Homeostasis and Feedback

Homeostasis
- Homeostasis refers to the dynamic constancy of the internal environment.
- What happens if there is no homeostasis?
- How is homeostasis controlled?

Feedback
- Feedback is a process in which the effect or output of an action is 'returned' (fed-back) to modify the next action.
- Feedback is essential in the management of all regulatory mechanisms.
- Examples?
Components of a Feedback Loop

1. Sensors (receptors) monitor the variable
2. Integrators compare the sensor information to the
3. Effectors cause an change (effect) on the variable

Negative Feedback

- Negative feedback is stabilizing; as a variable deviates from a setpoint, negative feedback ‘pushes’ it back towards the setpoint
- "The more product or result you have..."

In physiological systems, is the setpoint fixed? Hmmmm....
Another Example of Negative Feedback

Positive Feedback

- Destabilizes the system
- "The more you have...
- So what stops them?
Positive Feedback Loops

What are other examples of variables in the body controlled by positive feedback loops?