

Daily Union Article
July 3 (4th) Edition
"The Heat Is On"

A child walks in from the back yard wobbling and complaining of a headache. They have an upset stomach and seem overly tired. The parent asks a few questions, but the child seems to struggle answering and gets irritated when asked again. What may these symptoms indicate? The answer is dehydration.

Although dehydration can occur during any season of the year, it becomes more prevalent during the summer months. People lose water from their body while breathing as well as from the sweat they generate in these warmer months. Physical activity and exertion common to summer activities accelerate the rate at which water is lost from the body.

Dehydration can be a very serious health issue that can also have very serious side effects. Serious in that it can lead to death if left untreated. Children and persons over the age of 60 are especially vulnerable for dehydration. Why are young children and older adults more susceptible to dehydration? First, young children may not be able to express when they are thirsty. They may, instead, say they are hungry or not be able to verbalize their need at all. Older adults often lose their sense of thirst and may not realize they need to be drinking more.

It is normal for the body to lose water daily through sweat, tears, breathing, urine, and stool. The water lost is replaced by drinking fluids and eating foods that contain water. When water loss becomes greater than the intake, dehydration occurs. Above average water loss can occur due to illness including fever, diarrhea, or vomiting. It can also be lost through overexposure to the sun, not drinking enough water, or excessive sweating from physical exertion. Some prescription medications, such as diuretics, can cause the body to excrete higher amounts of water than normal.

The child mentioned at the beginning of the article exhibited some of the classic symptoms of dehydration: irritation, headache, dizziness, fatigue, confusion (or inability to concentrate) and nausea. Additional symptoms include: thirst, less-frequent urination, dry skin, light-headedness, dry mouth, and increase heart rate and breathing. Children may show symptoms such as: no tears when crying; skin that stays raised up when pinched and released; sunken abdomen, eyes or cheeks; and for infants, no wet diapers for several hours.

Dehydration, when caught early, can be treated at home by simply rehydrating. Drinking water and eating foods high in liquid (such as grapes, apples, carrots, cucumbers) are two ways to bounce back from mild dehydration.

Cases of moderate dehydration will need immediate medical attention and may require intravenous fluids. Severe dehydration should be treated as a medical emergency that will likely lead to hospitalization. A 20% loss of water is life-threatening but even mild dehydration over time has been found to have serious health outcomes. *“Mild dehydration has been linked with increased cancer risk, reduced salivary gland function, kidney stones, and even fatal heart attacks.”* Source: Clemson Cooperative Extension publication HGIC 4151 ‘Fluid Needs’.

Age, gender, weight, and weather all impact the exact amount of water an individual needs. It’s important to know how much water the body needs daily.

As a general rule, the adult human body needs 8 – 12 cups of water a day to replace the normal loss it experiences in a 24 hour period. This is the same as 2 quarts (8 c.) to 3 quarts (12 c.) each day. A high fiber diet requires even greater amounts of fluid to help process the additional roughage.

Other factors, such as exercise, environment, health condition, and pregnancy or lactation can all contribute to a body’s vulnerability for dehydration.

Exercise: As little as a 2% loss of body water has been found to reduce muscular strength and endurance as well as demonstrated compromised cognitive functioning. Running, playing ball, or swimming are among the many activities that can make the body sweat. Sweat is the body’s way of cooling off, but it requires that enough water be in the body for that purpose. Drink water before, during, and after exercise to reduce the risk of dehydration.

Environment: If the weather is hot or humid, additional water is needed to replace what is lost during sweating. In the winter months, the dry air created by heated air reduces that amount of fluid in the body. Recirculated air on planes and high altitudes are two other environmental conditions that require the body to consume more water.

Health Condition or Illness: Vomiting, fever, and diarrhea all drain the body of its needed fluid. Sometimes fluids won’t stay in the body long enough to meet the needs of the various systems. In these situations, intravenous water and electrolytes may need administered.

Pregnant and Lactating: Women who are pregnant or lactating need a higher amount of water intake than other adult women. The Institute of Medicine recommends that

pregnant women drink 10 cups of fluids daily while lactating mothers need 13 cups of fluids daily.

Although there are other liquids that will help the body maintain a healthy fluid balance, water is the most effective in keeping the body hydrated. Other good choices include drinks that have nutritional value such as milk, vegetable and fruit juices, or fortified soymilk.

Knowing how much water to drink daily is the first step in reducing the risk of dehydration. The second step is to drink water throughout the day. Don't wait to be thirsty. Thirst is an indication of mild dehydration. To avoid this, keep a bottle of water with you at work and at home.

For more information about nutrition and wellness, contact me at the Geary County Extension office 785-238-4161. Until next time, keep living resourcefully!