

# Mind Matters ECHO

Identifying and Treating Feeding and  
Eating Disorders

February 8, 2023



**Mount  
Sinai  
Health  
Partners**

# Welcome!

- ▶ Pre-survey: [bit.ly/feb23ed](https://bit.ly/feb23ed)
- ▶ Hub team introductions
- ▶ Disclosures
- ▶ Questions during presentations



# Barriers to Case Submissions

- ▶ In the last 12 months, have you had a case that you could have used consultation on?
- ▶ What were the barriers to submitting the case?
- ▶ What would help encourage you to submit a case?

# Identifying and Treating Feeding and Eating Disorders

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February 8, 2023

Tom Hildebrandt, Psy.D.  
Professor of Psychiatry  
Director, Center of Excellence for Eating  
and Weight Disorders



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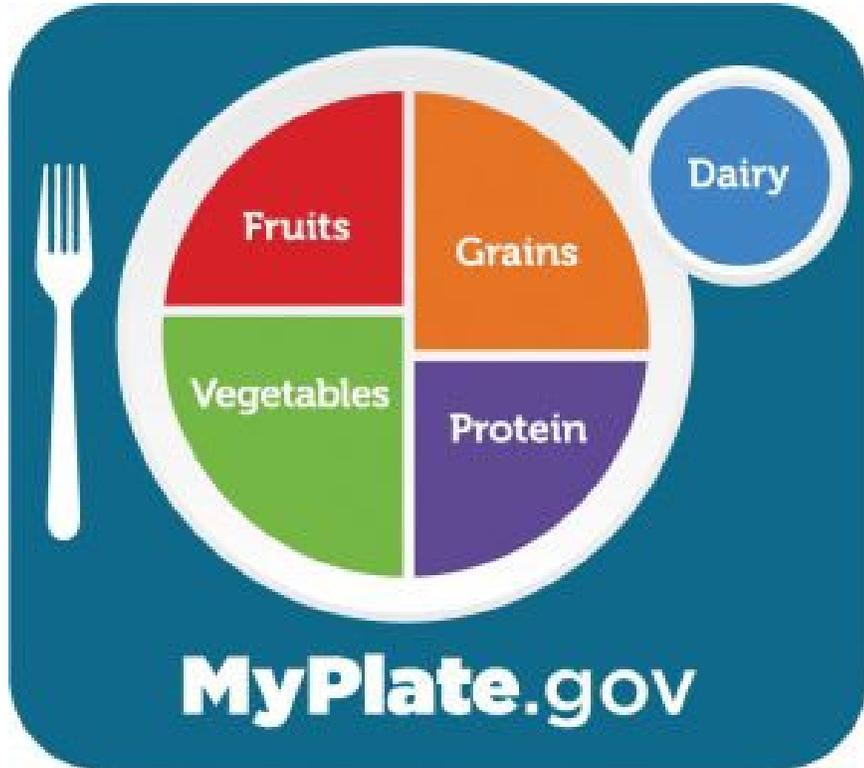
# Didactic Presentation



## **Tom Hildebrandt, Psy.D.**

Director, Center of Excellence for Eating and Weight Disorders  
Mount Sinai Health System  
Professor of Psychiatry  
Icahn School of Medicine at Mount Sinai

# What is normal eating?



## Heterogeneous, but usually consistent with:

- ▶ Regular meals and snacks
- ▶ Flexible
- ▶ Not avoiding types of foods/specific foods unless medically necessitated (e.g., Celiac, type II diabetes) or part of spiritual/religious practice
- ▶ Not restricted to one context (e.g., can eat at home, at work, with other people)
- ▶ Should not require substantial effort (cognitive or otherwise) to maintain



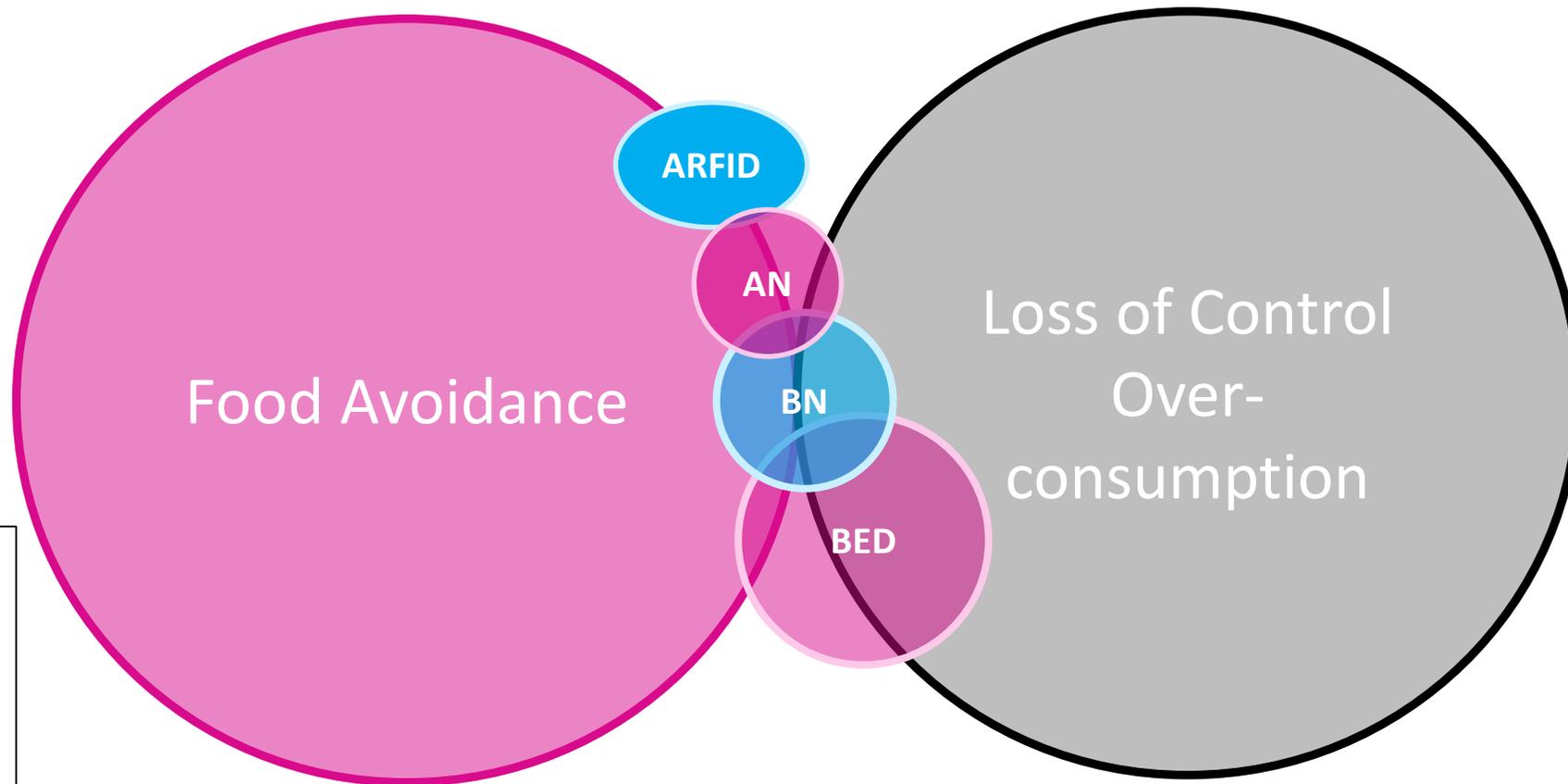
# What is an eating disorder?

Feeding and eating disorders are characterized by a **persistent disturbance of eating or eating-related behavior** that results in the altered consumption or absorption of food and that **significantly impairs physical health or psychosocial functioning**

- ▶ Anorexia Nervosa
- ▶ Bulimia Nervosa
- ▶ Binge Eating Disorder
- ▶ Avoidant/Restrictive Food Intake Disorder (ARFID)
- ▶ Rumination Disorder
- ▶ Pica
- ▶ Other Specified Feeding and Eating Disorder
- ▶ Unspecified Feeding and Eating Disorder

# Visualizing Primary Symptom Domains

“Fundamental Disturbance in Eating”



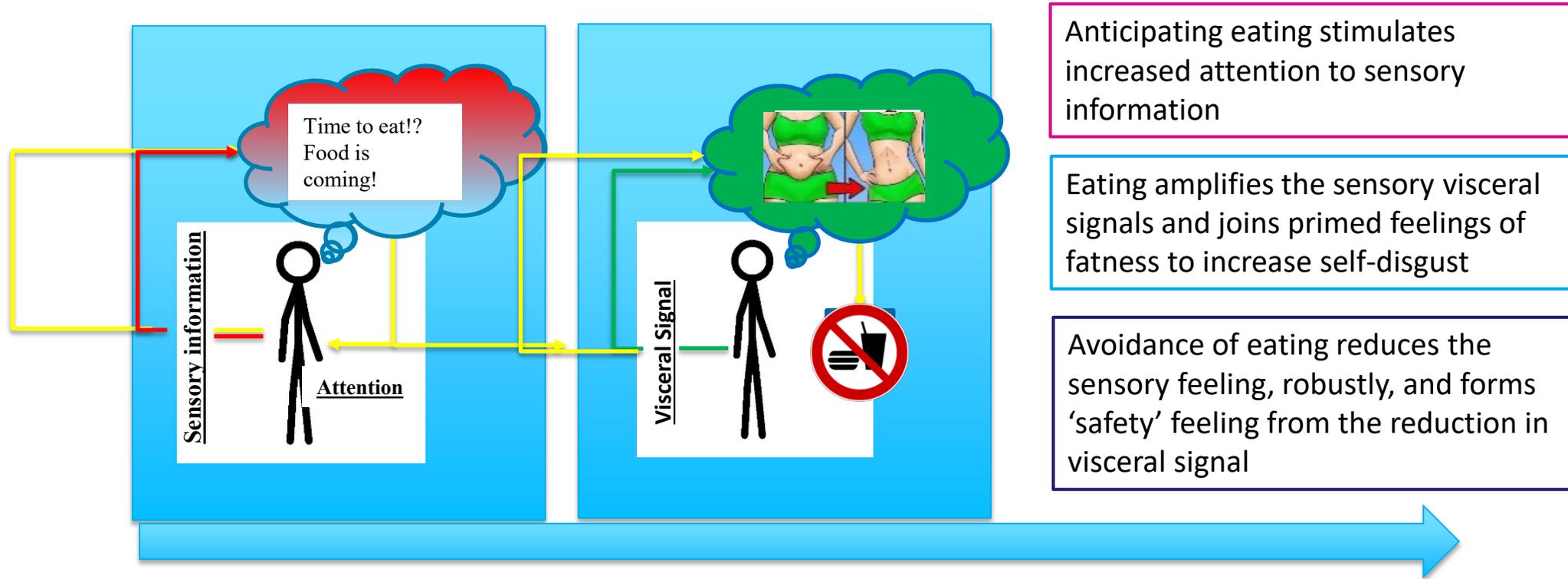
ARFID = Avoidant  
Restrictive Food Intake  
Disorder

AN = anorexia nervosa

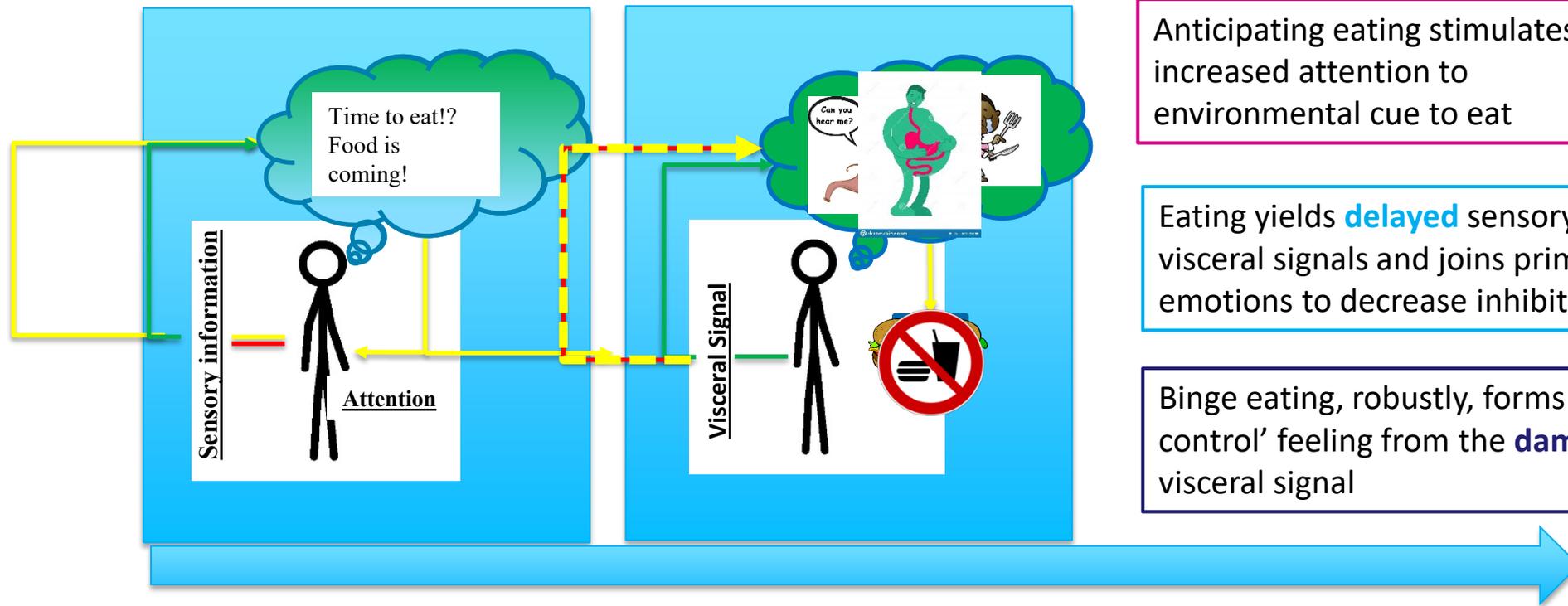
BN = bulimia nervosa

BED = binge eating  
disorder

# Deconstructing Food Avoidance



# Deconstructing Binge Eating



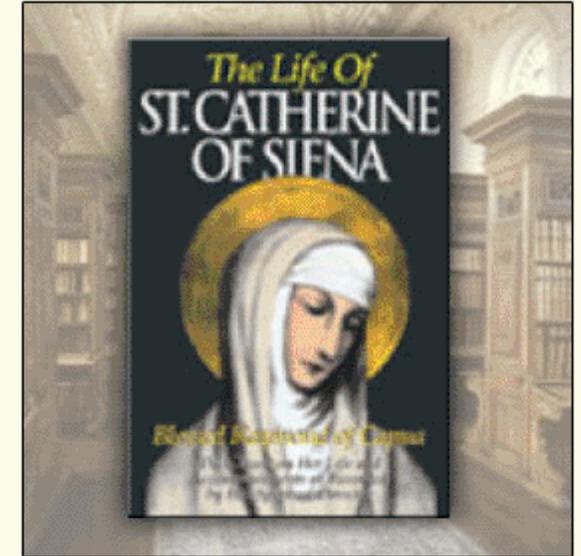
Anticipating eating stimulates increased attention to environmental cue to eat

Eating yields **delayed** sensory/visceral signals and joins primed emotions to decrease inhibition

Binge eating, robustly, forms 'loss of control' feeling from the **dampened** visceral signal

# Anorexia Nervosa | An old illness

- ▶ 1350 - St. Catherine of Siena: Holy Anorexia?
- ▶ 1689 - Richard Morton: “Nervous Consumption”
- ▶ 1874 - William Gull: “Anorexia Nervosa”
- ▶ 1873 - Charles Leseque: “Hysterical Anorexia”
  
- ▶ Prevalence: ~0.5-1% of women
  - Does not appear to be increasing over time



# Anorexia Nervosa | Features and Complications

## Diagnostic Features

- ▶ Relentless pursuit of thinness
- ▶ Fear of becoming fat
- ▶ Significantly underweight

## Clinical Features at Presentation

- ▶ Often patient will report no complaints despite clinician or family member's concern
- ▶ Vague gastrointestinal complaints
- ▶ Menstrual irregularity

## Medical Complications

### Hair

- ▶ Alopecia
- ▶ Lanugo

### Liver

- ▶ Increased liver enzymes
- ▶ High cholesterol

### GI tract

- ▶ Delayed Gastric Emptying
- ▶ Constipation

### Reproductive System

- ▶ Amenorrhea

### Metabolism

- ▶ Electrolyte disturbances  
(Na<sup>+</sup>, K<sup>+</sup>, CO<sub>2</sub>, BUN/Cr, PO<sub>4</sub>)
- ▶ Slow thyroid

### Heart

- ▶ Bradycardia
- ▶ Arrhythmias (prolonged QT)
- ▶ Hypotension

### Blood

- ▶ Anemia
- ▶ Low white count

### Other Complications

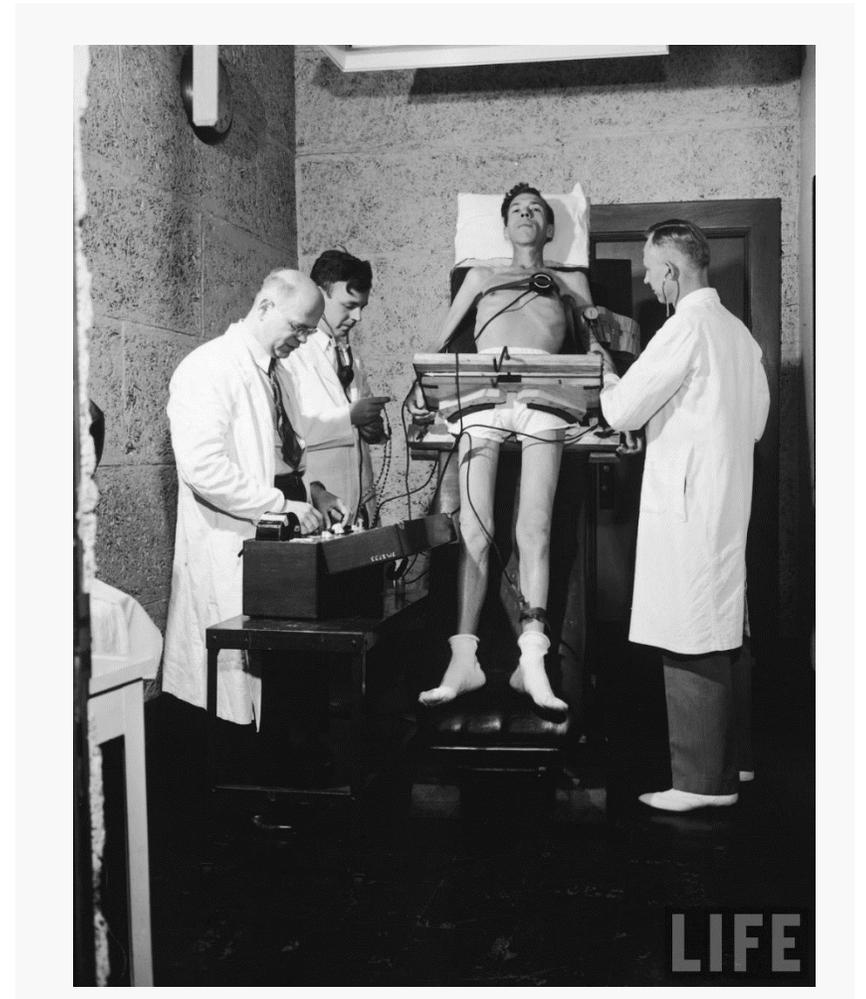
- ▶ Dry skin
- ▶ Osteoporosis
- ▶ Edema
- ▶ High amylase,
- ▶ Reduced brain volume

# Anorexia Nervosa | Starvation Experiment

## Minnesota “Starvation” Experiment: 1944

“Anticipation of eating heightened the craving for food...They (the subjects) tended to become irritated when the serving was slow or when those who served the food gave any evidence of not taking their business ‘seriously’...The subjects exhibited a possessive attitude towards their food...Those who ate in the common dining room smuggled out bits of food and consumed them on their bunks in a long, drawn-out ritual...The Minnesota subjects were often caught between conflicting desires to gulp their food down ravenously and to consume it slowly...Toward the end of starvation some of the men would dawdle for almost two hours.”

— *The Biology of Human Starvation*, Ancel Keys



# Semi-Starvation Experiment

## Subject #235

“During the seventh week of the semi-starvation period he became unsettled and restless. One evening while working in the grocery store he suffered a sudden ‘complete loss of will power’ and ate several cookies, a sack of popcorn, and two overripe bananas before he could ‘regain control’ of himself. He immediately suffered a severe emotional upset, and upon returning to the Laboratory he vomited.”

— *The Biology of Human Starvation*, Ancel Keys

# Anorexia Nervosa | Behavioral Features



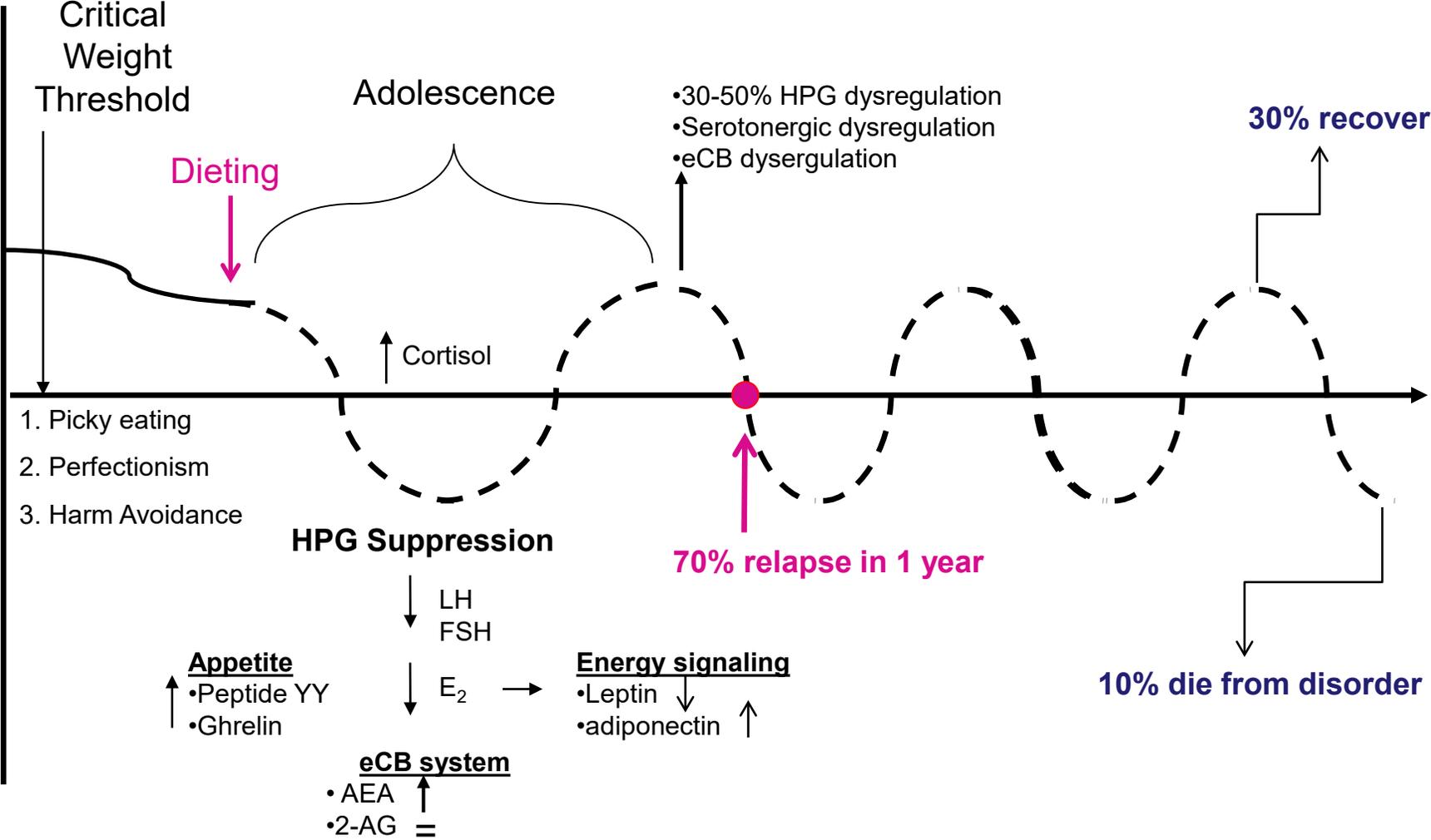
- ▶ Obsession with food
- ▶ Peculiar eating—food rituals, mutilation, hoarding
- ▶ Binge eating
- ▶ Compulsive behavior—checking body, repetitive weighing, etc.
- ▶ Depression—pervasive anhedonia
- ▶ Social isolation
- ▶ Laxative/diuretic abuse
- ▶ Increased physical activity

# Anorexia Nervosa | Risk Factors

- ▶ Female
- ▶ Adolescence
- ▶ Higher SES
- ▶ Caucasian
- ▶ Premorbid psychopathology?
  - Picky eating
  - Low body mass index (lean phenotype)
  - Harm avoidant temperament



# Course of Anorexia Nervosa



# Treatment for Anorexia

## Psychiatric

- ▶ Family therapy
- ▶ CBT-E
- ▶ Antipsychotics
  - Olanzapine
- ▶ Estrogen replacement
  - ER-beta selective agonists

## Endocrine/Metabolic

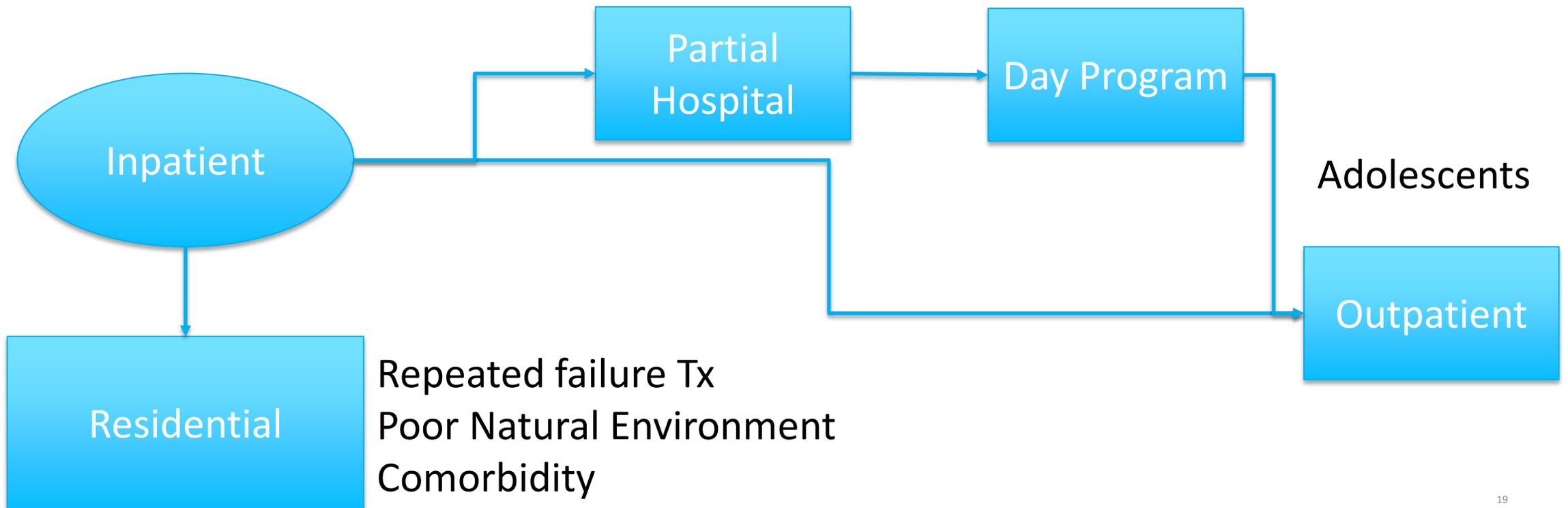
- ▶ Refeeding
- ▶ Motility agents
- ▶ Recumbent leptin
- ▶ Estrogen patch
- ▶ CBDs

# Anorexia Nervosa | Levels of Intervention

Low BMI  $\leq 16$   
Cardiac/BP Instability  
Electrolyte Abnormality  
Suicidality/Comorbidity

Low BMI  $> 16$  to  $< 18.5$   
Binge/Purge  $> 14$  week  
Abnormal EKG  
Rapidly losing weight

Low BMI  $> 16$ ,  $< 18.5$   
**Binge/Purge  $< 14$  week**  
**Normal EKG**  
**Stable weight**



# Bulimia Nervosa | Overview

## What are the key diagnostic features?

- ▶ Episodes of binge eating
- ▶ Inappropriate compensatory behavior
- ▶ Over concern with shape/weight
- ▶ Without concurrent Anorexia Nervosa

## What is a binge?

- ▶ Eating, in a **discrete period of time** (e.g., within any two hour period), an amount of food that is definitely larger than most people would eat in a similar period of time under similar circumstances
- ▶ A **sense of lack of control** over eating during the episode (e.g., a feeling that one cannot stop eating, or control what or how much one is eating)

# Bulimia Nervosa | Features and Complications

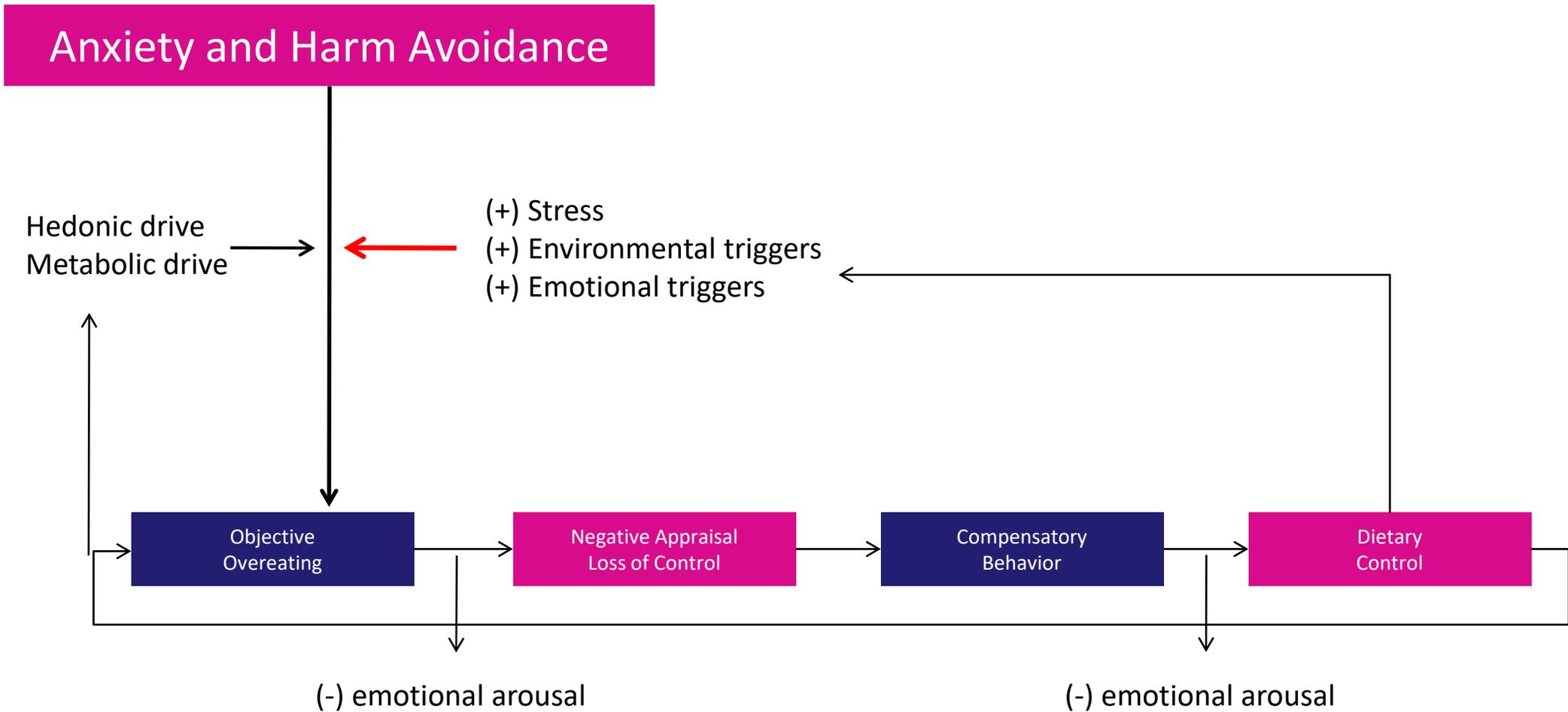
## Clinical Characteristics

- ▶ ~90% female
- ▶ Normal weight
- ▶ Onset at ~18 years and presentation at ~23 years
- ▶ Binges ~2,000 kcals not primarily CHO
- ▶ Compensation ~90% vomiting and ~33% laxatives

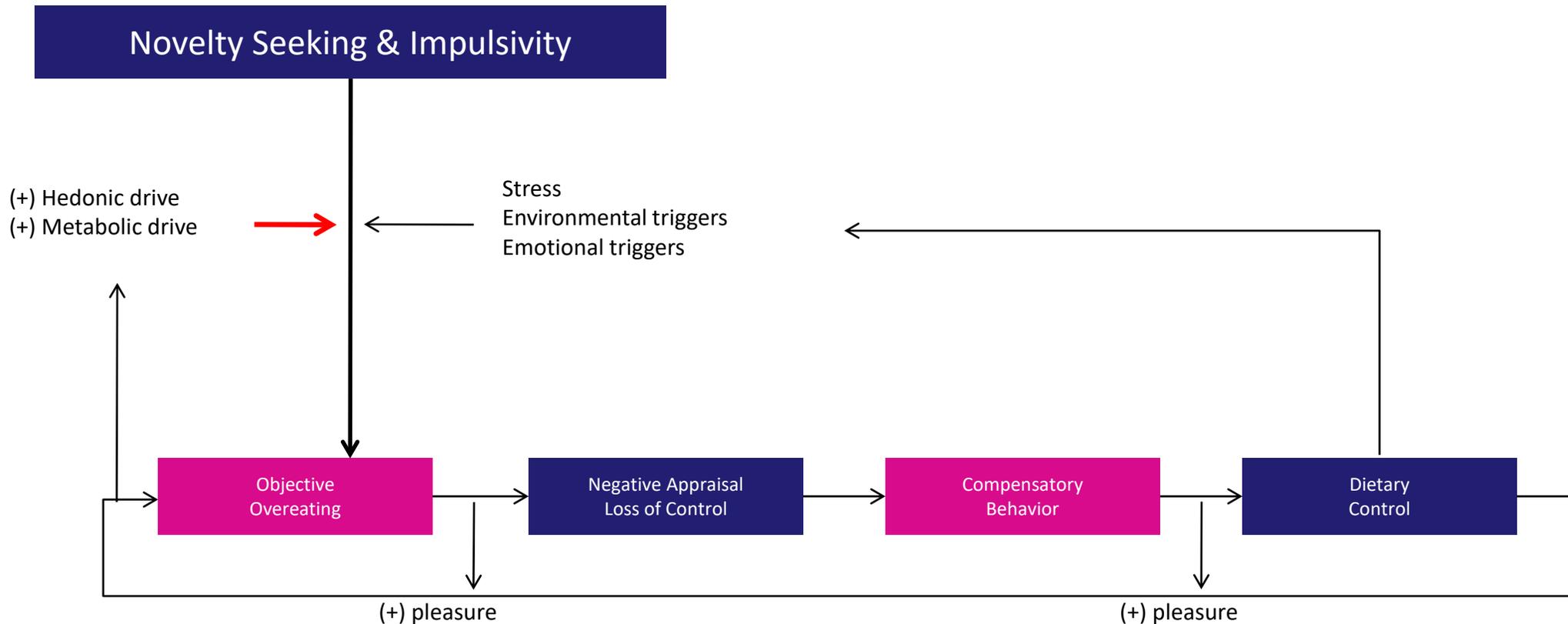
## Medical Complications

- ▶ Irregular menses
- ▶ Dental erosion
- ▶ Enlarged salivary glands
- ▶ Laxative dependence
- ▶ Ipecac toxicity
- ▶ Gastric rupture
- ▶ Hypokalemia, hypochloremia, hyponatremia, hyperamylasemia
- ▶ Alkalosis in vomiters
- ▶ Acidosis in laxative abusers

# Binge-Purge Cycle | Negative Reinforcement



# Binge-Purge Cycle | Positive Reinforcement



# Bulimia Nervosa | Typical Course



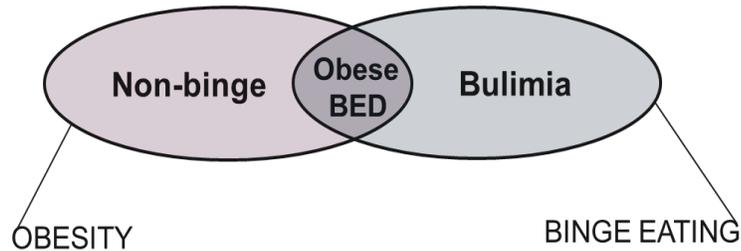
- ▶ Onset in late adolescence/early adulthood
- ▶ Begins during dieting
- ▶ Behaviors worsen in frequency and severity
- ▶ Tend to fade over years
- ▶ Treatments shorten course

# Binge Eating Disorder | Overview

## Key Features

- ▶ Episodes of binge eating
- ▶ Without concurrent Anorexia Nervosa, inappropriate compensatory behaviors
- ▶ Greater impairment in work and social functioning
- ▶ Greater concern with body shape and weight
- ▶ Greater proportion of adult life on diets
- ▶ Increased general psychopathology-more frequent H/O depression, alcohol/drug abuse, and treatment for emotional problems

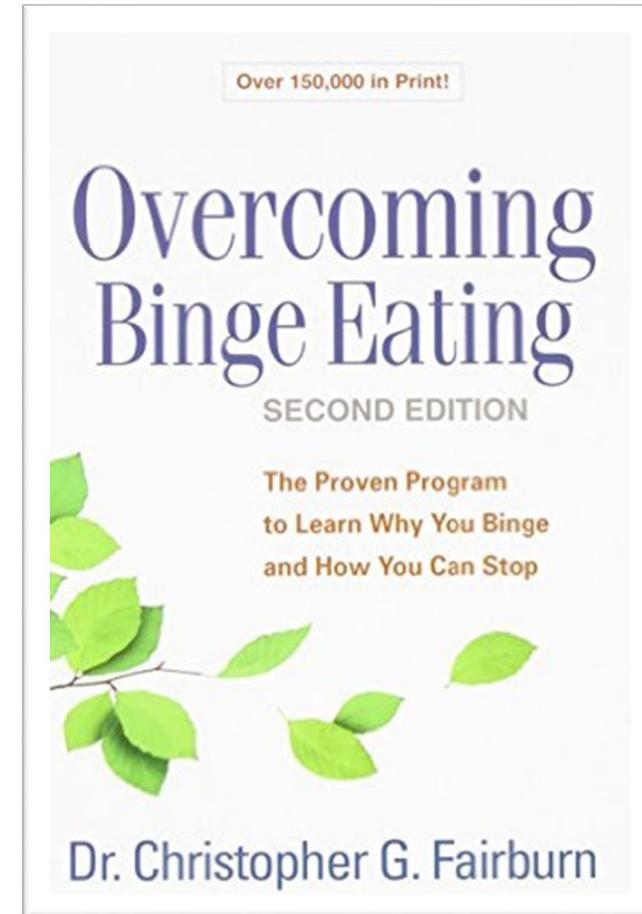
## Relationship to Obesity and Bulimia



# Self-Help Material

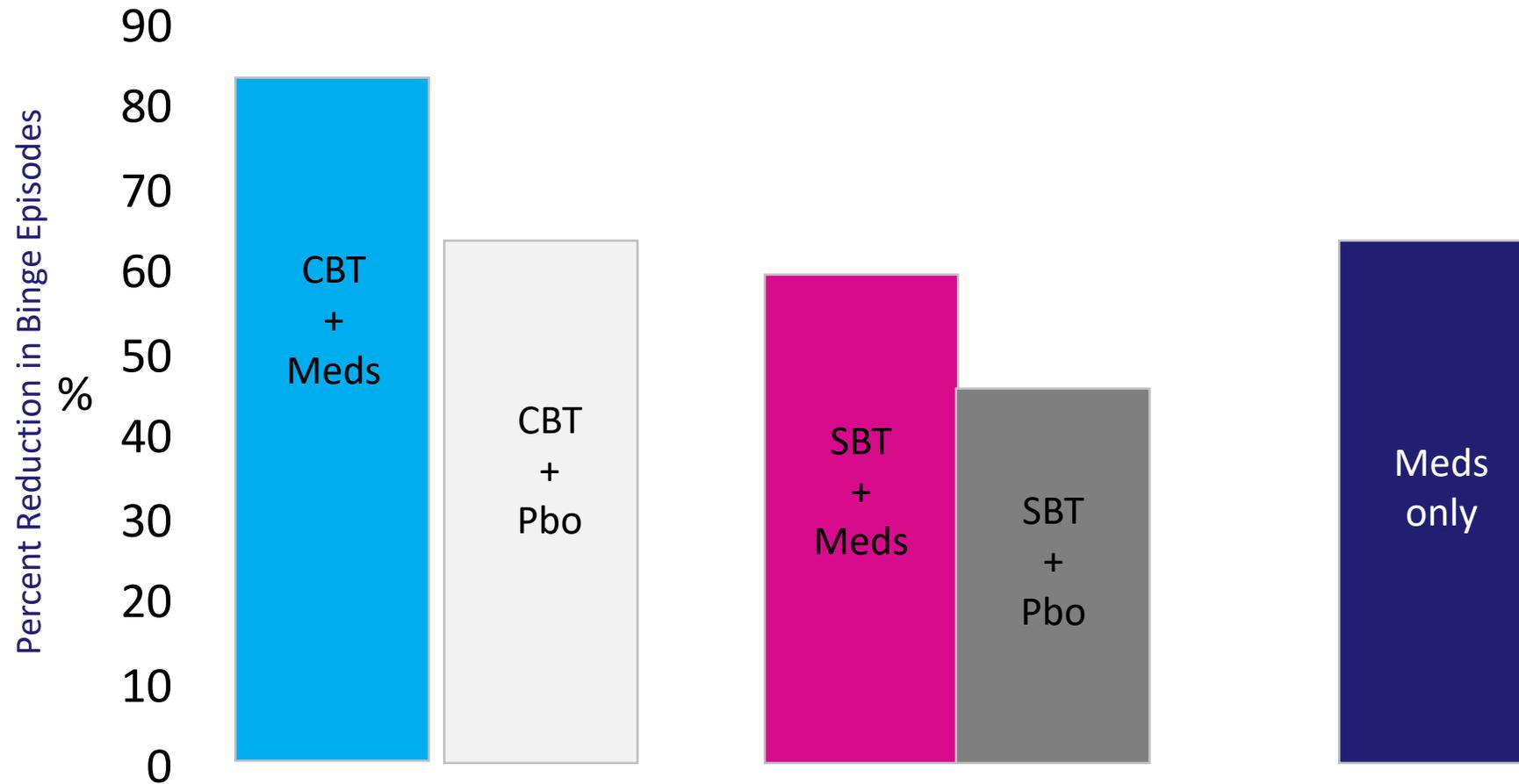
## Clinician-Facilitated Psychoeducation

- ▶ STEP I: Self-monitoring
- ▶ STEP II: Regular Eating
- ▶ STEP III: Alternative Activities
- ▶ STEP IV: Dieting
- ▶ STEP V: Body Image
- ▶ STEP VI: Relapse Prevention



# Columbia Therapy ± Meds Study

## Reduction in Frequency of Binge Eating



# Avoidant/Restrictive Food Intake Disorder (ARFID)

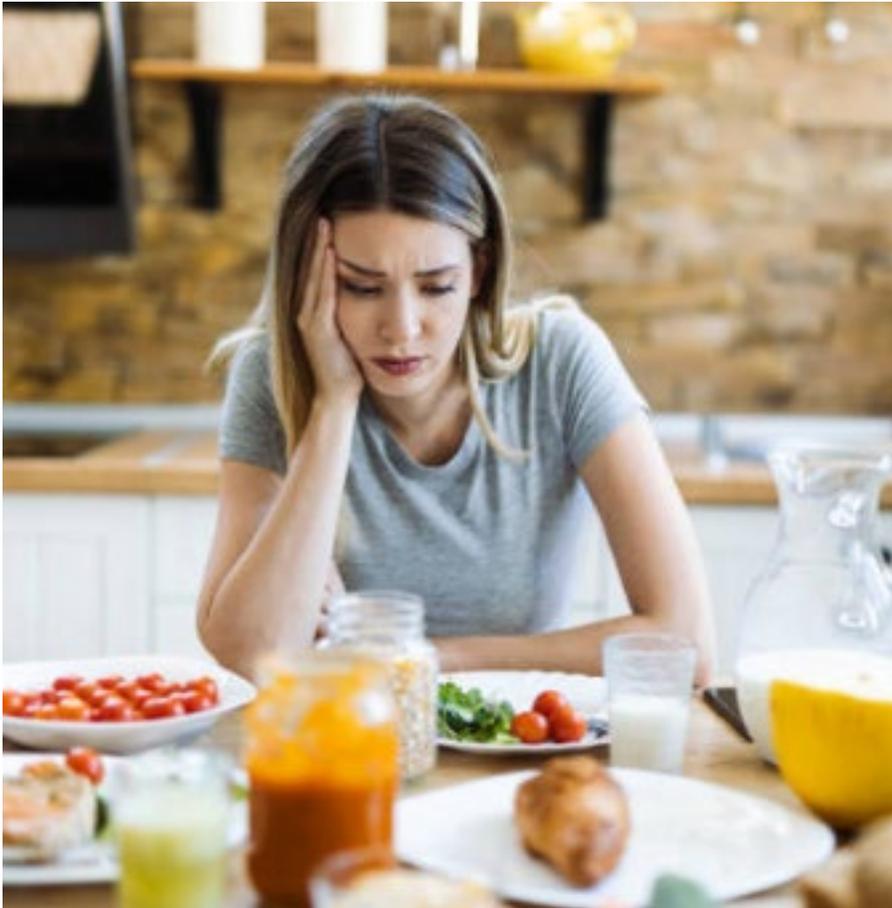
## Key Diagnostic Features

- ▶ Apparent lack of interest in eating or food; avoidance based on the sensory characteristics of food; concern about aversive consequences of eating
- ▶ Fail to meet appropriate nutritional and/or energy as indicated by
  - Significant weight loss
  - Significant nutritional deficiency
  - Dependence on enteral feeding or oral nutritional supplements
  - Marked interference with psychosocial functioning
- ▶ No concern with shape/weight



# Avoidant/Restrictive Food Intake Disorder (ARFID)

## Clinical Features



- ▶ Tend to be younger than children with AN
- ▶ Report a longer duration of illness, picky eating from early childhood
- ▶ A higher proportion are male or experience comorbid medical conditions
- ▶ Associated with gastrointestinal symptoms, fear of eating (choking or vomiting), or food allergies whereas patients with eating disorders describe almost none of the above associated symptoms

# Special Populations

- ▶ Males: low percentage of treatment-seeking patients
- ▶ Athletes: female athlete triad, training needs
- ▶ Pregnancy/post-partum
- ▶ Other medical conditions (e.g., type 1 diabetes)
- ▶ LGBTQIA+, Non-Caucasian ethnic/racial groups
- ▶ Older adults

# Warning Signs

## ▶ Finding ways to restrict variety and overall intake

- Extreme dietary restrictions (vegan/vegetarian, gluten free without medical diagnosis)
- Avoiding social situations or refusing foods consumed by others in similar situations
- Obsessively counting calories, reading food labels, and weighing portions
- Skipping meals or making excuses to avoid eating
- Drinking abnormally large amounts of water
- Taking tiny servings or replacing solid foods with liquids

## ▶ Change in interests

- Repetitive or obsessive body checking behaviors (mirror, circling wrists)
- Increased physical activity (sit-ups in room, exercising during class)
- Interest in weight-loss on social media, websites, magazines, television

# Warning Signs

## ► Physical Changes

- Sudden/rapid weight loss or frequent changes in weight
- Sensitivity to the cold, fainting, dizziness, or fatigue
- Loss or disturbance of menstrual periods (females)
- Signs of frequent vomiting - swollen cheeks / jawline, calluses on knuckles, or damage to teeth
- Change in clothing style, such as wearing baggy clothes

## ► Other Warning Signs

- Eating in secret or finding hidden food in strange areas
- Taking prescription stimulants like Ritalin, or even illegal drugs such as speed

# How to Manage

- ▶ A general medical evaluation is helpful to R/O other conditions known to affect eating and weight (e.g., Crohn's disease, central nervous system tumors, gastric outlet obstruction) and assess potential physical complications related to the eating disorder
- ▶ **Anorexia Nervosa will likely require specialty treatment**, and potentially hospitalization, but patients are more willing to be evaluated for “medical problems” than for associated psychological symptoms
- ▶ In addition to addressing the presenting medical symptoms, primary care providers can suggest the need for additional mental health services
- ▶ By focusing on the signs and symptoms that precipitated a medical evaluation, and emphasizing healthy meal planning and completion, the primary care provider can **shift the focus away from the presence of an eating disorder and toward the behaviors needed to improve health**, and thereby enhance motivation for treatment

# How to Manage

- ▶ In the case of continuing medical instability or significant eating problems, patients can be referred for additional specialist services
- ▶ Appropriately trained healthcare professionals may be able to treat BN on an outpatient basis (1 FDA approved medication), but some BN patients need to be monitored for potential medical complications
- ▶ **BED is unlikely to respond to weight loss interventions alone**; however, some providers may feel comfortable trying Vyvanse
- ▶ **ARFID should receive specialty care** in the case of malnutrition, vitamin deficiencies, or psychosocial impairment (e.g., cannot attend work functions because will not be able to eat at a restaurant)

# Tips on Care

- ▶ Scale weighing can be a source of high anxiety; defer to patient preference for seeing/knowing weight.
- ▶ In suspected underweight patients, scale manipulation is common. **Gown weights after voiding and urine test for specific gravity may be necessary to get accurate weight.**
- ▶ In patients with higher weights, discussion of weight loss as a goal may make symptoms worse. Discuss specialty interventions for metabolic improvements that treat entire individual should be done with care.
  - **DIETARY ADVICE IN MEDICAL OFFICE IS INEFFECTIVE**
- ▶ Be prepared to **hold the line for hospitalizing patients** based on medical need. Hospital care can provide motivation to engage in outpatient options.
- ▶ **Comments on patient or other's appearance is never helpful** and, at best, is neutral, but likely harmful.

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In appreciation of your  
attention and interest!

**ANY  
QUESTIONS?**

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