

Eating Disorders: Clinical Features, Comorbidity, and Treatment

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Outline

- Eating disorders overview
- Comorbidity with other psychiatric disorders
- Evidence-based treatments



Types of Eating Disorders

DSM-5

- Anorexia Nervosa
- Bulimia Nervosa
- Binge Eating Disorder
- Other Specified
- Unspecified

Anorexia Nervosa

- Peak onset ages 14-18
 - Seen at all ages of presentation
- Prevalence = 0.5%
- 90% female (vs. male)

Anorexia Nervosa

Criterion A: Restriction of energy intake relative to requirements, leading to significantly low body weight in the context of age, sex, developmental trajectory, and physical health.



Anorexia Nervosa

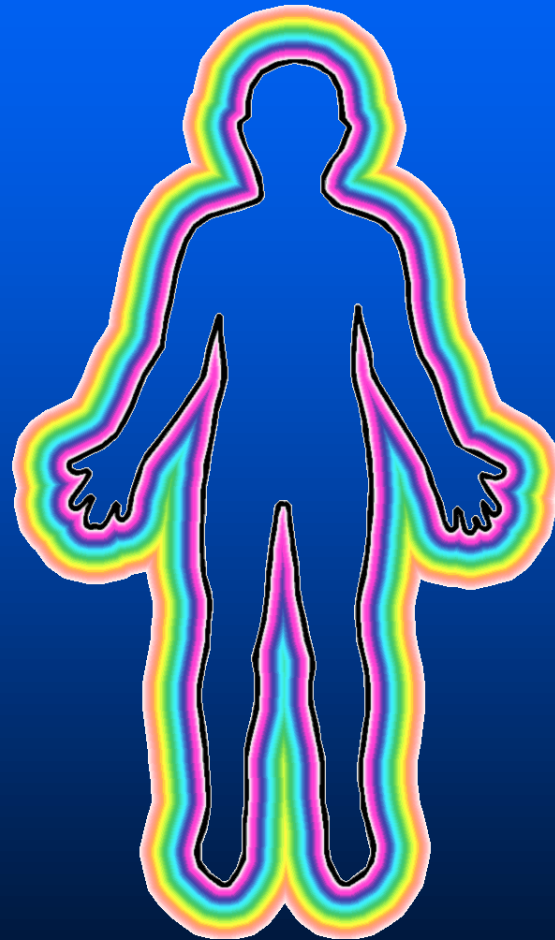
Criterion B: Intense fear of gaining weight or becoming fat, or persistent behavior that interferes with weight gain, even though at a significantly low weight



Anorexia Nervosa

Criterion C:

Disturbance in the way in which one's body weight or shape is experienced...or persistent lack of recognition of the seriousness of the current low body weight



Anorexia Nervosa Subtypes

- **Restricting Type:** during the last 3 months, the individual has not engaged in recurrent episodes of binge eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas).
- **Binge-Eating/Purging Type:** during the last 3 months, the individual has engaged in recurrent episodes of binge eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas).



Bulimia Nervosa

- Prevalence: 0.5-3%
- 90% female
- Weight usually in normal range
- 20-40% of those with anorexia nervosa develop bulimia nervosa
- People with bulimia nervosa tend to engage in dietary restriction outside of bulimic episodes

American Psychiatric Association, 2013; Herzog & Delinsky, 2001

Binge Eating in DSM-5

- **Recurrent episodes of binge eating characterized by both of the following**
 - Eating, in a discrete period of time (e.g., within a 2 hour period) an amount of food that is **definitely larger** than most people would eat during a similar period of time and 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)”

Binge Eating Episodes in Bulimia Nervosa*

<u>Feeding Lab Studies</u>	<u>Average kcal/binge</u>
Mitchell & Laine, 1985	4,394
Kaye et al., 1986	3,500
Kissileff et al., 1986	4,479
Hadigan et al., 1989	3,469
Walsh et al., 1989	3,031

*Mitchell, Crow, Peterson, Wonderlich, & Crosby, 1998

DSM-5 Bulimia Nervosa

- B. Recurrent inappropriate compensatory behaviors in order to prevent weight gain, such as self-induced vomiting; misuse of laxatives, diuretics, or other medications, fasting; or excessive exercise**
- C. The binge eating and inappropriate compensatory behaviors both occur, on average, at least once per week for 3 months**
- D. Self-evaluation is unduly influenced by body shape and weight**
- E. The disturbance does not occur exclusively during episodes of Anorexia Nervosa**

Binge Eating Disorder

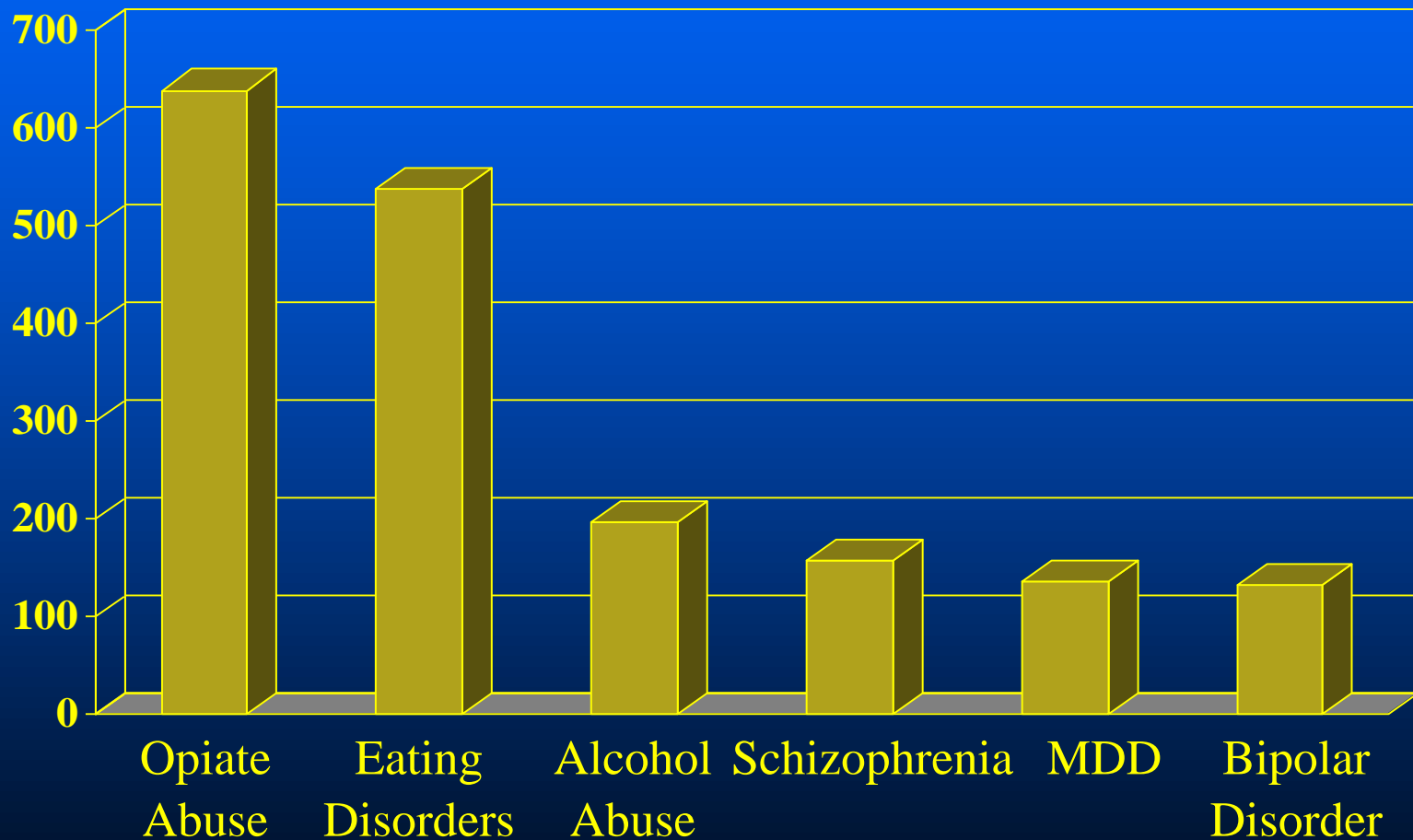
- Prevalence
 - General population=3%, Obese=8%
 - Seeking treatment for obesity=10-30%
 - Females 1.5 x more likely to have BED than males
- Majority (>50%) have comorbid obesity²
- Onset in late adolescence
- Dieting history, although lower scores than BN and AN for current dieting

Grilo, 2002; Spitzer et al., 1992, 1993; American Psychiatric Association, 2013

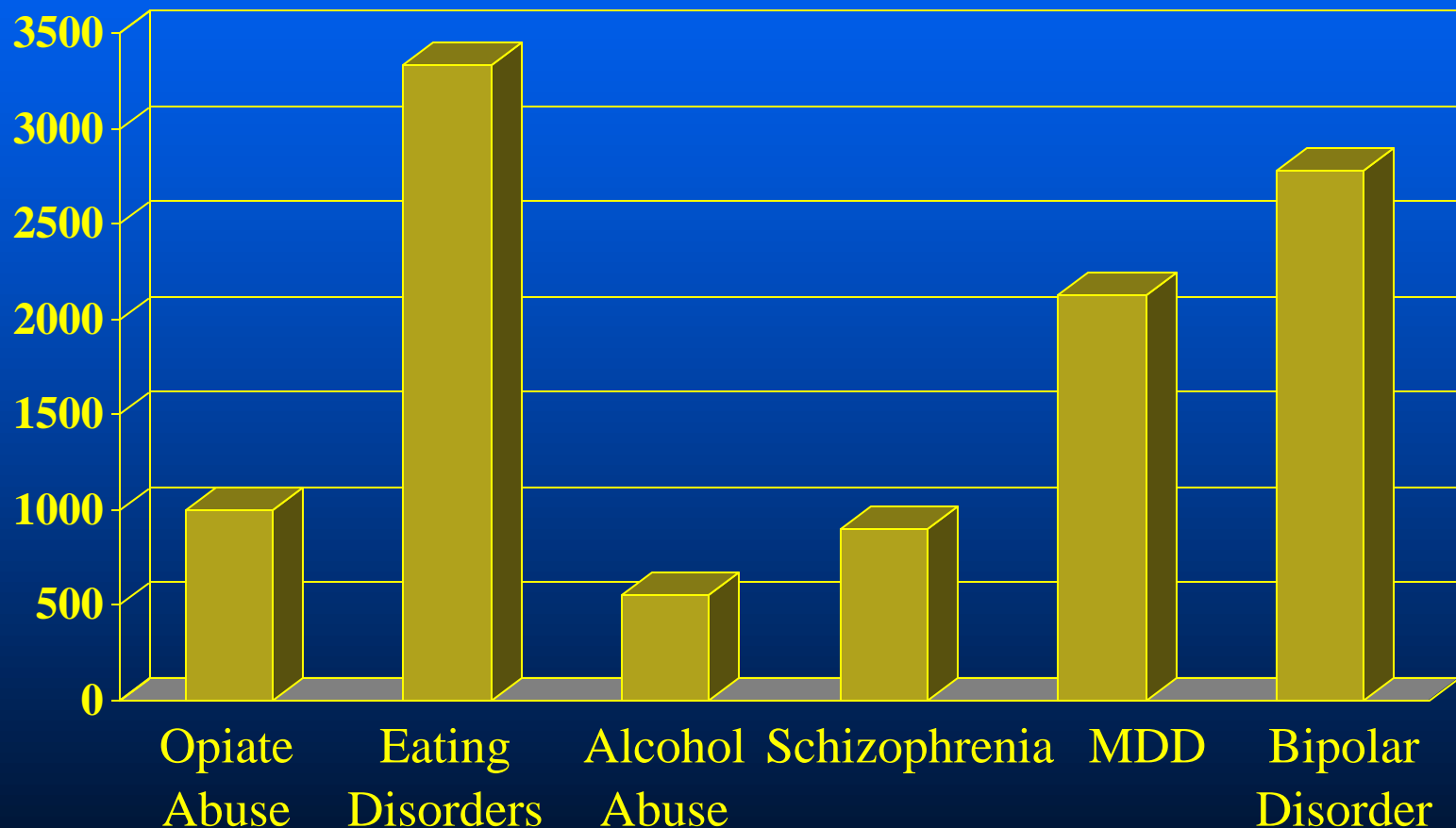
Binge Eating Disorder (DSM-5)

- Binge eating episodes
- The binge-eating episodes are associated with ≥ 3 :
 - » Eating much more rapidly than normal
 - » Eating until feeling uncomfortably full
 - » Eating large amounts of food when not feeling physically hungry
 - » Eating alone because of feeling embarrassed by how much one is eating
 - » Feeling disgusted with oneself, depressed, or very guilty after overeating
- Marked distress regarding binge eating
- Binge eating occurs, on average, at least once a week for 3 months.
- Binge eating is not associated with the recurrent use of inappropriate compensatory behavior and does not occur exclusively during the course anorexia or bulimia nervosa

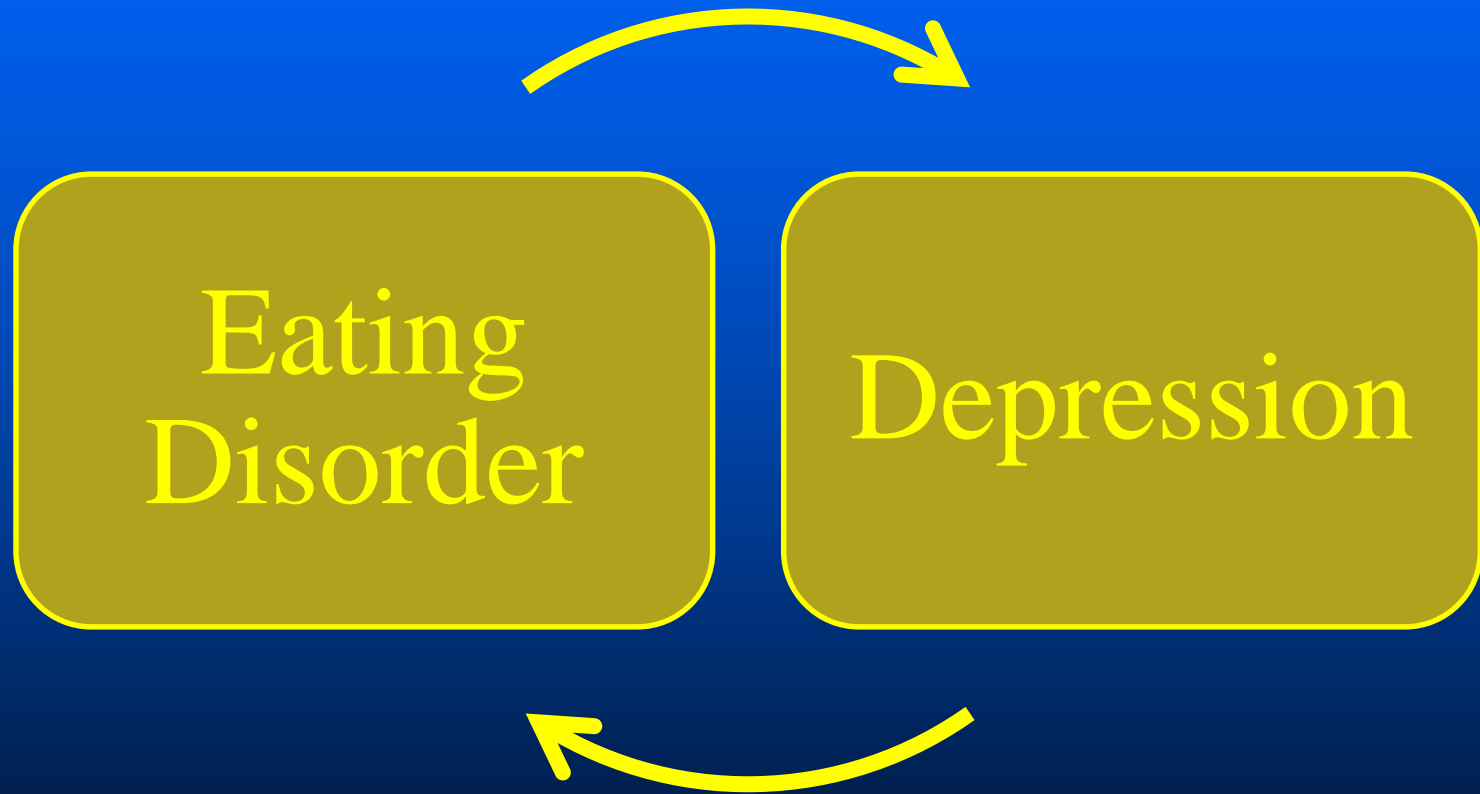
All Cause Mortality Rates for Various Psychiatric Conditions



Suicide Mortality Rates for Various Psychiatric Conditions



Depression and Eating Disorders



Lifetime Prevalence (Hudson et al., 2007)

	Anorexia Nervosa	Bulimia Nervosa	Binge Eating Disorder
Major Depressive Disorder (MDD)	39.1	50.1	32.3
Dysthymia	12.8	12.7	9.6
Bipolar Disorder	3.0	17.1	12.5
Any Mood Disorder	42.1	70.7	46.4

Lifetime Prevalance (Hudson et al., 2007)

	Anorexia Nervosa (%)	Bulimia Nervosa (%)	Binge Eating Disorder (%)
Panic Disorder	3.2	16.2	13.2
Agoraphobia	4.6	10.8	6.5
Specific Phobia	26.5	50.1	37.1
Social Anxiety	24.8	41.3	31.9
Generalized Anxiety	7.0	11.8	11.8
PTSD	12.0	45.4	26.3
OCD	0.0	17.4	8.2
Separation Anxiety	7.5	15.7	12.2
Any Anxiety Disorder	47.9	80.6	40.4

Lifetime Prevalence (Hudson et al., 2007)

	Anorexia Nervosa	Bulimia Nervosa	Binge Eating Disorder
Alcohol use or dependence	24.5	33.7	21.4
Drug use of dependence	17.7	26.0	12.4
Any substance use disorder	27.0	36.8	23.3

Lifetime Psychiatric Diagnoses

	Anorexia nervosa, Restricting	Anorexia nervosa, Binge-eating/purging	Bulimia nervosa
Substance Use Disorder	5%	15%	22.5%

Zonnevylle-Bender et al., 2004; Kaye et al., 2004; Bulik et al., 2004; Binford & leGrange, 2005; Godart et al., 2004; Ricca et al., 2001; Halmi et al., 1991; Herzog et al., 1992; Brewerton et al., 1995; Fornari et al., 1991; Braun et al., 1994

Eating Disorders and SUDs

- Typical thresholds of what is “excessive” (e.g., five drinks) that are included in some assessment measures may be too high for individuals who are nutritionally deprived
- Diet pill and stimulant use may be related to weight/shape, mood enhancement or both
- A subgroup of individuals with eating disorders, particularly bulimia nervosa, are characterized by “multi-impulsive” features
 - Substance use, shoplifting, multiple types of purging behaviors, impulsive sexual behaviors, self-injury

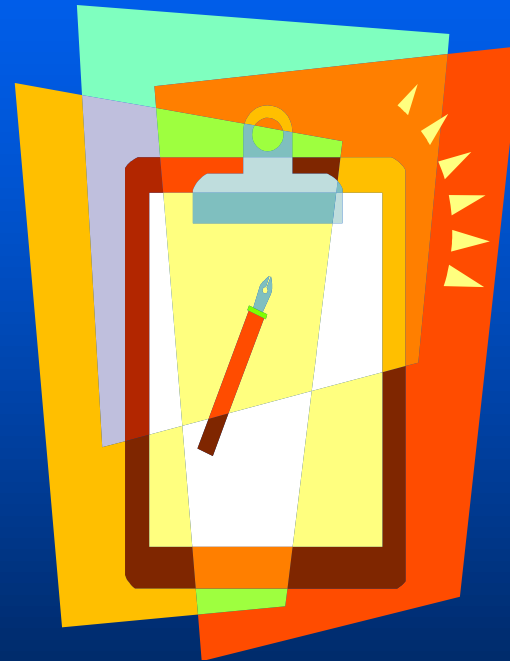
Multiple Diagnoses (Hudson et al., 2007)

	Anorexia Nervosa	Bulimia Nervosa	Binge Eating Disorder
Any Diagnosis	56.2	94.5	78.9
One Diagnosis	8.4	6.1	20.2
Two Diagnoses	14.1	24.0	9.8
Three or more Diagnoses	33.8	64.0	48.9

Which treatments for eating disorders are “Evidence-Based?”

Evidence-Based Treatments of Eating Disorders

- Cognitive-behavioral therapy (CBT/CBT-E)
- Interpersonal Therapy (IPT)
- Family-Based Treatment (FBT)
- Dialectical Behavioral Therapy (DBT)
- Antidepressant medications



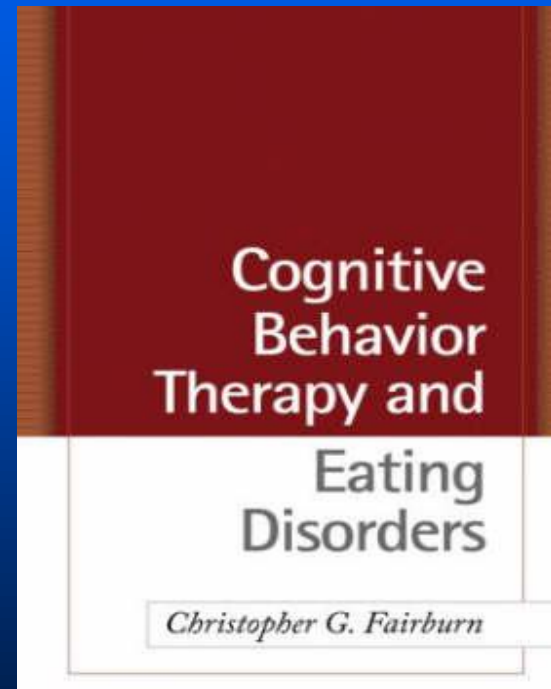
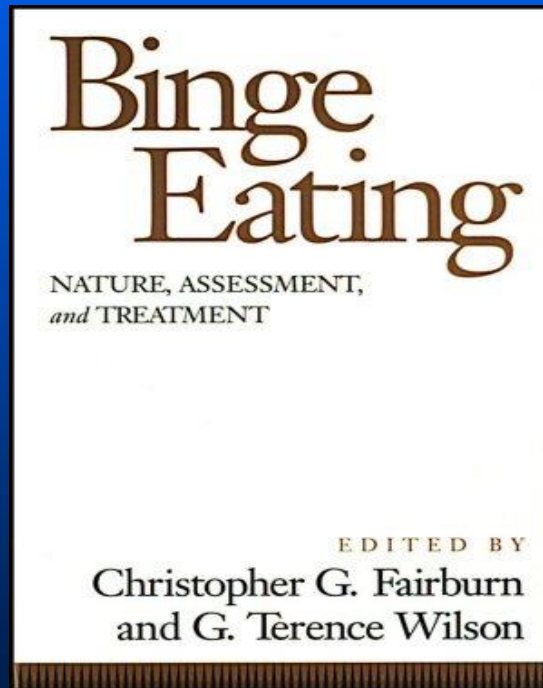
Limitations in Evidence-Based Psychotherapy for Eating Disorders

- **Most research is exclusively outpatient**
 - Minimal research on inpatient/intensive/residential programs—widely used for low weight treatment
- **“Good” outcomes are limited**
 - Symptomatic improvement is not recovery
 - High drop-out (20%) and relapse (20%+) rates
- **Co-occurring psychopathology is not consistently addressed**
 - Excluded from participation or not well-measured
 - Often improves in treatment outcome

Cognitive-Behavioral Therapy

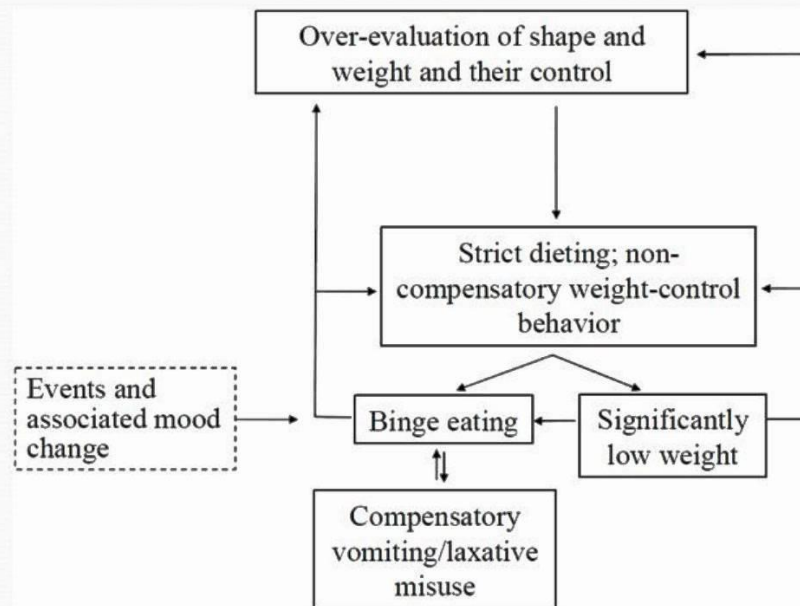
- **Rationale**: Modify thoughts and behaviors that cause and maintain eating disorders
- Originally developed for the treatment of depression (e.g., Beck et al., 1979) and adapted for eating disorders (Fairburn et al., 1993; Garner et al., 1997)
- New transdiagnostic treatment manual (CBT-E; Fairburn, 2008) for all types of eating disorders

CBT Manuals



CBT-E Formulation

Transdiagnostic Conceptualization



CBT Daily Food Record

Time	Food consumed	*	V/L/E	Context
8:00	1 bagel, plain			Breakfast at home
10:00	8 donuts	*	vomit	At work, upset about meeting

*** = “Any amount of food that felt excessive and/or was accompanied by a sense of loss of control”**

CBT-E Weekly Weight



CBT-E Psychoeducation

- Ineffectiveness of purging for weight control
 - Feeding lab studies have found that 30-50% of calories from binge eating episodes are retained, regardless of vomiting
 - Decision to vomit usually leads to consumption of more food
 - “Layer” theory of the stomach is inaccurate (e.g., using strawberries as “markers”)
 - Laxatives influence fluid, not energy absorption

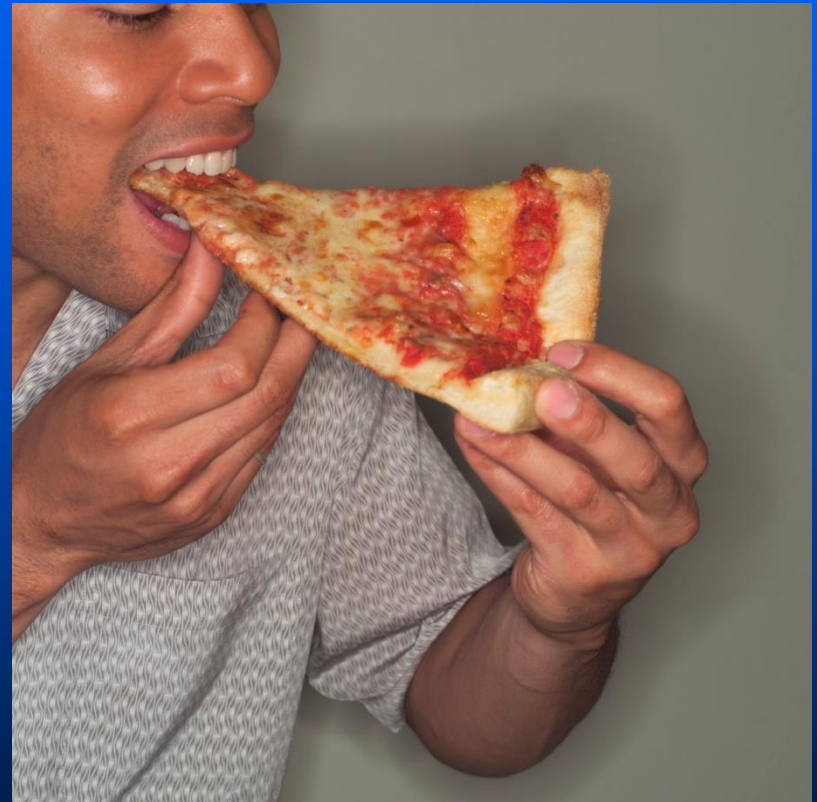
CBT-E Psychoeducation

■ Adverse effects of dieting

- Three types of dieting
 - » Avoiding eating for long periods of time (“gaps”)
 - » Avoiding certain types of food
 - » Restricting total amount eaten
- Dieting is rule-driven and impossible to follow
 - » Patients blame themselves for their lack of self-control when it is actually the dietary rules that are the problem and lead to more binge eating
- Prescribe a regular pattern of planned eating

CBT Behavioral Techniques

- Identify cues, stimuli or “triggers”
associated with eating disorder symptoms (usually from food logs)
- Construct alternative behavior list
- Discuss “urge surfing”



Food Avoidance and Rules

■ Rules

- Identify all rules
 - » “I must not eat past 7 PM”
- Deliberately “break” (planned/systematic)

■ Food avoidance

- Avoided foods list
- Rank and start to reintroduce in planned meals and snacks



Addressing Shape/Weight

- Monitor shape and weight checking
 - Ask how often and in what way they check
 - » Pinching, mirror-checking, trying on clothes
 - Assign and review written self-monitoring homework (usually check more than they had predicted)



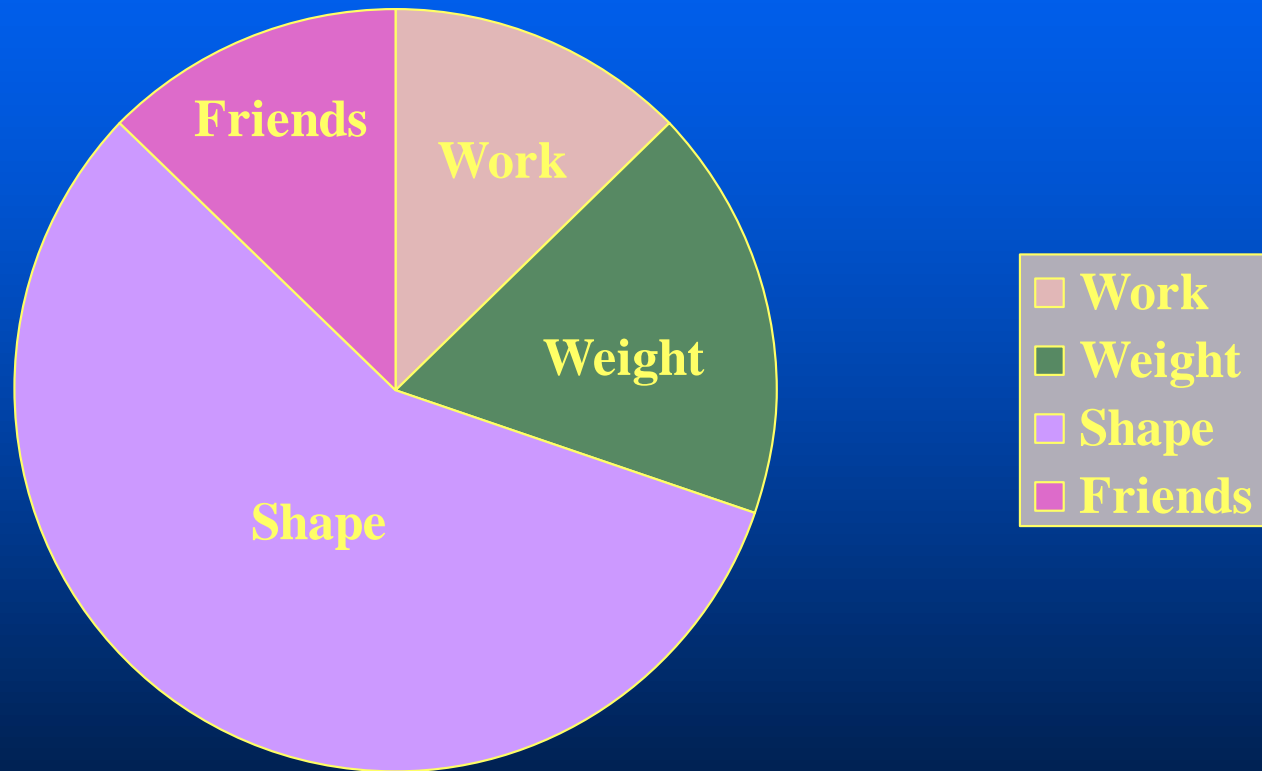
Shape Checking

- Discuss negative effects of vigilance
 - “Spider Phobia” analogy
 - » The more you are afraid of something, you more you are vigilant to details which can distort its actual size and shape
 - » Fear may impact perception
 - Spider looks like a tarantula
 - Visual “distortion” of prolonged staring
 - » Stare with focus and it will make it look bigger relative to other objects

Vigilance and Appraisal

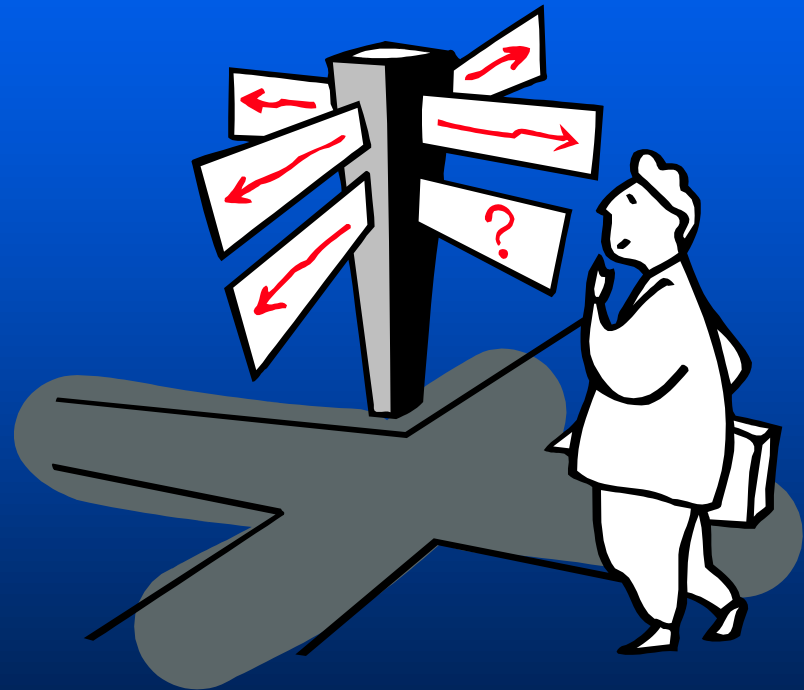


Self-Evaluation: Pie Chart



Final CBT-E Sessions

- Psychoeducation about “lapse” vs. “relapse”
 - Expect lapses and use as information to get back on track
 - Marlatt and Gordon’s (1985) model of relapse: appraisal of lapse can lead to relapse
- Construct a written maintenance plan



Interpersonal Therapy (IPT)

- **Rationale**: Modify current interpersonal relationships that are maintaining eating disorder symptoms
- Adapted from depression treatment manual (Klerman et al., 1984) for bulimia nervosa (individual; Fairburn, 1997) and BED (group; Wilfley et al., 2002)
- Eating behavior, weight, and appearance concerns are not a focus of treatment

Stages of IPT

- Stage 1: Determine primary interpersonal problems that will become the focus of treatment
 - **Grief**
 - » Death of a loved one
 - **Interpersonal deficits**
 - » Social isolation, shyness
 - **Role transitions**
 - » College graduation
 - **Interpersonal role disputes**
 - » Marital conflict
 - » Fighting with parents

Stages of IPT

■ Stage 2

- Patient takes a more active role in sessions
- Emphasis on current relationships and using this time as an opportunity to change
- Therapeutic techniques
 - » Exploration and clarification of feelings
 - » Discuss perceptions and expectations
 - » Role playing
 - » Examine possible changes that can be made

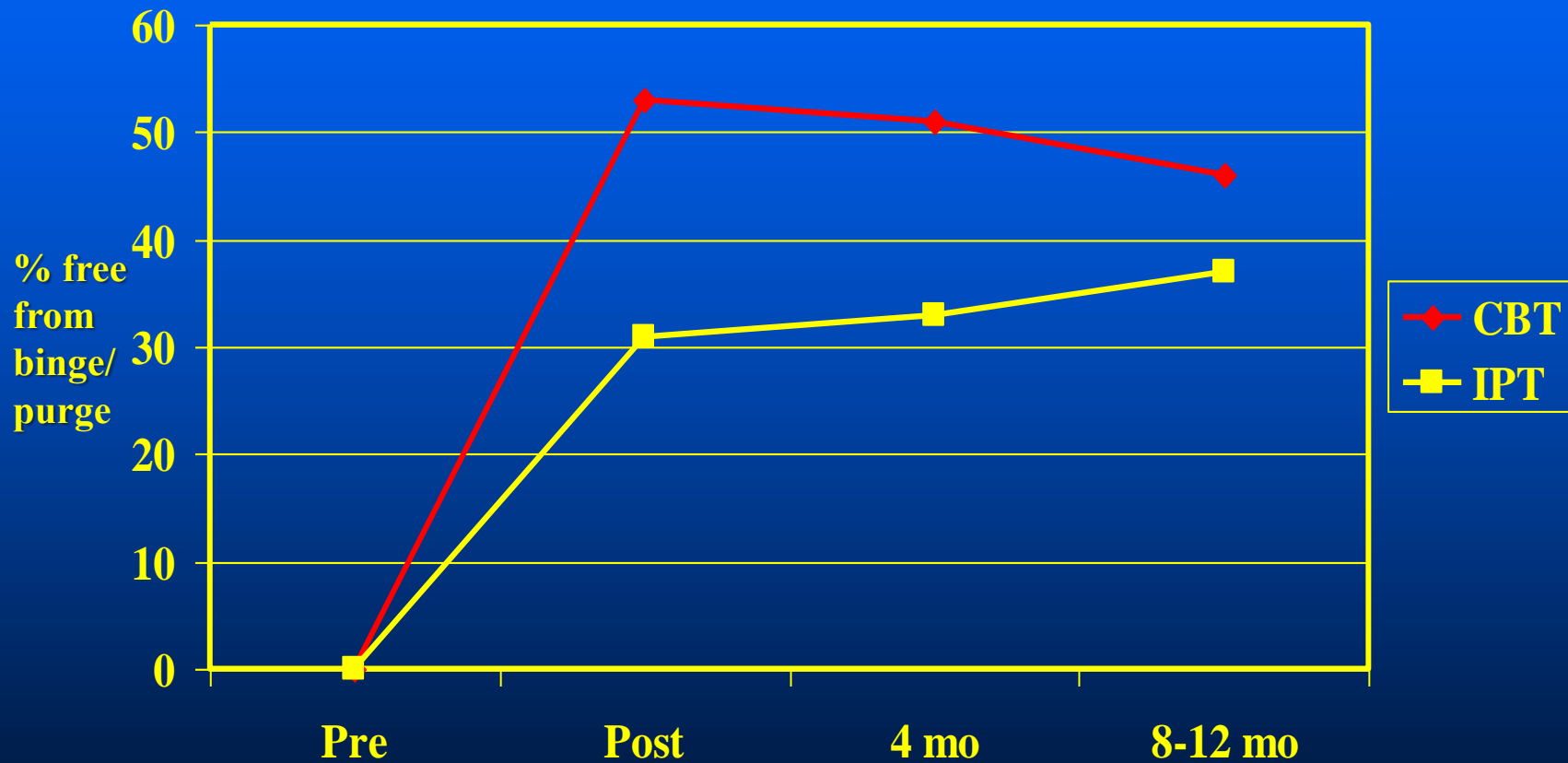
Stages of IPT

■ Stage 3

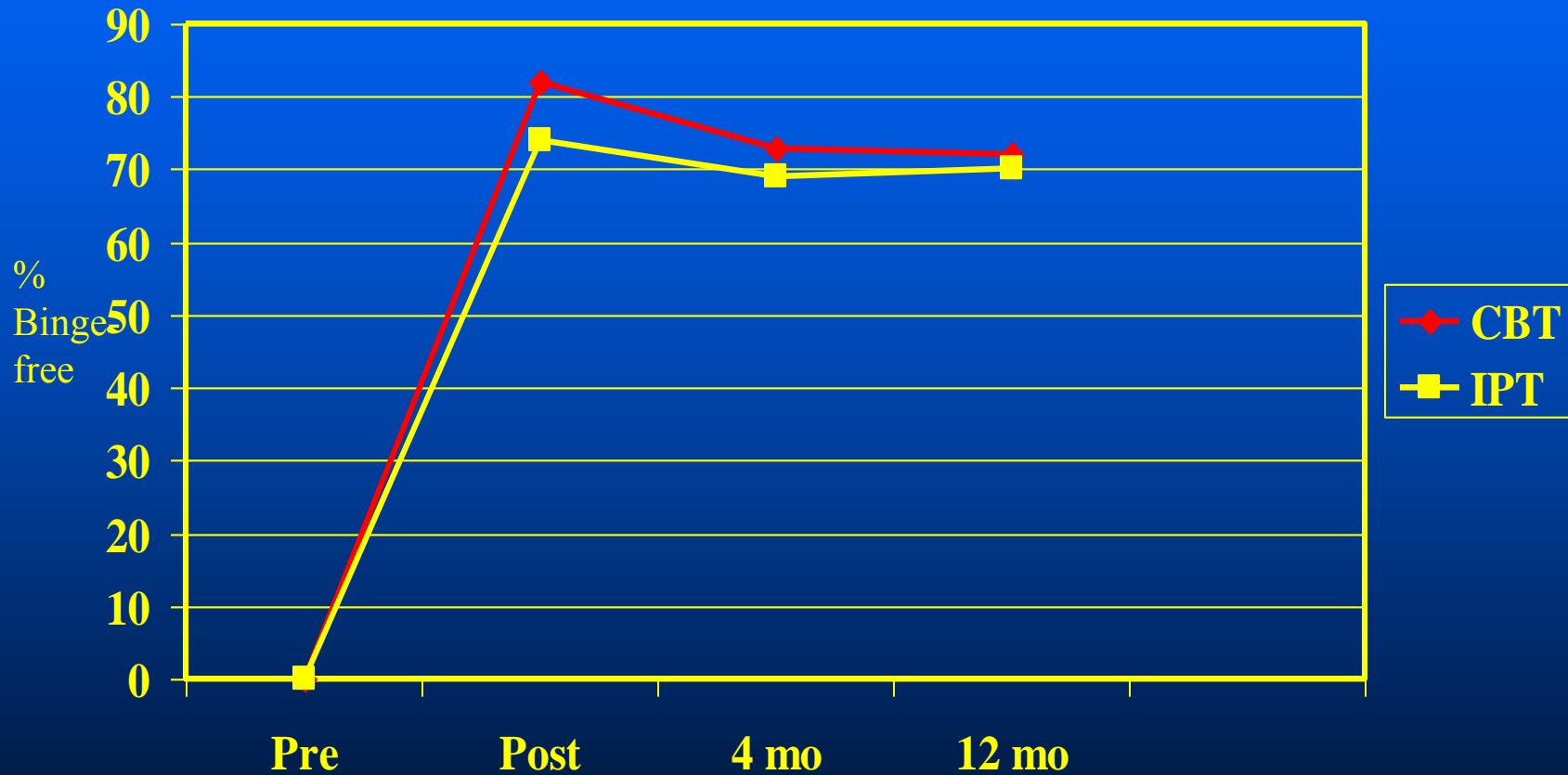
- Review and summarize changes
- Discuss feelings about ending treatment
- Relapse prevention
 - » Focus on what has worked and how to sustain
 - » Anticipate future difficulties
 - » Discuss what to do if eating problems occur

How does CBT compare to IPT
in treating different types of
eating disorders?

CBT versus IPT for Bulimia Nervosa (Agras et al., 2000)



CBT vs. IPT for Binge Eating Disorder (Wilfley et al., 2002)



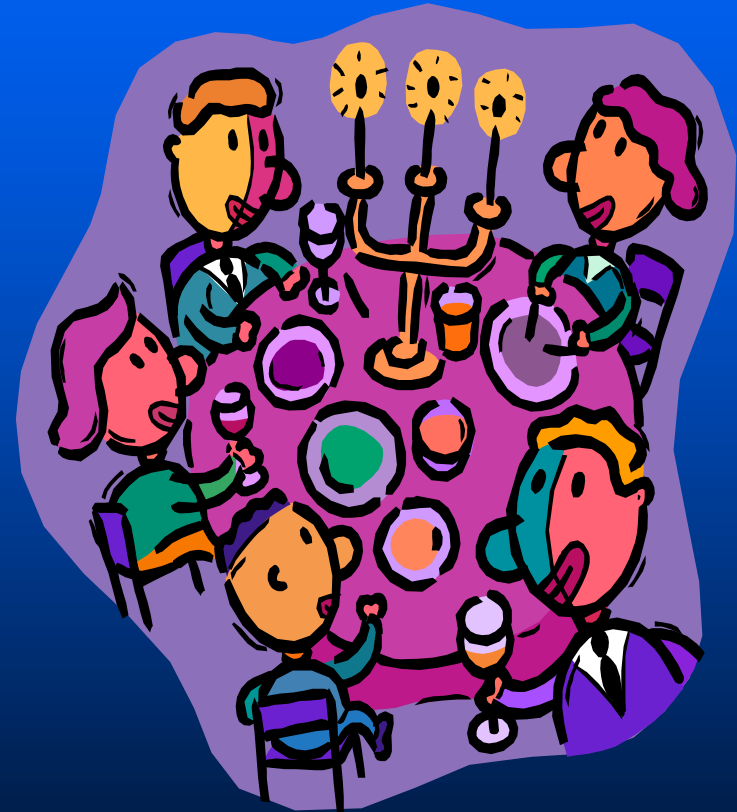
Family-Based Treatment

- **Rationale:** Parents should be empowered to “re-feed” their child
 - The therapist’s role is to facilitate parent’s role in re-feeding
- Data support FBT for anorexia nervosa and bulimia nervosa among adolescents and children
- Better outcome with patients who are younger than 18 and have been ill for shorter duration (e.g., < 3 years)

Family Based Treatment

■ Phase I

- Session 1: Charge parents with the task of re-feeding
- Session 2: Family brings meal to eat in session
 - » Help parents convince child/adolescent to eat one more mouthful
- Enlist sibling support
- Reduce family criticism



Family-Based Therapy

■ Phase II

- Maintain parent control of eating until child/adolescent can eat and gain weight independently, then gradually return control of eating to child/adolescent
- Support interests outside of eating disorder

■ Phase III

- Facilitate direct communication that does not involve eating and weight
- Facilitate effective problem-solving

Course

- Average duration of 6 years between the onset of bulimic symptoms and decision to seek treatment
- The majority of individuals with eating disorders in the community never seek treatment
- After 10 years, 30-50% still have significant eating disorder symptoms
- Patients move across different diagnostic categories over time (e.g., anorexia nervosa to bulimia nervosa, bulimia nervosa to unspecified)

Summary

- Eating disorders are characterized by complex psychological, behavioral, and physical features
- Eating disorders are associated with significant psychiatric comorbidity including mood, anxiety, and substance use disorders
- Mortality and particularly suicide risk is significant
- Evidence-based treatments are promising, but novel treatments are needed