

Exercise and Hydration

Time to start working out and committing to healthy living?

Obesity is a growing epidemic in our nation. The CDC states that, "American society has become 'obesogenic,' characterized by environments that promote increased food intake, non-healthy foods, and physical inactivity. Policy and environmental change initiatives that make healthy choices in nutrition and physical activity available, affordable, and easy will likely prove most effective in combating obesity."

The Wellness Revolution includes making lifestyle changes including more physical activity and better nutrition. Hydration is a key ingredient to wellness and healthy living. Maintaining proper hydration before, during and after exercise is also a key ingredient to good health.



First, let's define what it means to be overweight or obese:

According to the Center for Disease Control, "Overweight and obesity are both labels for ranges of weight that are greater than what is generally considered healthy for a given height. The terms also identify ranges of weight that have been shown to increase the likelihood of certain

diseases and other health problems."

Definitions for Adults

For adults, overweight and obesity ranges are determined by using weight and height to calculate a number called the "body mass index" (BMI), which is used for most people because it correlates with body fat.

- An adult who has a

BMI between 25 and 29.9 is considered overweight.

- An adult who has a BMI of 30 or higher is considered obese.

Although BMI correlates with the amount of body fat, BMI does not directly measure body fat. As a result, some people, such as athletes, may have a BMI that classifies them as overweight even though they do not have excess body fat.

Hydration and Losing Weight

Maintaining proper hydration before, during and after exercise is a key element to losing weight. The human body is made up of roughly 70% water, and we lose electrolytes sodium, potassium, chloride and bicarbonate/citrate through sweat. It is essential to replace fluid and electrolytes, in order, to promote stamina throughout activity and a quick recovery. Individuals, who are overweight or obese, need

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to pay close attention to their hydration. Carrying extra weight places additional physiological demands on the body. It increases sweat rate, especially during physical activity. Proper hydration means replacing what has been lost in amount and composition. As sweat rate increases the amount of fluid and salts lost through sweat also increases, making the replacement of these nutrients very important to stamina, endurance and recovery.

Major Functions of Water in the Body

1. Transportation mechanism in the body for oxygen, nutrients, hormones, and other compounds
2. Regulation of body temperature, especially for physically active individuals
3. Dissolves electrolytes at normal levels
4. Essential for proper

functioning of the senses (vision, hearing, smell)

5. Serves to protect key body tissues such as the brain and spinal cord

Major Functions of Electrolytes in the Body

1. Sodium
 - Helps to maintain normal body-fluid balance
 - Essential in the control of normal blood pressure
 - Critical for muscle contraction and nerve impulse transmission
2. Potassium
 - Helps to maintain normal body-fluid balance
 - Critical for muscle contraction; including the heart
 - Critical for nerve impulse transmission
 - Helps transport glucose (fuel for activity) into muscle cells
3. Chloride
 - Works with sodium and potassium in the regulation of body-fluid balance
 - Critical for nerve impulse transmission
 - Involved with the formation of hydrochloric acid in the stomach

4. Bicarbonate (citrate can be used for bicarb)
 - Works with sodium and potassium in the regulation of body-fluid balance
 - Helps to neutralize acidosis

Stay Healthy, Stay Hydrated

If an individual does not stay hydrated, the consequences can be very dangerous, and even fatal. Cera Products' hydration drinks including CeraSport and CeraSport EX1, have been scientifically designed by the doctors at Johns Hopkins University to replace nutrients that are lost in sweat and help individuals stay hydrated. They also contain mixed-chain carbohydrates

that provide quick and sustained energy for physically active individuals yet not high sugar or calories.

CeraSport EX1 is especially good for people who are overweight or obese because it has half of the rice-based carbohydrate and nearly double the amount of electrolytes compared to CeraSport. Therefore, it has fewer calories per serving and more electrolytes. Both CeraSport and CeraSport EX1 are gluten-free and have no caffeine. ■

Resources:
<http://www.cdc.gov/obesity/index.html>
<http://www.nhlbi.nih.gov/guidelines/obesity/obgdlns.pdf>

Hydration Guidelines Before, During and After Physical Activity

Before physical activity:

- ▶ Consume 16 ounces of CeraSport or CeraSport EX1 1-1.5 hours before activity
- ▶ Consume 4-6 ounces of CeraSport or CeraSport EX1 10 minutes before activity

During physical activity:

- ▶ Start drinking early to prevent dehydration
- ▶ Always drink before you are thirsty
- ▶ By the time you are thirsty you may have already lost 1-2% of your body weight due to fluid lost in sweat
- ▶ Consume 4-8 ounces of CeraSport or CeraSport EX1 every 15-30 minutes of strenuous activity

After physical activity:

- ▶ Consume enough fluids to regain your body weight losses
- ▶ Urine is used as an indicator of hydration and should be pale yellow in color