Eating Disorders

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CAMH ECHO Series

Disclosures

- No financial disclosures
- Some discussion of off-label use of medications

Preview

- Why is this important?
- Diagnoses
- Medical Complications
- Screening and Diagnosis
- Assessment
- Treatment

Why is this important?

- Higher rates of ER visits and hospitalization for eating disorders since the onset of the pandemic. We're not sure why.
- **Blacks, Asians, Hispanics with EDs are not getting the care they need even though they have just as high rates as white people.**
- **Men, boys, transgender individuals are underdiagnosed and undertreated.**
- **Anorexia Nervosa has highest mortality rate among all mental health disorders**, of those deaths- ~80% medical causes, ~20% by suicide
- **~50% have comorbid psych conditions**

The Diagnoses

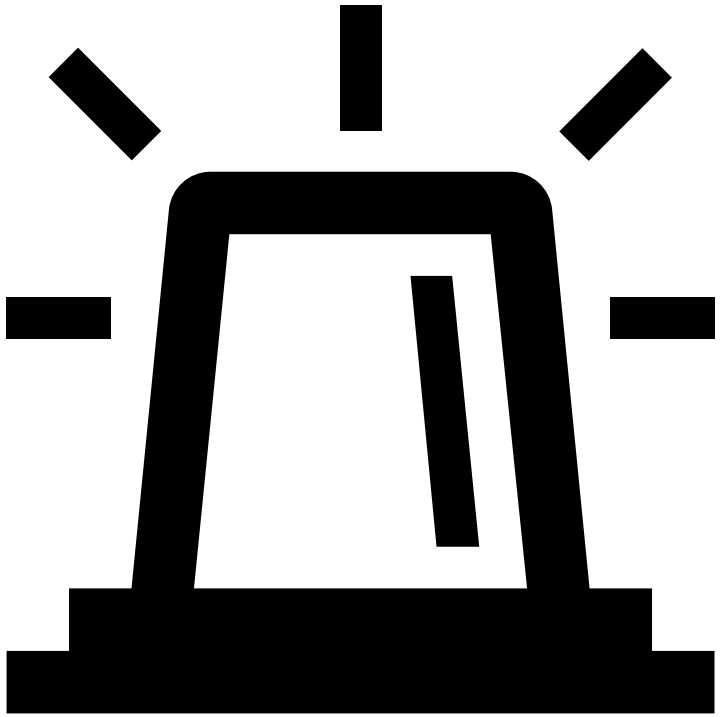
	Abnormally low weight	Bingeing	Compensatory Behaviors	Self-evaluation unduly influenced by body shape and weight
Anorexia nervosa	+	+/-	+/-	+ WITH intense fear of weight gain
Bulimia nervosa	-	+	+	+
Binge eating disorder	-	+ WITH ≥3 Feel terrible about it after, bingeing alone, eating when not hungry, eating til uncomfortably full, eating rapidly	-	+/-
Avoidant-restrictive food intake disorder (ARFID)	+ OR ≥ 1: significant nutritional deficiency, dependence on enteral feeding or oral nutritional supplements, marked interference w/ psychosocial functioning	-	-	-

Other Specified Feeding or Eating Disorder (OSFED)

	Simplified criteria
OSFED: Atypical anorexia nervosa	Anorexia nervosa with weight loss but weight is still ”within or above normal range”
OSFED: Bulimia nervosa of low frequency	All criteria met for BN but binge/purges <1x/week
OSFED: Bulimia nervosa of limited duration	All criteria met for BN but <3 months
OSFED: Binge eating disorder of low frequency	All criteria of BED met but binges happen <1x/week
OSFED: Binge eating disorder of limited duration	All criteria of BED but for <3 months
OSFED: Purging disorder	Recurrent purging behavior to influence weight or shape without binge eating
OSFED: Night eating syndrome	Recurrent episodes of night eating, as manifested by eating after awakening from sleep or by excessive food consumption after the evening meal. Patient remembers it. Not bc of sleep/wake cycle issues or local norms, + distress or functional impairment, not due a medication

OTHER SPECIFIED FEEDING OR EATING DISORDER: ATYPICAL ANOREXIA NERVOSA

- **Has just as high rate of medical complications as Anorexia nervosa!**



	Specifiers	Severity	Duration
Anorexia nervosa	Restricting type Binge-eating/purging type In partial remission In full remission	Mild Medium Severe (use your judgment)	3 months
Bulimia nervosa	None	Mild: 1-3 compensatory behaviors (CP)/week Moderate: 4-7 / week Severe: 8-13/week Extreme: ≥14/week	3 months
Binge eating disorder	In partial remission (<1 episode/week for “sustained period of time” In full remission: no criteria met for “sustained period of time”	Mild: 1-3 binges/week Moderate: 4-7 binge/week Severe: 8-13 binges/week Extreme: ≥ 14 binges/week	3 months
ARFID	In remission (criteria not med for “sustained period of time”)	None	any

A couple more..

	What's wrong	For how long	Common comorbidities	Rule out…
Pica	**eating non-nutritive things** inappropriate to developmental level, not normal for the culture, if it happens with ID, ASD, schizophrenia, pregnancy – severe enough that it needs its own attention	≥ 1 month	Autism spectrum disorder Intellectual disability Trichotillomania Excoriation disorder ARFID (if sensory issues prevalent)	GI complications Poisoning Infection Nutritional deficiency Trichotillomania Iron deficiency Nonsuicidal self-injury (Ex- swallowing blades) Factitious disorder Anorexia nervosa (ex- eating tissue to control appetite) Trichotillomania → Bezoar (hair)
Rumination syndrome	**Effortless regurgitation** → rechewed, reswallowed, spat out not nausea	≥ 1 month	Intellectual disability GAD	GERD Pyloric stenosis Anorexia nervosa Bulimia nervosa Binge-eating disorder ARFID Cyclic vomiting syndrome **(NAUSEA AND VOMITING)**

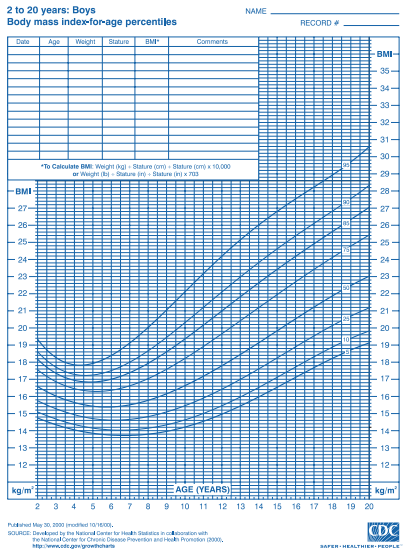
Unspecified eating disorder

When something is off but we don’t know what just yet.

What's "abnormal weight" for kids?

Growth faltering (failure to thrive)

- Attained weight for length or BMI is below expected on age and sex-specific growth charts
- Weight on the charts has crossed down ≥2 major percentile lines
- BMI <5th percentile for age



"Normal" = BMI between 5th and 85th percentile

BUT BMI has limitations!

Overweight or obese

- Overweight: BMI ≥85th percentile to <95th percentile
- Class I Obesity: BMI ≥95th percentile to <120% of 95th percentile or BMI ≥30 to <35 (whichever is lower)
- Class II Obesity: BMI ≥120 to 140% of the 95th percentile or a BMI ≥35 to <40 (whichever is lower)
- Class III: BMI ≥ 140% of the 95th percentile or a BMI ≥40 (whichever is lower)

Society for Adolescent Health and Medicine, 2022

Table 3
Proposed classification of the degree of malnutrition for adolescents and young adults with eating disorders

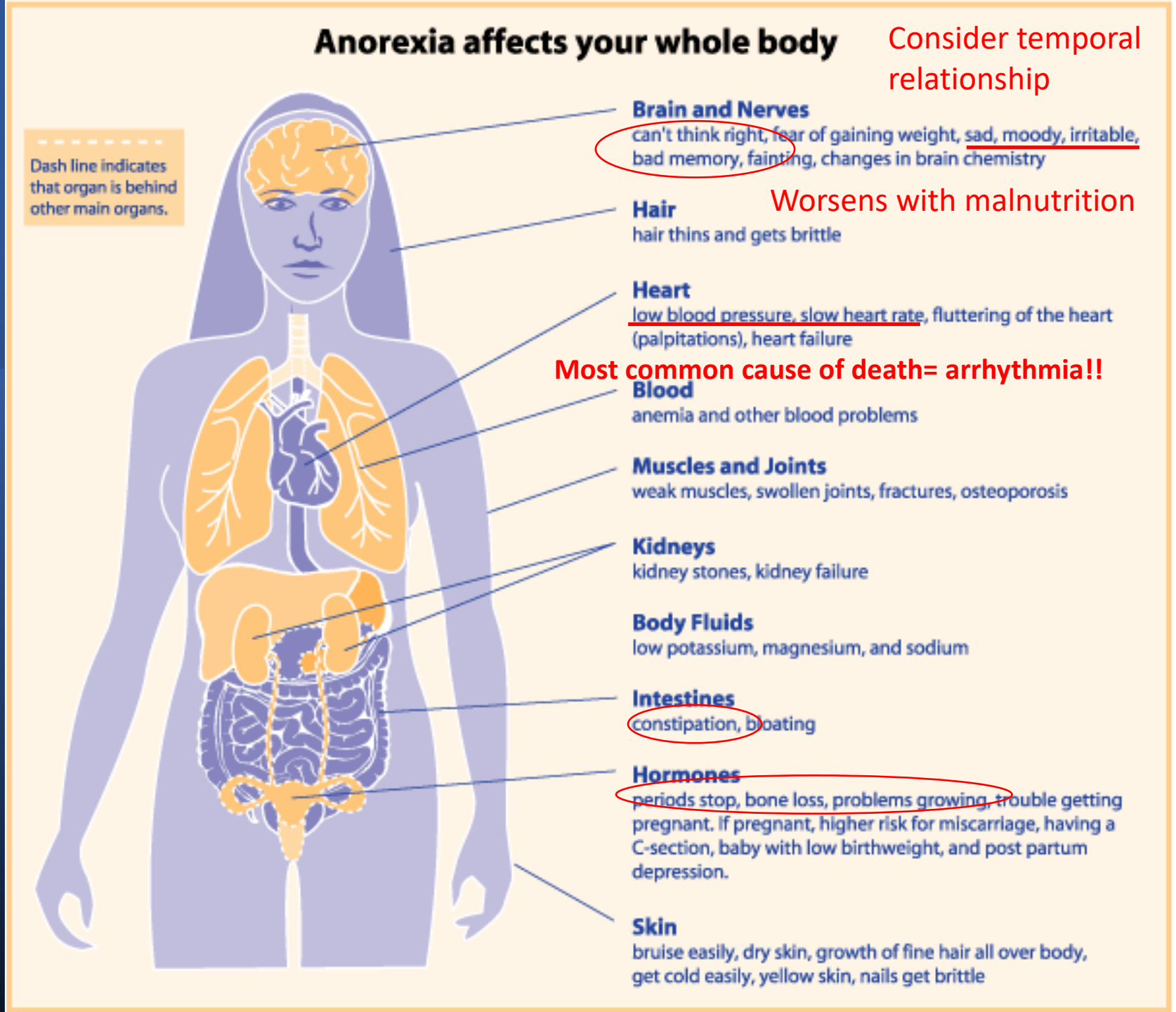
	Mild	Moderate	Severe
% mBMI[a]	80%–90%	70%–79%	<70%
BMI Z-score[b]	−1 to −1.9	−2 to −2.9	−3 or greater
Magnitude of weight loss[c]	5%	7.5%	10%
Rapidity of weight loss[d]		5% in 1 month 7.5% in 3 months 10% in 6 months 20% in 1 year	>5% in 1 month >7.5% in 3 months >10% in 6 months >20% in 1 year

One or more of the following would suggest mild, moderate, or severe malnutrition.
[a] Percent median BMI.
[b] Mehta et al. [6].
[c] When two or more data points are available to calculate percent of body mass lost [8].
[d] When two or more data points are available and timeframe is known [10].

percent median BMI calculated as patient BMI/50th percentile BMI for age and sex in reference population x100

Medical Complications of Eating Disorders

Medical Complications of AN and ARFID



physio-pedia.com

The brain literally shrinks

Impaired decision making

Difficulty focusing

Slowed thinking

Ruminating and obsessing

Short-term memory loss

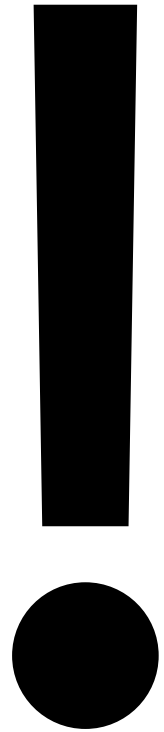
Distorted self-assessment

Hibernation Mode

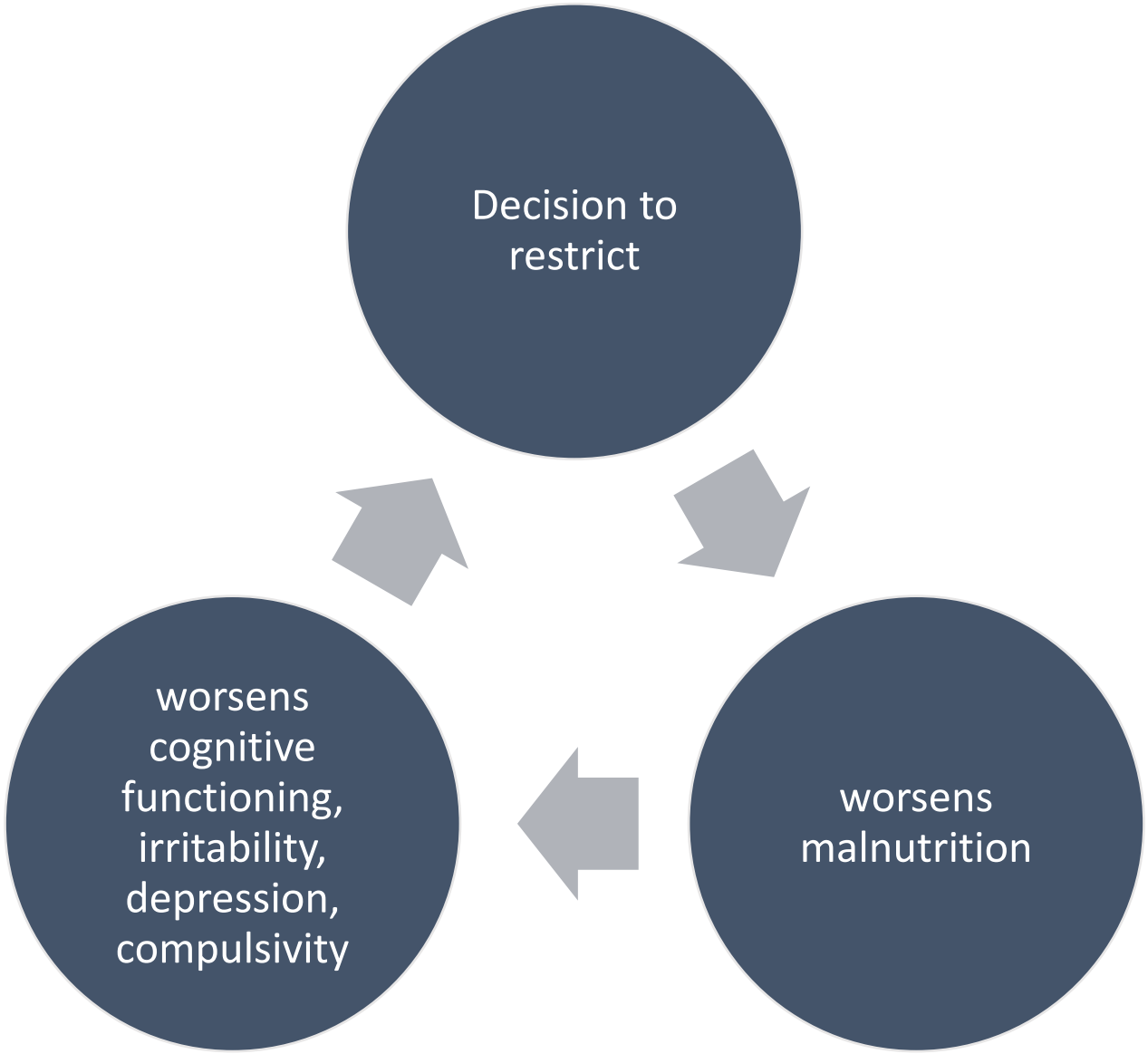
- HR, temp, blood pressure all low
- Blood flow prioritizes the brain and heart, other organs neglected
- Growth and development and certainly reproduction are put on standby

Potentially irreversible…

- Osteoporosis
- Growth retardation
- Impaired fertility



Irreversible: Death



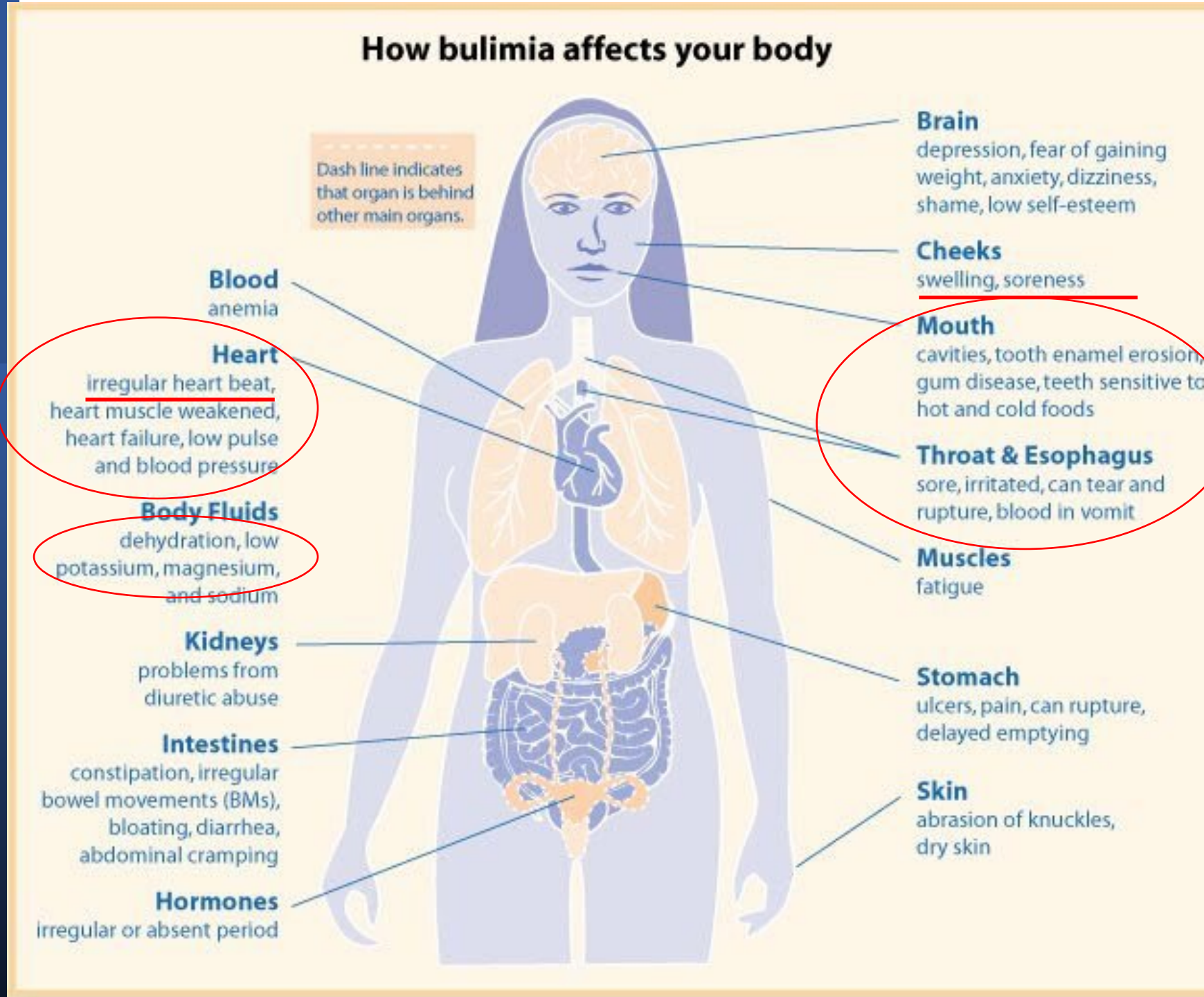
A vicious downward spiral

More psych considerations

What does the Eating Disorder do for the patient?

- More secure, just “used to it” – misery is comfortable
- Obsessing about food/body = don’t have to worry about other things (like your trauma history)
- Sense of feeling good at something
- Getting compliments from others is reinforcing
- Looking sick as a way to get help
- Method of slow suicide
- Part of the cool crowd
- For ARFID- avoid a sensation, avoid a feared outcome, low interest in food.

Medical Complications of Bulimia Nervosa



Screening and Diagnosing Eating Disorders

Who should be screened?

- USPSTF says Insufficient evidence to screen everyone, but probably the following patients:
- Patients with ACES (adverse childhood experiences) or trauma history
- Young adults
- Females
- Transgender individuals
- Athletes
- Patients with
  - Rapid weight loss
  - Concerning medical symptoms
  - Depression
  - Anxiety
  - Rigidity
  - Perfectionism
- USPSTF , 2022 Guidelines for Screening for ED in adults and adolescents
- Probably patients with certain chronic diseases (example: DM, Celiac, IBD)

Red or pink flags..

“She’s been making a lot more healthy choices. She even lost weight!”	”I decided I’m going to be vegan.”	He joined a second baseball team and needs to keep up with track.	Huh, I haven’t had to buy her pads for a few months now.
Coach says he always trains so much harder than everyone else!	She’s in this phase right now where she’ll only wear baggy clothes.	Yeah, she’s a really picky eater.	I had an eating disorder in college so now I always make them all finish everything on their plate.

One question.

Do you have any concerns about your child’s body weight, body shape, body image, or eating behaviors?

Short on time? Use a screener!

EAT: Eating Attitudes Test

24 questions

10. Feel extremely guilty after [illegible]					0	0	___
11. Am preoccupied with a desire to be thinner	0	0	0	0	0	0	___
12. Think about burning up calories when I exercise	0	0	0	0	0	0	___
13. Other people think that I am too thin	0	0	0	0	0	0	___
14. Am preoccupied with the thought of having fat on my body	0	0	0	0	0	0	___
15. Take longer than others to eat my meals	0	0	0	0	0	0	___
16. Avoid foods with sugar in them	0	0	0	0	0	0	___
17. Eat diet foods	0	0	0	0	0	0	___
18. Feel that food controls my life	0	0	0	0	0	0	___
19. Display self-control around food	0	0	0	0	0	0	

SCOFF- 6 questions

1. Do you make yourself **S**ick because you feel uncomfortably full?
2. Do you worry you have lost **C**ontrol over how much you eat?
3. Have you recently lost **O**ne stone (~14 pounds) in a 3-month period?
4. Do you believe yourself to be **F**at when others say you are too thin?
5. Would you say that **F**ood dominates your life?

USPSTF: SCOFF has adequate evidence for adult females, but not for adolescents, males, or other populations.

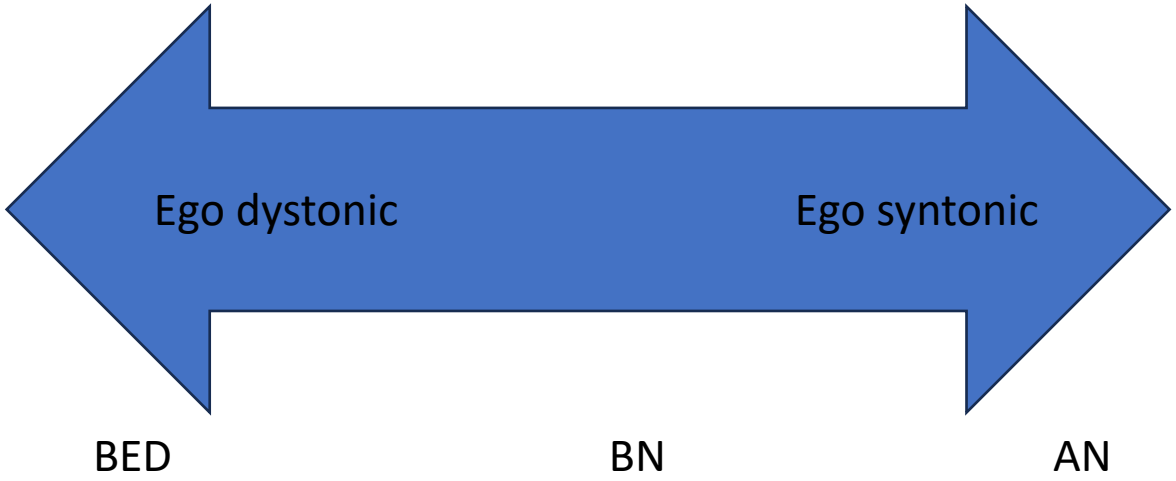
Assessment

You suspect an ED. Now what?

- Interview
- Examine
- Determine level of care
- Exclude other causes of weight loss or vomiting
- Assess nutrition and psychosocial situation
- Evaluate and treat medical and mental comorbidities
- Refer for therapy or specialized programming

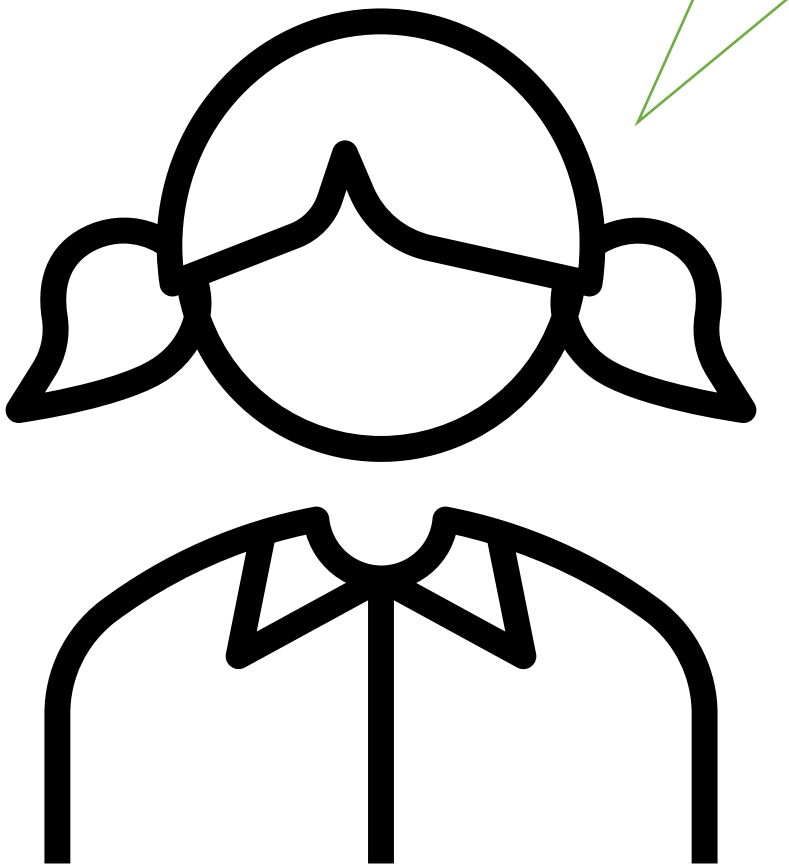
Example questions

- What did you eat all of yesterday?
- How do you feel about your weight and how your body is developing?
- What do you think about your weight?
- What percentage of time would you say you are thinking about food?



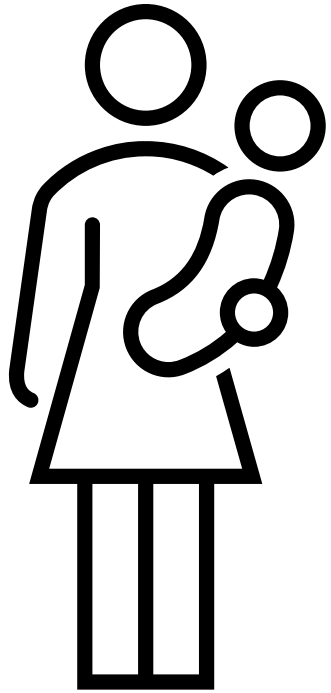
Interview

Fine.
Good.
No.
Yes.
I don't know.
Are we done yet?

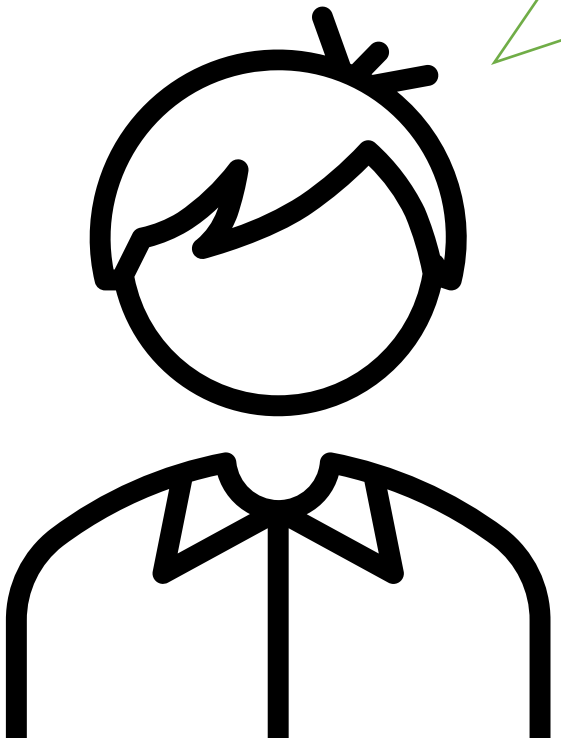


She's been spending 30 minutes in the bathroom after dinner.

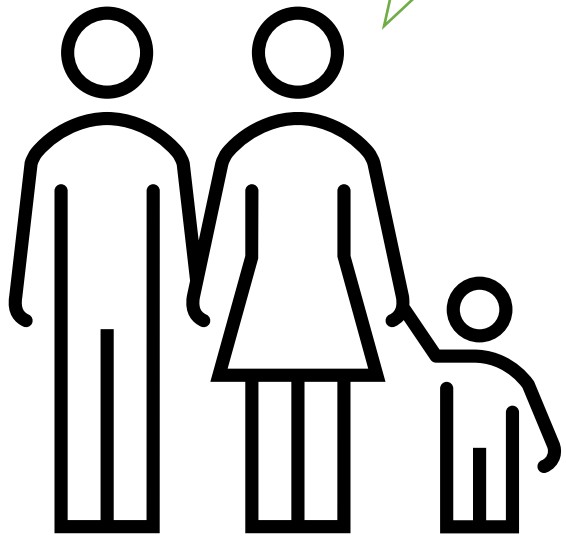
I saw her phone- she's been looking at all these "pro mia" sites!



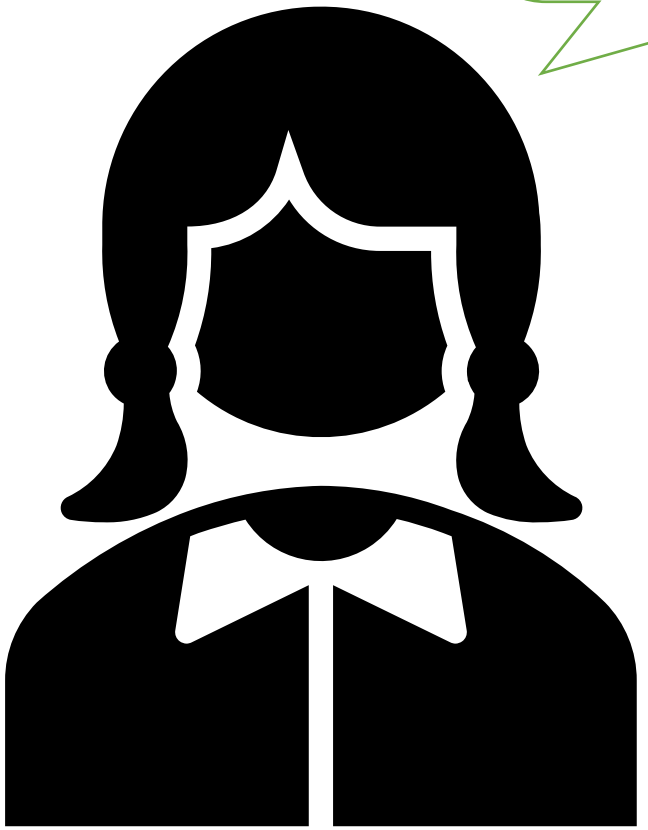
I want more ab definition. I'm getting compliments for losing weight, it's great!



Oh, he's the "perfect child!" But he seems pretty rigid and won't eat beyond a certain number of calories a day.



I dunno.. I just don’t feel like eating.
I don’t care about my weight.



PHQ-A Score: 11

She’s always been a picky eater.
No, I don’t have any concerns. I was small too at that age.

a kid should be allowed to run around

She’s fine. She’s quiet but she behaves. Why are they telling me she’s depressed? I give her everything she has no reason to be depressed.

Why won’t she just eat? I don’t understand him.

Parents deal with a lot of stress themselves.

He told me he ate it so I believed him.

Fear of psychotropic medications

She just sat there at the kitchen table and cried and yelled at me. I gave up and went to bed.

I don’t want to upset her. She was really looking forward to this dance competition.

Physical exam

The usual with special attention to:

- Signs of muscle wasting
- Pallor, dry skin
- Tanner Stage (growth delay)
- Cardiac- rhythm, murmur (arrhythmia, MV prolapse)
- Parotid swelling (vomiting)
- Russell's sign (abrasions on knuckles from self-induced vomiting- very rare)
- Dental erosions
- Palpable stool

Labs and Diagnostic Studies

Everyone	Significant weight loss / orthostasis / bradycardia / other CV signs	Malnourished	Girls with amenorrhea	Boys who restrict	Amenorrhea > 6-12 months	Uncertain diagnosis / rule-out other diseases
CBC Electrolytes Ca Mag Phos Glucose LFTs UA TSH	EKG Consider Echo	Vit B12 Vit D Iron panel Zinc	UPT FSH/LH Prolactin Estradiol	Gonadotropin Testosterone	Dual radiograph absorptiometry (bone densitometry)	ESR/CRP Celiac panel Cortisol Stool ova/ parasites Brain MRI CT abdomen Urine tox screen

Treatment

Indications for Hospitalization

- <75% median BMI for age and sex (percent median BMI calculated as patient BMI/50th percentile BMI for age and sex in reference population x100)
- Dehydration
- Electrolyte disturbance (hypokalemia, hyponatremia, hypophosphatemia)
- EKG abnormality (prolonged QTc, bradycardia)
- Severe bradycardia (HR <50 bpm daytime, <45 bpm nighttime)
- Hypotension (<90/45)
- Hypothermia (body temp <96)
- Orthostatic hypotension (increase in pulse >20, decrease in BP >20 systolic or >10 diastolic upon standing)
- Arrested growth/development
- Failure of outpatient treatment
- Acute food refusal
- Uncontrollable binge eating and purging
- Acute medical complications of malnutrition (syncope, seizures, CHF, pancreatitis, so forth)
- Comorbid psych or medical condition that limits appropriate outpatient treatment (ex- severe depression, SI, OCD, type I DM)

FOOD IS THE MEDICINE

- Parents take over, give 3 meals, 2 -3 snacks / day
  - Parents plate out and serve the meals
  - Finishing the meals is non-negotiable
- Enlist the help of a dietician
- Vitamin supplements if needed
- Calorie dense foods – beverages like milk or juice > water
- Gradually confront fear foods
- Monitor weight and vital signs every week
- Treat the MH and medical comorbidities
- SCHOOL OR COLLEGE PROVISIONS! (ex- supervised lunch)
- For ARFID: OT can be helpful

Family-Based Treatment (FBT)

- First-line for pediatric eating disorders especially Anorexia nervosa
- 3 phases over weeks/months:
  1. Parents feed the child. work on restoring weight
  2. Adolescent gradually resumes responsibility for their own eating
  3. Weight is restored, therapy shifts to address development
- Pediatrician takes a back seat unless medical issues
- Parent-focused therapy – adaptation of FBT – therapist meets with parents alone

Lock J, Le Grange D. *Treatment Manual for Anorexia Nervosa: A Family-Based Approach*, 2nd ed. New York, NY: Guilford Press; 2012
Google Scholar

Levels of Care

- Partial Hospitalization Program or Intensive Outpatient Program
  - More than outpatient but not hospitalization
  - Go most days of the week, have most meals there, family therapy, groups, individual therapy, etc. Go home in evenings, stay home on weekends.
- Residential treatment

	Common MH comorbidities	Therapy	FDA-approved Medication
Anorexia nervosa	Anxiety OCD Depression Substance use d/o Developing personality disorders	FBT CBT AFT- Adolescent-focused therapy	None
Bulimia nervosa	Similar to above	FBT DBT CBT	Fluoxetine, higher doses
Binge eating disorder	Similar to above	FBT DBT CBT	vyvanse
ARFID	Anxiety OCD Autism spectrum disorder ADHD Intellectual disability	FBT-ARFID CBT-ARFID	None

Medications in underweight patients with EDs

- Olanzapine (1.25 mg starting dose) – weak evidence but is an option in severe patients with a lot of mood dysregulation – to help with weight gain
- Aripiprazole (1 mg starting dose) also has weak evidence but less than olanzapine – to help with weight gain
- SSRIs- not helpful in acute phase – wait til about 85% target body weight reached – helpful for comorbidities like anxiety or depression
- A few case studies on mirtazapine – maybe?
- No evidence or potentially harmful: SNRIs, mood stabilizers, bupropion

Resources for families

- Nationaleatingdisorders.org
  - Look up providers and articles

- Book: Life Without Ed by Jenni Schaefer

Sources

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The end.

Thank you!