Psychopathology
Eating and Sleep Disorders

What you should know when you finish studying Chapter 8:
1. DSM-IV Eating Disorders
2. Eating Disorders not in DSM-IV
3. Integrated Model of Eating Disorders
4. Treatment for Eating Disorders
5. Sleep Disorders: Dyssomnias vs. Parasomnias
Psychopathology
Eating and Sleep Disorders

What you should know when you finish studying Chapter 8:

6. Defining Features of sleep disorders
7. Common Interventions for Sleep Disorders
Eating Disorders: Overview

DSM IV TR disorders:
Anorexia nervosa and bulimia nervosa
- Severe disruptions in eating behavior
- Extreme fear and apprehension about gaining weight
- Strong sociocultural origins: Westernized views

Binge Eating Disorder (DSM IV Appendix)
Obesity—Not in DSM IV (but should be?)
Bulimia Nervosa: Overview and Defining Features

• Binge Eating – Hallmark of Bulimia
  – Binge – Eating excess amounts of food
  – Eating is perceived as uncontrollable

• Compensatory Behaviors
  – Purging – Self-induced vomiting, diuretics, laxatives
  – Some exercise excessively, whereas others fast

• DSM-IV Subtypes of Bulimia
  – Purging subtype – Most common subtype (e.g., vomiting, laxatives, enemas)
  – Nonpurging subtype – About one-third of bulimics (e.g., excess exercise, fasting)
Bulimia Nervosa: Overview and Defining Features (cont.)

- Associated Medical Features
  - Most are within 10% of normal weight
  - Purging can result in severe medical problems
  - Erosion of dental enamel, electrolyte imbalance
  - Kidney failure, cardiac arrhythmia, seizures, intestinal problems, permanent colon damage

- Associated Psychological Features
  - Most are overly concerned with body shape
  - Fear gaining weight
  - High comorbidity – Anxiety, mood, & substance use
Anorexia Nervosa: Overview and Defining Features

• Successful Weight Loss – Hallmark of Anorexia
  – Defined as 15% below expected weight
  – Intense fear of obesity
  – Relentless pursuit of thinness
  – Often begins with dieting

• DSM-IV Subtypes of Anorexia
  – Restricting subtype – Limit caloric intake via diet and fasting
  – Binge-eating-purging subtype – About 50% of anorexics
Anorexia Nervosa: Overview and Defining Features (cont.)

- Associated Features
  - Marked disturbance in body image
  - High comorbidity with other psychological disorders
  - Weight loss methods have life threatening consequences
Binge-Eating Disorder: Overview and Defining Features

- Binge-Eating Disorder – Appendix of DSM-IV-TR
  - Experimental diagnostic category
  - Engage in food binges without compensatory behaviors

- Associated Features
  - Many are obese
  - Often older than bulimics and anorexics
  - More psychopathology vs. non-binging obese people
  - Concerned about shape and weight
Bulimia & Anorexia: Facts & Statistics

• Bulimia
  – Majority are female
  – Onset around 16 to 19 years of age
  – Lifetime prevalence is about 1.1% for females, 0.1% for males
  – 6-8% of college women suffer from bulimia
  – Tends to be chronic if left untreated

• Anorexia
  – Majority are female and white
  – From middle-to-upper middle class families
  – Usually develops around age 13 or early adolescence
  – More chronic and resistant to treatment than bulimia

• Bulimia and Anorexia Are Found in Westernized Cultures
Causes of Bulimia and Anorexia: Toward an Integrative Model

• Cultural Considerations (Media?)
  – Being thin = Success, happiness....really?
  – Cultural imperative for thinness translates into dieting
  – Standards of ideal body size change as much as fashion
  – Media standards of the ideal are difficult to achieve

• Biological Considerations
  – Eating disorders – Can lead to neurobiological abnormalities
Causes of Bulimia and Anorexia: Toward an Integrative Model (cont)

• Psychological and Behavioral Considerations
  – Low sense of personal control and self-confidence
  – Perfectionistic attitudes
  – Distorted body image
  – Preoccupation with food and appearance
  – Mood intolerance
Causes of Bulimia and Anorexia: Toward an Integrative Model (cont)
Treatment of Bulimia Nervosa

• Medical Treatment
  – Antidepressants – Help reduce binging and purging
  – Antidepressants are not efficacious in the long-term

• Psychological Treatment
  – Cognitive-behavior therapy (CBT) – Treatment of choice
  – Interpersonal psychotherapy – Gains similar to CBT
Treatment of Anorexia Nervosa

• Medical Treatment
  – None exist with demonstrated efficacy

• Psychological Treatment
  – Weight restoration – First and easiest goal to meet
  – Psychoeducation – Food, weight, nutrition, health
  – Behavioral and cognitive interventions
  – Treatment often involves the family
  – Long-term prognosis – Poorer than bulimia
Treatment of Binge Eating Disorder

• Medical Treatment
  – Sibutramine (Meridia)

• Psychological Treatment
  – CBT similar to for bulimia appears efficacious.
  – Interpersonal psychotherapy has been as effective as CBT.
  – There is some evidence to suggest self-help techniques are also effective.
Obesity (Not in DSM IV)

- Not a formal DSM disorder
- Concern because of medical complications social and occupational impairments
- Statistics
  - In 2000, 20% of adults in the United States were obese
  - Mortality rates are close to those associated with smoking
  - Increasing more rapidly for teens and young children
  - Obesity is growing rapidly in developing nations
Obesity and Disordered Eating

• Obesity and Night Eating Syndrome
  – Occurs in 7-15% of treatment seekers
  – Occurs in 27% of individuals seeking bariatric surgery
  – Patients are wide awake and do not binge eat

• Causes
  – Obesity is related to technological advancement
  – Genetics account for about 30% of the cause
  – Biological and psychosocial factors contribute as well
Obesity Treatment

• Treatment
  – Moderate success with adults
  – Greater success with children and adolescents

• Treatment Progression
  – From least to most intrusive options
  – First step – Self-directed weight loss programs
  – Second step – Commercial self-help programs
  – Third step – Behavior modification programs
  – Last step – Bariatric surgery
Sleep Disorders Overview

• Two Major Types of DSM-IV Sleep Disorders
  – **Dyssomnias** – Difficulties in getting enough sleep, problems in the timing of sleep, and complaints about the quality of sleep
  – **Parasomnias** – Abnormal behavioral and physiological events during sleep

• Assessment: Polysomnographic (PSG) Evaluation
  – Electroencephalograph (EEG) – Brain wave activity
  – Electrooculograph (EOG) – Eye movements
  – Electromyography (EMG) – Muscle movements
  – Includes detailed history, assessment of sleep hygiene and sleep efficiency
Insomnia: Defining Features

• Insomnia and Primary Insomnia
  – One of the most common sleep disorders
  – Problems initiating and maintaining sleep, and/or nonrestorative sleep
  – Primary insomnia – Insomnia unrelated to any other condition (rare!)

• Facts and Statistics
  – Affects females twice as often as males
  – Associated with medical and/or psychological conditions

• Associated Features
  – Unrealistic expectations about sleep
  – Believe lack of sleep will be more disruptive than it is
Hypersomnia: Defining features

• Hypersomnia and Primary Hypersomnia
  – Sleeping too much or excessive sleep
  – Experience excessive sleepiness as a problem
  – Primary hypersomnia – Unrelated to any other condition (rare!)

• Facts and Statistics
  – About 39% have a family history of hypersomnia
  – Associated with medical and/or psychological conditions

• Associated Features
  – Complain of sleepiness throughout the day
  – Are able to sleep through the night
Narcolepsy: Defining Features

• Narcolepsy
  – Daytime sleepiness and cataplexy
  – Cataplectic attacks – REM sleep, triggered by strong emotion

• Facts and Statistics
  – Narcolepsy is rare – Affects .03% to .16% of the population
  – Affects males and females equally
  – Onset during adolescence, and typically improves over time

• Associated Features
  – Cataplexy, sleep paralysis, and hypnagogic hallucinations
  – Symptoms often improve over time
  – Daytime sleepiness does not remit without treatment
Breathing-Related Sleep Disorders

- Sleepiness during the day and/or disrupted sleep at night
- Sleep apnea – Restricted air flow and/or brief cessations of breathing

Subtypes of Sleep Apnea

- Obstructive sleep apnea (OSA) – Airflow stops, but respiratory system works
- Central sleep apnea (CSA) – Respiratory system stops for brief periods
- Mixed sleep apnea – Combination of OSA and CSA
Breathing-Related Sleep Disorders

• Facts and Statistics
  – More common in males, occurs in 10-20% of population
  – Associated with obesity and increasing age

• Associated Features
  – Persons are usually minimally aware of apnea problem
  – Often snore, sweat during sleep, wake frequently
  – May suffer morning headaches
  – Experience episodes of falling asleep during the day
Circadian Rhythm Sleep Disorders

• Circadian Rhythm Disorders
  – Disturbed sleep – Insomnia or excessive sleepiness
  – Problem – Brain unable to synchronize day and night

• Nature of Circadian Rhythms and Body’s Biological Clock
  – Circadian Rhythms – Do not follow a 24 hour clock
  – Suprachiasmatic nucleus – The brain’s biological clock, stimulates melatonin

• Types of Circadian Rhythm Disorders
  – Jet lag type – Problems related to crossing time zones
  – Shift work type – Problems related to work schedule
Although light is the main setter of the human biological clock, researchers believe melatonin influences the time keeping center, too. Darkness stimulates production of the hormone melatonin. Production is abruptly suppressed in bright light.

When melatonin reaches receptors in the hypothalamus the body thinks it is dark out.

After traveling through nerves in the spinal cord, the signal reaches the pineal gland. In the absence of light signals, the gland begins production of melatonin.
Medical Interventions for Dyssomnias

• Insomnia
  – Benzodiazepines and over-the-counter sleep medications
  – Prolonged use can cause rebound insomnia, dependence
  – Best as short-term solution

• Hypersomnia and Narcolepsy
  – Stimulants (usually Ritalin)
  – Cataplexy is usually treated with antidepressants

• Breathing-Related Sleep Disorders
  – Include medications, weight loss, or mechanical devices
Environmental Interventions for Dyssomnias

• Circadian Rhythm Sleep Disorders
  – Phase delays – Moving bedtime later (best approach)
  – Phase advances – Moving bedtime earlier (more difficult)
  – Use of very bright light – Trick the brain’s biological clock
Dyssomnias: Psychological Interventions

• Relaxation and Stress Reduction
  – Reduces stress and assists with sleep
  – Modify unrealistic expectations about sleep

• Stimulus Control Procedures
  – Improved sleep hygiene – Bedroom is a place for sleep
  – For children – Setting a regular bedtime routine

• Combined Treatments
  – Insomnia – Short-term medication plus psychotherapy
  – Combined treatments – Lack data with other dyssomnias
Parasomnias

• Nature of Parasomnias
  – The problem is not with sleep itself
  – Abnormal events during sleep, or shortly after waking

• Two Types of Parasomnias
  – Those that occur during REM (i.e., dream) sleep
  – Those that occur during non-REM (i.e., non-dream) sleep
Parasomnias: Nightmare Disorder

- Nightmare Disorder
  - Occurs during REM sleep
  - Involves distressful and disturbing dreams
  - Dreams interfere with daily life functioning

- Facts and Associated Features
  - Dreams often awaken the sleeper and disrupt sleep
  - Problem is more common in children than adults

- Treatment
  - May involve antidepressants and/or relaxation training
Parasomnias: Sleep Terror Disorder

• Sleep Terror Disorder
  – Occurs during non-REM sleep
  – Often noted by a piercing scream
  – Person looks extremely upset
  – Experiences signs of elevated arousal (e.g., sweating)

• Facts and Associated Features
  – Problem is more common in children than adults
  – Child cannot be easily awakened during the episode
  – Children have little memory of the event the next day
Parasomnias: Sleep Walking

• Sleep Walking Disorder – Somnambulism
  – Occurs during non-REM sleep
  – Usually during first few hours of deep sleep
  – Person must leave the bed

• Facts and Associated Features
  – Problem is more common in children than adults
  – Difficult, but not dangerous, to wake a sleepwalker
  – Seems to run in families
  – Problem usually resolves on its own

• Related Conditions
  – Nocturnal eating syndrome – Person eats while asleep
Summary of Eating & Sleep Disorders

• All Eating Disorders Share
  – Gross deviations in eating behavior
  – Fear or concern about weight, body size, appearance
  – Strong bio-psycho-social contributions

• All Sleep Disorders Share
  – Interference with normal process of sleep
  – Interference results in problems during waking
  – Influenced by psychological and behavioral factors

• Need More Effective Treatments for Eating and Sleep Disorders