←Drink up

Beat the Heat

Managing the challenges of the summer months

STORY BY SHERRY BALLOU HANSON

A COOL BREEZE MAY AWAIT on a distant mountain top, but several hours of midsummer heat and sun exposure separate you from the summit. So how can you prepare for and complete your trip safely? Simple: Have a plan—and follow it.

"Many people get into trouble because they deviate from their reasonable plan by taking an alternate route, traveling faster or farther than expected, or by attempting more than they have prepared for," says Dr. Scott Pyne of the United States Navy, who works with soldiers and endurance athletes.

PREPARATION Always take heat and humidity into consideration when planning backpacking trips, bike rides, or paddling trips during warm-weather months. Preparation—and prevention—start long before your trip. Begin to transition to hot weather activity by adjusting the duration or the intensity of your workouts. If maintaining your normal pace, then cover less distance. If going a longer distance, then take it more slowly. "Heat acclimatization requires a gradual increase in the intensity and duration of activity during the initial 8 to 14 days of heat exposure," advises Lawrence E. Armstrong, Ph.D., a professor of environmental and exercise physiology at the University of Connecticut Human Performance Laboratory and a member of AMC's Connecticut Chapter.

EXECUTION "People set unrealistic goals and ignore their body's signals to slow down and often get themselves into trouble," says Pyne. Unless you maintain adequate fluid levels to perspire, evaporation won't occur and body temperature will rise. This can happen suddenly: One minute you may feel fine, but the next you're dizzy and weak, maybe experiencing muscle cramping.

If this happens, stop your activity, get out of the sun, and drink fluids. You are probably suffering from heat exhaustion. If sweating has stopped and you are feeling disoriented, stop exercising and signal for help, dowsing yourself with cool water if possible. This could be heat exhaustion or the beginning of exertional heat stroke (EHS), a dangerous medical condition that can be fatal if untreated. Heat exhaustion will generally resolve with oral fluid replacement, rest, and treatment of symptoms.

Armstrong offers these additional cautions for people about to exert themselves in the heat:

- Take frequent rest breaks to rehydrate and to cool down, no matter how well conditioned you are.
- Use the buddy system, checking each other every 30 minutes for signs of confusion, loss of mental clarity, mood disturbance, or combative behavior. Don't charge ahead of the pack or leave someone straggling behind.
- Someone knowledgeable about heat exhaustion, heat syncope (fainting), and heat stroke should be along on particularly challenging adventures.
- Know who to contact for medical evacuation, should you get in trouble.

HYDRATION Dehydration is the biggest concern when you exert yourself in the heat. You need to carry fluids with you and secure them en route for a long journey. The American College of Sports Medicine (ACSM) recommends 10 ounces of water or sports drink 10 to 20 minutes before you start your activity and six to eight 8-ounce glasses of water during the day. Properly formulated sports drinks with 6 percent or more carbohydrate concentration are absorbed faster into the body than water, and contain electrolytes like potassium and sodium that replace those lost during your activity. Drink before you feel thirsty; if you're taking in enough fluid, your urine should be running clear. Remember you need more than water on long outings to avoid hyponatremia, an excess loss of sodium in the blood.

PROTECTION Taking simple steps to dress appropriately can also have a big impact. Wear light colors to reflect heat away from your body, and porous materials to maximize evaporative and convective heat loss from the skin. Don a hat and use sunblock on exposed skin; an SPF (Sun Protection Factor) of 15 is OK, but 30 is stronger and lasts longer. When you plan to be out for an extended period, apply sunscreen 30 minutes before going outside, and then reapply throughout the day.

→DID YOU KNOW?
Ultraviolet radiation **increases with elevation,** rising 4 percent per 1,000 feet in altitude.

COMPLICATING FACTORS Be aware that older people are more at risk for heat-related illness because the body's ability to handle hot weather declines with age. Health problems like high blood pressure, heart or lung conditions, and diabetes also increase risk, as does air pollution. Certain medications can interfere with a person's ability to stay hydrated adequately. Check with your doctor if this applies to you. ●