

Homeostasis and Homeostatic Systems

System model

- Set point
- System variable
- Input (sensory) mechanism
- Output (correctional) mechanism

Fluid Balance

- Water and tissue
- Intracellular versus extracellular fluid

Osmotic Thirst

- Water NaCl ratio
- “Osmoreceptors”

Volumetric Thirst

- Kidney functions
- ADH/Aldosterone
- Angiotensin and drinking

Body (core) temperature

- Optimal temperature
- Correctional mechanisms
 - heating
 - cooling
- Anterior hypothalamus
- Behavioral factors in regulation

Addiction and Dependence

- Tolerance
- Dependence
- Response systems
- Opponent Process Theory
- Associative Factors

Sex and Sexual Arousal

- Freud and excitation
- Deprivation and “drive”
- Comparison between species
- Internal factors
- External factors



Freud on “equilibrium” (constancy):

“The nervous system endeavors to keep constant something in its functional condition that may be described as the ‘sum of excitation’. It seeks to establish this necessary precondition of health by dealing with every sensible increase of excitation along associative lines or by discharging it by an appropriate motor reaction.”