

## Chapter 8: Motivation and Emotion

### Motivation Concepts and Theories

- Motivation—factors within and outside an organism that cause it to behave a certain way at a certain time
- Drive—an internal condition or impulse that activates behavior to reduce a need and restore homeostasis
- Incentive—external goal that “pulls” or “pushes” behavior

### Theories of Motivation

- Instinct—motives are innate
- Drive—biological needs as motivation
- Incentive—extrinsic things push or pull behavior
- Arousal—people are motivated to maintain optimum level of arousal (A person high in *sensation seeking* tends to look for exciting, perhaps risky activities)
- Humanistic—hierarchy of needs; psychological and cognitive factors

### Characteristics of Motivation

- Activation* is demonstrated by the initiation or production of behavior.
- Persistence* is demonstrated by continued efforts or the determination to achieve a particular goal, often in the face of obstacles.
- Intensity* is seen in the greater vigor of responding that usually accompanies motivated behavior.
- Many forms of motivation have an emotional component, which is involved in the initiation and persistence of behavior.

## Drives as Tissue Needs

- Homeostasis—the constancy of internal conditions that the body must actively maintain.
- Drives may be due to an upset in homeostasis, inducing behavior to correct the imbalance.
- Animals do behave in accordance with their tissue needs (e.g., increasing or decreasing caloric intake, drive for salt).
- However, homeostasis cannot explain all drives.

## Hunger Drive

## Eating Behavior

- What are considered “normal” food choices depend on culture.
- Can be related to one’s mood

## Energy Homeostasis

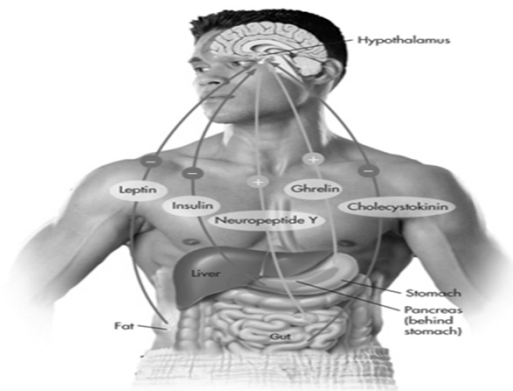
- Calories consumed=Calories expended
- Food is broken down by enzymes, absorbed by intestines
- Glucose, or blood sugar, is converted as a source of energy
- Insulin helps control glucose and regulate eating and weight
- Basal metabolic rate is resting rate
- Adipose tissue (body fat) is main source of stored calories
- Baseline body weight—cluster of genetic and environmental factors that cause a person’s weight to settle within a given range

## Hunger Drive: Regulating Eating

- Physiological changes:
  - slight* drop in blood glucose
  - Ghrelin: internal “signal” stimulates secretion of growth hormone by pituitary gland in brain
  - increase in body temperature
  - decrease in metabolism
- Psychological changes:
  - stimuli can be associated with anticipation of eating (operant conditioning)
  - preference for certain tastes (positive incentive value)

## Hunger Drive: Regulating Eating

- Satiety signals:
  - stretch receptors communicating sensory information
  - signals from the stomach (CCK)
  - sensory-specific satiety-appeal diminishes
- Long-term signals:
  - leptin, a hormone indicating the amount of fat in the body
  - signals indicating the amount of food molecules in the blood (insulin)
  - Neuropeptide Y (NPY), neurotransmitter regulated by leptin and insulin



## Changes over Lifespan

- Set-point theory: body has optimal body weight
- Settling-point models: body weight settles balance between energy intake and expenditure

## Excess Weight and Obesity

- Body mass index (BMI) —numerical scale indicating height in relation to weight
- Obesity—condition characterized by excessive body fat and a BMI equal to or greater than 30.0
- Overweight—condition characterized by BMI between 25.0 and 29.9
- More than 1/3 of adult U.S. population considered to be overweight.

## Factors in Weight Gain

- Lack of sleep
- Highly palatable foods
- Overeating
- More variety=more consumed (“Cafeteria diet”)
- Sedentary lifestyle
- Variation in Basal Metabolic Rate (BMR)
- Weight cycling (“yo-yo dieting”)—repeated dieting, weight loss and weight gain tends to result in higher weight and reduced BMR

## Basal Metabolic Rate

- The rate at which the body uses energy for vital functions while at rest
- Factors that influence BMR:
  - Age
  - Sex
  - Size
  - Genetics
  - Food intake

## Factors Involved in Obesity

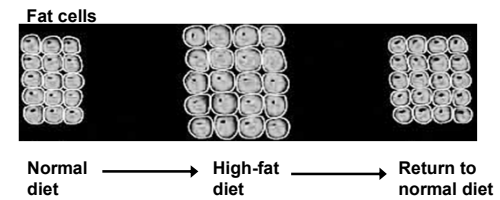
- Genetic susceptibility
- Environmental conditions
- Leptin resistance
- BMR resistance to maintaining weight loss
- Role of Dopamine receptors (cause or consequence unknown)

## Obesity Rates

- Beyond the United States, rapidly increasing rates of obesity have become a global health problem.
- More than one billion adults are overweight.
- At least 300 million of these are clinically obese (World Health Organization, 2009).

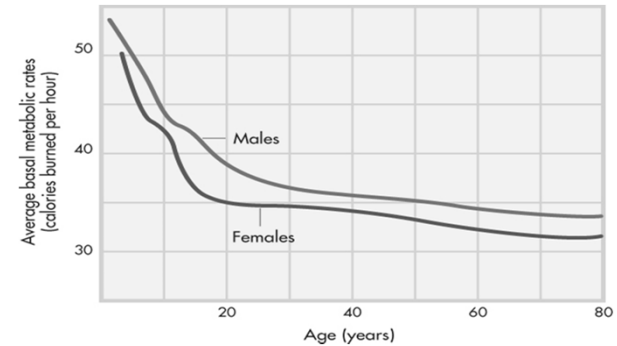
## Research on Weight Regulation and Dieting

- Body better at defending against weight *loss* than weight *gain*.
- Fat cells are determined by genetics and food intake.
- They increase with weight gain, but merely shrink with weight loss; may stimulate hunger
- Weight loss causes a decline in basal metabolism.



## Effects of Culture and Habits on Body Weight

- In America, focus is on the “thin ideal.”
- Reality: the “expanding waistline”
- 2/3 of Americans are not at the weight they should be.



## Humanistic Theories

Abraham Maslow suggested that motives are divided into several levels from basic survival needs to psychological and self-fulfillment needs.

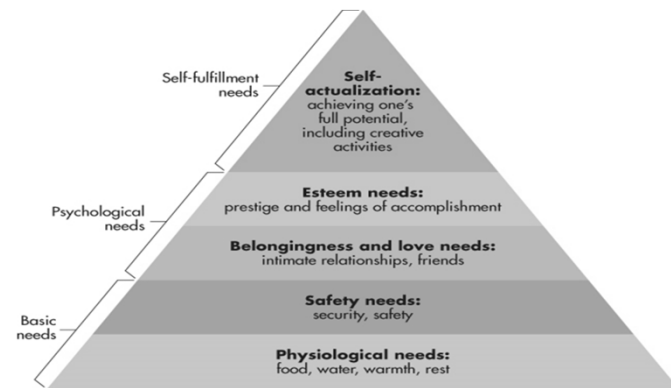


Table 8.3

### Maslow's Characteristics of Self-Actualized People

<b>Realism and acceptance</b>	Self-actualized people have accurate perceptions of themselves, others, and external reality.
<b>Spontaneity</b>	Self-actualized people are spontaneous, natural, and open in their behavior and thoughts. However, they can easily conform to conventional rules and expectations when necessary.
<b>Problem centering</b>	Self-actualized people focus on problems outside themselves. They often dedicate themselves to a larger purpose in life.
<b>Autonomy</b>	Although they accept and enjoy other people, self-actualized individuals have a strong need for privacy and independence.
<b>Continued freshness of appreciation</b>	Self-actualized people continue to appreciate the simple pleasures of life with awe and wonder.
<b>Peak experiences</b>	Self-actualized people commonly have <i>peak experiences</i> , or moments of intense ecstasy, wonder, and awe during which their sense of self is lost or transcended.

Source: Based on Maslow (1970).

## Self-Determination Theory

- Optimal human functioning can occur only if the psychological needs of autonomy, competence and relatedness are met.

- Proposed by E. L. Deci and R. M. Ryan

## Self-Determination Theory

- Autonomy—need to determine, control, and organize one's own behavior and goals
- Competence—need to effectively learn and master challenging tasks
- Relatedness—need to feel attached to others

## Self-Determination Theory

- To satisfy one's needs for autonomy, competence, and relatedness.
- Intrinsic Motivation: engaging in tasks inherently satisfying, novel, or challenging to the person
- Extrinsic Motivation: Internalizing and integrating outside reinforcers (rewards, social evaluations)

## Competence and Achievement

- Competence motivation—behavior aimed at demonstrating competence and exerting control in a situation
- Achievement motivation—behavior aimed at excelling, succeeding, or outperforming others at some activity
- Henry Murray (1935) developed Thematic Apperception Test (TAT) to test human motives

## Culture and Achievement Motivation

- Individualistic cultures more focused on personal, individual success rather than success of group; closely linked to success in competitive tasks
- Collectivistic cultures' orientation is toward the social, promoting one's group and/or family.

## Concept of Emotion

- A complex psychological state that involves subjective experience, a physiological response, and a behavioral or expressive response.
- Emotion moves us to act, to set goals, make rational decisions
- Emotional intelligence* involves the ability to manage and understand one's own emotional experiences as well as be attuned to that of others.

## The Evolution of Emotion

- Darwin argued that emotions reflect evolutionary adaptations to the problems of survival and reproduction.
- Emotions help us to solve adaptive problems.
- Move us *toward* resources and *away* from danger.
- Emotions are crucial to human relationships.

## Basic Emotions

- Fear, surprise, anger, disgust, happiness, sadness
- Basic emotions are innate and “hard-wired.”
- Complex emotions are a blend of many aspects of emotions.

## Gender differences

- Both men and women tend to view women as more emotional.
- Men and women do not differ in their self ratings of *experience* of emotions, but they do differ in their *expression* of emotions.



## Culture and Emotion

- General agreement across culture about basic emotions.
- Classified along two dimensions:
  - Pleasant or unpleasant
  - Level of activation or arousal associated with the emotion
- But cultural variations do exist in the presence of a third dimension: *interpersonal engagement*

## Physical Arousal and Emotions

- Sympathetic nervous system is aroused with emotions (fight-or-flight response)
- Different emotions stimulate different responses
  - Fear—decrease in skin temperature (cold-feet)
  - Anger—increase in skin temperature (hot under the collar)

## Brain and Emotions

The Amygdala:

- evaluates the significance of stimuli and generates emotional responses
- generates hormonal secretions and autonomic reactions that accompany strong emotions
- damage causes “psychic blindness” and the inability to recognize fear in facial expressions and voice

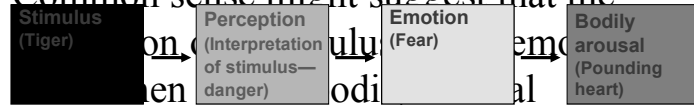
## Emotion and Facial Expressions

- Each basic emotion is associated with a unique facial expression.
- Facial expressions are innate and “hard-wired.”
- Innate facial expressions the same across many cultures.
- Display rules—social and cultural rules that regulate emotional expression, especially facial expressions.

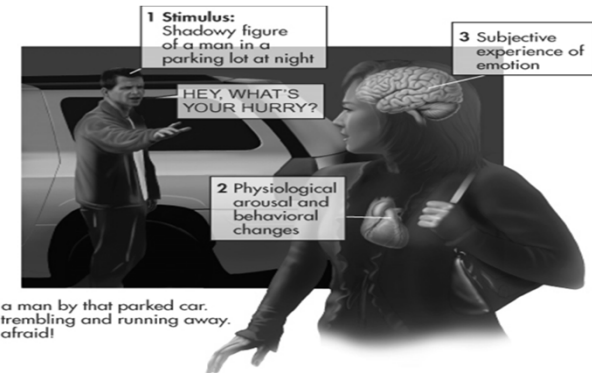
## Theories of Emotion

### Common-Sense Theory

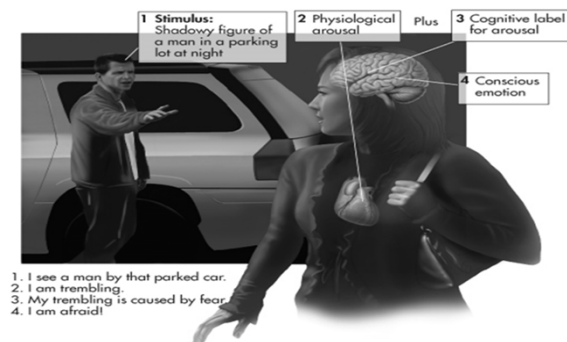
Common sense might suggest that the



## James-Lange Theory



## Two-Factor Theory



## Cognitive-Appraisal Theory

- Emotions result from the cognitive appraisal of a situation's effect on personal well-being.
- Similar to two-factor, but cognitive mediational theory's emphasis is on the cognitive appraisal as the essential trigger for the emotional response.