Psychiatry Bootcamp IV

Eating Disorders

ARFID

Anorexia

Bulimia

Binge Eating

ARFID (avoidant/restrictive food intake disorder)

- Failure to thrive in a child due to chronic starvation that is **not** driven by fear of weight gain.
  - Do not need to be underweight for diagnosis.
  - Often only eat bland "kid" foods (mac and cheese, vanilla ice cream)
  - Stick to only one brand of food
  - Co-morbid with anxiety disorders and autism
- Fear of choking/vomiting
- Sensory issues with food taste/texture
- Lack of interest in food/lack of hunger

It's More than Just Picky Eating!

ARFID: Medical Evaluation

- Blood Work
  - CMP and CBC
  - Micronutrients such as Mg, Phosphorus, Zinc, Fe, Vit D, folate, B12
  - Consider total immunoglobulin IgA and tissues transglutaminase IgA for Celiac
- Physical Exam
  - cachexia, hypothermia, bradycardia, orthostatic tachycardia and hypotension, scaphoid abdomen, lanugo, and pallor
  - ECG if bradycardia or orthostatic, consider DEXA bone scan
- Differential
  - Celiac, IBS, tonsillar hypertrophy, achalasia

ARFID
(avoidant/restrictive food intake disorder)

- Treatment:
  - Occupational therapy for feeding, eating, and swallowing
    - https://ajot.aota.org/article.aspx?articleid=2652875
  - Nutritionist
  - Cognitive Behavioral Therapy
    - Includes graded exposure to previously avoided foods
    - Mass General has published a free CBT-AR workbook
      - www.tinyurl.com/4nwtwuvm

What Does CBT-AR look like?

4 stages over 20-30 sessions

1

LEARN ABOUT ARFID AND MAKE EARLY CHANGES

Keep records to figure out what maintains your symptoms; if you are underweight, increase the volume of your preferred foods; make early changes to variety

2

CONTINUE EARLY CHANGES AND SET BIG GOALS

Set goals to face your fears; continue increasing volume and/or food variety

3

FACE YOUR FEARS

Gain exposure with new or feared foods; taste small amounts at first, then incorporate larger amounts

4

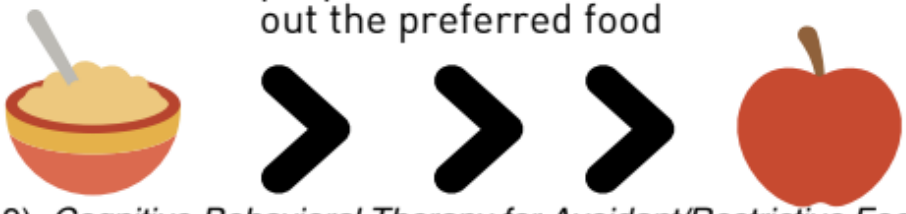
PREVENT RELAPSE

As part of completing treatment, develop a skills plan to keep practicing on your own

Here are some strategies for incorporating new foods into your meals and snacks at home

1 Fade it in

Start with a high proportion of a preferred food (e.g., applesauce) and add a small portion of a novel food (e.g., pieces of raw apple). Then gradually increase the proportion of the novel food while fading out the preferred food



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

2 Add some spice

Preferred condiments and spices can act as training wheels for trying new foods. For example, add cheese to your broccoli, ketchup to your meat, ranch dressing to your carrots, or garlic salt to vegetables

3 Chain to a goal

Use a preferred food to chain to a novel food. For example, if you currently prefer potato chips, try veggie chips. Before you know it, you might feel comfortable trying raw veggies!

4 Switch it up

If at first you don't succeed, try, try again -but change it up! Try different presentations of novel foods. Think cooked versus raw, salted versus unsalted, etc

5 Deconstruct

If you have never tried a new food like pizza, try starting with one component of the food and then layering on individual components one-by-one. For example, try crust alone, then crust with cheese, then crust with cheese and sauce, and, finally, a slice of pizza!

Strategies for Eating Enough

1. Reduce discomfort after eating

Interoceptive exposures

*Increasing your tolerance of full sensations can help you eat enough

*Types of exposures you can do with your therapist in session are: pushing your belly out, gulping water, and spinning in a chair
- -Try all three and then practice the hardest
- -Plan practices as homework (e.g., chug several full glasses of water before lunch each day)

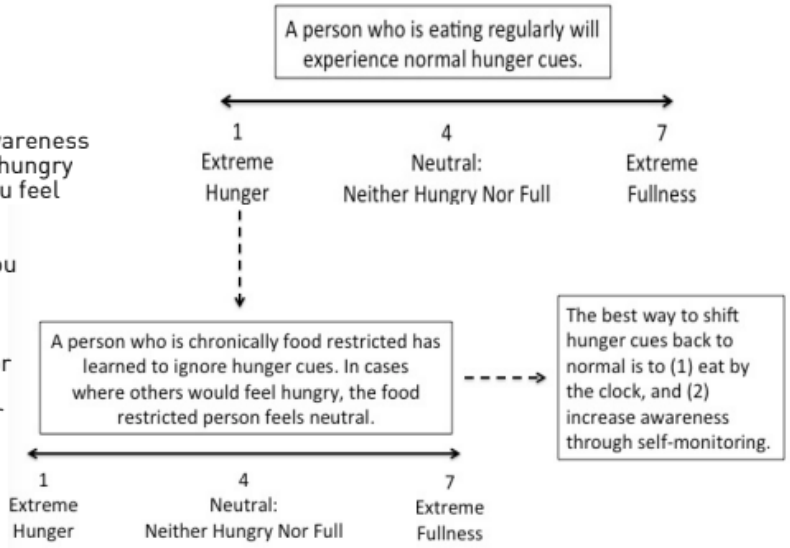
2. Increase your hunger

Recognizing Hunger Cues

*Over time, eating too little confuses your hunger and fullness cues

*The best way to help increase your awareness of hunger cues is to keep track of how hungry you feel before you eat, and how full you feel afterward

*To begin shifting your hunger cues, you will need to start eating at a 3 or 4 (neither hungry nor full), rather than waiting for a 1 (extreme hunger). You will also need to keep eating until a 6 or a 7 (extreme fullness), rather than stopping at a 4 or 5 (neither hungry nor full)



3.Increase enjoyment of eating

Notice what you like about your preferred foods

*Remind yourself of foods you have eaten during happy occasions, such as eating birthday cake with your friends and family

*Pick 5 foods you prefer or used to really enjoy and closely describe them using "The Five Steps" handout

ARFID
(avoidant/restrictive food intake disorder)

Medication Treatment

- Low dose olanzapine (1.25mg) or cyproheptadine an hour prior to meals
- Mirtazapine to increase appetite and reduce nausea
- SSRIs to reduce anxiety

Anorexia Nervosa

- Restriction of food intake leading to a "significantly low body weight"
- Fear of becoming fat or gaining weight
- Distorted view of themselves as overweight
- Amenorrhea is no longer a criterion in DSM-5

- Two Types
  - **Restricting Type**
  - **Binge-eating/purging type**
    - Similar to Bulimia but there is no low weight criterion for Bulimia nervosa like there is for Anorexia nervosa.

Table. Key Features of Different Eating Disorders[a]

Characteristic	Anorexia nervosa	Bulimia nervosa	Binge eating disorder	Avoidant/restrictive food intake disorder	Atypical anorexia nervosa
Key diagnostic features	• Restriction of energy intake relative to requirements leading to a considerably low body weight (defined as a weight that is less than minimally normal, or, for children and adolescents, less than that minimally expected) in the context of age, sex developmental trajectory, and physical health • Intense fear of gaining weight or becoming fat, or persistent behavior to avoid weight gain, even though at a considerably low weight • Disturbance in the way in which one's body weight or shape is experienced, undue influence of body shape or weight on self-evaluation, or persistent lack of recognition of the seriousness of current low body weight	• Recurrent episodes of binge eating accompanied by recurrent inappropriate compensatory behaviors to prevent weight gain, such as self-induced vomiting; misuse of laxatives, diuretics, or other medications; fasting; or excessive exercise • The binge eating and inappropriate compensatory behaviors both occur, on average, at least once a week for 3 mo • Self-evaluation is unduly influenced by body shape and weight	• Recurrent episodes of binge eating not associated with recurrent use of inappropriate compensatory behaviors • The binge eating episodes are associated with ≥3 of the following: (1) eating much more rapidly than normal, (2) eating until feeling uncomfortably full, (3) eating large amounts of food when not feeling physically hungry, (4) eating alone because of feeling embarrassed by how much one is eating, and (5) feeling disgusted with oneself, depressed, or very guilty afterward • Marked distress regarding binge eating • The binge eating occurs, on average, at least once per week for 3 mo	• An eating or feeding disturbance (eg, apparent lack of interest in eating or food, avoidance based on the sensory characteristics of food, concern about aversive consequences of eating) as manifested by persistent failure to meet appropriate nutritional and/or energy needs associated with ≥1 of the following: (1) considerable weight loss (or failure to achieve expected weight gain or faltering growth in children), (2) considerable nutritional deficiency, (3) dependence on enteral feeding or oral nutritional supplements, and (4) marked interference with psychosocial functioning • The disturbance is not better explained by lack of available food or by an associated culturally sanctioned practice • The eating disturbance does not occur exclusively during the course of anorexia nervosa or bulimia nervosa, and there is no evidence of a disturbance in the way in which one's body weight or shape is experienced • The eating disturbance is not attributable to a concurrent medical condition or not better explained by another mental disorder; when the eating disturbance occurs in the context of another condition or disorder, the severity of the eating disturbance exceeds that routinely associated with the condition or disorder and warrants additional clinical attention	• All the criteria for anorexia nervosa are met, except that despite considerable weight loss, the individual's weight is within or above the normal range
Body weight	Markedly low	Usually normal	Normal or above normal	Low	Normal or above normal
Preoccupation with weight and shape	Marked	Marked	Present	Absent	Marked

[a] Adapted from the *Diagnostic and Statistical Manual of Mental Disorders* (Fifth Edition).[1]

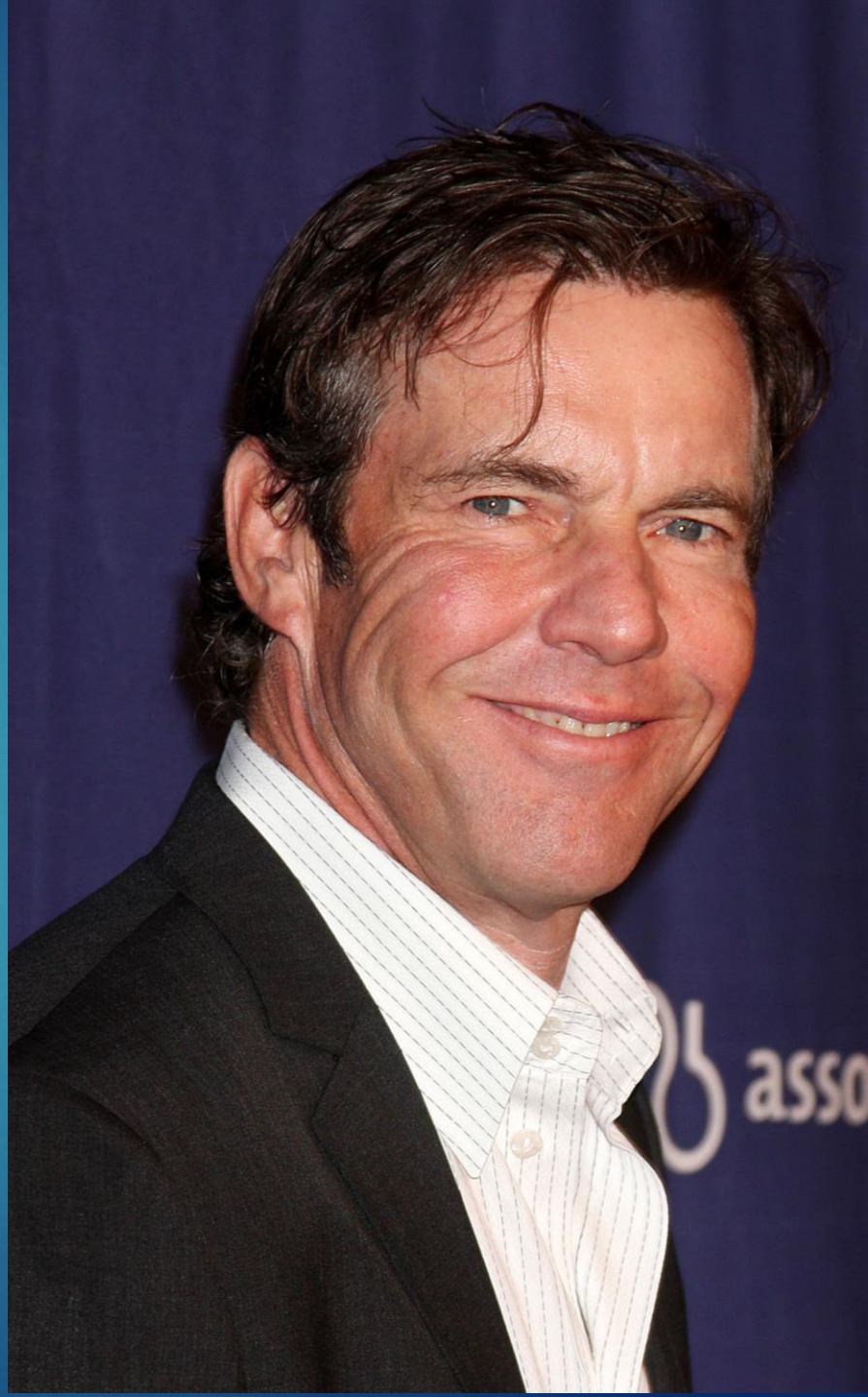
Anorexia Nervosa

- **Etiology**
  - Highly heritable
    - 44% genetic concordance rate for monozygotic twins and 12.5% for dizygotic twins
  - Does occur in non-western and developing nations, though may present differently than fear of gaining weight, ie fear of abdominal fullness
  - **Not** just a cultural illness caused by barbie dolls and social media.
  - Does occur in men.

"My arms were so skinny that I couldn't pull myself out of a pool. I'd look in the mirror and still see a 180-lb. guy, even though I was 138 pounds."

— Dennis Quaid

https://www.youtube.com/watch?v=Sbbdee4N4yA



Bulimia Nervosa

- Screen for eating disorders in your higher weight patients as they are more likely to be missed.

- Patients with eating disorders who are normal weight, still experience life threatening complications.

Bulimia Nervosa Temperament

- Bulimia and binge eating disorder are associated with higher rates of substance abuse and difficulty delaying gratification.
  - Increased reward sensitivity to food.
  - Affective dysregulation
  - Impulsivity and sensation seeking often extends beyond food
    - Cutting and other self-injurious behaviors
    - Shop lifting
    - Drug and alcohol use
    - Borderline personality disorder

The Vicious Cycle of Eating Disorders

Government of Western Australia
North Metropolitan Health Service

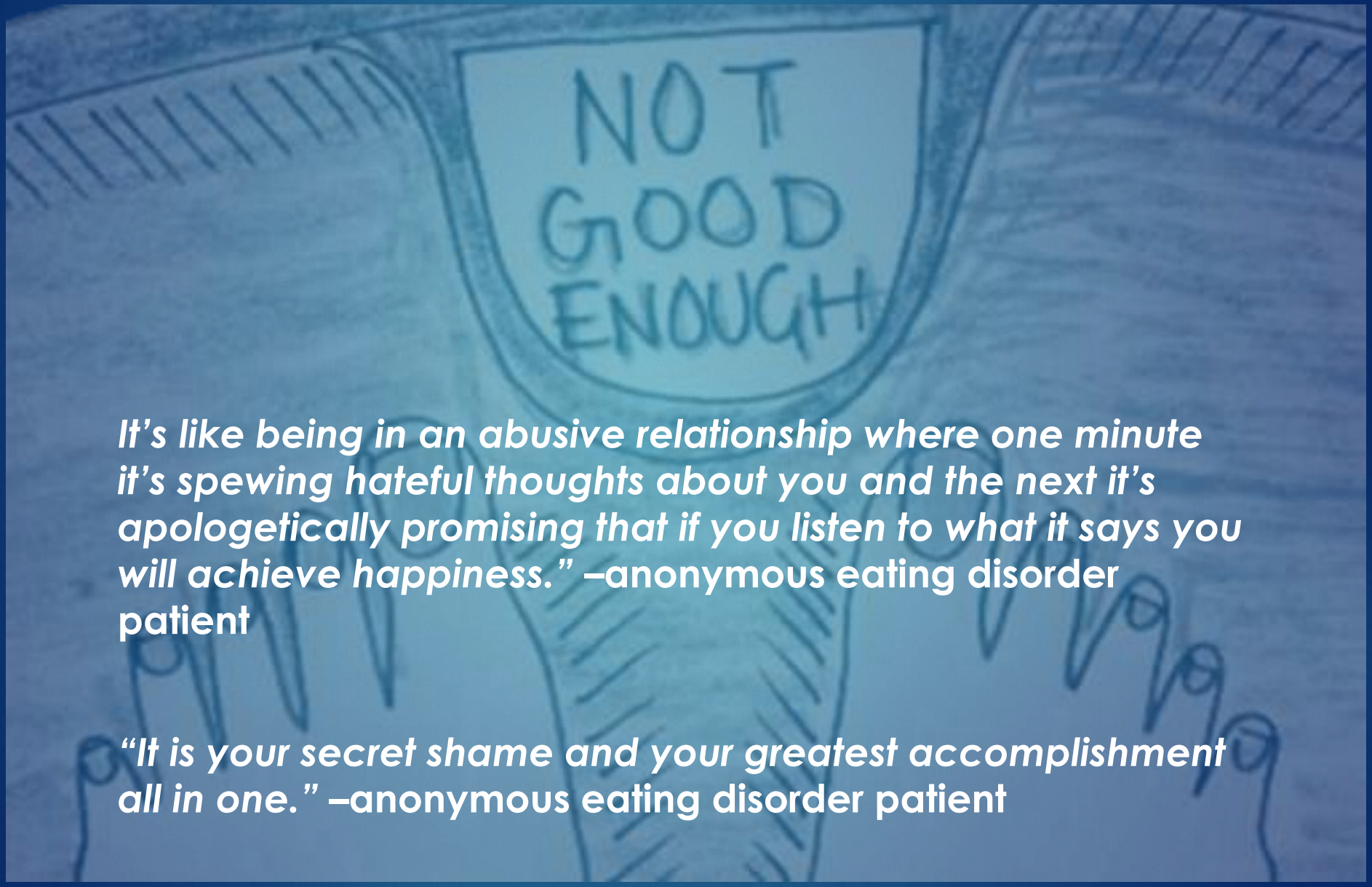
Trading temporary relief for long term agony.

Anorexia Temperament

- Anorexia temperament often predates the illness
  - anxiety, perfectionism, inflexibility, harm avoidance, obsessive behaviors (order, exactness, and symmetry), asceticism, loss aversion
  - Increased anxiety in anticipation of food and decreased reward in response to food.
    - Food triggers anxiety rather than pleasure.
    - Affective blunting
  - Decreased interoceptive awareness
    - Decreased response to hunger cues

- Anorexia is actually protective against substance abuse disorders with lower rates than the general population.

The Psychology of Anorexia



***It's like being in an abusive relationship where one minute it's spewing hateful thoughts about you and the next it's apologetically promising that if you listen to what it says you will achieve happiness."* –anonymous eating disorder patient**

***"It is your secret shame and your greatest accomplishment all in one."* –anonymous eating disorder patient**

The Psychology of an Eating Disorder

Self-worth is entirely consumed by being thin. Using eating disorder behaviors to feel "good enough."

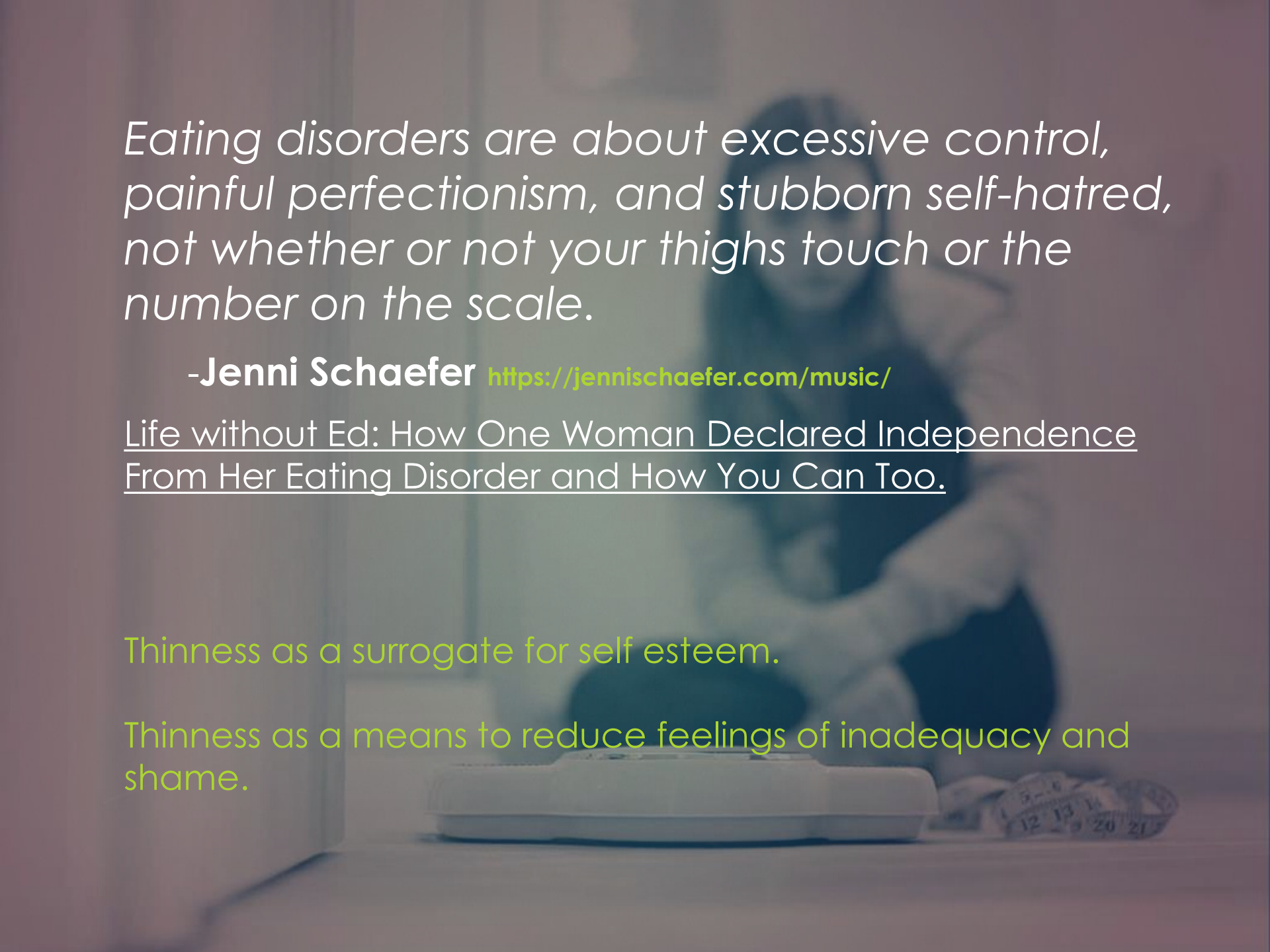
- *It's OK if I don't get an A on my test as long as I am thin.*
- *I am not the thinnest one on this elevator right now. Therefore I am fat and worthless.*

Feeling powerless/helpless and use eating disorder behaviors to feel in control.

- *Restricting means I am in control of my life. Eating means I am out of control and weak.*
- *Look at her eating that cheeseburger. She has no self-control.*

Delusion of being fat no matter how thin and that the key to decreasing painful feelings is losing weight.

- *If I just lose a few more pounds, then I will finally be happy.*



Eating disorders are about excessive control, painful perfectionism, and stubborn self-hatred, not whether or not your thighs touch or the number on the scale.

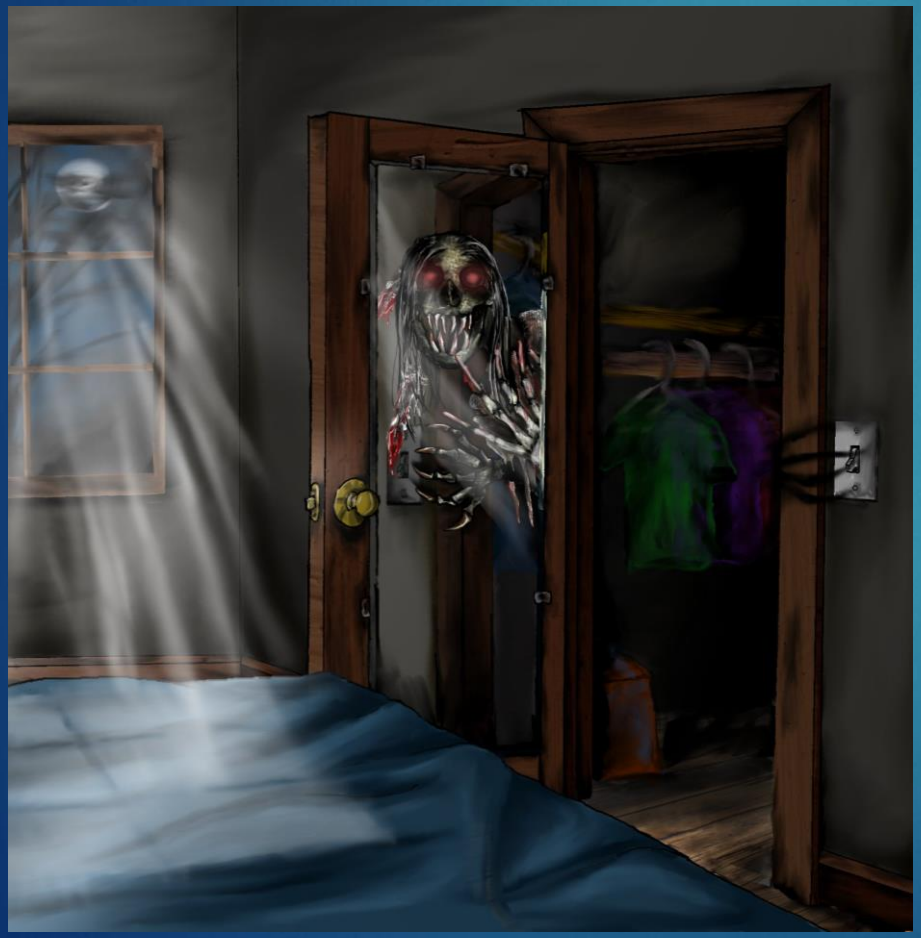
-**Jenni Schaefer** https://jennischaefer.com/music/

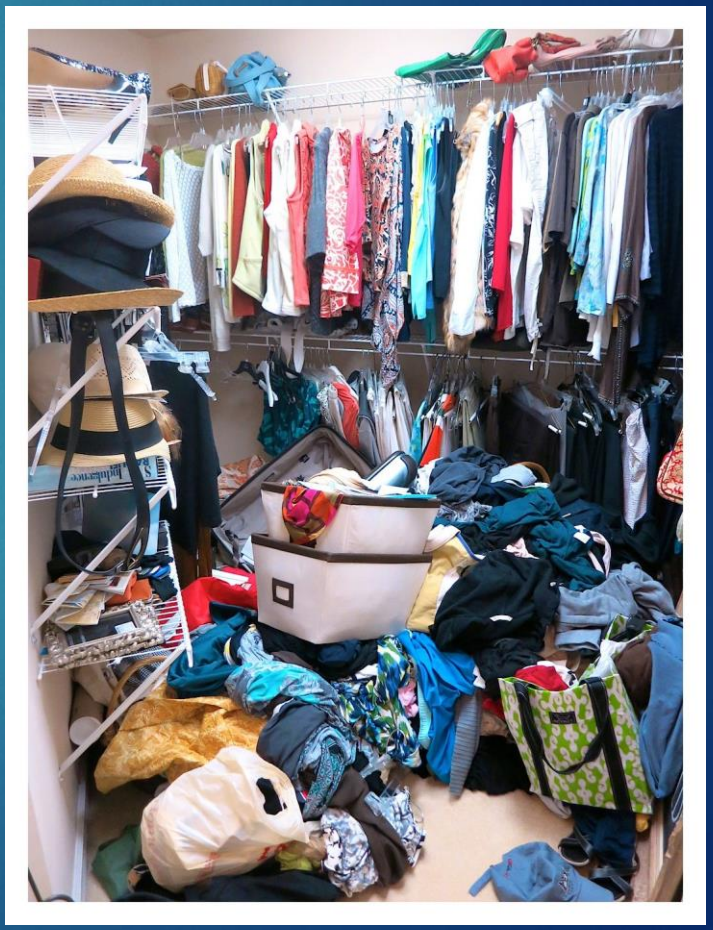
Life without Ed: How One Woman Declared Independence From Her Eating Disorder and How You Can Too.

Thinness as a surrogate for self esteem.

Thinness as a means to reduce feelings of inadequacy and shame.

Shame thrives in the darkness of secrecy and solitude. It cannot survive the light of open acceptance and human connection.



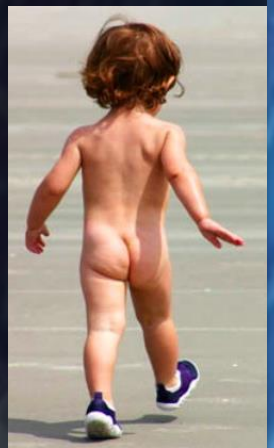


Let patients know…

- I can handle whatever you need to tell me.
- I will not reject you or dismiss you.
- I have the courage to discuss uncomfortable things with you directly.
- I expect you to relapse. That is part of the illness that we will handle together.
- Who can you share this information with next and get support from?

Shame derives its power from being unspeakable.

-Brene Brown



Anorexia Nervosa Physical Exam

- BMI
- Cardiovascular system (arrhythmia, bradycardia, hypotension)
- Hypothermia
- Lanugo
- Menstrual history

Bulimia Nervosa Physical Exam

- Bilateral parotid gland enlargement
- Scars on dorsum of hands
- Tooth enamel erosions

- **ECG**
  - Remember that even with normal weight, bulimia nervosa is associated with more severe QT prolongation than anorexia.

Cardiac Complications of Eating Disorders

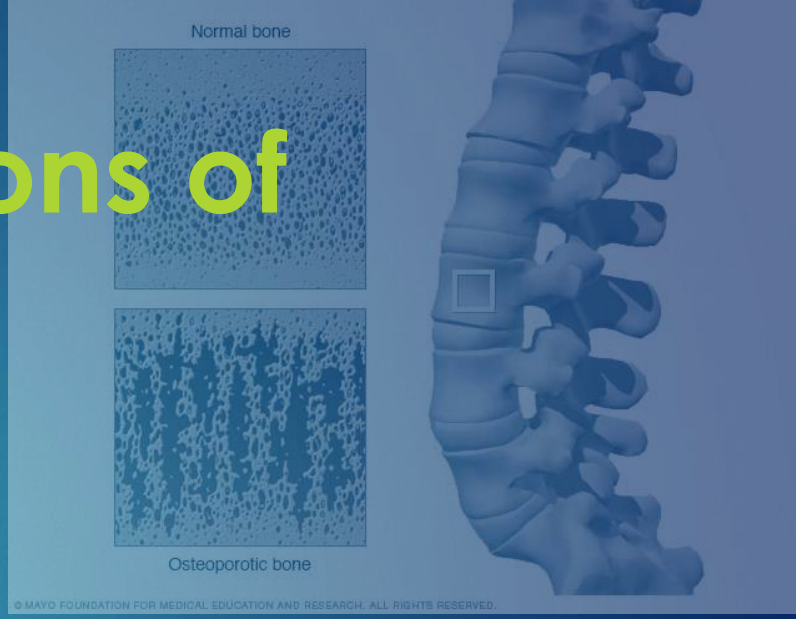
- Responsible for about one third of deaths due to eating disorders.
- Weight loss causes decreased cardiac mass, especially left ventricular mass and thus decreased cardiac output.
  - In compensation, to lower cardiac workload:
    - Bradycardia
    - Hypotension
    - Decreased metabolic rate
    - Increased vagal tone
- QT prolongation is associated with both anorexia and bulimia. (more severe in bulimia)
- Ipecac abuse can cause irreversible cardiomyopathy

Other Complications of Eating Disorders

- Endocrine
  - Hypothalamic, hypogonadotropic, hypogonadism
  - Higher rates of polycystic ovarian syndrome
  - Thyroid abnormalities

- Hematologic
  - Anemia
  - Thrombocytopenia
  - Increased risk of infection

Other Complications of Eating Disorders



- Gastrointestinal
  - Delayed gastric emptying
  - Hyperlipidemia
  - Superior mesenteric artery syndrome – severe pain after eating due to ischemia
- Orthopedic
  - Low bone mass
  - Low bone density
  - Increased fracture risk
  - Particularly impacts trabecular bone of the lumbar spine
  - Women who develop anorexia in adolescence have lower bone mass than those who developed symptoms in adulthood.
    - Adolescence represents a critical window of time when optimal peak bone mass is accrued for women and thus anorexia during this time can permanently impact a woman's bone structure.

Medical Monitoring

- ECG
- Osteopenia assessment – DEXA scan (inquire about fracture history)
- Blood work
  - CMP (note phosphorous and magnesium)
  - TSH
  - CBC with diff
  - Calcium, magnesium, phosphorous, ferritin
  - Amylase and lipase
  - Prolactin
  - Estradiol in females and testosterone in males
  - Vit D, thiamine, ferritin, B12, zinc
  - Consider FSH and LH testing

Monitor Electrolytes

Most Common Electrolyte disturbances:

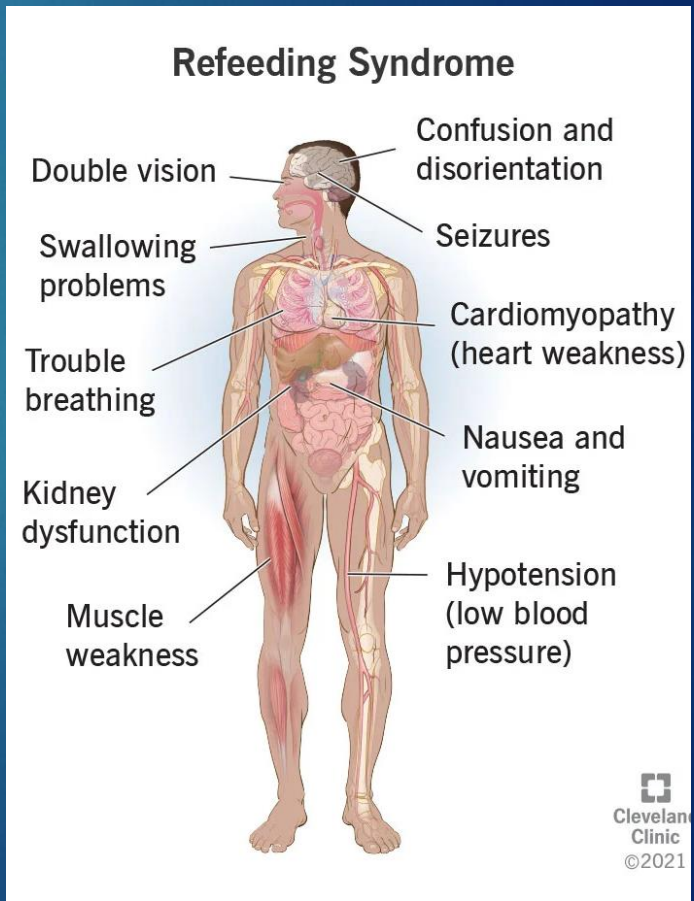
- Hypokalemia
- Hypophosphatemia – can worsen during re-feeding

- Vomiting
  - Hypochloremic, metabolic alkalosis
- Laxative Abuse
  - Hyperchloremic, metabolic acidosis

Caution While Restoring Weight

- As weight is restored, **metabolic rate rises rapidly**, so caloric intake must increase dramatically to maintain weight.
  - Patients with anorexia may need 3 times their predicted resting energy requirements to achieve appropriate weight gain.

- **Refeeding Syndrome**
  - When the body starts metabolizing glucose again, levels of phosphorous, magnesium and potassium can drop precipitously.
  - Low phosphorous can cause cardiac failure. Consider supplementation and monitor electrolytes during re-feeding.

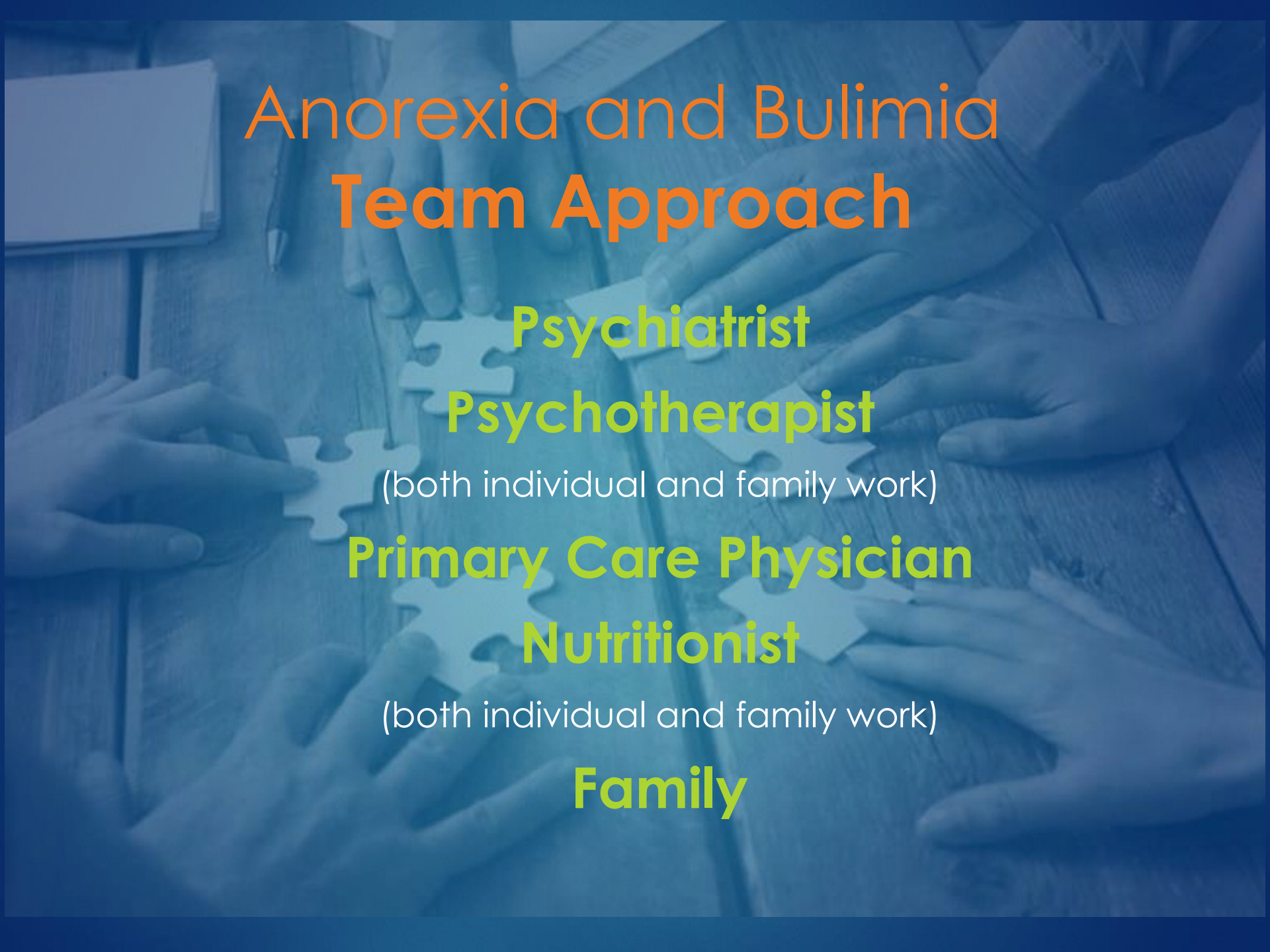


Anorexia Nervosa hospitalization

- **Consider hospitalization if….**
  - Heart rate < 50 bpm
  - Blood pressure < 90/60
  - Glucose < 60
  - Electrolyte imbalances such as hypokalemia, hypophosphatemia, or hypomagnesemia
  - Temperature < 97 degrees
  - Hepatic, renal, or cardiovascular organ compromise

Anorexia Nervosa other levels of care

- **Consider residential treatment center or day treatment program if….**
  - Fails to respond to outpatient treatment
  - Medical instability to the extent that intravenous fluids, nasograstric tube feedings, or multiple daily labs are needed.
  - Weight continues to be <85% of recommended weight
  - Need for structure to prevent compulsive exercising
  - Inadequate family support and needs supervision at all meals to prevent restrictive eating.



Anorexia and Bulimia
Team Approach

Psychiatrist

Psychotherapist

(both individual and family work)

Primary Care Physician

Nutritionist

(both individual and family work)

Family

Just hold the door open for them.....

Educate parents/spouses that …….

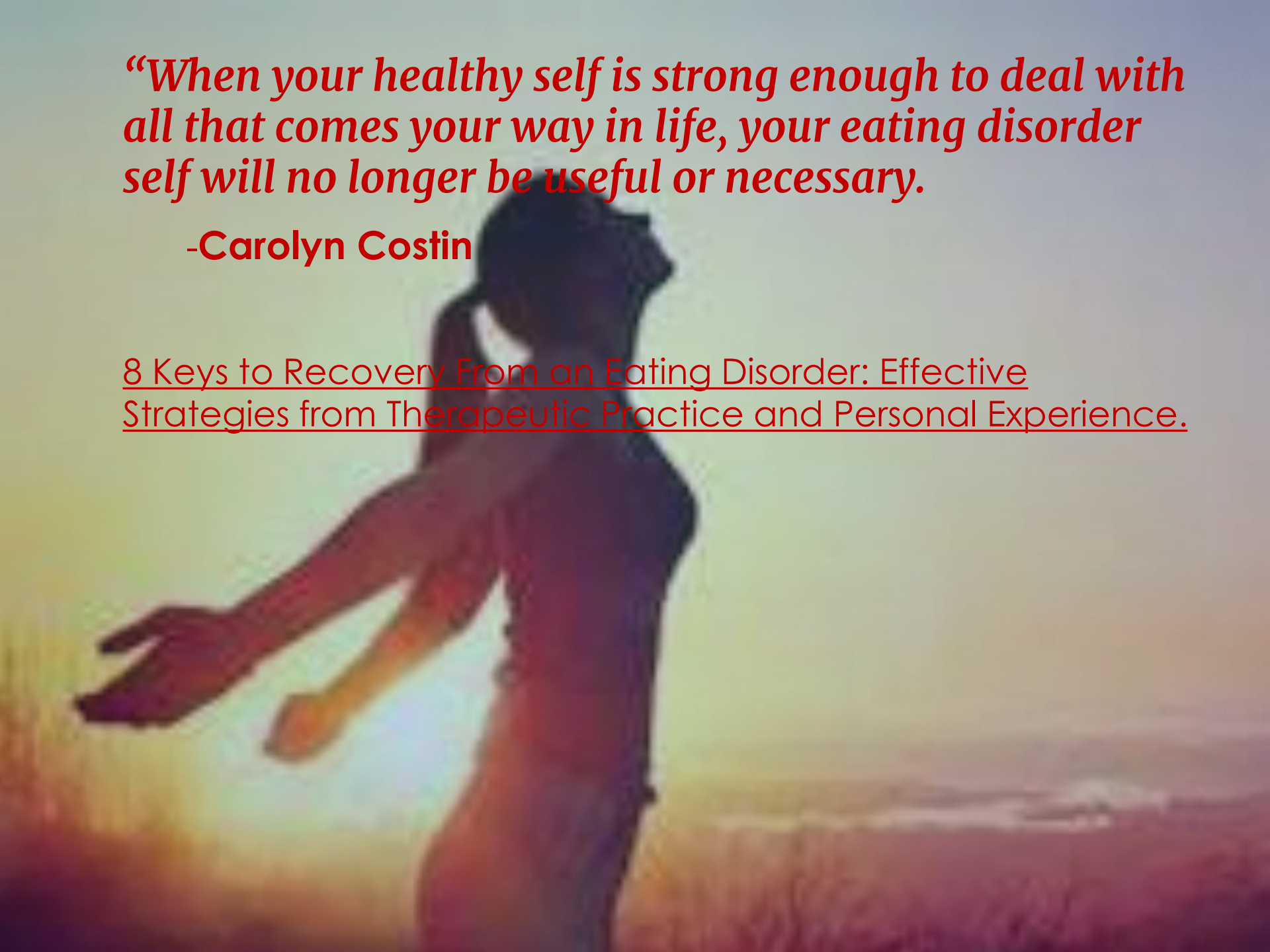
- This is a brain disorder and a life-threatening illness
- Their loved one can't just snap out of it. Nor do they choose this disorder.
- **Externalize the disorder** (loved one vs eating disorder)
- Teach them to take an **empathic, nonjudgmental stance**.
- Let go of the need to understand "why this happened?" or "what caused this?" **No one is to blame for this illness.**
- Focus on **health and psychological recovery,** not their loved one's physical appearance.
  - Don't say "You gained 5 pounds and you look so much better!"
  - Say "The therapist says you are making great progress and I'm so glad to see you feeding yourself and getting healthier."

Empower parents/spouses to …….

- Have an active role in preparing meals and encouraging their loved one to eat under the nutritionist's guidance. Do not force your loved one to eat.
- Set up barriers to eating disorder behaviors under a family therapist's guidance.
  - Getting rid of the scale
  - Helping to distract their loved one and encouraging them to stay out of the bathroom after eating
- Support and empathize with their loved one while having a zero tolerance towards eating disorder behaviors.
  - I love you. I'm absolutely not ok with you purging. How can I help?
- *https://www.allianceforeatingdisorders.com/dos-and-donts-supporting-spouse-through-eating-disorder-recovery/*

Psychotherapeutic Strategies
(just a few)

- **Decrease shame and blame.**
  - Eating disorder is an illness, not a personal failure/character flaw.
  - Eating disorder behaviors are just your best effort to cope with painful feelings, albeit ineffective.
- **Depersonalize the eating disorder thoughts.**
  - Teach patient to distinguish eating disorder thoughts from healthy thoughts and to cultivate the latter.
  - Externalize eating disorder by giving it a name, ie Ed.
- **Cognitive therapy**
  - Learn to reframe and contradict eating disorder thoughts.
- **Cultivate sources of self-worth that are not based on physical appearance or comparison to others. "compare and despair"**
- **Motivational interviewing**
  - Increase desire for change, elicit reasons for change.
  - Increase confidence in their ability to change and heal.


"When your healthy self is strong enough to deal with all that comes your way in life, your eating disorder self will no longer be useful or necessary.
-**Carolyn Costin**
8 Keys to Recovery From an Eating Disorder: Effective Strategies from Therapeutic Practice and Personal Experience.

Anorexia Nervosa
Medication Strategies

- **SSRIs**
  - Fluoxetine has the largest body of evidence behind it.
    - also evidence for tricyclic antidepressants, including comipramine
  - **SSRIs separate from placebo only if weight is restored.**
    - Tryptophan from the diet is required to manufacture more serotonin.
  - Especially effective for co-morbid OCD.
- **Zinc supplementation**
  - Superior to placebo for weight restoration in 3 randomized controlled trials
- **Olanzapine**
  - Effective for weight gain and OCD symptoms
- One study on medical marijuana (specifically delta -9-tetrahydrocannabinol) was negative.

Bulimia Nervosa
Medication Strategies

- SSRIs
  - Fluoxetine has the largest body of evidence behind it.
    - Therapeutic dosage in trials was at least 60mg/day.
  - Sertraline and fluvoxamine have good evidence behind them.
- Topiramate
  - Reduced frequency of binging/purging in two double blind randomized controlled trials
  - Unfortunate cognitive side effects
- Naltrexone
  - Mixed results for reducing binging/purging

- Wellbutrin is contraindicated due to seizure risk!

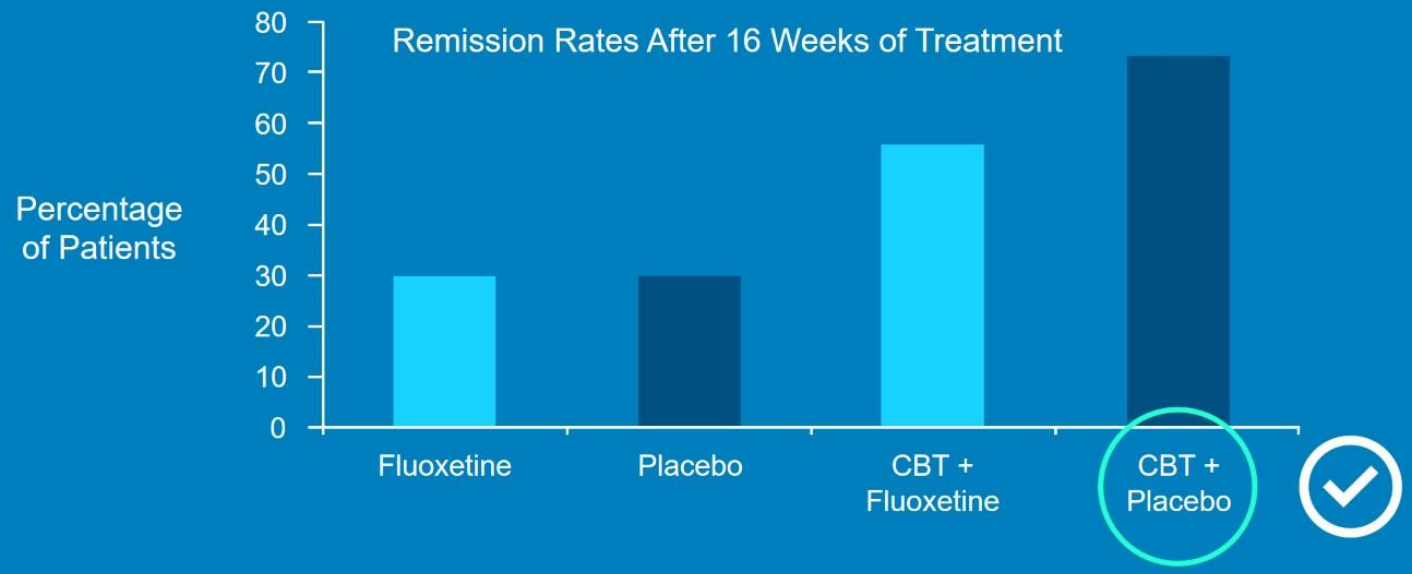
Binge Eating Disorder

Binge Eating Disorder
Diagnosis

- Binge eating episodes occur at least once a week for at least 3 months.
- Criteria for a binge eating episode
  - Eating in a 2 hr period significantly more than what a typical person would eat
  - Feeling out of control while eating
- Also associated with at least 3 of the below symptoms
  1. Eating much more rapidly than normal
  2. Eating until feeling uncomfortably full
  3. Eating large amounts of food when not feeling physically hungry
  4. Eating alone because of being embarrassed by how much one is eating
  5. Feeling disgusted with oneself, depressed, or very guilty after overeating

Binge Eating Disorder

Fluoxetine and CBT for BED



Grilo, C. M., Crosby, R. D., Wilson, G. T., & Masheb, R. M. (2012). 12-month follow-up of fluoxetine and cognitive behavioral therapy for binge eating disorder. *Journal of Consulting and Clinical Psychology*, *80*(6), 1108–1113.

Psychopharmacology Institute

Binge Eating Disorder
Medication Strategies

- **Stimulants**
  - Vyvanse – has FDA approval
    - Dosages of 50-70mg were most effective
    - Low dosage such as 30mg did not separate from placebo
  - Methylphenidate has positive evidence as well
    - Suggests that it is not Vyvanse in particular but stimulant medications as a class that are effective in binge eating.
  - Therapeutic effect is not via appetite suppression
  - Is binge eating more impulse control disorder or an addictive disorder?

Binge Eating Disorder Medication Strategies

- Atomoxetine
  - Decreased obsessive cravings
  - Decreased binge eating and decreased weight
- Duloxetine
  - Decreased binge eating
- Topiramate
  - reduced binge eating and promoted weight loss
- Zonisamide
  - reduced binge eating and promoted weight loss
- Acamprosate and naltrexone have not shown clear efficacy

Screening Tools

- NEDA (National Eating Disorder Association Online Screening Tool)
  - https://www.nationaleatingdisorders.org/screening-tool
- EDY-Q (eating disorders in youth questionnaire) age 8-13
  - chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://ul.qucosa.de/api/qucosa%3A14486/attachment/ATT-0/
- EDE-Q
  - chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://cedd.org.au/wordpress/wp-content/uploads/2014/09/Eating-Disorder-Examination-Questionnaire-EDE-Q.pdf

Eating Disorder Resources

- **Printable Information**
  - https://www.nimh.nih.gov/health/publications/eating-disorders/eatingdisorders_148810.pdf
- **Websites**
  - https://www.nationaleatingdisorders.org
  - https://www.nimh.nih.gov/health/topics/eating-disorders/
  - https://recoverywarriors.com/
- **Apps**
  - Rise up + Recover: An Eating Disorder Monitoring and Management Tool for Anorexia, Bulimia, Binge Eating, and EDNOS
    - https://apps.apple.com/us/app/rise-up-recover-an-eating-disorder-monitoring/id509287014

https://www.youtube.com/watch?v=i6yE08kwxNw

Eating Disorder Resources

Books

- It's Not About Food: End Your Obsession with Food and Weight by Carol Emery Normandi MFT and Laurelee Roark

- Banish Your Body Image Thief: A Cognitive Behavioral Therapy Workbook on Building Positive Body Image for Young People. by Kate Collins-Donnelly

- Life Without Ed: How One Woman Declared Independence From Her Eating Disorder and How you Can to. By Jenni Schaefer

- The Body Image Workbook: An Eight-Step Program for Learning to Like your Looks. by Thomas Cash, PhD.

- 8 Keys to Recovering from an Eating Disorder: Effective Strategies from Therapeutic Practice and Personal Experience. By Carolyn Costin and Gwen Schubert –also comes as a workbook

Eating Disorder Resources

- For Clinicians
  - https://academic.oup.com/ijnp/article/15/2/209/655624
  - https://focus.psychiatryonline.org/doi/pdf/10.1176/appi.focus.120401
  - https://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/eatingdisorders-guide.pdf
  - https://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/eatingdisorders-watch.pdf
- Jenni's Song
  - https://jennischaefer.com/music/

Coming up next….

Email stacygreetermd@gmail.com to be added to be invited to future presentations.

- Psychiatry Bootcamp V: Dec 2022
  - Perinatal and post-partum psychiatric treatment
  - Supporting patients in rationally making complex risk/benefit decisions regarding treatments
  - Creating healthier kids by supporting parental health
- Psychiatry Bootcamp VI:
  - Addictions
  - Insomnia
  - Strategies for Sustaining Ourselves While Working with Challenging Patients

Questions?????