

### “The Dangers of Dehydration”

Every day, an average adult loses more than 10 cups of water simply by sweating, breathing and eliminating waste, according to the Mayo Clinic. During the hot summer months, this amount can easily increase. If a person does not compensate by replenishing his/her water supply, a potentially life-threatening condition can occur – dehydration. While mild dehydration can be easily treated and prevented, severe dehydration can be much more complicated.

“Dehydration occurs when your body does not have enough water and electrolytes to carry out its normal functions and maintain a balance of fluids,” says Joel Feder, President of the Kansas Association of Osteopathic Medicine, and an osteopathic physician from Overland Park, Kansas, “Without enough water, the body literally dries out.”

Diarrhea, vomiting, fever, excessive sweating, increased urination and burns all cause dehydration. “Because diarrhea is one of the most common childhood illnesses, infants and children are especially at risk for developing dehydration and therefore must be monitored closely when they are sick,” warns Dr. Feder. In addition to infants and children, older adults, people with chronic illnesses, endurance athletes, and people living at high altitudes are also at a greater risk of developing dehydration.

According to Dr. Feder, symptoms of dehydration include:

- **Mild Dehydration:** Thirst, dry lips, dry mouth, flushed skin, fatigue, irritability, headache, darker urine, decreased urine output, muscle weakness
- **Moderate Dehydration:** All of the signs of mild dehydration, plus: skin doesn't bounce back quickly when pressed, very dry mouth, sunken eyes, (in infant - sunken fontanel, the soft spot on the head), limited, very dark urine, cramps, stiff and/or painful joints, severe irritability, severe headache, few or no tears when crying

- **Severe Dehydration:** All of the signs of mild and moderate dehydration, plus: blue lips, blotchy skin, confusion, lethargy, lack of sweating, cold hands and feet, rapid breathing, rapid and weak pulse, low blood pressure, dizziness, fainting, high fever, little or no urination

The only effective treatment for dehydration is to replace lost fluids. The best approach to dehydration treatment depends on age, the severity of dehydration and its cause. "Most adults with mild to moderate dehydration from diarrhea, vomiting or fever can improve their condition by drinking more water," says Dr. Feder. It is best to avoid coffee, tea and other beverages that contain caffeine, as they may temporarily increase dehydration. Fruit juices and sodas can make diarrhea worse.

When treating a sick child with diarrhea, vomiting, or fever, it is best to consult with your doctor directly, but a general guideline is to give them an oral rehydration solution, such as Pedialyte. "These solutions contain water and salts in specific proportions to replenish both fluids and electrolytes," says Dr. Feder.

If dehydration is severe, seek emergency treatment, for children and adults.

According to Dr. Feder, the best way to prevent dehydration is to drink regular amounts of fluid throughout the day. "If you try to drink a large amount of water all at once, your kidneys will simply flush the excess fluid by sending you to the bathroom," he says. You need to drink additional water during hot and humid weather to help lower your body temperature and to replace what you lose through sweating. In addition, while exercising, you should drink liquids during and after the activity.

Preventive medicine is just one aspect of care osteopathic physicians (D.O.s) provide. Osteopathic physicians are fully licensed to prescribe medicine and practice in all specialty areas including surgery. D.O.s are trained to consider the health of the whole person and use their hands to help diagnose and treat their patients.