

## Vocabulary: Human Homeostasis



### Vocabulary

- **Dehydration** – a state of not having enough water inside the body.
  - Failure to drink enough water can lead to dehydration.
  - Vomiting, diarrhea, or excessive activity on a hot day also can lead to loss of body fluids and eventually dehydration.
  - Severe dehydration can cause fainting and requires immediate medical attention.
- **Heat stroke** – serious medical condition caused by a very high body temperature.
  - Heat stroke usually occurs when body temperature is greater than 40 °C (104 °F).
  - Heat stroke often occurs when the body is dehydrated and is no longer able to produce sweat or when it is so humid outside that sweat does not evaporate.
  - Symptoms of heat stroke include skin that is hot and dry, headache, dizziness, vomiting, chills, and loss of consciousness. Death can result without immediate medical attention.
- **Homeostasis** – the maintenance of stable conditions inside the body in spite of changing external or internal conditions.
  - *Thermoregulation* (keeping a stable body temperature) is an example of homeostasis.
  - Other examples of homeostasis include keeping a constant level of oxygen in the blood, regulating blood sugar, and preventing the buildup of waste products in the body.
- **Hypothermia** – serious medical condition in which body temperature is abnormally low.
  - *Stage 1 hypothermia* occurs when body temperature is 35 °C–36 °C (95 °F–97 °F). Symptoms include shivering, goose bumps, and numb fingers and toes.
  - *Stage 2 hypothermia* occurs when body temperature is 33 °C–35 °C (91 °F–95 °F). Symptoms include violent shivering, pale skin, blue lips, and slow or awkward movements.
  - *Stage 3 hypothermia* occurs when body temperature is below 32 °C (90 °F). Shivering stops, and the victim will have difficulty speaking and thinking. The victim may feel sleepy and not be able to move very well. Death can result without immediate medical attention.
- **Involuntary** – something that occurs unconsciously, without thought or will.
  - Examples of involuntary processes include sweating and the digestion of food.
  - Some processes, such as breathing, can be both voluntary and involuntary.

- Thermoregulation – the maintenance of a stable body temperature.
  - The body can be warmed by shivering, exercising, adding clothing, or reducing the flow of blood to the skin.
  - The body can be cooled by sweating, removing clothing, or increasing the flow of blood to the skin.
- Voluntary – something that occurs consciously, with thought and will.
  - Examples of voluntary processes include walking, scratching your nose, and eating food.
  - Some processes, such as breathing, can be both voluntary and involuntary.

