NORTHEAST
BUSINESS GROUP ON HEALTH

Tuesday, March 19, 2019
12:00 – 1:00 PM

Martin Fisher, MD
Chief of the Division of Adolescent Medicine at Cohen Children's Medical Center
Northwell Health

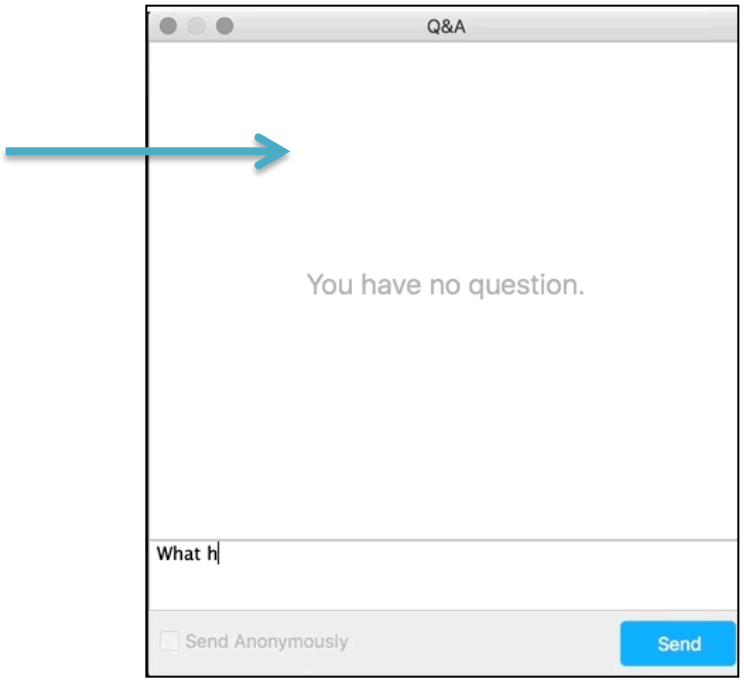
Kamryn Eddy, PhD
Co-Director of Mass General's Eating Disorders Clinical and Research Program
Massachusetts General Hospital

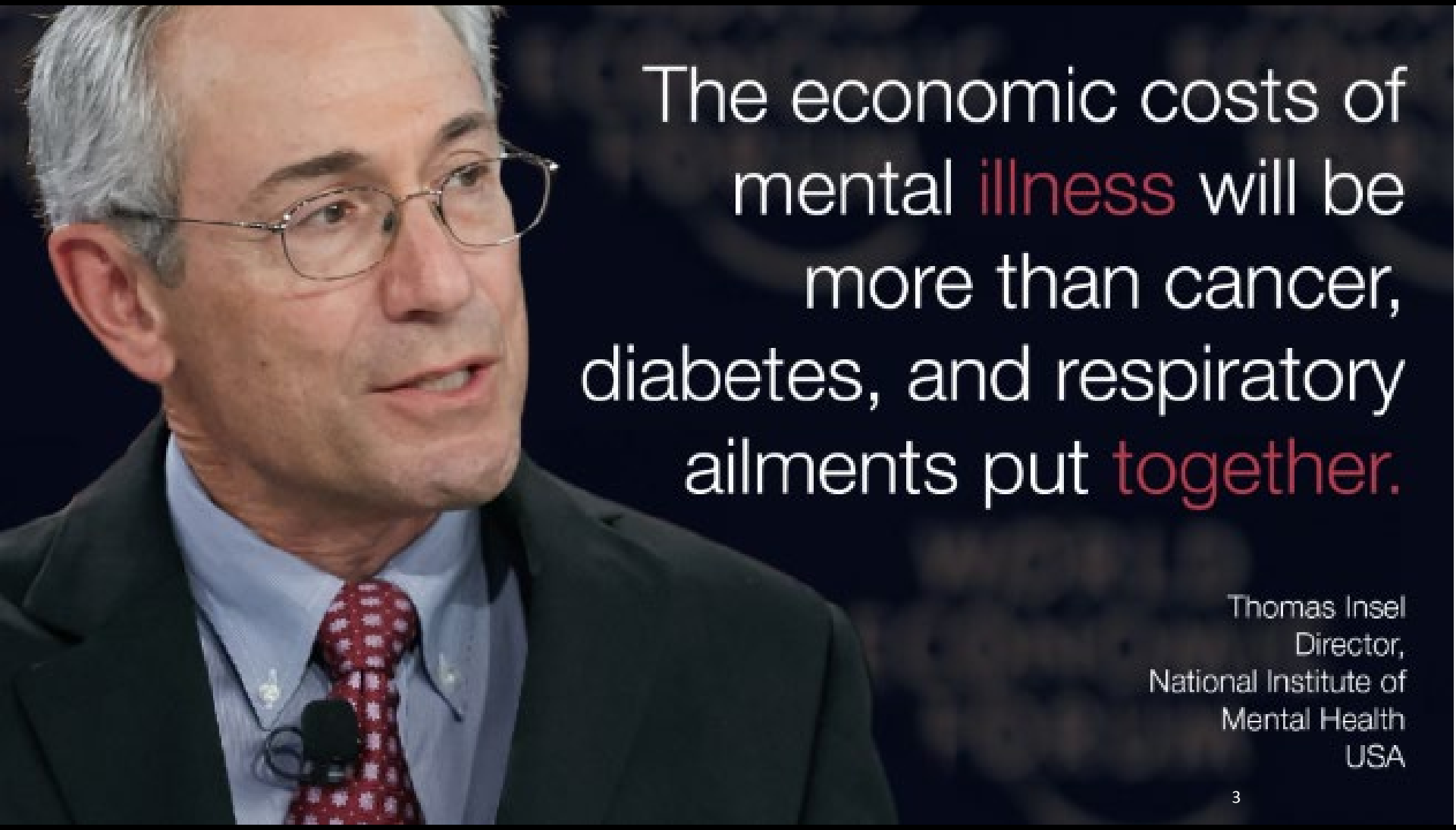
Craig Kramer
Mental Health Ambassador and Chair, Global Campaign for Mental Health
Neuroscience External Affairs, Janssen R&D

~with~
Dr. Mark Cunningham-Hill, Medical Director, *Northeast Business Group on Health*

Webinar Procedures

- All lines will be muted
- Please submit all questions using the "Q&A" dialog box
- Email Diane Engel at dengel@nebgh.org with any issues during this webinar




The economic costs of mental illness will be more than cancer, diabetes, and respiratory ailments put together.
Thomas Insel
Director,
National Institute of Mental Health
USA

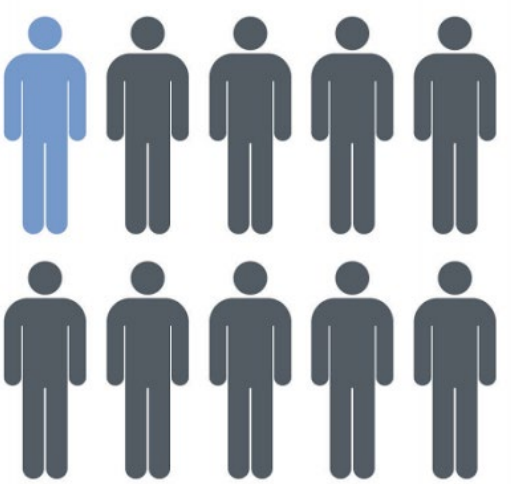
Why has mental illness emerged as #1?

- 1 in 4 will suffer mental illness at some point
  - Depression is the leading cause of disability worldwide
  - More women affected by depression than men
- It's the only "chronic disease of the young"
  - 50% onset by age 14, and 75% by age 24
  - Without treatment, illness can last a lifetime
- Currently, only 1/3 of sufferers receive treatment
  - Stigma and social distancing mask the disease
- The increasingly knowledge-based economy puts a premium on cognitive & mental health

WHO, CDC, US Surgeon General report

30 MILLION

AMERICANS SUFFER FROM EATING DISORDERS



AMERICANS SUFFER FROM EATING DISORDERS

- Highest mortality rate of all mental disorders: anorexia
- 80% of sufferers don't get treatment
- Eating disorders cut across gender, ethnicity, class, body shape and size
- Eating disorder non-profits collectively raise less than $10 million per year

Eating Disorders in Children and Adolescents

Martin Fisher, MD
Chief, Division of Adolescent Medicine
Cohen Children's Medical Center of New York
Northwell Health
Hofstra - Northwell School of Medicine

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Diagnosis of Eating Disorders – DSM IV

Anorexia Nervosa –

- Weight ≥ 15% below expected
- Fear of gaining weight
- Body image distortion
- Amenorrhea of at least 3 consecutive cycles

Bulimia Nervosa –

- Recurrent episodes of binge eating
- Inappropriate compensatory behaviors
- Binge eating / compensatory behaviors [≥ 2x/week for 3 months]
- Body image concerns
- Disturbance not only during episodes of anorexia nervosa

Eating Disorder Not Otherwise Specified (EDNOS)

Feeding and Eating Disorders of Infancy and Early Childhood

Binge Eating Disorder – In Appendix

Diagnosis of Eating Disorders – DSM 5

- **Anorexia Nervosa (AN)** – 15% below IBW and amenorrhea eliminated
- **Bulimia Nervosa (BN)** – binging 1x / week, no subtypes
- **Binge Eating Disorder (BED)** - official category
- **Other Specified Feeding or Eating Disorders**
    - Atypical anorexia nervosa (not underweight)
    - Purging disorder (not binging)
    - Sub-threshold bulimia nervosa (<1x/week or <3 months)
    - Sub-threshold binge eating disorder (<1x/week or <3 months)
    - Night eating syndrome (nocturnal eating disorder)
    - Other FECNEC
- **Avoidant / Restrictive Food Intake Disorder (ARFID)** – Rearticulation and expansion of Feeding and Eating Disorders of Infancy and Early Childhood

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Epidemiology of Eating Disorders

Anorexia Nervosa	• 0.5% of females • more in adolescents
Bulimia Nervosa	• 1-3% of females • more in young adults
Males vs. females	• 10% of total • more in past decade
Socioeconomic Status	• most in upper middle class • more widely distributed lately
Race and Ethnicity	• more in White and Asian populations • less in Black and Hispanic populations
International	• greater than previously • can introduce to new societies

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Progression to an Eating Disorder

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Evaluation of an Eating Disorder

- Diagnosis
- Severity
- Differential Diagnosis
  - Medical
  - Psychiatric
- Effects of Malnutrition
- Psychological Context
- Treatment Planning
  - Outpatient
  - Inpatient

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Differential Diagnosis / Comorbidity

Medical

- Inflammatory Bowel / Celiac Disease
- Addisons Disease
- Hypo/Hyperthyroidism
- Diabetes Mellitus/Insipidus
- Brain Tumor
- Occult Malignancy

Psychiatric

- Affective Disorder
- Obsessive-Compulsive Disorder
- Schizophrenia
- Substance Abuse
- Paranoid Disorder
- Conduct Disorder

Medical Complications

- Growth and Development
- Metabolic
- Cardiac
- Pulmonary
- Gastrointestinal
- Renal
- Endocrine
- Hematologic
- Neurologic
- Dermatologic

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Medical Work - Up

Initial Testing

- CBC
- Comprehensive Metabolic Panel (SMA-20)
- T_4/TSH
- LH/FSH/prolactin
- Urinalysis
- EKG

Atypical Presentation

- CT Scan/MRI
- Upper/lower GI

Effects of Malnutrition

- Vitamin/mineral studies
- Bone Density

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The Team Approach To Eating Disorders

- **Rationale**
  - Combination of Medical/Psychological Care
  - Patients often opposed to treatment
  - Difficult Family Situations
- **Team Members**
  - Primary Care Physician, Nursing
  - Psychiatrist, Psychologist, Social Worker
  - Nutritionist
- **Modalities**
  - Nutritional Rehabilitation, Medical Evaluation, Behavior Therapy, Individual Psychotherapy, Family and Group Therapy, Pharmacotherapy

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Introduction to Treating Feeding and Eating Disorders

Kamryn T. Eddy, Ph.D.

Co-Director, Eating Disorders Clinical & Research Program,
Massachusetts General Hospital
Associate Professor of Psychology, Department of Psychiatry,
Harvard Medical School

Agenda

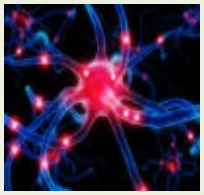
1. Evidence-based outpatient treatments
2. Outcomes: what to expect

Eating disorders are common

- An estimated 30 million Americans have a lifetime eating disorder
- Most begin in childhood or adolescence
- 75% of teens are unhappy with their bodies (25 million teens!)
- 4-18% of boys and 10-49% of girls engage in problematic weight management behaviors 12 million teens!)

Causes of Eating Disorders are Multi-factorial

Bio-

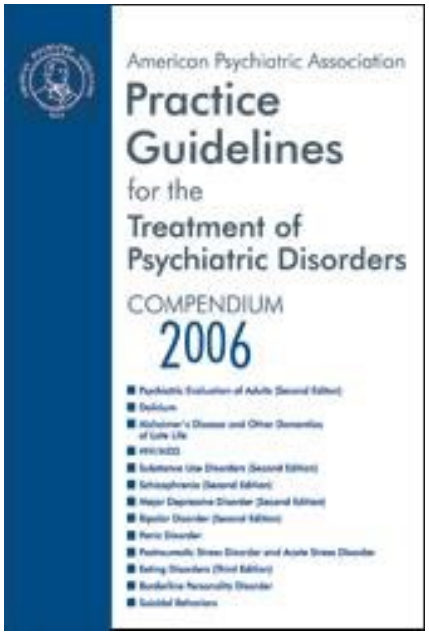


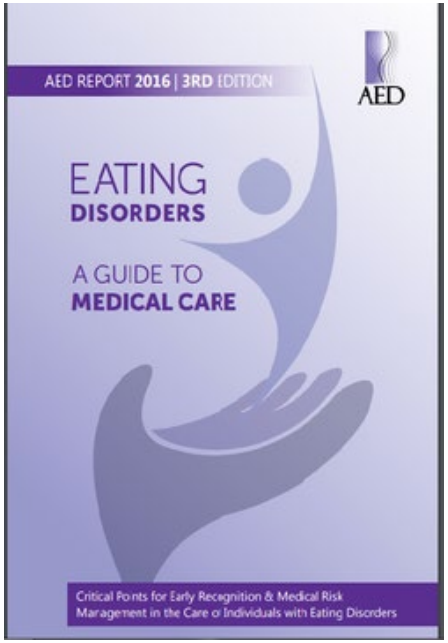
Psycho-

Social

For Whom, What?

- Assessment guides treatment decisions
- APA Practice Guidelines (2006)
- AED Report, Eating Disorders a Guide to Medical Care (2016)



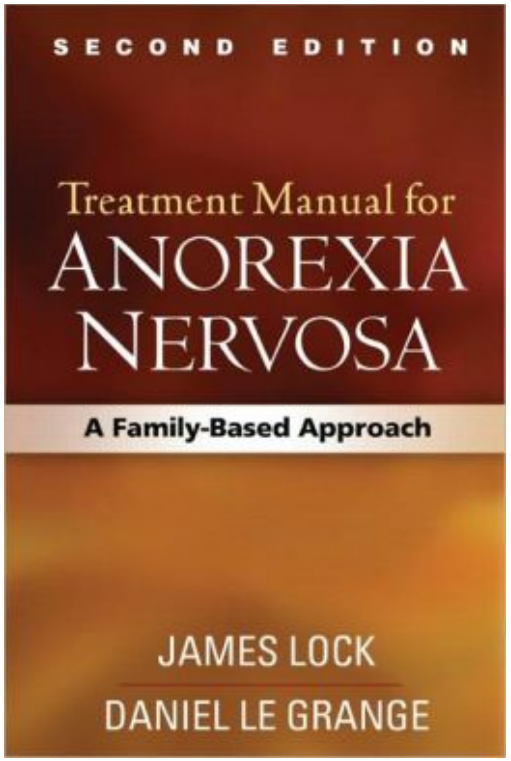


Evidence-based treatments for eating disorders share symptom interruption *behavioral* focus

- Family-based treatment (for youth)
- Cognitive-behavioral therapy
- Focus is on symptom interruption first

Family-Based Treatment for Adolescents

- Basic principles
  - AN is developmental setback
  - Parents must step in to interrupt symptoms that patient cannot control
- Three phases
  1. Parents re-feed child
  2. Child eats independently
  3. Return to normal development



Lock and Le Grange, 2015

FBT Phase I:

Parents Re-feed Child

- Therapist absolves parents of self-blame
- Parents and patient eat <u>all</u> meals together as a family
- Separate patient from ED

Parents encourage "one more bite"

Parents choose energy-dense foods

FBT Phase II:

Child Eats Independently

Patient may eat lunch at school

Patient might return to activities

- Patient gradually begins to eat meals away from parents
- Therapist tries to differentiate patient's identity from the ED
- Family explores how AN has affected family relationships

FBT Phase III:

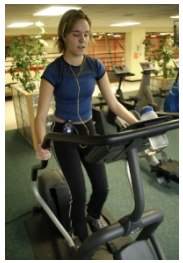
Return to Normal Development

- Patient eats most meals on her own and selects foods
- Therapist supports patient's separation from her parents as age-appropriate
- Family remains vigilant for signs of relapse

Increase emphasis on socializing

Family prepares for separation

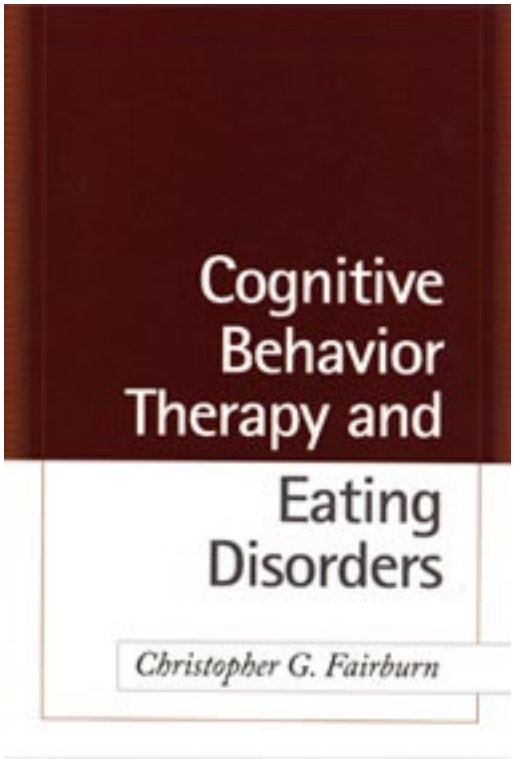
Cognitive Behavioral Therapy - Enhanced



- Basic principles
  - Under-eating maintains psychological ED features
  - Dieting promotes binge eating

Four phases

1. Create personal formulation
2. Identify barriers to change
3. Address maintaining mechanisms
4. Prevent relapse

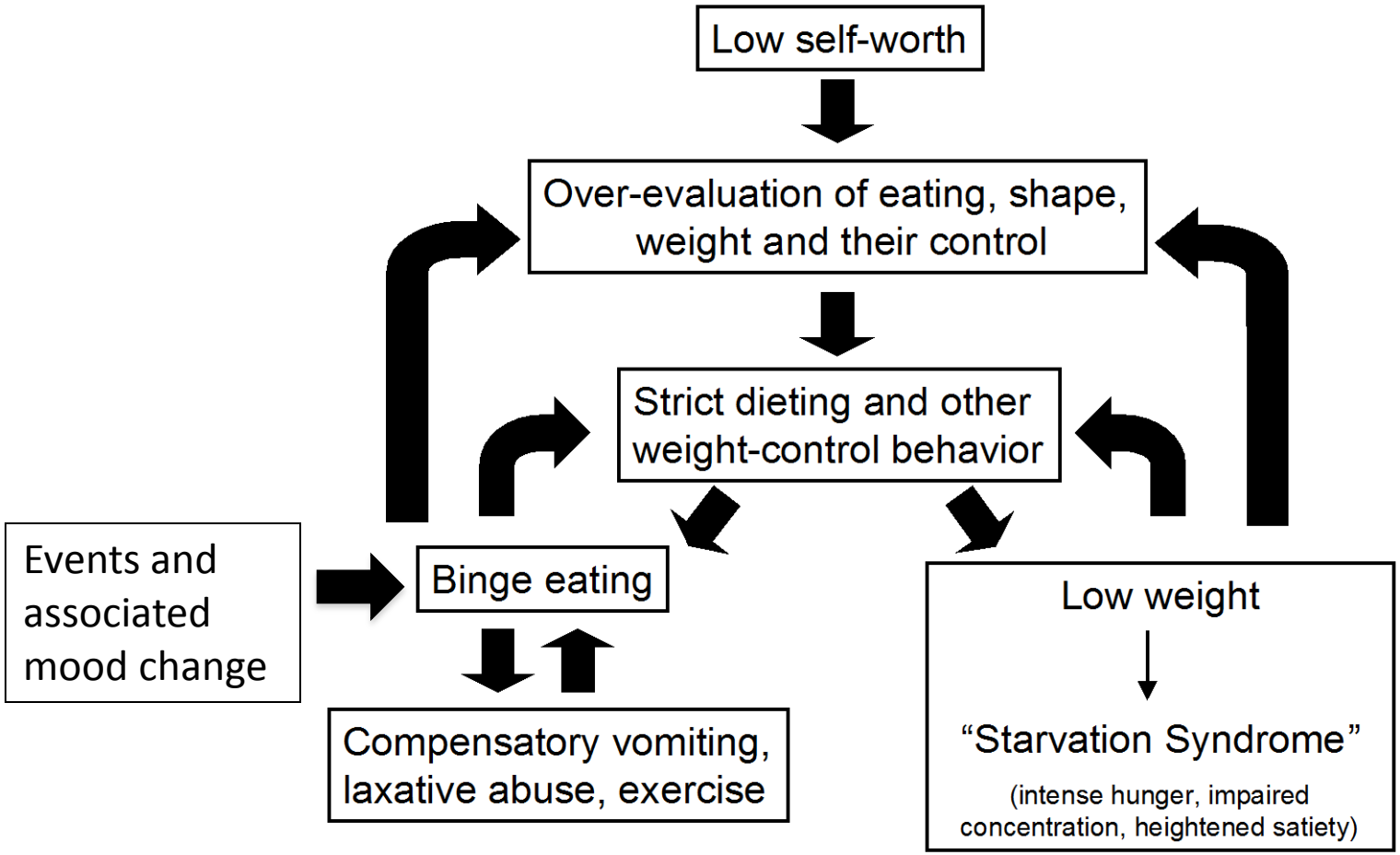


CBT-E Manual

Fairburn, 2008

CBT Phase I:

Create Personal Formulation



CBT Phase II:

Identify Barriers to Change

Weekly weighing prevents patients from magnifying minor changes

- Perceived benefits of ED
  - Consider both pros and cons
- Irregular eating pattern
  - Prescribe 3 meals + 2 snacks
  - Let patient choose foods
- Weighing very frequently or not at all

CBT Phase III:

Address Maintaining Mechanisms

Hypothesis:

"Eating white instead of brown rice will make me fat."

Day 1:
Try on jeans

Day 1:
Eat ½ cup white rice

Day 2:
Are jeans tighter?

CBT Phase III:

Address Maintaining Mechanisms

- ED patients are incredibly vigilant for potential flaws
  - *Examples*: hourly weighing, seeing if thighs touch, comparing
  - Design experiments to show how checking is misleading

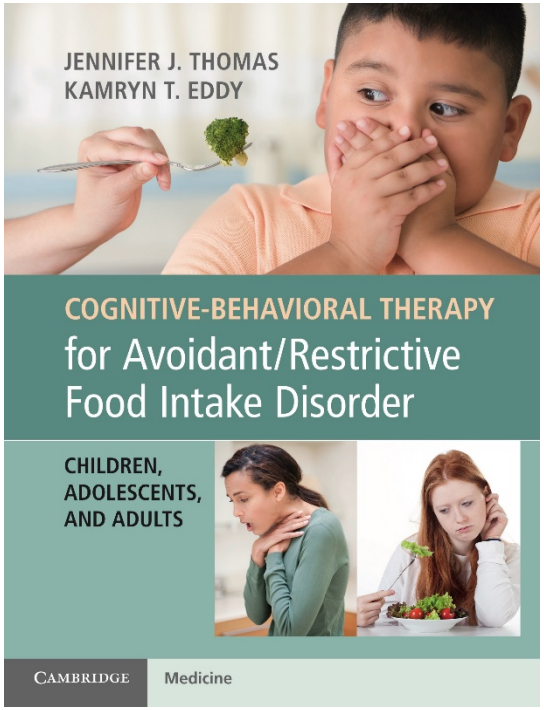
- ED patients often avoid clothing or activities that accentuate shape
  - *Examples:* wearing baggy clothes, missing social events
  - Approach valued activities regardless of body image

CBT Phase IV: Prevent Relapse

- Identify helpful treatment strategies to continue
- Anticipate upcoming triggers
- Make a plan for handling setbacks

Cognitive Behavioral Therapy for ARFID (CBT-AR)

1. Psychoeducation and regular eating
2. Treatment planning
3. Address maintaining mechanisms
   a. Sensory sensitivity
   b. Fear of aversive consequences
   c. Lack of interest in food or eating
4. Relapse prevention



Thomas & Eddy, 2019

- Delivered in family-supported or individual formats

CBT-AR: Stage 1

- Psychoeducation on ARFID
- Self- or parent-monitoring
- Regular eating
- Personalized formulation
- *If underweight:*
  - Begin to restore weight by increasing volume of preferred foods
  - Conduct in-session therapeutic meal to provide coaching
- *If not underweight:*
  - Make small changes in presentation of preferred foods and/or reintroduce recently dropped foods

CBT-AR: Stage 2

- Identify foods that could correct nutrition deficiencies
- Select new foods to learn about in Stage 3

CBT-AR: Stage 3

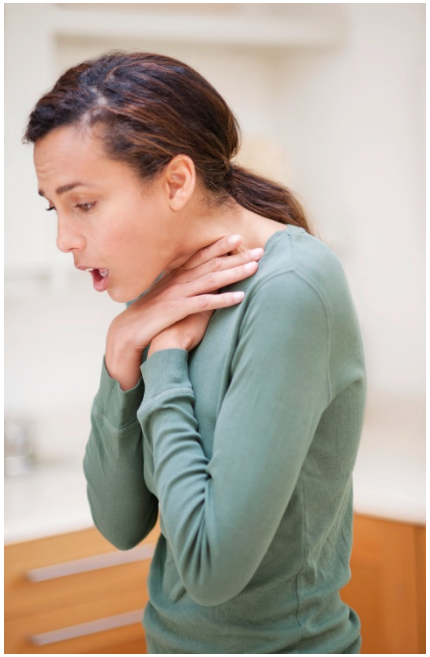
Sensory Sensitivity Module

Food selectivity due to sensory sensitivity

- Select foods to learn about that
  - Increase representation from 5 food groups
  - Correct nutritional deficiencies
  - Reduce psychosocial impairment
- *Early sessions:* Repeated exposure to very small portions
- *Later sessions:* Incorporate larger portions into meals and snacks to met calorie needs

CBT-AR: Stage 3

Fear of Aversive Consequences Module



Fear of Aversive Consequences

- Provide psychoeducation on how avoidance increases anxiety
- Create exposure hierarchy to include small steps leading up to food or eating-related situation that led to initial avoidance
- Continue exposures until patient has completed the most distressing task on the hierarchy

CBT-AR: Stage 3

Lack of Interest in Food or Eating Module

Lack of interest in food or eating

- Interoceptive exposures to increase tolerance of physical sensations:
  - Fullness: Rapidly drink several glasses of water
  - Bloating: Push belly out
  - Nausea: Spin in chair
- Self-monitoring to increase awareness of hunger and fullness
- In-session practice with highly preferred foods

CBT-AR: Stage 4

- Evaluate treatment progress
  - Patients unlikely to become “foodies,” even if treatment is successful
  - CBT-AR is designed to expand diet, restore weight, correct nutritional deficiencies, and reduce psychosocial impairment related to ARFID
- Co-create relapse prevention plan
  - Identify CBT-AR strategies to continue
  - Set goals for continued progress

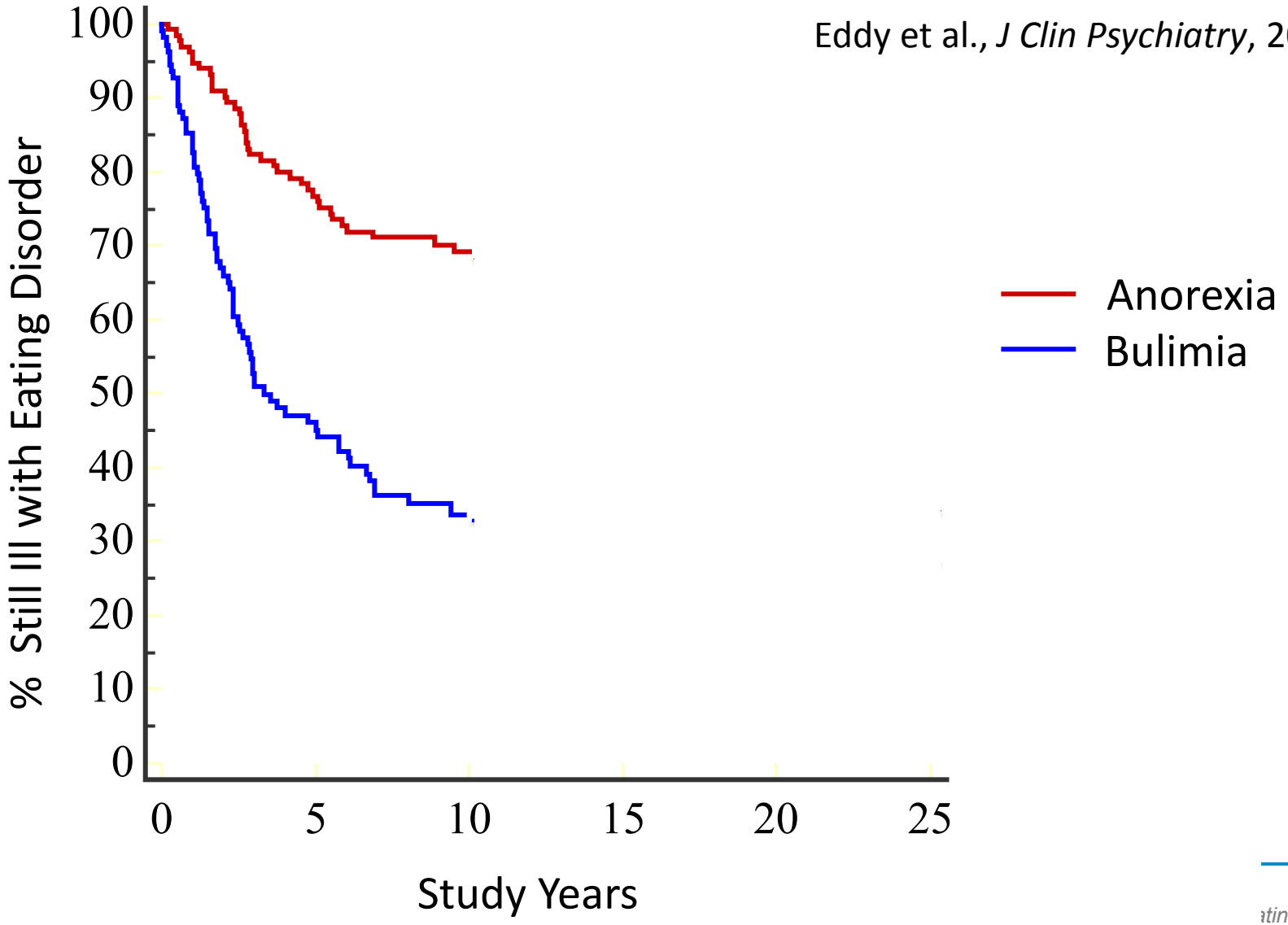
Most people with eating disorders will recover

MGH Longitudinal Study of Anorexia and Bulimia Nervosa

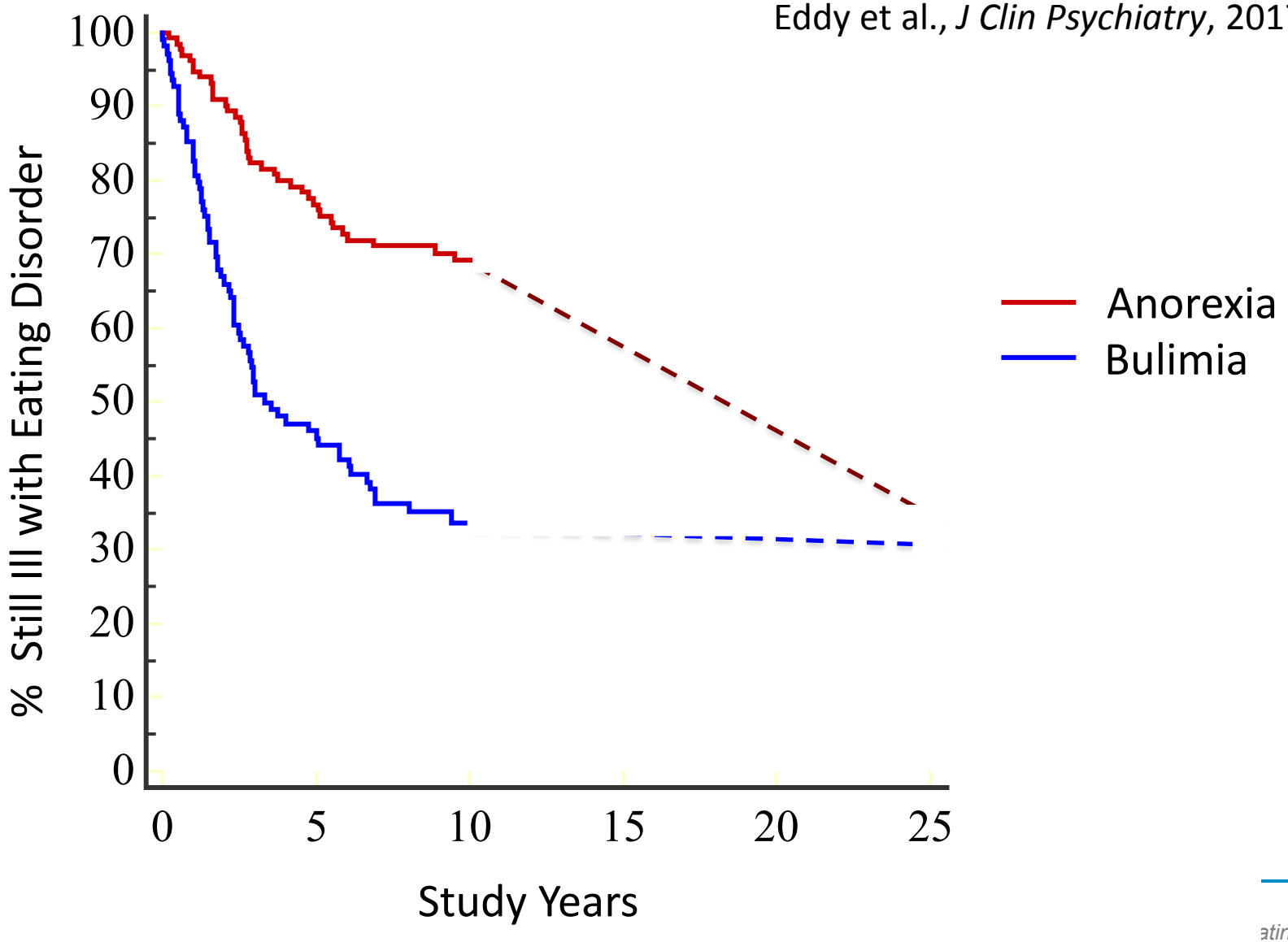
- Prospective naturalistic study initiated 1987 (*N* = 246)
  - *n* = 136 with AN, *n* = 110 with BN

- 25-year follow-up
  - During the first 10 years, interviews every 6 months
  - At 25-years, single follow-up interview

Eddy et al., *J Clin Psychiatry*, 2017



Eddy et al., *J Clin Psychiatry*, 2017



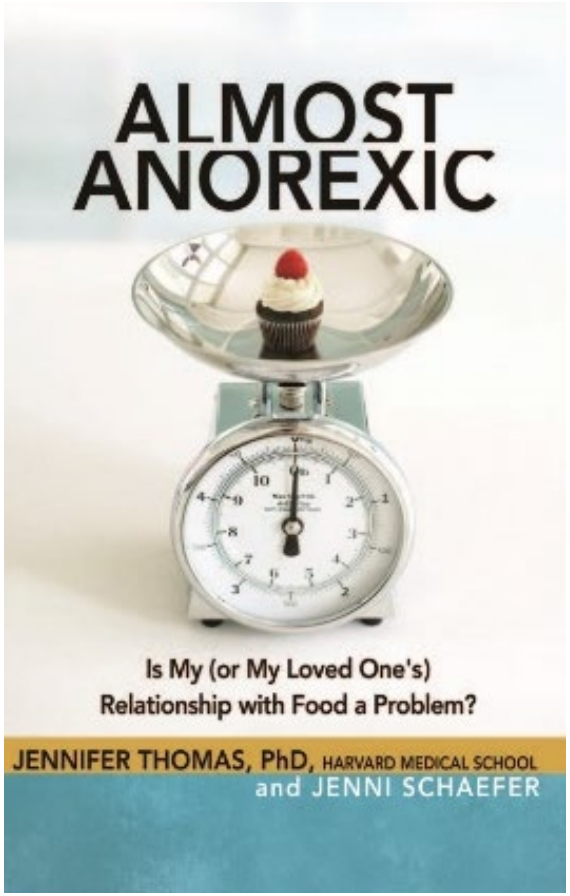
But outcomes can be fatal, and premature death is increased

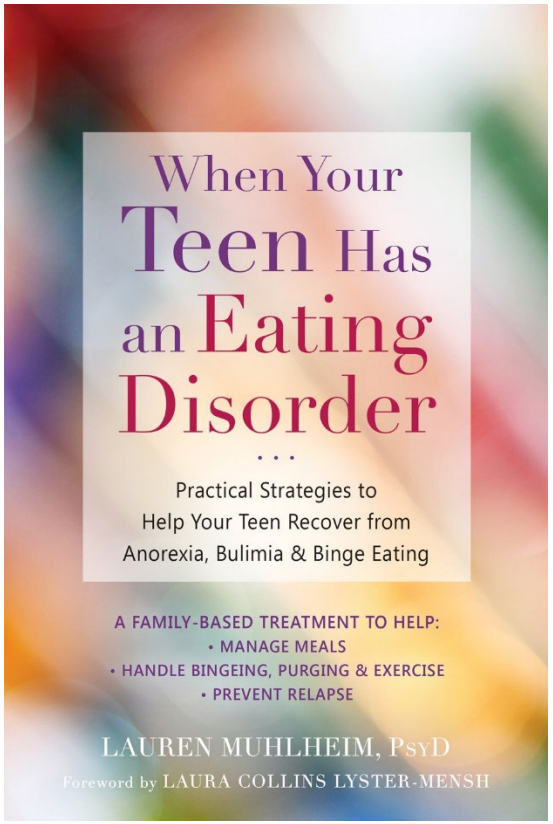
- Mortality SMR = 5.22 [3.65 – 7.47]
- Suicide SMR = 18.13 [11.47 – 28.66]
- MGH Longitudinal Study f/u for 25 years:
  - 6.5% mortality rate
  - SMR= 3.2 [0.9-8.3] for 0-15 yrs
  - SMR=6.6 [3.2-12.1] for >15-30 yrs
  - Low BMI; alcohol use d/o; poor social fx

Keshaviah et al., *J Clin Psychiatry;* 2014;
Franko et al., *Am J Psychiatry,* 2013

Resources

- www.massgeneral.org/eatingdisorders





SCOFF Questionnaire as a screening tool: "Yes" to 2+ indicates likely ED

Do you make yourself Sick because you feel uncomfortably full?

Do you worry you have lost Control over how much you eat?

Have you recently lost Over 15 pounds in a 3-month period?

Do believe yourself to be Fat when other say you are too thin?

Would you say that Food dominates your life?

Morgan et al., 2009