Myers' *PSYCHOLOGY*

(7th Ed)

Chapter 12

Motivation

Motivation

- Motivation
  - a need or desire that energizes and directs behavior
- **Instinct**
  - complex behavior that is rigidly patterned throughout a species and is unlearned
    - Bird knowing to fly south for the winter

Motivation

- Drive-Reduction Theory
  - the idea that a physiological need creates an aroused tension state (a drive) that motivates an organism to satisfy the need

Motivation

- Homeostasis
  - tendency to maintain a balanced or constant internal state
  - regulation of any aspect of body chemistry around a particular level
- Incentive
  - a positive or negative environmental stimulus that motivates behavior

Intrinsic Motivators

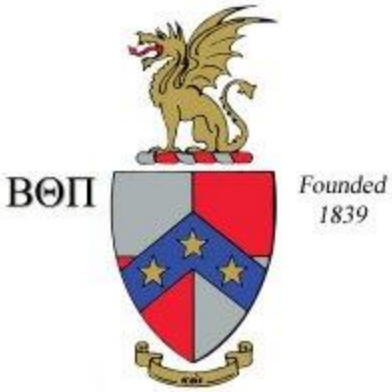
- Refers to motivation that comes from inside an individual rather than from any external or outside rewards, such as money or grades.
- It is stronger than external motivation
  - Intrinsic Motivation creates creativity, if you do not use intrinsic motivation to complete something you would lack creativity

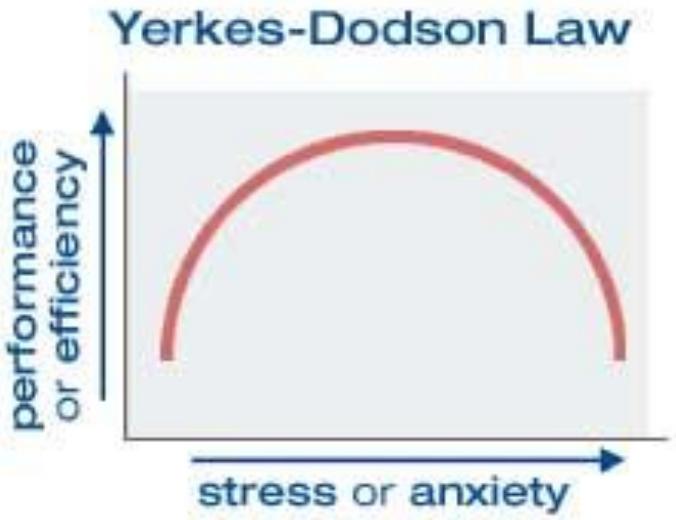
Extrinsic Motivators

- Refers to motivation that comes from external or outside rewards, such as money or grades.

Arousal Theory

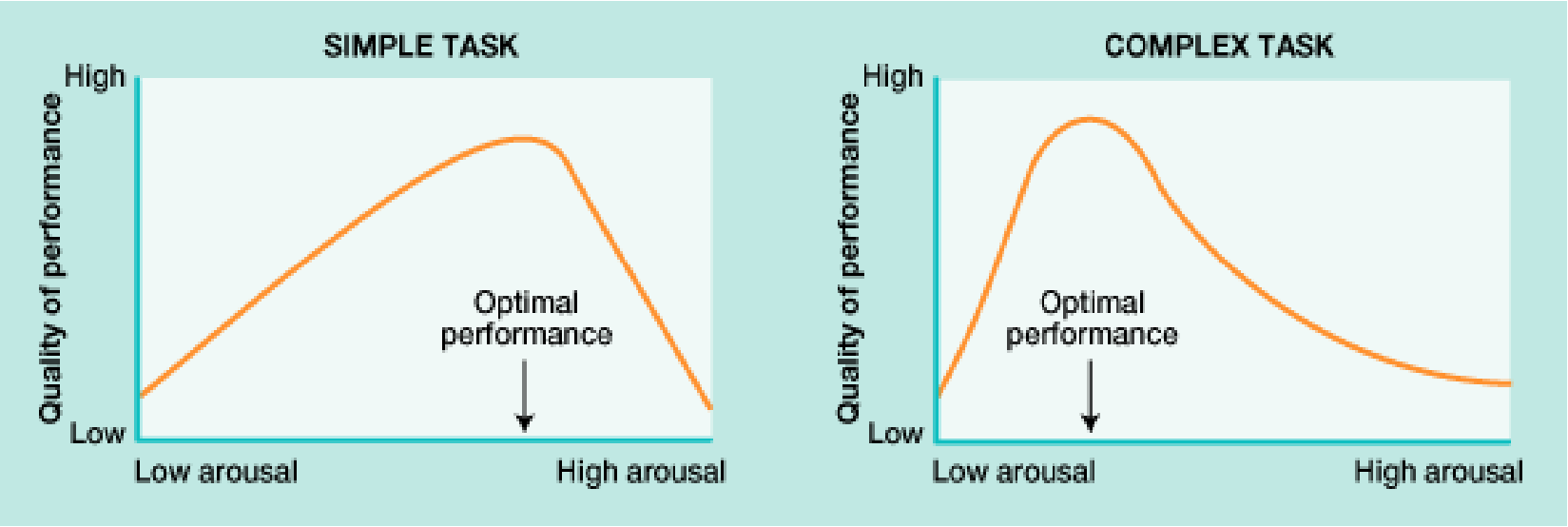
- We are motivated to seek an optimum level of arousal.
- Yerkes-Dodson Law



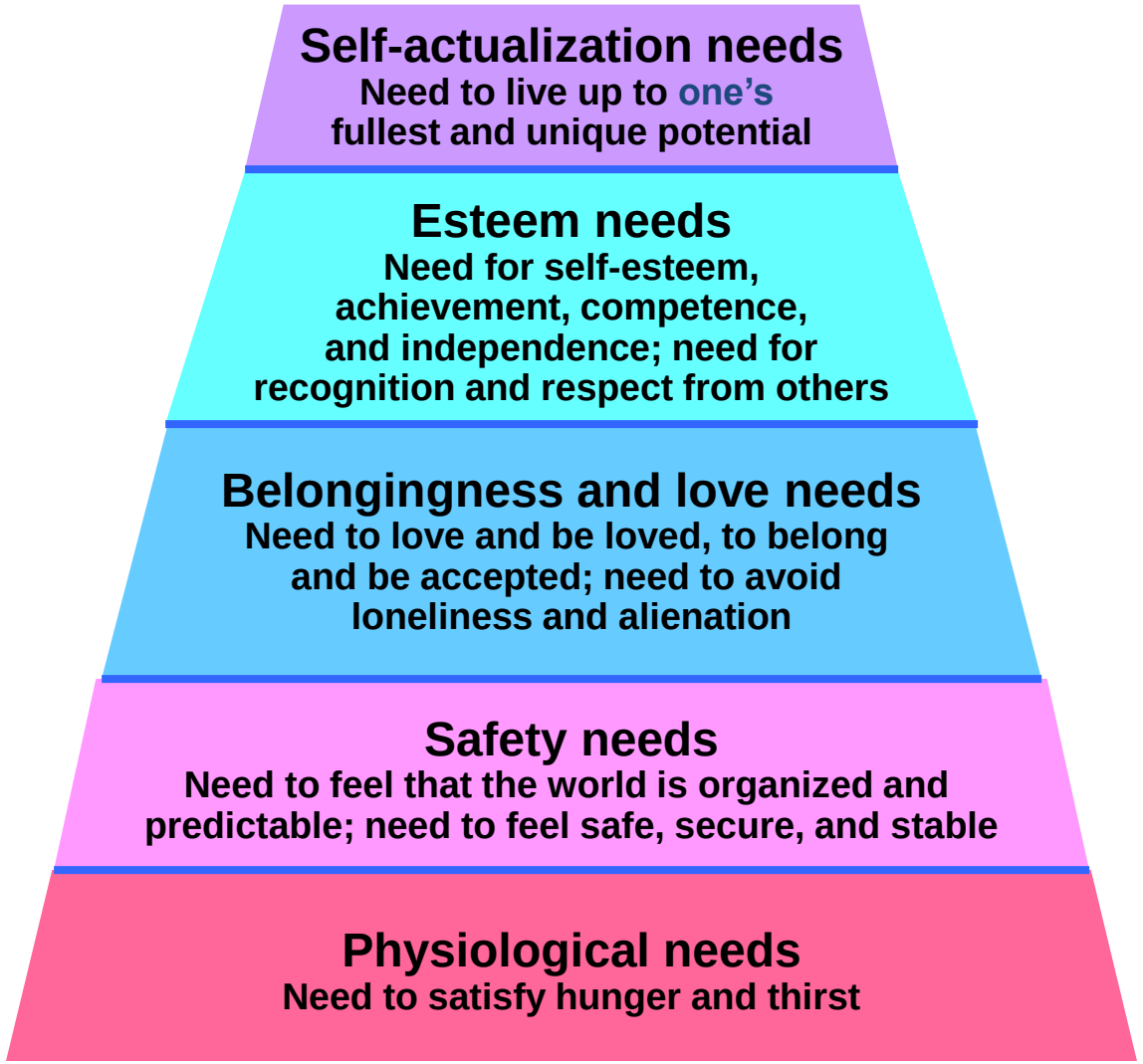


Yerkes-Dodson Law

- States that there is an optimal level of arousal for best performance on any task
- The more complex the task, the lower the level of arousal that can be tolerated without interfering with performance



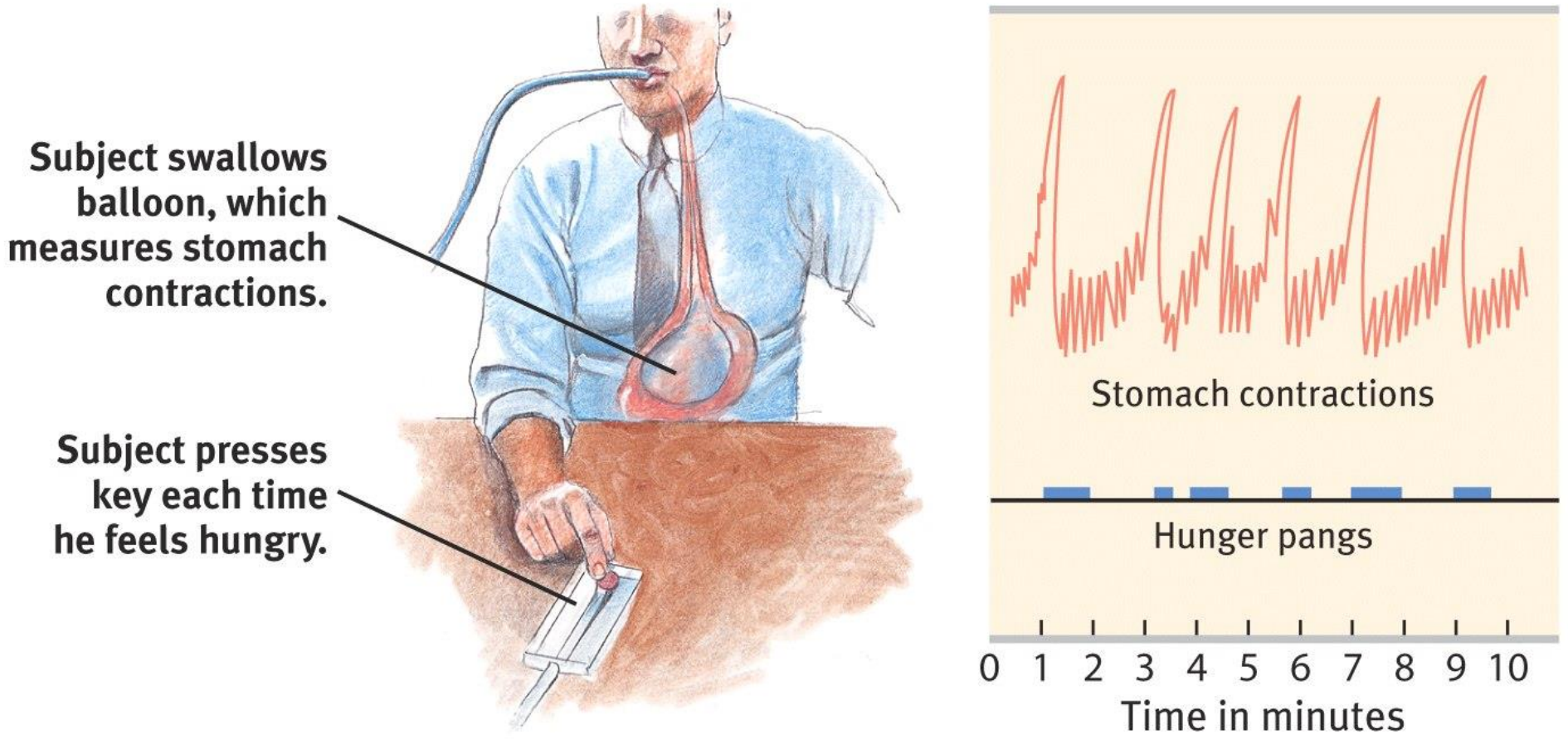
Maslow's Hierarchy of Needs



- begins at the base with physiological needs that must first be satisfied
- then higher-level safety needs become active
- then psychological needs become active
- If you view work as a calling then you would classify work as a higher level need

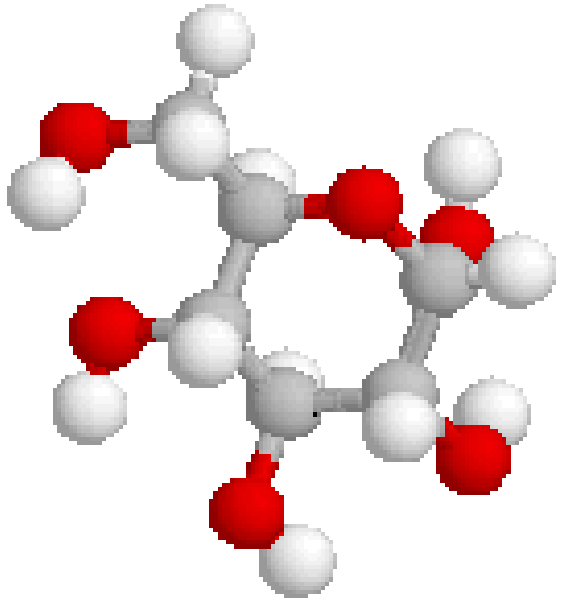
Motivation-Hunger

- Stomach contractions accompany our feelings of hunger



Glucose: $C_6H_{12}O_6$

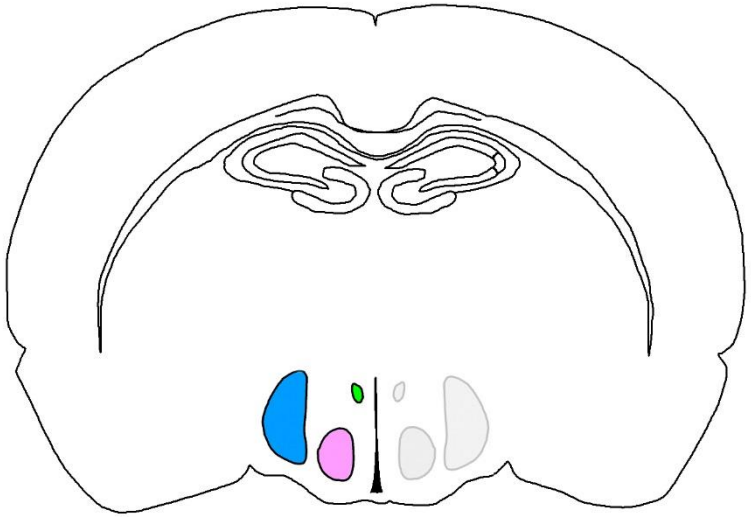
The glucose level in blood is maintained by your pancreas. Insulin decreases glucose in the blood, when the level gets too low, we feel hungry.



Glucose Molecule

Glucose & the Brain

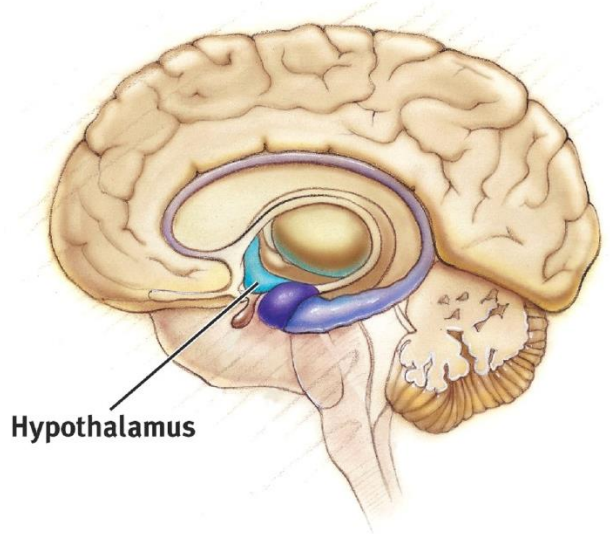
Levels of glucose in the blood are monitored by receptors (neurons) ir the stomach, liver, anc intestines. They send signals to the hypothalamus in the brain.



Rat Hypothalamus

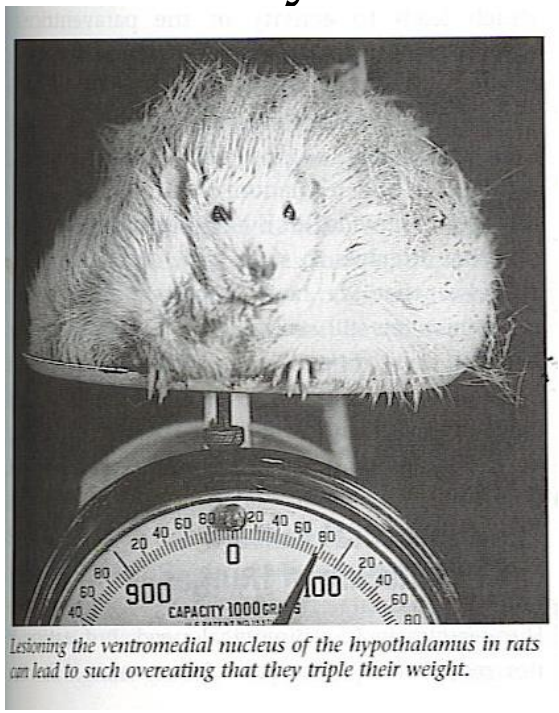
Hypothalamic Centers

- The lateral hypothalamus (LH) brings on hunger (when stimulated lab animals ate!).
- Destroy the LH, and the animal has no interest in eating.
- The reduction of blood glucose stimulates *orexin* in the LH, which leads one to eat



Hypothalamic Centers

- The ventromedial hypothalamus (VMH) depresses hunger (satiety)
- Destroy the VMH, and the animal eats excessively.



Lesioning the ventromedial nucleus of the hypothalamus in rats can lead to such overeating that they triple their weight.


Richard Howard

Leptin

- Fat cells in our body produce leptin
- Hypothalamus monitors these levels
- High levels of leptin signal the brain to reduce appetite or increase the rate at which fat is burned.
- Leptin deficiency can cause obesity

The Psychology of Hunger

- Environmental cues can trigger the biological responses (increased insulin production)
- Memory plays an important role in hunger. Due to difficulties with retention, amnesia patients eat frequently if given food (Rodin et al., 1998).
- Emotional attachment?
- Social expectations
- Conditioning

Taste Preference: Biology or Culture?

Body chemistry and environmental factors influence not only *how much or when* we feel hunger but *what* we feel hungry for!

Richard Olsenius/ Black Star

Victor Englebert

Eating Disorders

Anorexia Nervosa: A condition in which a normal-weight person (usually an adolescent woman) continuously loses weight but still feels overweight.

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Lisa O'Connor/ Zuma/ Corbis

Eating Disorders

Bulimia Nervosa: A disorder characterized by episodes of overeating, usually high-calorie foods, followed by vomiting, using laxatives, fasting, or excessive exercise.

Motivation-Hunger

- Set Point
  - the point at which an individual's "weight thermostat" is supposedly set
  - when the body falls below this weight, an increase in hunger and a lowered metabolic rate may act to restore the lost weight
- Basal Metabolic Rate
  - body's base rate of energy expenditure

Women's Body Images