Gazelle Sports

The Dangers of Heat and Humidity

When heat and humidity combine to reduce the amount of evaporation of sweat from the body, outdoor exercise becomes dangerous even for those in good shape. Key rules for coping with heat are to drink plenty of water to avoid dehydration and to slow down and cool off when feeling fatigued, a headache, a high pulse rate or shallow breathing. Overheating can cause serious, even life-threatening conditions such as heat stroke. The apparent temperature, which combines the temperature and relative humidity, is a guide to the danger. Below is the heat stress index based on the apparent temperature.

Apparent temperature heat stress index

Category	Apparent temperature	Dangers
Extreme danger	Greater than 130	Heat stroke imminent
Danger	105 - 130	Heat exhaustion likely
Extreme caution	90 - 105	Heat cramps, exhaustion possible
Caution	80 - 90	Exercise more fatiguing than usual

Effects of Heat Illnesses:

- Heat cramps: Exercising in hot weather can lead to muscle cramps, especially in the legs, because of brief imbalances in body salts. Cramps become less frequent as a person becomes used to the heat.
- Heat syncope or fainting: Anyone not used to exercising in the heat can experience a quick drop in blood pressure that can lead to fainting. The cure is to take it easy.
- Heat exhaustion: Losing fluid and salt through perspiration or replacing them in an imbalanced way can lead to dizziness and weakness. Body temperature might rise, but not above 102 degrees. In some cases victims, especially elderly, should be hospitalized. Heat exhaustion is more likely after a few days of a heat wave than when one is just beginning. The best defense is to take it easy and drink plenty of water. Don't take salt tablets without consulting a physician.
- Heatstroke: In some cases extreme heat can upset the body's thermostat, causing body temperature to rise to 105 degrees or higher. Symptoms are lethargy, confusion and unconsciousness. Even a suspicion that someone might be suffering from heatstroke requires immediate medical aid. Heatstroke can kill.