

News Release From:
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Beat the Heat when Exercising

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We all know that when it comes to strength – to do the activities of daily life or to work out as an athlete – if we don't use it, we lose it. But how do we keep up with that movement during the hot days of summer AND avoid illness due to the heat? The first step is understanding how excess heat can cause problems and how to beat the heat when exercising.

According to Dr. Steve Ball, Associate Professor of Nutrition and Exercise Physiology at University of Missouri, “during exercise body temperature begins to rise as it converts the chemical energy from food into the mechanical energy necessary for movement.” The key is to keep up with the fluid loss associated with exercise before, during and after activity.

The human body is designed to cool itself. When a person exercises, perspiration forms on the skin. This surface liquid then evaporates, cooling the skin, which cools the blood circulating past it, and subsequently cools the body. Adequate water in the cells is needed for this to work efficiently. When the air temperature is high, a person perspires profusely, losing a lot of water. If that person does not replenish the body's fluids, dehydration can occur which raises the body's temperature even higher, and the body cannot cool itself and illness can occur.

There are three progressive stages to heat illness: heat cramps, heat exhaustion and heat stroke. Heat cramps occur when muscles cramp during or after exercising. Rubbing down the muscles and replenishing fluids can alleviate them. Heat exhaustion is more serious and involves excessive sweating, cold clammy skin, dizziness, change in pulse, shallow breathing, nausea, and/or headaches. When this happens, stop exercising, find a cooler place in the shade or air conditioned room, and drink lots of fluids. Medical attention may be needed if severe enough. Heat stroke is the most severe stage of heat illness and is a medical emergency. The body's natural cooling system shuts down and the body no longer perspires. Without this, the pulse becomes rapid, breathing is difficult and body temperature may rise to 106°F. Cool the person down immediately with whatever it takes – ice packs, a cold bath or hose them down.

Prevent heat illness by choosing a cooler time or place to exercise and drink lots of fluids.

For more information, ask for Exercising in the Heat GH1900 when you contact me Janet Hackert, Regional Nutrition Specialist, at 660-425-6434 or HackertJ@missouri.edu or contact your local MU Extension office. You can also go to our web site at <http://extension.missouri.edu> to download this guide.