

Homeostasis and Wellness

Mrs. Kornelsen



Wellness

Wellness is not the same as health. Health generally refers to only the physical well-being of an individual, whereas, wellness refers to the multidimensional interrelationship between the physical, emotional, spiritual, intellectual, interpersonal or social and environmental aspects of life.

Types of Wellness

- With a partner, discuss what is involved with the following types of wellness:
 - Physical
 - Emotional
 - Spiritual
 - Intellectual
 - Social

In your journal...

- What is wellness?
- What is my current level of wellness or health?
- What things do people do to promote wellness?
- What other things could I do to improve my own health?
- How do my personal choices related to my own health, affect others around me (ex: family, community)



Homeostasis

- **Def'n** – equilibrium of an organism's internal environment that maintains conditions suitable for life.
- **Ex:** blood pressure, heart rate, body temperature, blood pH and blood glucose concentrations

Homeostasis

- Great interactive activity on homeostasis:
- <http://www.teachersdomain.org/resource/tdc02.sci.life.reg.bodycontrol/>

Homeostasis Examples

Receptor or sensor (detects the change)

Control center (triggers something to fix the change)

Effector (actually fixes the change)

- A driver trying to maintain his car at a 60 km/h. If his speed differs (the speedometer and the control center detect the change) from the set speed (set point), the driver (control center) uses his foot on the break pedal or the accelerator pedal (effectors) to reverse the change.
- Controlling the body temperature, the set point would be 37 degrees C and the control center would be the hypothalamus in the brain. The hypothalamus would detect changes in body temperature and send messages to effectors (glands that sweat and the muscles that shivers) to activate or deactivate.