

Body Organization and Control

Text: Human Biology, by Mader. pp. 83-87

1. Body Cavities (p. 83 - 84)
 - A. Dorsal Body Cavity
 - i. Cranial Body Cavity
 - ii. Vertebral or Spinal Canal
 - B. Ventral Body Cavity
 - i. Thoracic Cavity
 - a. Plural Cavities
 - c. Paracardial Cavity
 - Pericardium
 - ii. Abdominopelvic Cavity
 - a. Abdominal Cavity
 - Peritoneum
2. Membranes (p. 84)
 - A. Components
 - i. Epithelia
 - ii. Loose Connective Tissue

B. Mucous Membrane

- i. Goblet Cells
- ii. Function of Mucous
 - a. Protection from microorganisms
 - b. Maintain Clean Environment
 - c. Movement of Egg

C. Serous Membranes (serosa)

- i. Function of Mucous
 - b. Lubricant
- ii. Examples
 - a. Pleural Membranes
 - b. Pericardial Membrane
 - c. Peritoneal Membrane

C. Synovial Membranes - To be discussed at a later lecture

- i. Synovial Fluid

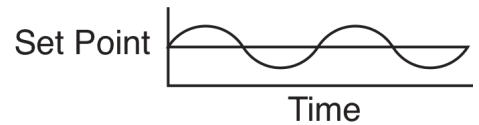
3. Organ Systems (pp. 80 - 81; see also, p. 85))

- A. Integumentary
- B. Skeletal
- C. Muscular
- D. Nervous
- E. Endocrine
- F. Cardiovascular
- G. Lymphatic
- H. Respiratory
- I. Digestive
- J. Urinary
- K. Reproductive

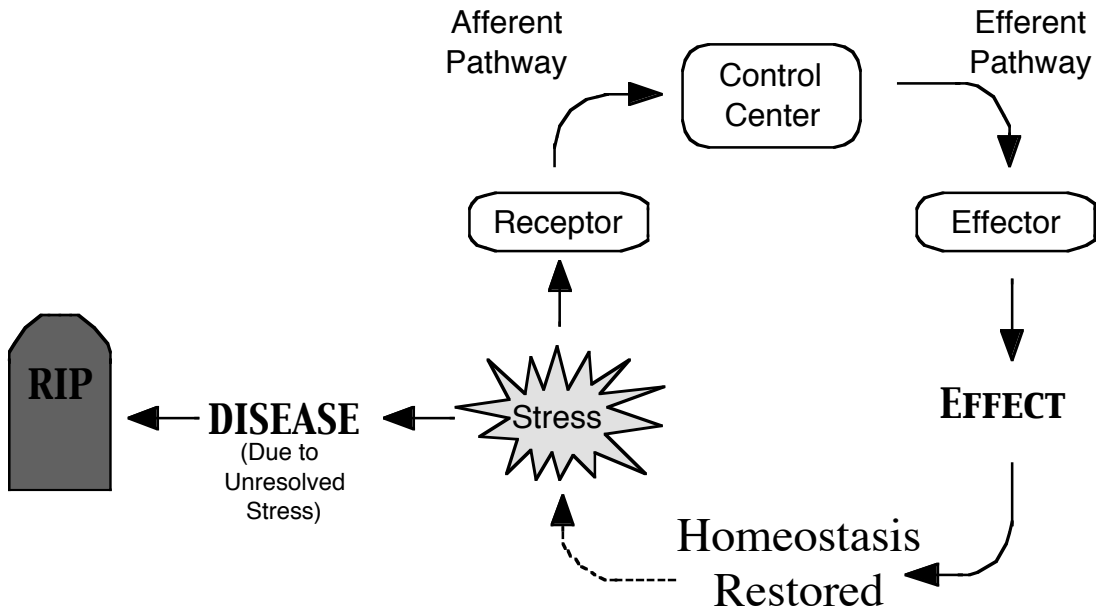
4. Stress and Homeostasis

A. Essential States of Health

- i. Homeostasis
- ii. Stress



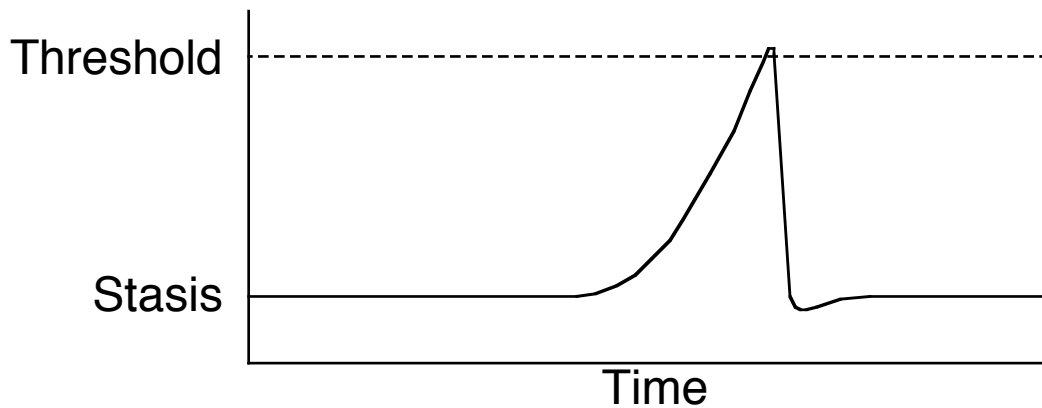
B. Basic Paradigm of a Negative Feedback Mechanism



iii. Examples

a. Temperature Regulation

C. Positive Feedback System



i. Oxytocin Example

5. Integumentary System

A. Functions of the Integument

B. Overview Structure of Skin

i. Epidermis

a. Stratified Squamous Epithelium

b. Keratinized

c. Melanin

d. Avascular

ii Dermis

a. Vascularized

- b. Sensory Reception
- c. Strong
- iii. Subcutaneous Layer
 - a. Insulation
 - b. Protection
- iv. Accessory Structures
 - a. Hair
 - Arrector Pili Muscles
 - Oil Glands
 - b. Nails
 - c. Skin Glands
 - Sebaceous Glands (Oil glands)
 - Sweat Glands