

Water- The Medium of Life

We all know the importance of a well-balanced diet to our overall health and well being, but we sometimes forget the other critical element of sound nutrition - water.

The Functions of Water

Water is the medium for all body fluids, including the blood, the lymph, the digestive juices, urine and perspiration. Water balances acids, moves nutrients into the cells, and is a solution for holding electrolytes. Electrolytes are salts that allow the conveyance of electrical currents.

The body's need for water is second in importance only to its need for oxygen. An adult's body weight is approximately 55-65% water, with infants' body water as much as 70% of its weight. A 10% loss of body water poses significant health risks, and a 20% loss may result in death.

Water plays an essential role in the human energy system. During physical activity only 25% of the energy generated by the body is turned into mechanical work - the balance is actually turned into heat.

This heat must be removed by sweating to avoid dangerous increases in body temperature. During intense activity, the body can lose up to two liters of water as sweat! A marathon runner can actually lose 13 lbs. of body weight in the form of water during a race.

The more water we expend, the more water we need.

Dehydration

Dehydration due to water loss during activity can have a significant effect on the body's performance. Since the body's energy production takes place in a fluid environment, the blood, muscles and organs all need water balance to work effectively.



When water is drawn away from the working muscles, waste products build up, performance falters, and cramps occur. When blood volume is decreased the heart must pump harder to accomplish the same job. Without adequate water, the kidneys must work harder to remove wastes, and can even shut down.

Helpful Tips About Water

- ◆ Drink 8-10 8oz glasses of water daily. Drink more if physically active.
- ◆ Add fruits and vegetables that contain 80% or more water such as tomatoes, carrots, strawberries, pears, apples, and oranges. Such foods add to you total water intake.
- ◆ Start drinking before you feel thirsty because during activity the body loses water faster in sweat than it can absorb into the digestive system.
- ◆ Use water to cool your skin during activity.
- ◆ Wear light, loose, porous clothing in hot weather to help sweat evaporate.
- ◆ Weigh yourself before and after activity; replace the water you've lost with cool water.
- ◆ Thirst is not an accurate guide to your water needs. You'll quench your thirst long before you replenish your body supply.
- ◆ Weight loss does not occur by not replacing water lost during activity.
- ◆ Rubberized clothing doesn't promote weight loss: it just prevents sweat from evaporating.

