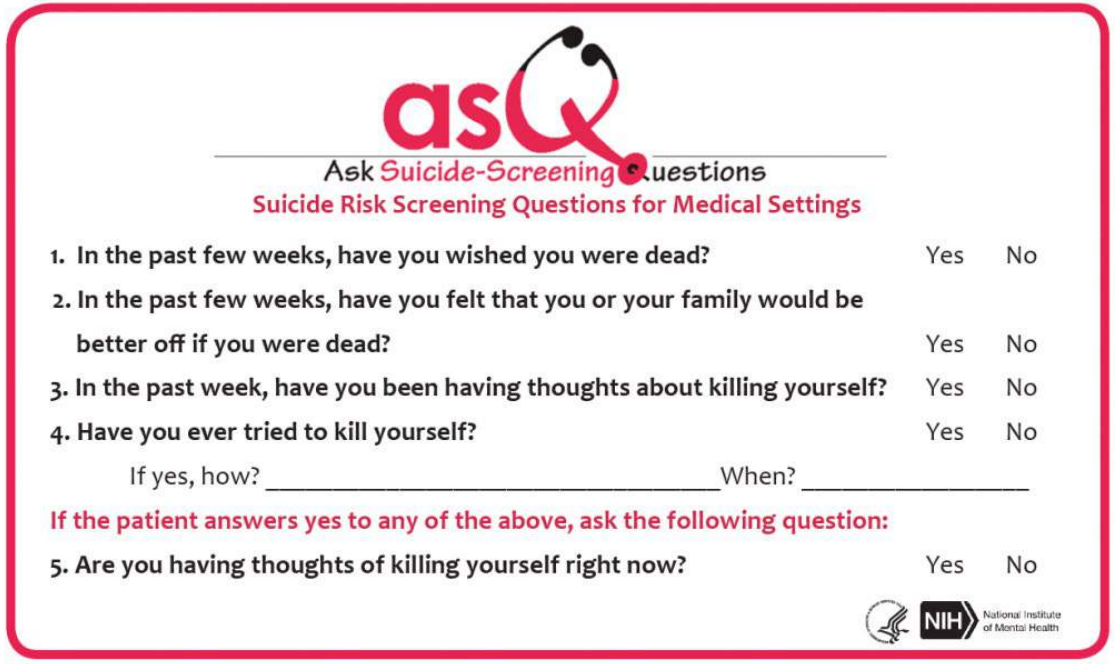
AN – Medical Monitoring

- Physical Exam (including dental check)
- Vital Signs
  - Orthostatic BP & HR, temp, height, & gowned, post-void, blinded weight
- Labs
  - CBC, CMP, Mag, Phos, Amylase & Lipase (if suspect vomiting), TSH, fT4, Vitamin D, Estradiol, Prealbumin, UA
    - Anemia, elevated BUN (dehydration), hypercholesterolemia, elevated LFTs, low prealbumin, etc.
    - Less common- hypomagnesemia, hypozincemia, hypophosphatemia, hyperamylasemia
    - Self-induced vomiting -> metabolic alkalosis (incrs serum bicarb), hypochloremia, hypokalemia, elevated amylase & lipase
    - Laxative abuse -> mild metabolic acidosis
    - serum T4 (low nml), T3 (decrs), reverse T3 (high)
  - Testosterone (low in genetic M) and Estrogen (low in genetic F) - optional
- EKG
  - Bradycardia common, arrythmias less so, some w/severely prolonged QTc
- Bone density scan
  - Obtain if persistent low weight/loss of menses x 6 months or significantly delayed menarche (ie: primary amenorrhea)
  - Low bone mineral density, osteopenia/osteoporosis, increased risk of fracture
  - Discourage pt from viewing the DEXA, as it can be triggering



AN – Suicide Risk

- Risk of suicide/SI are ELEVATED in individuals with AN!
- 12/100,000 per year
- SCREEN for SUICIDE!
- The ASQ is a quick and easy screener, although others also exist, such as the CSSRS (Columbia-Suicide Severity Rating Scale)- https://cssrs.columbia.edu/wp-content/uploads/C-SSRS_Pediatric-SLC_11.14.16.pdf
  - In a NIMH study, a "yes" response to one or more of the four questions identified 97% of youth (aged 10 to 21 years) at risk for suicide.



asQ

Ask Suicide-Screening Questions

Suicide Risk Screening Questions for Medical Settings

1. In the past few weeks, have you wished you were dead?	Yes	No
2. In the past few weeks, have you felt that you or your family would be better off if you were dead?	Yes	No
3. In the past week, have you been having thoughts about killing yourself?	Yes	No
4. Have you ever tried to kill yourself?	Yes	No

If yes, how? _____ When? _____

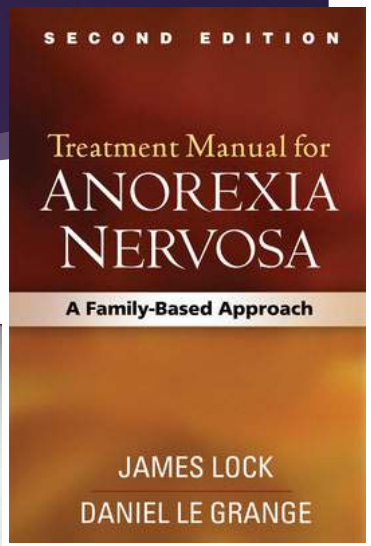
If the patient answers yes to any of the above, ask the following question:

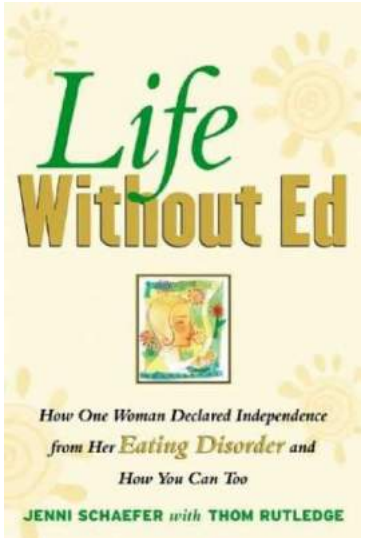
5. Are you having thoughts of killing yourself right now?	Yes	No

NIH National Institute of Mental Health

AN - Treatment

- Determine the Minimum Safe Weight (AKA: goal weight, ideal body weight)
- For weight restoration, either hospitalization +/- NGT feeds or outpt management with FBT (family based therapy)
- Consider PHP/IOP as step-down/up options
- Medications – None directly
  - SSRIs for depression/anxiety (but generally do not work well if severely underweight)
  - Atypical Antipsychotic for rigid thinking/delusional thoughts/possibly to stimulate appetite (ie: Olanzapine/Zyprexa)
  - Melatonin +/- Trazodone for sleep
  - Prazosin/Guanfacine/Clonidine for PTSD symptoms
- Individual therapy to focus on challenging body image distortions/ED thoughts & co-morbid conditions (emotional stunting at age of onset)
- Art therapy – challenge body image distortions
- OT/Nutrition – work on normalized eating & re-engagement in the life





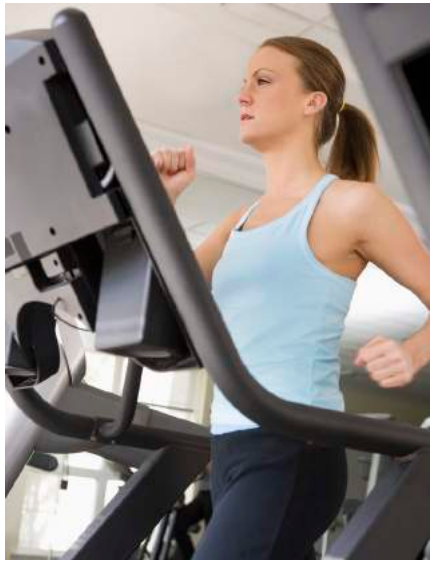
AN – When to admit?

- HR <50bpm in daytime or <45 bpm when asleep
- Systolic BP <90mm Hg
- Orthostatic changes
  - Check HR and BP in the recumbent, seated, & standing positions with 3 minutes in-between
  - Orthostatic BP: A decrease in Systolic BP by >/= 20mm Hg or a decrease in Diastolic BP of >/= 10mm Hg
  - Orthostatic pulse: An incrs in HR by 20 bpm or more
- Arrhythmia
- Temp <96*F
- Weight < 75% of the Minimum Safe Weight
- Failure to gain weight despite intensive management
- Body fat <10%
- Refusal to eat
- Failure to respond to outpatient treatment
- Any acute safety concern (ie: active suicidal ideation)

DSM-V Criteria: Bulimia Nervosa

1) Uncontrolled Binge Eating

- Recurrent episode of binge eating. An episode of binge eating is characterized by <u>both</u> of the following:
  - I. Eating, in a discrete period of time (ex: 2 hours), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances
  - II. A sense of lack of control over eating during the episode
    - Feeling that one cannot stop or control what/how much one is eating



2) Compensatory Behaviors

- Recurrent, inappropriate compensatory behavior performed in order to prevent weight gain:
  - Self-induced vomiting **OR** Misuse of laxatives, diuretics, enemas or other medications **OR** Fasting **OR** Excessive exercise **OR** a combo

DSM-V Criteria: Bulimia Nervosa

3) Frequency

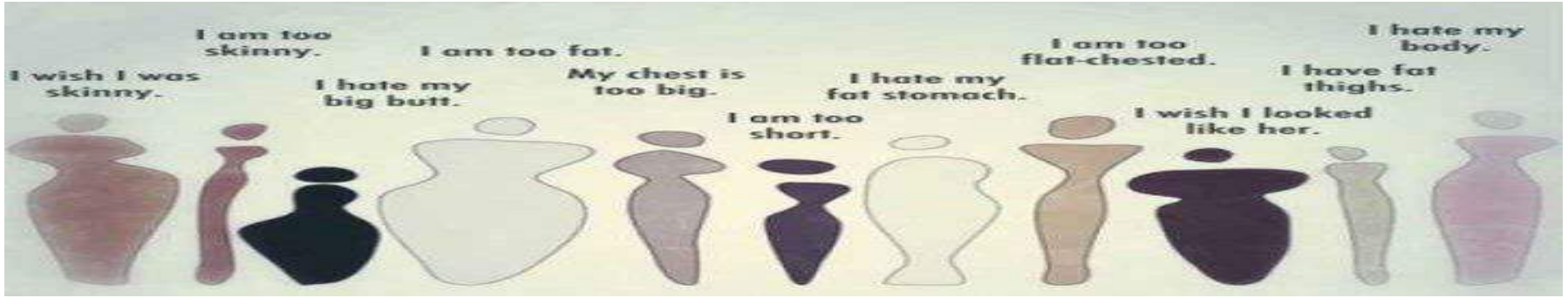
- The binge eating and inappropriate compensatory behaviors both occur, on average, at least once a week for 3 months

4) Self Concept

- Self-evaluation is unduly influenced by body shape and weight

AND

- The disturbance does not occur exclusively during episodes of Anorexia Nervosa

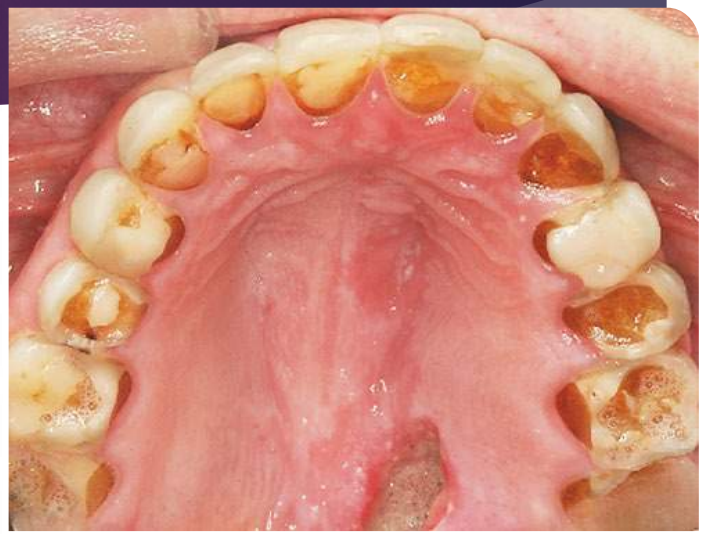


BN Diagnosis Cont'd

- Specify:
  - Mild: avg 1-3 episodes of inappropriate compensatory behaviors per week
  - Moderate: avg 4-7 episodes of inappropriate compensatory behaviors per week
  - Severe: avg 8-13 episodes of inappropriate compensatory behaviors per week
  - Extreme: avg 14 or more episodes of inappropriate compensatory behaviors per week

Bulimia Nervosa – the Highlights

- Not perfectionistic, often messy, sometimes with social withdrawal
- "Normal" weight or overweight
- Body dissatisfaction and negative body image
- Significant swings in weight overtime; ED behaviors often correlate with mood swings
- Restricting +/- exercise, but ALSO bingeing and/or purging (Ie: self-induced vomiting w/hand or instrument, laxative/diuretic/diet pill abuse, insulin abuse in those with DMII)
- Binge eating – eating an excessive amount of food in a discrete period of time w/lack of control, often guilt afterwards
- Overlap with substance abuse disorders
- Self-harm is common
- Trauma can lead to desire to make oneself as unappealing as possible – gaining weight, poor hygiene, dressing in excessive layers & bulky clothing
- Cluster B Personality Disorders (esp. Borderline, Histrionic) are common & parents may have Narcissistic or Antisocial P.D.
- The ED behaviors are generally ego-syntonic, but the aftermath of bingeing/purging is generally ego-dystonic
- Dental caries/stains, malodorous breath, Russel's sign, diarrhea, esophageal bleeds
- The Eating Disorder (ED) becomes like an abusive significant other – controlling, degrading, restrictive, but also praises for and encourages acting on ED urges

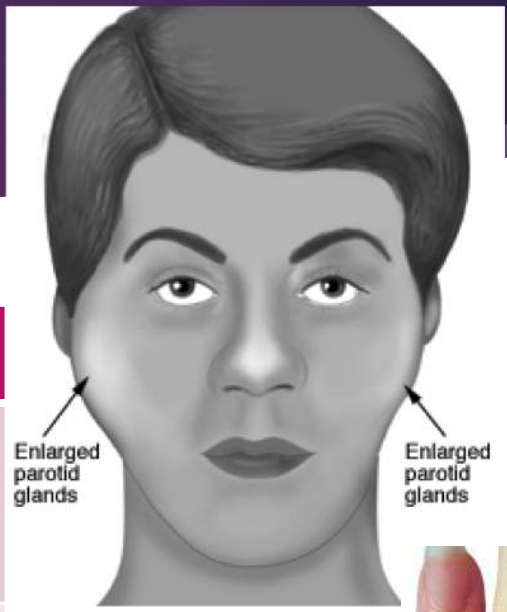


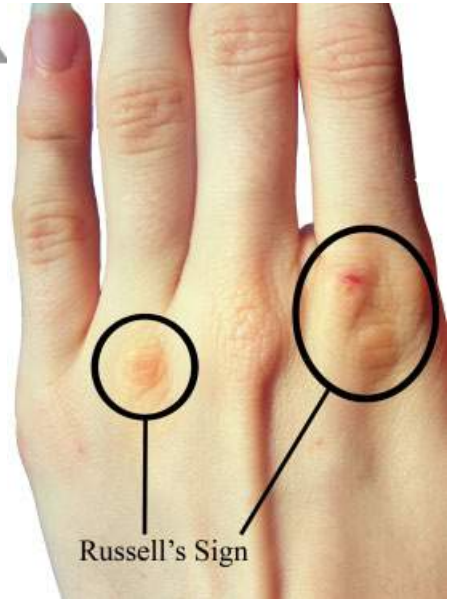
Signs & Symptoms of BN

System	Symptoms	
Fluids/Electrolytes	Hypokalemia, Hypochloremia, Hypocalcemia	Hyponatremia, Hypophosphatemia, Hypomagnesemia
Cardiovascular	EKG abnormalities (esp. QTc prolongation)	
GI	Parotid gland enlargement, Dental enamel erosion, Russel's sign (scars/calluses on the hand f/scraping the teeth during SIV), Mallory-Weiss tears (esophageal bleeds, *can be life threatening)	Loss of gag reflex, Stomach rupture (*can be life threatening), GERD, Pancreatitis, Constipation

Signs & Symptoms of BN Cont'd

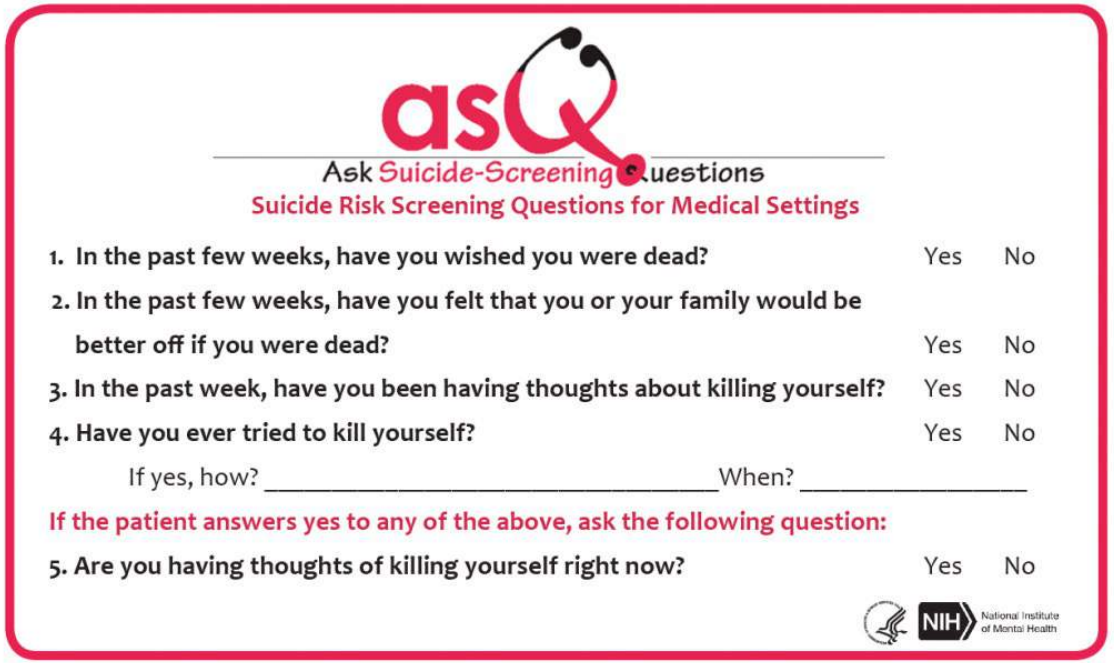
System	Symptoms
Metabolic/Endocrine	Fatigue, Amenorrhea, Oligomenorrhea, or nml menses
Musculoskeletal	Normal or over-weight, Usually nml bone mineral density
CNS	Seizures, Cognitive & memory dysfxn, Depression, Anxiety





BN – Suicide Risk

- Also with elevated risk of suicide (attempt, plan, ideation) and/or self-harm (acting on vs urges)
- Ask about safety



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Ask Suicide-Screening Questions

Suicide Risk Screening Questions for Medical Settings

1. In the past few weeks, have you wished you were dead?	Yes	No
2. In the past few weeks, have you felt that you or your family would be better off if you were dead?	Yes	No
3. In the past week, have you been having thoughts about killing yourself?	Yes	No
4. Have you ever tried to kill yourself?	Yes	No

If yes, how? _____ When? _____

If the patient answers yes to any of the above, ask the following question:

5. Are you having thoughts of killing yourself right now?	Yes	No

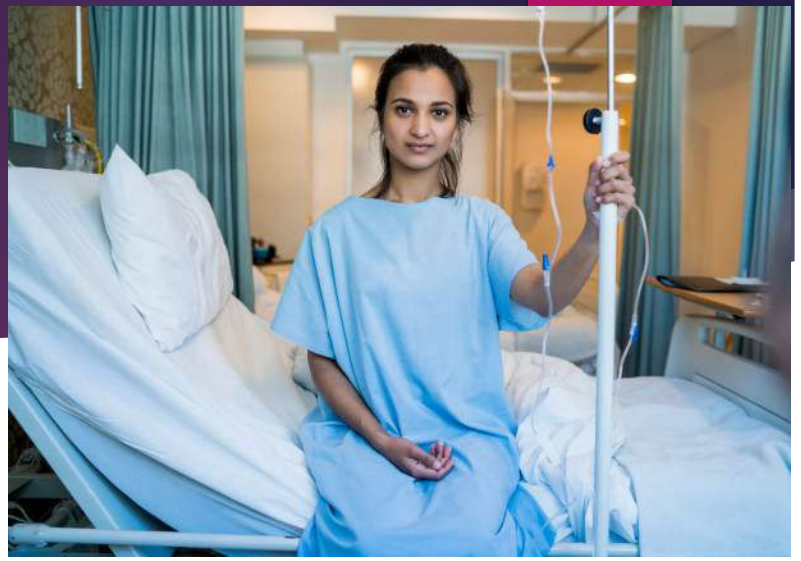
NIH National Institute of Mental Health

BN Treatment

https://www.mayoclinic.org/diseases-conditions/bulimia/diagnosis-treatment/drc-20353621

- Multidisciplinary team approach - health and mental health professionals
- Treatment team to include: PCP, psychiatrist, psychotherapist, and dietician
  - Cognitive Behavioral Therapy (CBT), Family Based Therapy (FBT), Interpersonal Therapy
- Meds:
  - **Selective serotonin reuptake inhibitors (SSRIs):**
    - Fluoxetine (Prozac) (FDA approved for BN in adults; off-label for BN for ages 12 & up)
  - **Other:**
    - Prazosin (Minipress) – if PTSD symptoms are a contributing factor (off-label ages 5 yrs & up)

BN - When to Admit?



- Syncope
- Serum potassium <3.2 mmol/L
- Serum chloride <88 mmol/L
- Esophageal tears
- Arrhythmias (including prolonged QTc)
- Hypothermia
- Intractable vomiting
- Hematemesis
- Failure to respond to outpatient treatment
- Suicide risk or any acute safety concerns

DSM-V Criteria: Binge Eating Disorder (BED)

A. Recurrent episodes of binge eating.
   1. Eating, in a discrete period of time (ex: 2 hours), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances
   2. A sense of lack of control over eating during the episode (Feeling that one cannot stop or control what/how much one is eating)

B. The binge-eating episodes are associated with 3 or more of the following:
   1. Eating much more rapidly than normal
   2. Eating until uncomfortably full
   3. Eating large amounts of food when not physically hungry
   4. Eating alone d/t embarrassment over amount of food consumed
   5. Feeling disgusted with oneself, depressed, or very guilty afterwards

C. Marked distress regarding binge eating

D. Binges occur (on avg) at least once a week x 3 months

E. NOT associated with recurrent use of compensatory mechanisms & not exclusively in the setting of AN or BN.

BED Diagnosis Cont'd

- Specifiers
  - Mild: 1-3 binge episodes per week
  - Moderate: 4-7 binge episodes per week
  - Severe: 8-13 binge episodes per week
  - Extreme: 14 or more binge episodes per week

True Binge vs Perceived Binge

BED – the Highlights

https://www.nationaleatingdisorders.org/binge-eating-disorder/

- Engages in episodes of binge eating large amounts of food in a short period of time, often in secret
- Avoids eating in public or with others and often feels embarrassed about the quantity of food consumed
- Steals or hoards food in strange places
- Repeated failure to sustain weight loss through dieting, increased activity, or the use of weight loss medications
- Creates lifestyle schedules or rituals to make time for binge sessions
- Withdraws from friends and previously pleasurable activities and becomes more isolated and secretive
- Shows extreme concern with body weight and shape
- Disruption in normal eating behaviors, including eating throughout the day with no planned mealtimes; skipping meals or taking small portions of food at regular meals; engaging in sporadic fasting or repetitive dieting
- Manipulation of insulin dosage to accommodate binge episode
- Experiences shame, guilt and despair after binge-eating episodes
- Fluctuations in weight
- Frequently experiences low self-esteem
- Co-morbidities: Anxiety, Depression, Bipolar D/O, ADHD, Sunstance Use D/O, and Suicidality

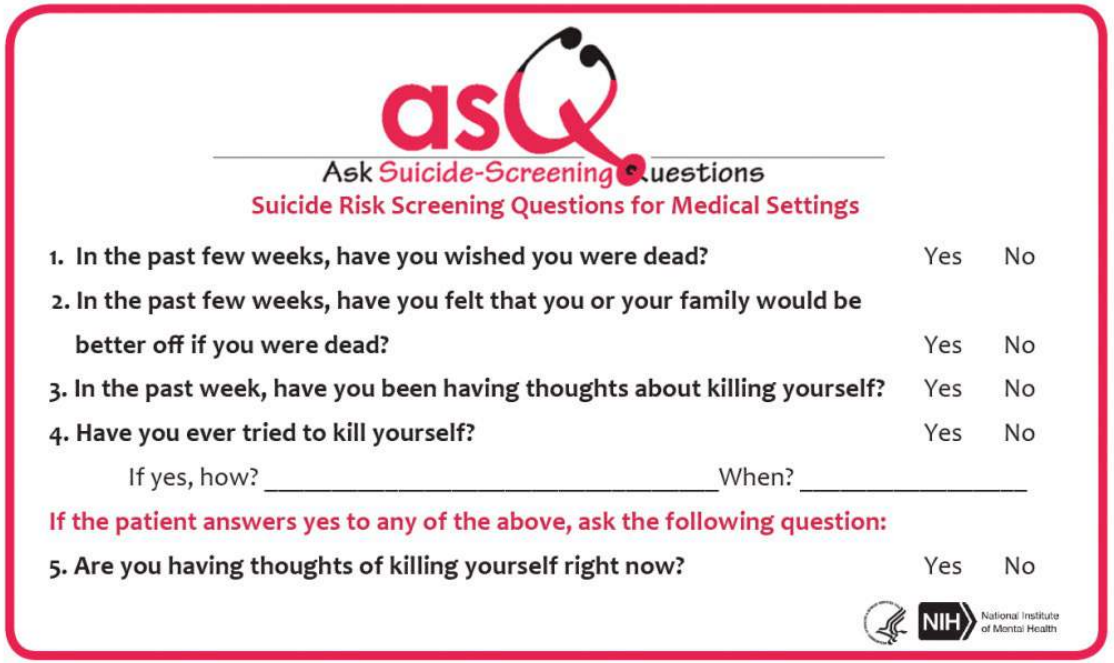
Signs & Symptoms of BED

- Type 2 Diabetes
- Metabolic syndrome: higher waist circumference, increased triglyceride levels, elevated blood pressure (hypertension), elevated fasting glucose, & decreased HDL cholesterol
- Polycystic ovarian syndrome (PCOS) - can lead to menstrual irregularities
- High LDL cholesterol
- Chronic pain or pain syndromes (ie: neck/back pain and headaches)
- Sleep difficulties
- Asthma
- GI symptoms & disorders (ie: GERD, heartburn, dysphagia, bloating, diarrhea)
- Cardiovascular problems/disease

https://www.nationaleatingdisorders.org/binge-eating-disorder/

BED – Suicide Risk

- Also with elevated risk of suicide (attempt, plan, ideation) and/or self-harm (acting on vs urges)
- Ask about safety



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If yes, how? _____ When? _____

If the patient answers yes to any of the above, ask the following question:

5. Are you having thoughts of killing yourself right now?	Yes	No

NIH National Institute of Mental Health

BED Treatment

https://www.webmd.com/mental-health/eating-disorders/binge-eating-disorder/medications-binge-eating-disorder

- Multidisciplinary team approach - health and mental health professionals (with expertise in treating this type of eating disorder)
- Treatment team to include: physician, psychiatrist, psychotherapist, and dietician
  - CBT & DBT
- Early intervention has also been shown to be an important factor in improving treatment outcomes.
  - Hambleton, A., Pepin, G., Le, A., Maloney, D., National Eating Disorder Research Consortium, Touyz, S., & Maguire, S. (2022). Psychiatric and medical comorbidities of eating disorders: findings from a rapid review of the literature. *Journal of eating disorders*, 10(1), 132.
- Meds:
  - **Psychostimulants:** to control impulses to binge eat (similar to targeting impulsivity in tx of ADHD), also appetite suppression
    - Lisdexamfetamine dimesylate (Vyvanse) (FDA approval in adults)
  - **Selective serotonin reuptake inhibitors (SSRIs):** reduces symptoms of anxiety & improves mood which may be protective against binge urges
    - Escitalopram (Lexapro) (FDA approved for ages 7 & up for Generalized Anxiety Disorder)
  - **Other:**
    - Bupropion (Wellbutrin) - *decreases the seizure threshold (ie: increases risk of sz) in those who purge
  - **Anticonvulsants/Mood stabilizers:** to control binge episodes
    - Topiramate (Topamax) (off-label) – but risk of memory difficulties/brain-fog (“Dopamax”)

BED - When to admit?

- Outpatient treatment is usually sufficient
- Inpatient hospitalization required when there is a severe mental health issue/safety risk

OR

- Binge Eating Disorder has resulted in unstable medical picture (ie: unstable heartbeat)

OR

- The BED is severe, and other outpatient interventions have not been successful

DSM-V Criteria: Avoidant Restricting Food Intake Disorder (ARFID)

- Persistent failure to meet nutritional needs with one or more of:
  - Significant weight loss
  - Significant nutritional deficiency
  - Dependence of enteral feeding or supplements
  - Interference with functioning
- 3 Subtypes:

1. Apparent lack of interest in eating/food
   - "Infantile Anorexia"
2. Avoidance based on sensory sensitivities
   - "Sensory Food Aversions"
3. Concern about aversive consequences of eating
   - "Post-traumatic Feeding Disorder"

Symptoms of Lack of Interest in Eating/Infantile Anorexia:

All Six Required:

- Low appetite, rapid satiety persisting for >/= 1 month
- Starting before age 3 years
- Does not communicate hunger & not interested in food (More interested in talking/playing than eating.)
- Significant growth deficiency (falling off growth curves)
- No traumatic predecessor
- Not d/t underlying medical condition

Other Symptoms:

- Repeatedly getting out of the highchair/leaving the table
- Low percentiles on growth charts
- Parents feeding "on-the-go", leaving food out to be eaten whenever, and using distractions at the meals
- Onset is generally between 9-18 months, during transition to spoon-feeding & self-feeding

Symptoms of Sensory Food Aversion:

All Four Required:

- Food selectivity for only certain tastes/textures/smells/temperatures
- Onset of selectivity occurred when new types of foods were introduced (ex: move f/purees to finger foods)
- Eats preferred foods easily
- Lacking certain micronutrients in the diet and/or oral motor delay
  - The same muscles are utilized in eating as in speaking -> speech delays

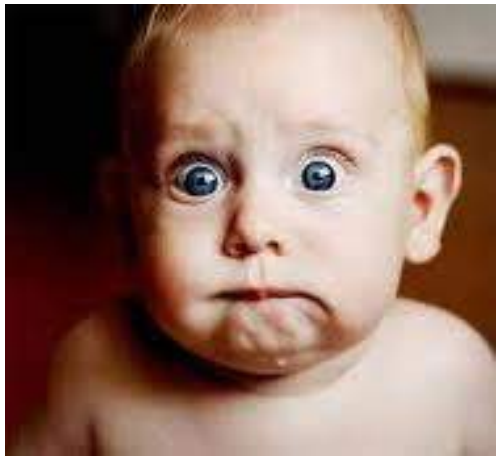
Other Symptoms:

- Fear of trying new foods ("food neophobia")
- Leaving the table prematurely can also be due to anxiety related to the new foods
- Avoiding the table when strong smelling foods are present
- Spitting up/gagging on non-preferred foods & subsequently refusing those foods
- Other sensory sensitivities – ex: not tolerating mess on the hands

Symptoms of Posttraumatic Feeding Disorder:

All Four Required:

- Food refusal followed a major aversive event/noxious insult to oropharynx or GI tract.
- A consistent refusal to eat - could also take the form of refusing all liquids, all solids, or both solids and liquids.
- Any reminders of the traumatic event cause anticipatory distress and refusal to eat or swallow.
- Food refusal poses an acute or long-term threat to child's nutrition.

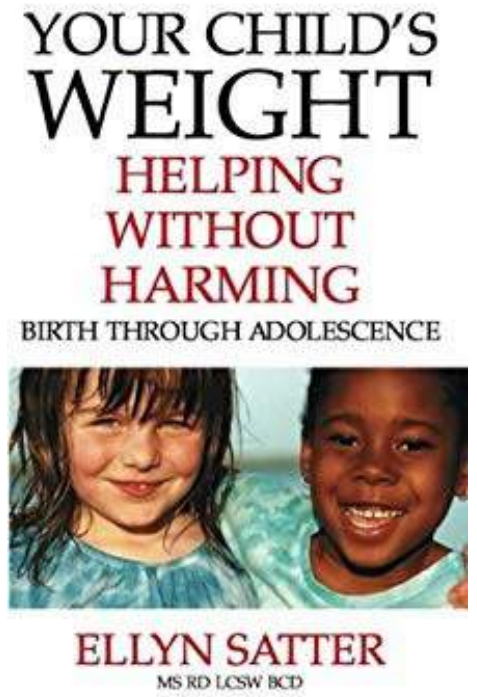


ARFID- Medical Monitoring

- In young children, consider GI eval to r/o anatomic causes
- Monitor for anemia, Vit D deficiency, macronutrient deficiencies, etc.
- 3 day food log can be helpful for tracking whether or not nutritional needs are being met
- In those with the post-traumatic subtype, if food refusal is severe, they may require hospitalization for rehydration/stabilization, in which case electrolytes will need to be monitored.

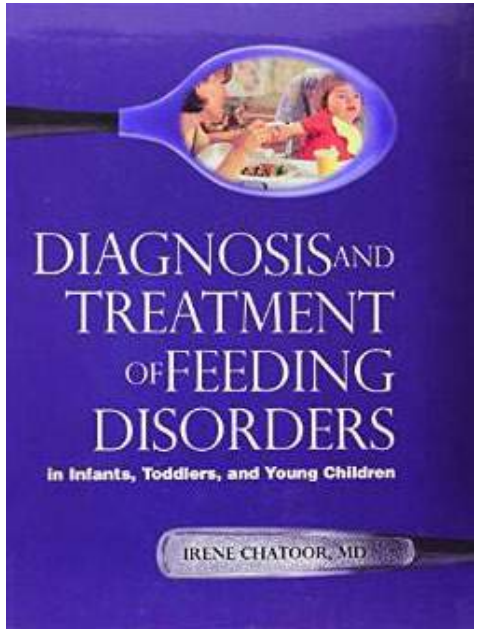
ARFID- Treatment

- Goal is to restore (or create) normalized feeding behaviors in both child and parents (& family)
- Therapeutic interventions are primary
  - Focus on family meals, food hierarchy
- The What, When, How Much approach to feeding
  - Ellyn Satter, M.S., R.D, L.C.S.W., B.C.D.
- Medications to assist with comorbid sleep, anxiety, appetite stimulation, bed wetting, etc, if indicated
  - SSRI, TCA (ex: Imipramine), low dose Atypical Antipsychotic (ex: Zyprexa), Cyproheptadine, Melatonin
- Hospitalization for medical stabilization in acute decompensation associated w/severe post-traumatic subtype
  - Can be life threatening!

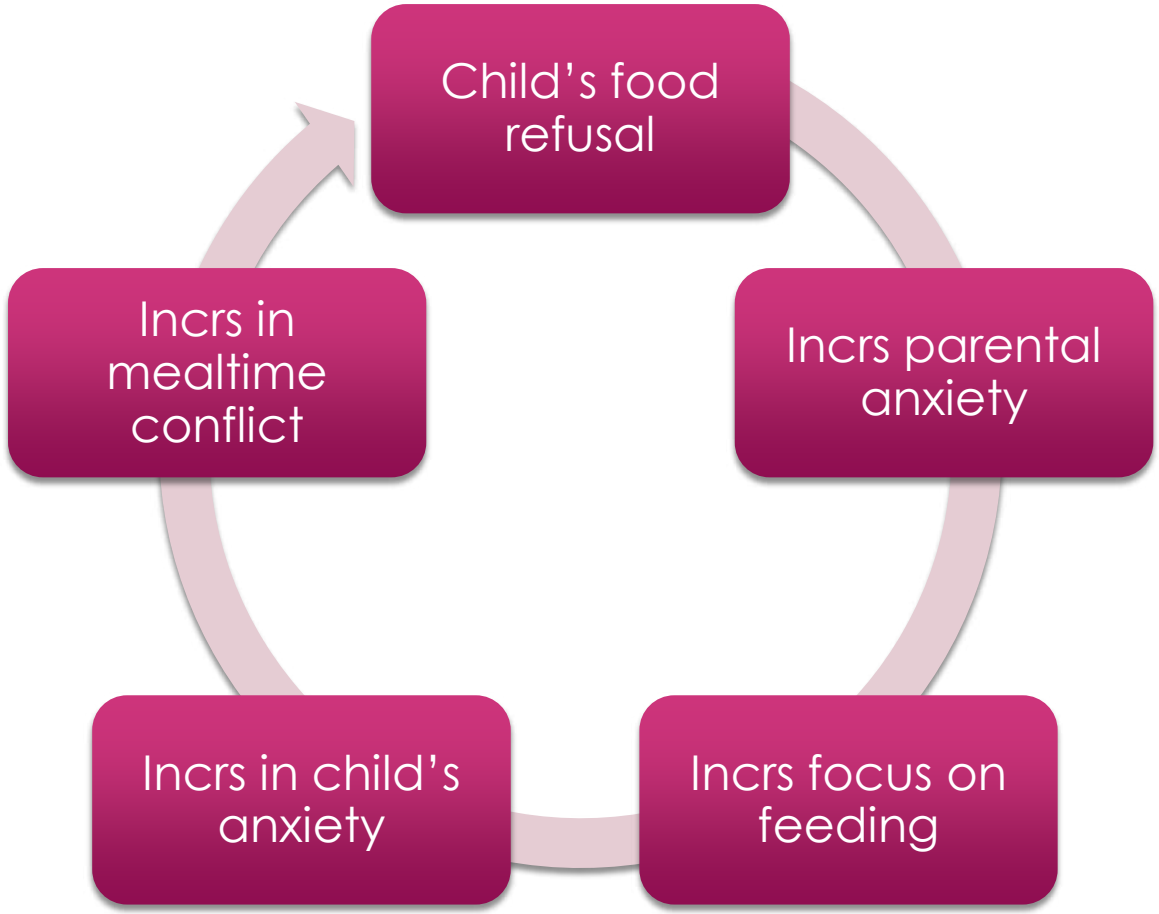


ARFID- Treatment Cont'd

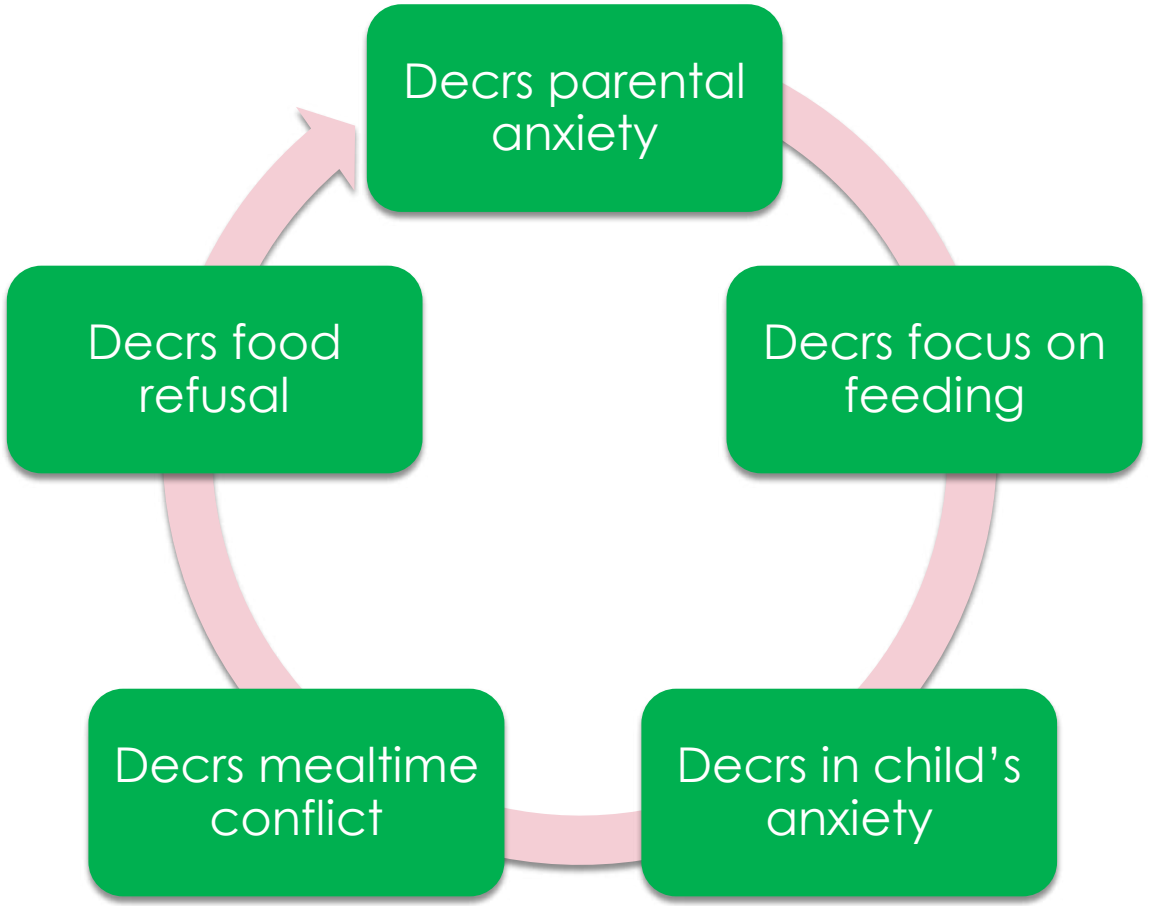
- For the IA subtype, the focus is on regulating hunger and fullness cues and modeling appropriate eating routines/habits
- For SFA subtype, the focus is on exposure therapy – use of a food hierarchy w/behavioral techniques to reward trying the challenge food until it is no longer as aversive
- For post-traumatic subtype, the focus is also on exposure, but can allow some distractions while beginning this process
  - Ex: dream feeding the bottle, allowing TV during meal



ARFID- Negative & Reinforcing Cycle



ARFID- Positive & Reinforcing Cycle



The Full Feeding Guidelines

1. Feed child at regular times approximately 3-4 hours apart for 20-30 minutes only.
2. No other food or drinks, aside from water if thirsty.
3. Eat all meals and snacks in the kitchen or dining room, rather than in front of the TV or while the child is playing.
4. Offer child small portions and allow him/her to have more until he/she is full and does not want to eat anymore.
5. Occasionally offer child "special foods" along with the meal (desserts, candies, or "junk" foods). Allow child to eat these items first, if desired.

The Full Feeding Guidelines Cont'd

6. Do not praise of criticize your child based on the amount that he/she eats.
7. Do not use food as a reward, special gift, expression of your affection, or a way to calm your child. Do not restrict food intake or withhold food as a threat or punishment for your child.
8. Teach your child to sit at the table until "Mommy's and Daddy's tummies are full", rather than leaving when they are "done".
9. Discourage your child from playing with the food or talking excessively at the meal. Instead, set a special time for playing and talking with your child after the meal is completed.
10. If your child gets up from his/her chair, throws food or utensils, or is otherwise misbehaving, give one warning. If the behavior does not resolve, administer a "time-out".

Thank you

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- https://www.nationaleatingdisorders.org/
- https://www.nationaleatingdisorders.org/sites/default/files/ResourceHandouts/WhatisHealthAtEverySize.pdf