Eating Disorders
Prevalence

- Most recognized in Western cultures
  - Population specific (e.g. dancers, athletes)
  - 1-20% of American populations are affected
- Eating disorders affect individuals of all ethnicities, all socioeconomic strata

Ethnicity and acculturation


Global Prevalence

- Generally, western cultures have higher rates than in eastern cultures
  - Flinders University, Australia [video](YouTube, 1:45)

- Issue is growing in eastern cultures

- Variations in ideals of “beauty”

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Global Prevalence

- Places where female roles are more socially restricted have fewer incidences
  - Psychiatric Times - some affluent Muslim societies where social interaction is limited = no occurrence

- Reasons for disordered eating may vary
  - Religion-based practices (fasting)
  - Custom-based theories on nutrition
Global Prevalence

- Japan study: lower prevalence than European whites (Int. J. Eat Dis, 2000)
- 796 Chinese students: those in Hong Kong (large community) reported more body dissatisfaction than those in more rural communities (Int. J. Eat Dis, 2000)
  - 668 females attending two schools
  - Median BMI of 21.1; 100 had BMI at or below 19
  - 10 had BMI < 17.5
    - Self-starvation appeared to be only cause
    - All 10 subjects reported positive association with food restriction
Global Prevalence

- Research in Capetown, S. Africa
  - Questionnaire to 1435 college students
  - Results: more eating disturbances among black students

- Impact of Westernized culture on eating disorders among college-aged females of Arab descent:
  - Nasser’s study in London (50) & Cairo (60)
    - No incidence of bulimia in Cairo; six in London (Psych. Medicine, 1986)

- Nasser’s study in Cairo, 15-year old girls
  - 420 subjects
  - Dieting behavior, concern for weight exists
  - 15 cases of bulimia/related diagnosis
Disordered Eating Behavior

- Without diagnosis, health problems may still exist
  - 75% of 4,000+ women surveyed reported weight/shape to interfere with happiness (Reba-Harreleson et. al., 2009)

Artwork created by Maria Raquel Cochez, available via Wikimedia Commons
Eating Disorder Assessments

- Body mass index
- Psychiatric interview
- Self-report tests
  - EAT-26 Self-test
Binge Eating Disorder

- Uncontrolled eating
  - Large amounts of food
  - Discrete period of time
  - Eating to point of discomfort
  - At least once per week for three months
  - More serious than “overeating”

Binge Eating Disorder

- Eating usually kept secret
- Lack of control
- Shame and guilt associated with eating
- Food used as a way to deal with discomfort
  - Physical
  - Emotional/psychological
Binge Eating Disorder

- Most common specified eating disorder
  - 2-3% of all adults
  - Most commonly affects young to middle adults
  - More common among women, 3:2
  - Affects all races, ethnicities
    - Factors within populations can be different e.g. age at onset
    - Latinas experience similar rates as white women
- Recognized as an official eating disorder, DSM-V
Binge Eating Disorder: Complications

- Obesity
- Hypertension
- Diabetes
- Poor blood lipid profile
- Heart disease
- Gall bladder disease
- Some forms of cancer
Anorexia Nervosa

- Characterized by extreme thinness
- Approximately 1% of adolescent and young adult women
  - Statistic varies with specificity of population
    - Age
    - Gender
    - Athletic involvement (PBS, “Dying to Be Thin,” chap. 5)
Anorexia Nervosa

- Restriction of food intake
  - Weight loss or failure to gain weight
- Sufferer usually has intense fear of becoming fat or gaining weight (non-fat phobic patients do not)
- 85% or less of typical body weight
  - Food restriction
  - Food purging
- Distortion of body image
  - Seeing more fat than what is present in reality
  - Unique characteristic of anorexia
Anorexia Nervosa: Symptoms

- Weight loss
- Eating rituals
- Loss of menstruation
- Lanugo
- Change in social habits
- Fatigue
- Pro-ana mentality
  - Thinspiration
  - Reverse thinspiration
Anorexia Nervosa: Complications

- Anemia
- Bone loss
- Dehydration
- Depression
- “Female athlete triad”
  - Anorexia, amenorrhea, osteoporosis
- Arrhythmia
- Death
Anorexia Nervosa - Subtypes

- **Restricting Type**
  - Disordered eating behavior does not include binge eating

- **Binge-Eating/Purge Type**
  - Binge eating and purging behaviors are featured
Bulimia

- 2-3% of adolescent and young adult females
  - Similar rates for Latinas
- Recurrent episodes of binge eating
- Extreme weight control methods
- At least once per week, three months (DSM-V)
Bulimia

- Extreme weight control methods
  - Vomiting
  - Laxative abuse
  - Over-exercise
  - Diet pills
  - Diuretics
  - Smoking
  - Fasting
  - Methodology may vary across groups
Bulimia: Symptoms

- Symptoms may not be obvious
- Secretive behaviors
- Exercise
- Mouth sores
- Russell’s sign
- Hair changes
- Tooth decay
Bulimia: Complications

- Teeth damage from vomiting
  - Example #1 from (mirror-mirror.org)
  - Example #2 (anorexicbeauty97)
  - Example #3 (cosmetic Dentist Virginia – Full-Mouth Rehabilitation)
- Dehydration
- Strains, sprains from extreme exercise
- Gastrointestinal problems
- Depression
- Arrhythmia
Brain Function

- Disruptions in reward system
- Top images: given sugar
- Bottom images: denied sugar
- Woman with anorexia had more brain activity in reward center
- 2015 Nature article: aspects of habit control changed in brain, anorexia (Foerde et. al.)
- Bulimia: self-regulation controls may not be as active
- Binge eating: more dopamine in reward area when food present (Walsh, Genzer, 2011)

https://www.sciencenews.org/article/anorexic-brain
Pica

- Craving for non-food items
  - Ex: ice, dirt, clay, paint chips, chalk, baking soda
- Pica associated with:
  - Children
  - nutrient deficiencies
  - psychiatric disturbances
  - Autism, other mental impairments
  - ethnic customs

- Video: Eating Disorder Makes Girl Crave Metal
- Video: Girl, 3, Has Pica (ABC News, 5:40)
Rumination

- Usually infants, young children, but no age restrictions
- Previously chewed food is regurgitated then re-chewed & swallowed or spit out
- Voluntary or involuntary
- Not due to underlying GI problem
- Not common or well understood
- [WOWT News Story](http://www.wowt.com/story/) Nebraska, 2014
Avoidant/Restrictive Food Intake Disorder

- Symptoms do not align with other disorders
- Issues with food consumption
- May take variety of forms
  - Aversion to specific foods
  - Fear of choking
  - No appetite
  - Digestive issues
- Symptoms include weight loss, nutrient deficiencies, interference with daily life
Other Specified Feeding or Eating Disorder

- Disordered eating or feeding behavior
- Significant disruption/distress/impairment
- Criteria for other disorders not met
- “Partial syndrome”
  - Diagnostic criteria of other disorders unmet
  - Significant symptoms and problems experienced
- Some professionals feel eating disorders criteria are too stringent
Disordered Eating: Risk Factors

- Gender identification
- Low self-esteem
- Alcoholism and other substance abuse disorders
- Psychiatric disorders
- Genetics
- Family influences
- Social, cultural influences

(Source: Mayo Clinic)
Lesser-Known Disordered Eating

- **Muscle dysmorphia**
  - Obsession with gaining muscle mass
  - Experienced by more males than females
  - Also known as “bigorexia”
  - [Video](Discovery Health via Youtube, 4:27)
  - [Video](BBC via YouTube, 2:45)
Lesser-Known Disordered Eating

- **Night-eating syndrome**
  - Large amount of food is consumed in evening
  - 1-2% of adults
  - Related to stress
  - Hormonal changes
    - Appetite
    - Sleep
    - Mood/anxiety disorder
- [Video](dLife via YouTube, 3:38)
Lesser-Known Disordered Eating

- Nocturnal sleep-related eating disorder
  - Thought to be a sleep disorder
  - People eat while asleep
  - "Comfort foods" tend to be consumed
  - 1-3% of the population (ANRED)
  - pharmaceutical connection
  - Video (YouTube)
Eating Disorders in Men

- Binge eating disorder more common
  - *NOVA* describes a psychiatrist who developed anorexia after a knee injury

- Numbers:
  - Bulimia: one male for every 8-11 females
  - Anorexia: one male for every four females (*A J Psych*, 2001)

- Men less likely to seek treatment
- More research needed
Eating Disorder Treatments

- Cognitive-behavioral therapy
  - Changing perceptions, reactions
  - Techniques to monitor and change habits
- Psychotherapy
- Medications
- Self-help groups
- Minority groups less likely to seek treatment