

# Chapter 12: Ingestive Behavior

Physiological Regulatory Mechanisms

Fluid Regulation

Nutrition and Metabolism

Obesity and Anorexia / Bulimia

# Chapter 12: Ingestive Behavior

## **Physiological Regulatory Mechanisms**

Fluid Regulation

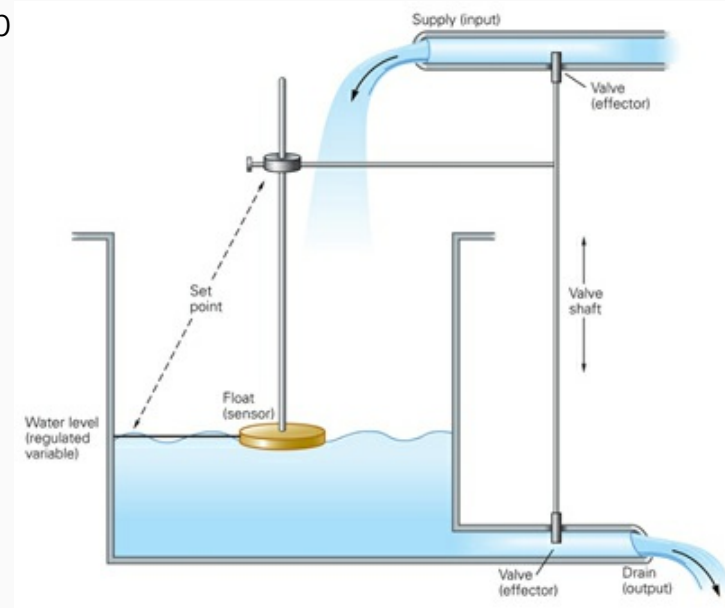
Nutrition and Metabolism

Obesity and Anorexia / Bulimia

# Physiological Regulatory Mechanisms

## Homeostasis.

- “any self-regulating process by which b  
(Encyclopedia Britannica)



ty while adjusting to [constantly changing] conditions”

# Physiological Regulatory Mechanisms

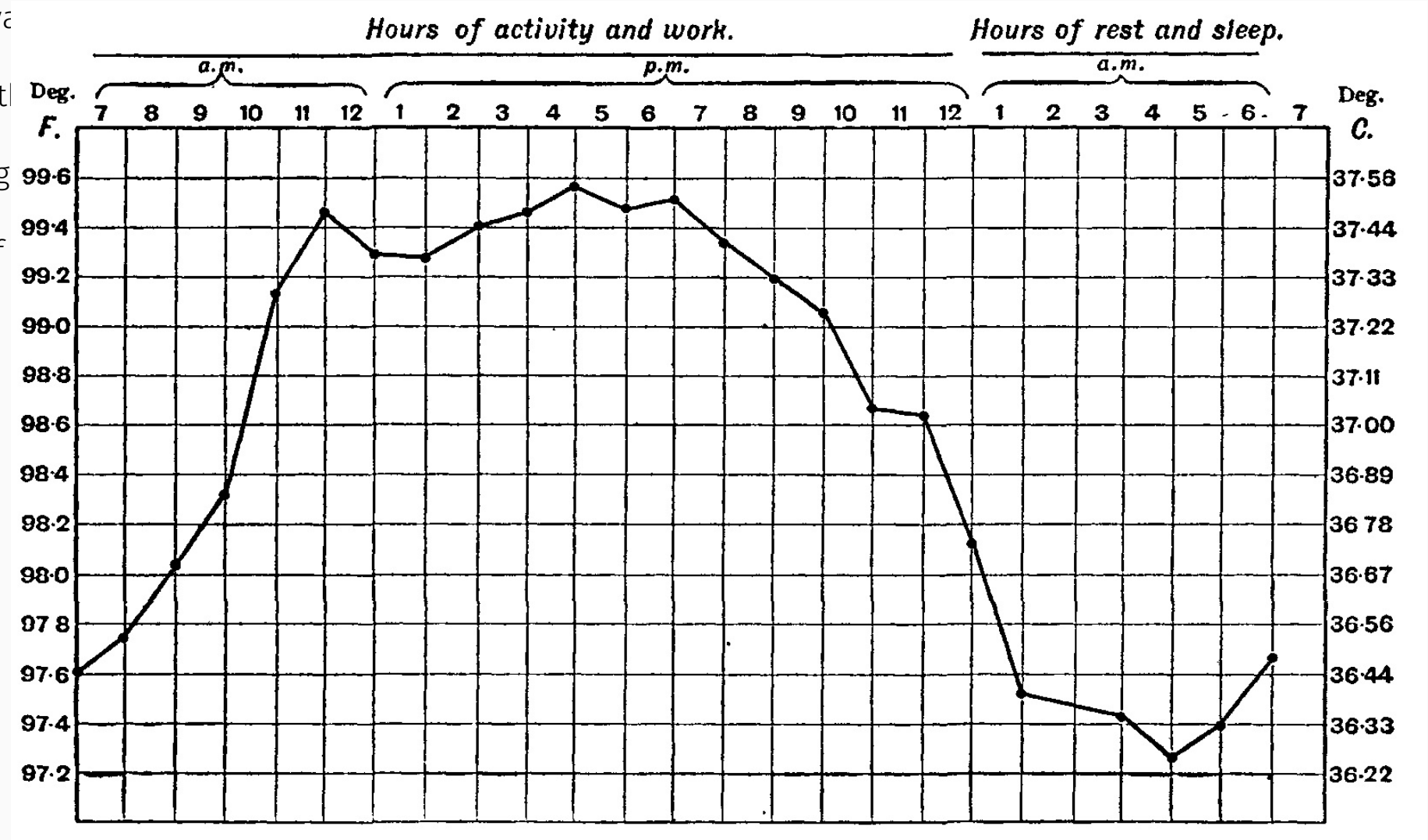
## Homeostasis.

- set point: optimum value of a system variable under homeostatic regulation
- set range: tolerable variability around the set point

# Physiological Regulatory Mechanisms

## Homeostasis.

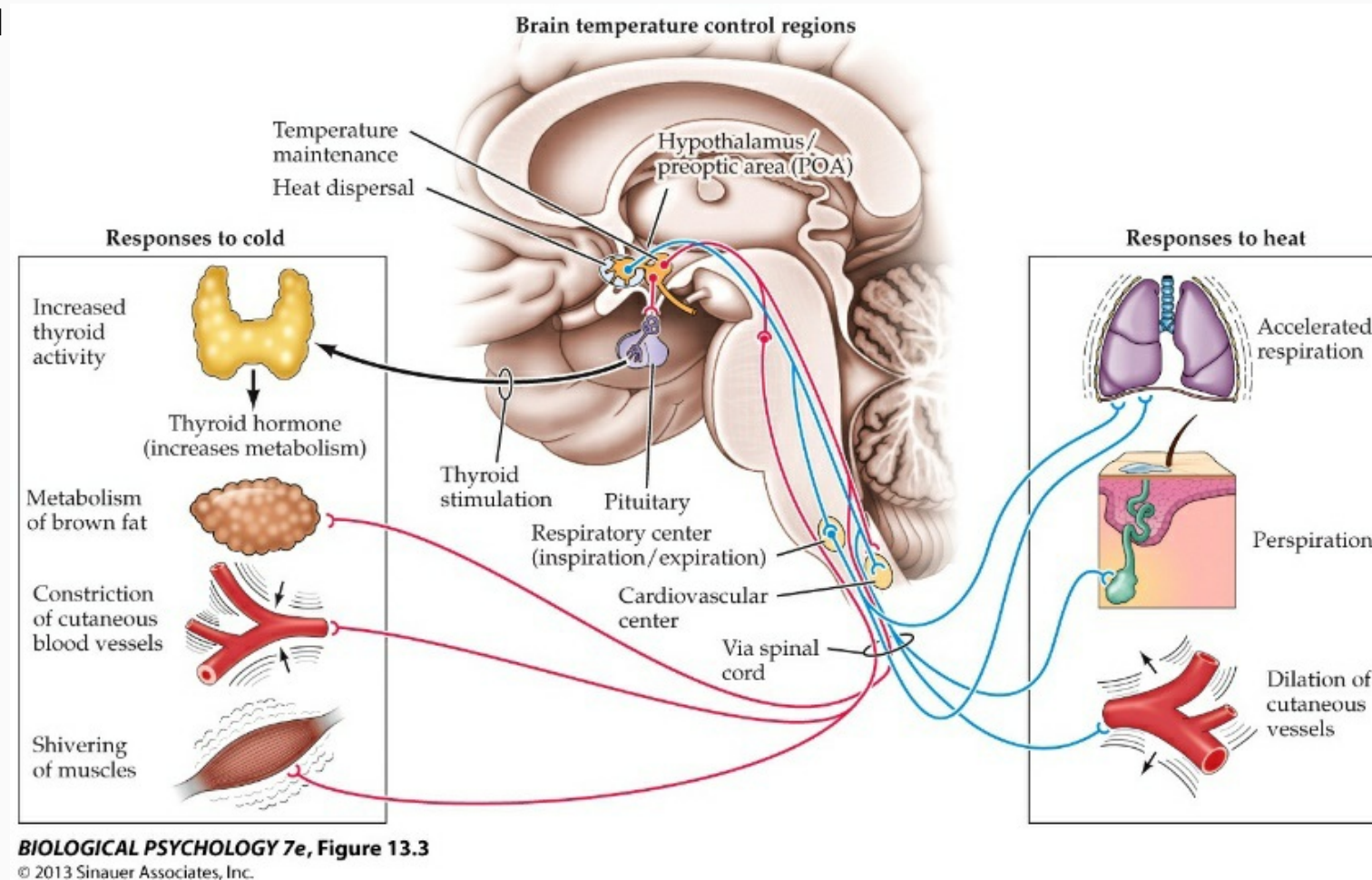
- set point: optimum value of a system variable
- set range: tolerable variability around the set point
- anticipation: typically, physiological regulation occurs in anticipation of changes in the environment
- regulation is enacted in anticipation of changes in the environment



# Physiological Regulatory Mechanisms

## Physiological and Behavioral Homeostasis.

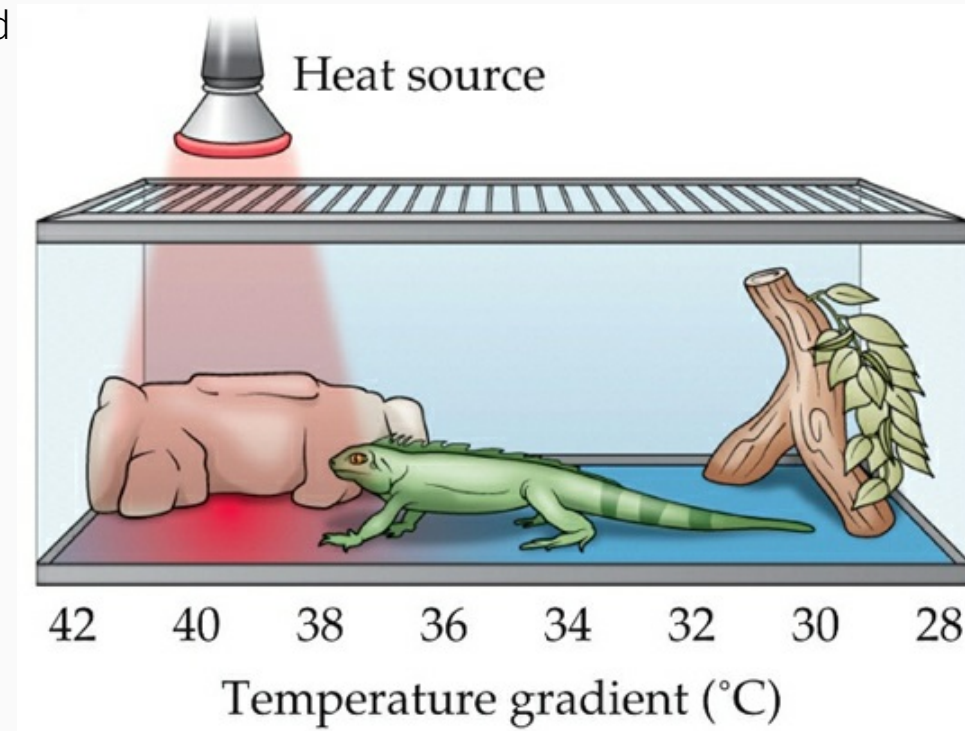
- bidirectional physiological sensing and



# Physiological Regulatory Mechanisms

## Physiological and Behavioral Homeostasis.

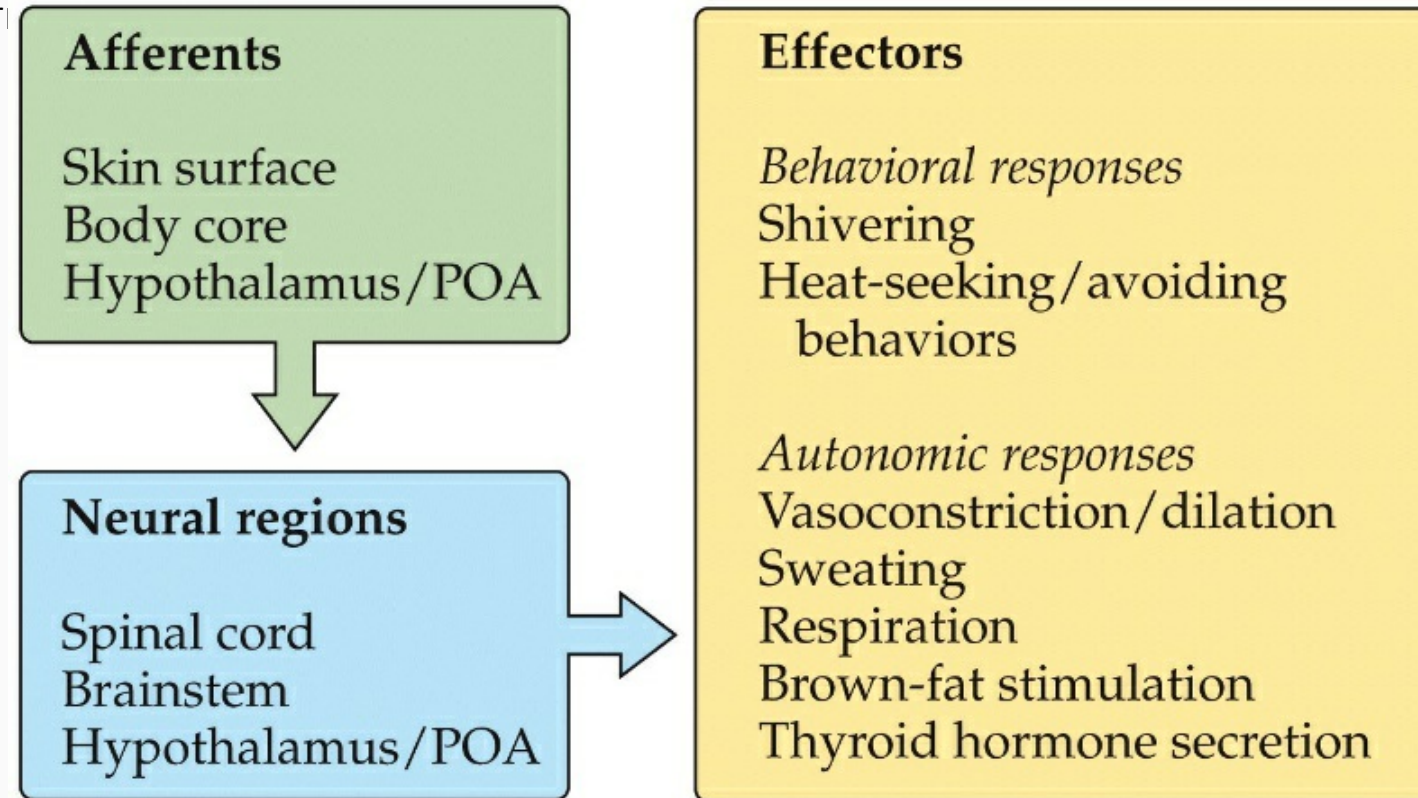
- bidirectional physiological sensing and



# Physiological Regulatory Mechanisms

## Physiological and Behavioral Homeostasis.

- redundancy: multiple monitors and control



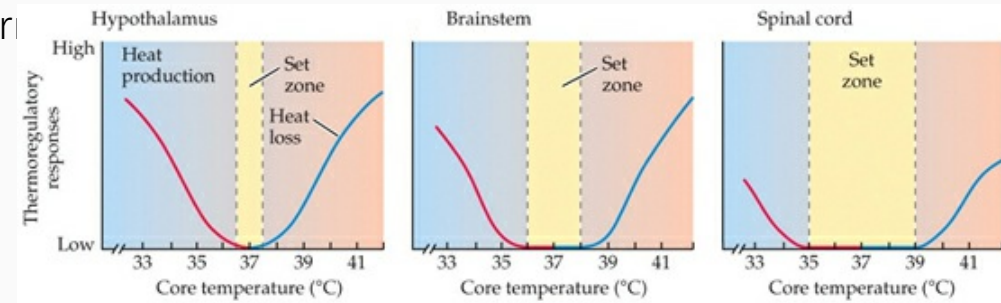
BIOLOGICAL PSYCHOLOGY 7e, Figure 13.7  
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# Physiological Regulatory Mechanisms

## Physiological and Behavioral Homeostasis.

- redundancy: multiple monitors and control

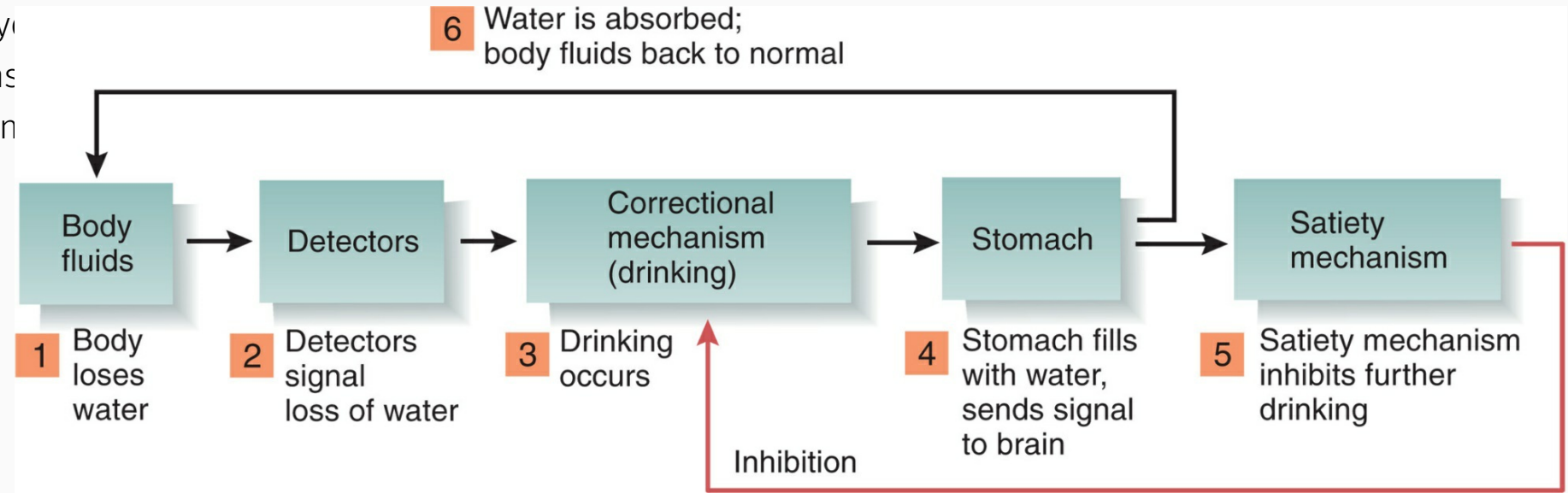


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# Physiological Regulatory Mechanisms

## Homeostasis.

- regulatory systems for nutrition and hydration
- thirst and hunger: motivational systems
- satiety mechanisms: monitor correction



# Image Credits

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- slide 4: Breedlove, S.M., Watson, N.V. (2013). Biological Psychology: An Introduction to Behavioral, Cognitive, and Clinical Neuroscience, 7th ed. Sinauer Associates, Inc.
- slide 5: [http://upload.wikimedia.org/wikipedia/commons/thumb/0/05/Body\\_Temp\\_Variation.png/250px](http://upload.wikimedia.org/wikipedia/commons/thumb/0/05/Body_Temp_Variation.png/250px) -Body\_Temp\_Variation.png
- slide 6-8: Breedlove, S.M., Watson, N.V. (2013). Biological Psychology: An Introduction to Behavioral, Cognitive, and Clinical Neuroscience, 7th ed. Sinauer Associates, Inc.
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