

General Psychology 202

Motivation and Emotion

Prologue: One Step at a Time

Introduction: Motivation and Emotion

Motivation Concepts and Theories

- Instinct theories: Inborn behaviors as motivators
- Drive theories: Biological needs as motivators
- Incentive motivation: Goal objects as motivators
- Arousal theory: Optimal stimulation as a motivator
- Humanistic theory: Human potential as a motivator

Biological Motivation: Hunger and Eating

- Energy homeostasis: Calories consumed = calories expended
- Short-term signals that regulate eating
- Long-term signals that regulate body weight
- Excess weight and obesity: The epidemic
- Eating disorders: Anorexia and bulimia

Psychological Needs as Motivators

- Maslow's hierarchy of needs
- Deci and Ryan's self-determination theory
- Competence and achievement motivation

Emotion

- The functions of emotion
- The subjective experience of emotion
- The neuroscience of emotion
- The expression of emotion: making faces

Theories of Emotion: Explaining Emotions

- The James-Lange theory of emotions: Do you run because you're afraid? Or are you afraid because you run?
- Cognitive theories of emotion

Closing Thoughts

Application: Turning your goals into Reality

Motivation

Motivation: The biological, emotional, cognitive or social forces that activate and direct behavior.

There are three basic characteristics associated with motivation

- Activation (initiation of behavior)
- Persistence (continual efforts or determination)
- Intensity (strength of response)

Theories of Motivation

- Instinct Theories
- Drive Theories
- Incentive Theories
- Arousal Theories
- Humanistic Theories

Instinct Theories

Just as animals display instinctive behavioral patterns, such as migration or mating behaviors, human behavior is thought to be motivated by innate instincts or genetic programming.

Instinct theories say that people are motivated to engage in certain behaviors because of evolutionary programming.

Examples of Instincts Proposed by Instinct Theorists

Table 8.1

James's List of Instincts	
Attachment	Resentment
Fear	Curiosity
Disgust	Shyness
Rivalry	Sociability
Greediness	Bashfulness
Suspicion	Secretiveness
Hunting	Cleanliness
Play	Modesty
Shame	Love
Anger	Parental Love

- Instinct theory describes and labels behavior and relies on circular reasoning.
- While instinct theories seem logical, these labels and descriptions do not explain behavior.

In addition, we don't have enough genes to account for every behavior and motivation. People try to use instincts to "explain" one's behavior, but it rarely does.

Drive Theories

Behavior is motivated by the desire to reduce internal tension caused by unmet biological needs, such as hunger and thirst (p. 330).

These unmet biological needs “drive” us to behave in certain ways to ensure survival. Drives such as hunger and thirst arise from tissue deficits--when we are hungry, we are driven to eat. When we are thirsty, we are driven to drink.



When a particular behavior reduces a drive, the behavior becomes reinforced when the same need state arises again.

Our bodies biological systems are delicately balanced to ensure survival (page 330). Homeostasis is a state of internal physiological equilibrium that the body strives to maintain.

For example,

- when you are hot, your body automatically tries to cool itself by perspiring.
- when you are cold, your body generates warmth by shivering.

Physiological disruptions in homeostasis produce drives—states of internal tension that motivate an organism to reduce this tension.

Where else have we heard the concept of homeostasis before?

Incentive Theories

Behavior is motivated by the “pull” of external goals and rewards such as rewards, money or recognition (page 331).

This approach is based heavily on operant learning theory (behavior is based on the expectation of consequences such as reinforcements or punishments, Chapter 5), and hence testable.

Reinforcements _____ behavior
Punishments _____ behavior

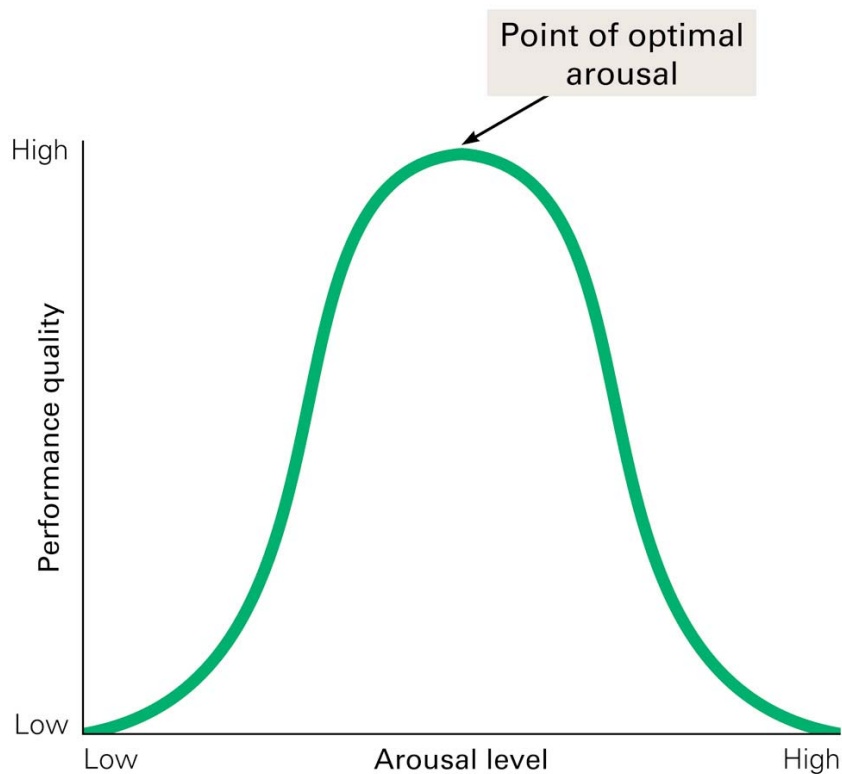
- If we think we will be reinforced for the behavior, we are motivated to engage in that behavior.
- If we think we will be punished for the behavior, we are motivated to avoid that behavior.

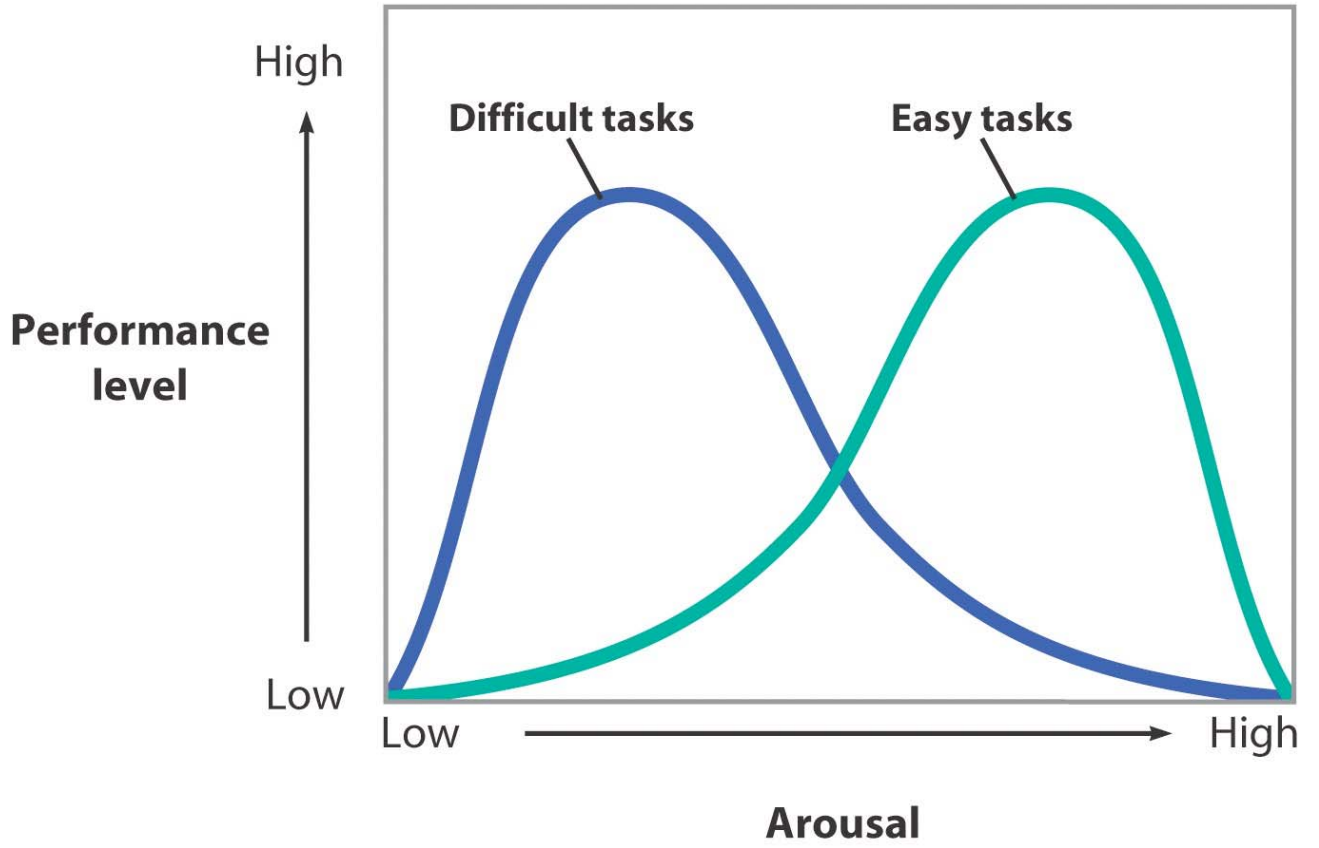
Arousal Theories

Arousal theories are based on the observation that people find both very high levels of arousal and very low levels of arousal quite unpleasant.

- When arousal is too low, we become motivated to increase arousal by seeking stimulating experiences
- When arousal is too high, we become motivated to reduce arousal by seeking a less stimulating environment.

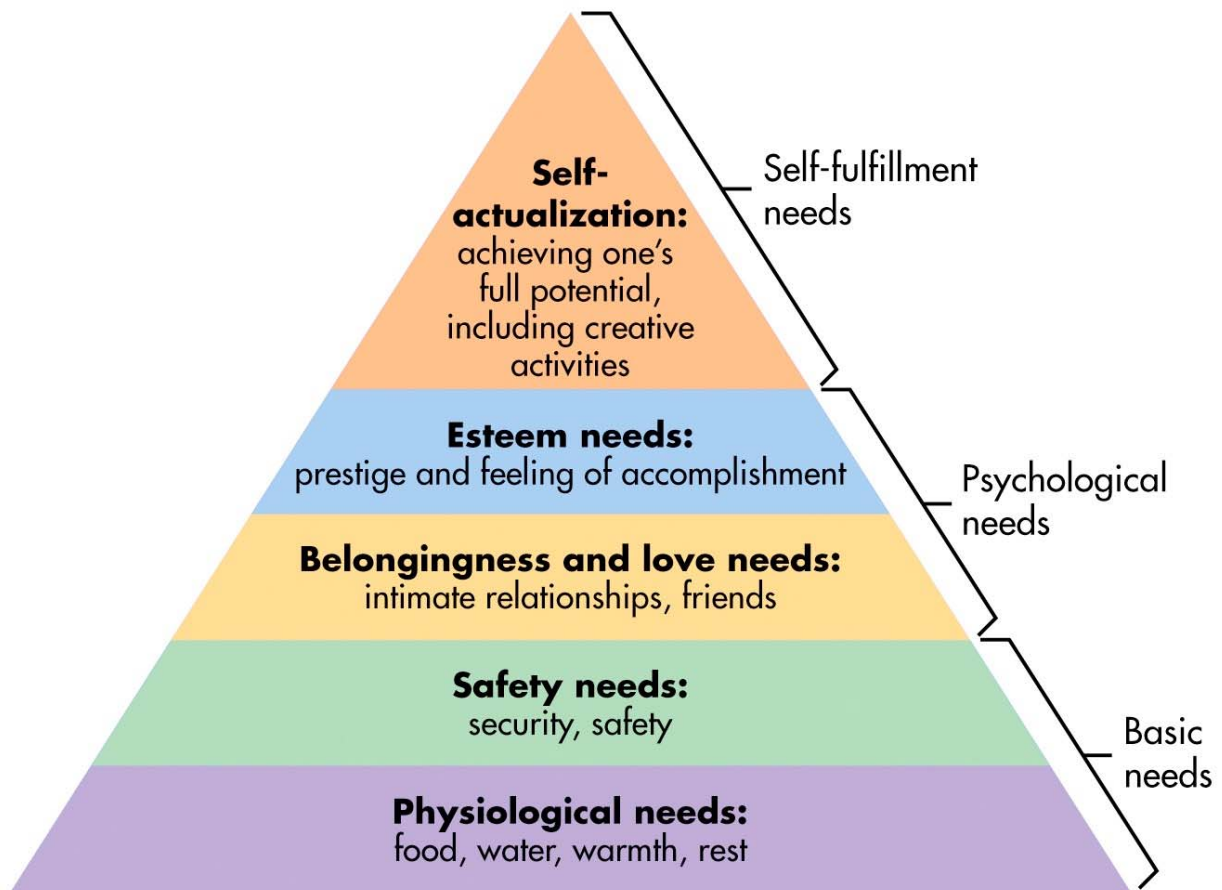
People are motivated to maintain an optimal level of arousal—one which is neither too high or too low.





Humanistic Theories

Abraham Maslow, a humanistic theorist, proposed a broad motivational model. He proposed that psychology's other perspectives ignored a key human motive—the desire to strive for personal growth.



Maslow's concept of self-actualization is hard to define, test and give too little weight to incentives.

Table 8.2: Maslow's Characteristics of Self-Actualized People	
Realism and acceptance	Self-actualized people have accurate perceptions of themselves, others, and external reality. They easily accept themselves and others as they are.
Spontaneity	Self-actualized people are spontaneous, natural and open in their behavior and thoughts. However, they can easily conform to conventional rules and expectations when situations demand such behavior.
Problem centered	Self-actualized people focus on problems outside themselves. They often dedicate themselves to a larger purpose in life, which is based on ethics or sense of personal responsibility.
Autonomy	Although they accept and enjoy other people, self-actualized individuals have a strong need for privacy and independence. They focus on their own potential and development rather than on the opinions of others.
Continued freshness of appreciation	Self-actualized people continue to appreciate the simple pleasures of appreciation of life with awe and wonder.
Peak experiences	Self-actualized people common have <i>peak experiences</i> , or moments of intense ecstasy, wonder and awe during which their sense of self is lost or transcended. The self-actualized person may feel transformed and strengthened by these peak experiences.

What do all of these theories of motivation tell us about what motivates behavior?

Hunger and Weight Regulation

Many Americans are obsessed with achieving, or at least getting closer to, the socially desirable goal of thinness. Approximately one-third of all American women and one-fourth of all American males are trying to lose weight, and the weight-loss industry is a \$33 billion a year enterprise.

- Based on what you have read in your text, what advice would you give to a friend who is trying to lose weight?
- A recent finding indicates that 64% of American adults (115 million adults) are overweight or obese. This is a large increase in the last 50 years. Based on what you have learned on intelligence, explain why this gain in weight is not a genetic change in the American population, but most likely an environmental change?
- What factors lead a person to become overweight and obese?

*(from Study Guide for Psychology by Cornelius Rea to Accompany Psychology by Hockenbury and Hockenbury, page 130):

Hunger and Weight Regulation

With an obsession with losing weight, consumers are easier to become persuaded by easy remedies such as:

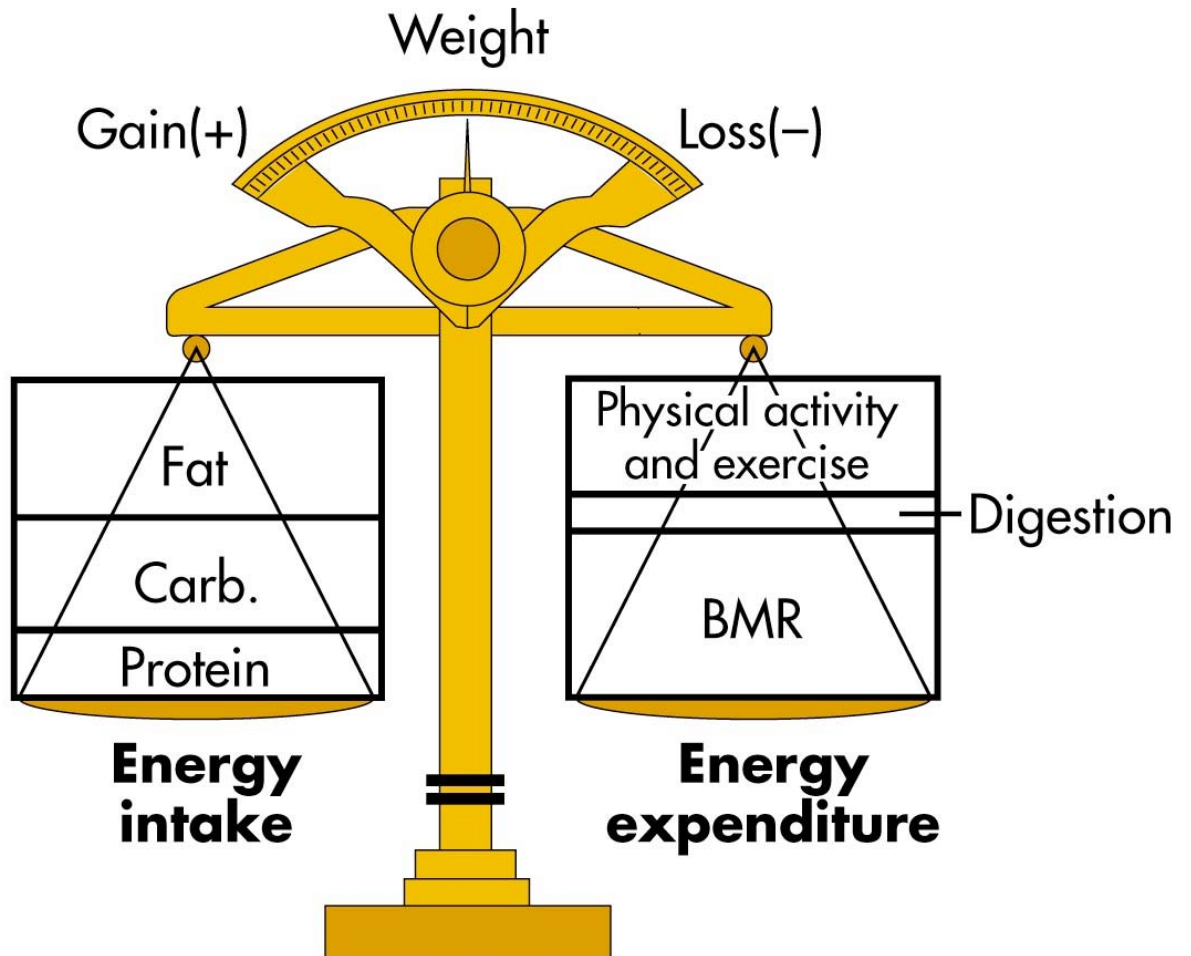
- Weight-loss products such as “Slimming Insoles” that supposedly help you lose weight with every step
- The Svelt-Patch that “melts away fat as you sleep”
- Absorb-it-ALL Plus supplements promise you will lose three inches from your thighs.
- A book, Dr. Hirsch’s Guide to Scentsational Weight Loss, claims that inhaling certain odors will reduce hunger; a one-month supply of aroma “pens” (banana, green apple, and peppermint) sells for \$45.
- Subliminal tapes to decrease the motivation to eat.

What motivates us to eat?

Hunger and Weight Regulation

Food intake: Does energy in = energy out?

Energy Balance



There are many biological, psychological and environmental factors that regulate our food intake.

Short-term Signals that Regulate Eating

Physiological Changes

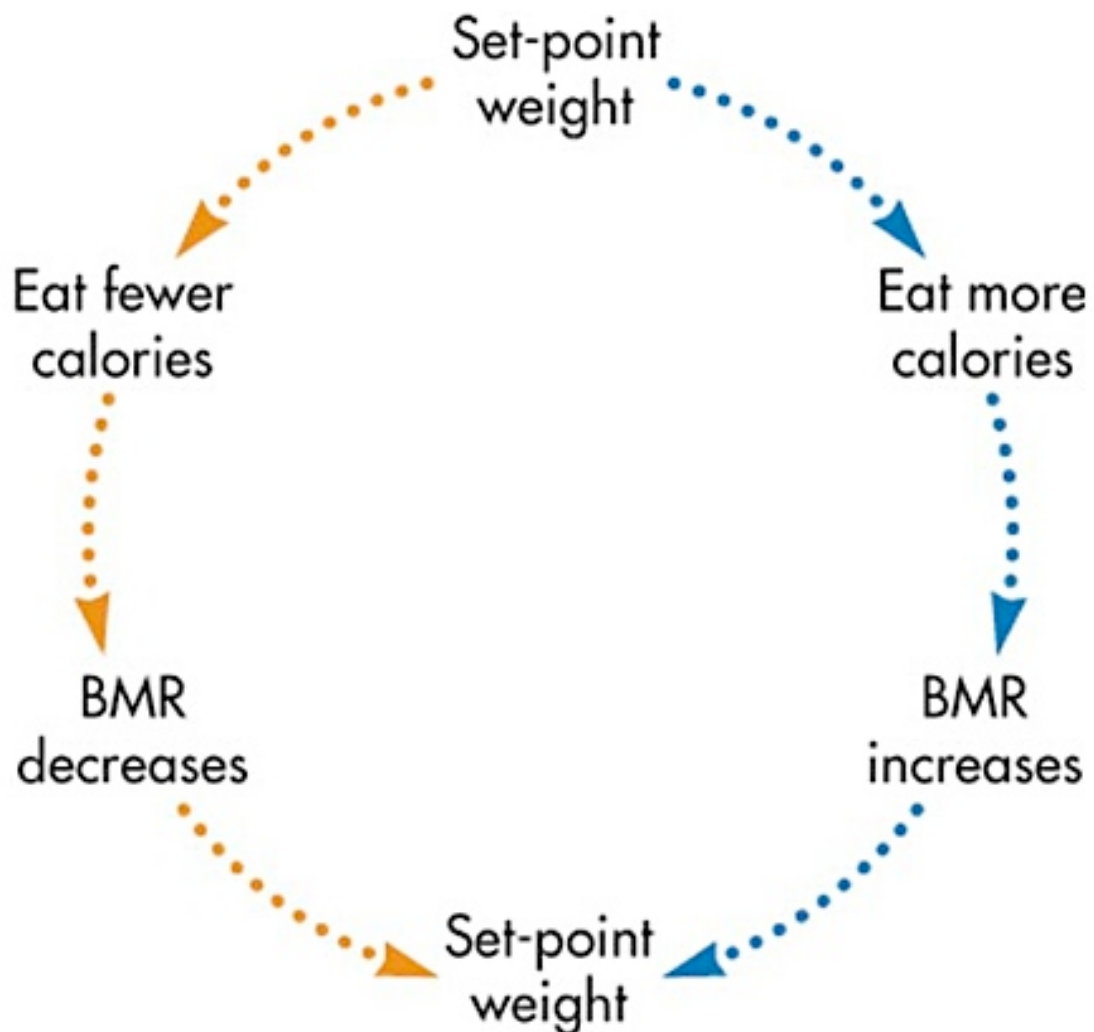
- Blood Glucose
- Ghrelin (GRELL-in)

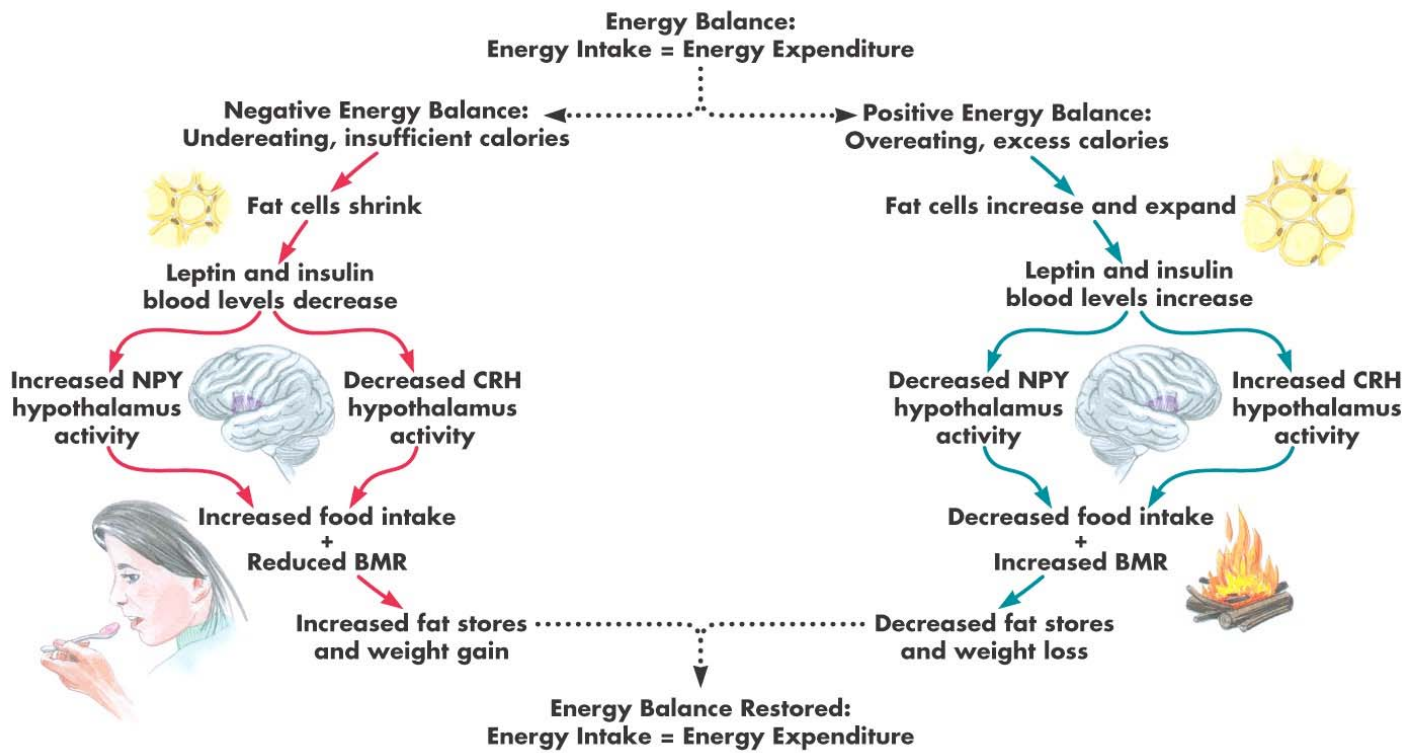
Set-Point Theory / Settling Point Theory

Many researchers believe that there is a set point—a biologically determined “standard” around which body weight (fat mass) is regulated.

For example,

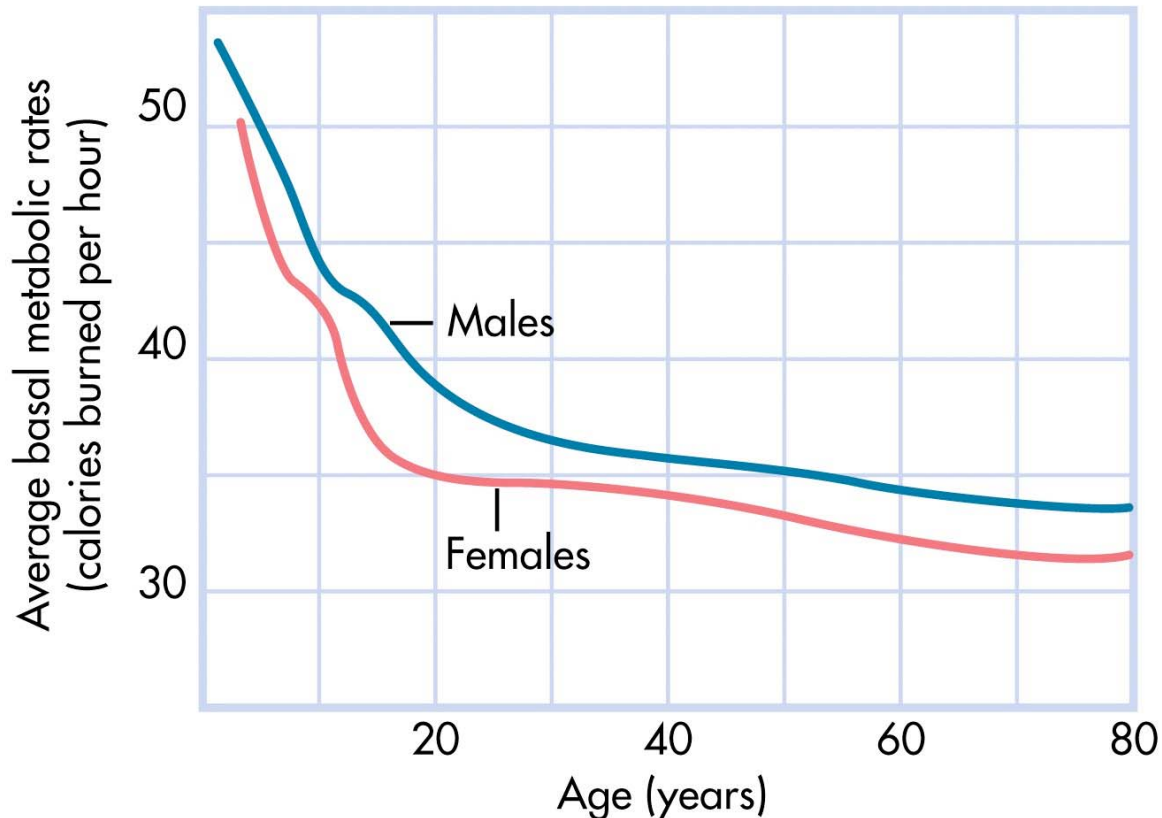
- As you eat fewer calories, your BMR decreases
- As you eat more calories, your BMR increases





The physiology of hunger

Metabolism: The body's rate of energy (or caloric) utilization.



- Age: BMR slows down with increased age, especially during the first two decades of life
- Gender: Males tend to have higher metabolic rates than women
- Body size: Heavy people tend to have a higher metabolic rate than slender people*
- Genetics: Evidence strongly suggests that the BMR is influenced by heredity
- Diet: Restricted food intake lowers BMR; excess food intake increases BMR

Signals that Start and Terminate a Meal

Not only do contractions in the stomach lead to feelings of hunger, but other factors the feeling of hunger.

- Glucose
- Cholecystokinin (CCK)

Glucose A simple sugar that is the body's major source of immediate usable fuel. When blood glucose levels slightly decrease, stored nutrients are used to restore blood glucose levels and may stimulate the desire to eat.

CCK A peptide (a type of hormone) that helps produce feelings of satiation. As food arrives in the small intestine, CCK is released into the bloodstream that travel to the brain and stimulate the brain to decrease food intake.

Signals that Regulate General Appetite and Weight

Leptin:

A hormone secreted by fat cells and released into the bloodstream.

As fat stores increase, leptin increases and eating decreases. When leptin reaches the brain, it decreases appetite and increases energy use.

Hypothalamus:

Ventromedial hypothalamus (“hunger off”)— When the ventromedial hypothalamus (VMH) is damaged, rats will eat until they become obese—but only if the food is appetizing.



Psychological Aspects of Hunger

Attitudes, habits, and psychological needs regulate food intake.

- “Don’t leave food on your plate” attitude increases the likelihood that we will finish what is on our plate despite feeling full
- “autopilot snacking” while watching TV may lead us to eat even when we don’t feel hungry, thus eating more
- Social expectations—especially for women pressure women to conform to an idealized norm.

Environmental and Cultural Factors

Food availability

- Too little
- Too much

Food taste and food variety

- Good tasting food increases consumption
- Food variety increases consumption (eg. buffets)

Factors the Influence Eating Behavior

Biological

- Basal Metabolic Rate (BMR)
- CCK—a hormone that helps produce feelings of satiation (released by small intestines when food arrives)
- Glucose levels (low levels associated with hunger)
- Leptin (secreted by fat cells)
- Abnormal hypothalamus activity

Psychological

- Attitudes
- Habits (automatic eating when watching TV)
- Social expectations for women

Environmental factors

- Food availability
 - Too little
 - Too much
- Food taste and food variety
 - Good tasting food increases consumption
 - Food variety increases consumption (eg. buffets)