

Protecting Yourself Against Heat Stress Disorders

Summer is coming, the weather is getting hot, and we're all looking forward to barbecuing and relaxing by the pool (or at least a garden hose!).



When the weather gets hot, there are some important things to remember to protect yourself against heat stress disorders.

The first and perhaps most easily controllable factor is hydration. You should be careful to consume a well-balanced diet, avoid alcoholic and caffeinated beverages in the day before the heat exposure, and drink fluids as much and as frequently as possible. If you're thirsty, it's too late; your body is already becoming dehydrated. Hydration should continue after work as well. For most cases, water is sufficient. When the going gets tough, think about supplementing water with electrolyte-replacing sports drinks or food, like bananas and cantaloupes. Electrolytes are minerals, like sodium, chlorine, calcium, and potassium, which the body needs to function normally.

Clothing helps to strike a balance between shading the skin and aiding in the evaporation of sweat. Properly chosen clothing will prevent heat in the air from hitting the skin but should not interfere with the evaporation of sweat. When possible, choose light-colored, breathable clothing, like cotton. When outside, wear a hat with a brim to keep the sun off your head and face.

Allowing your body to adjust to the surrounding environment helps it to better deal with the heat. If at all possible, allow a few days for your body to get used to the hot environment.

Try to schedule outdoor activities during cooler parts of the day, like the early morning or evening. When possible, use a cooling fan or other cooling device, like a cooling vest.

Some factors, like body size and health, are uncontrollable. Larger people require more energy to do a task. When you're sick, your internal temperature is higher in order to combat the illness. This means the same amount of work will be done at a higher, more dangerous internal temperature. In addition, any illness or disease that affects cardiovascular or kidney functions, or your hydration state (e.g. diarrhea) may impact the amount of heat you can tolerate. Individuals with high blood pressure or who take diuretics (water pills) may be more susceptible to heat exposure.

So now that you know some of the things you can do to prevent heat stress disorders, let's look at some signs of disorders.

Heat rash- Also known as prickly heat. This is when sweat glands become clogged and often become infected. Often caused by tight clothing that prevents sweat from evaporating. Loose cotton clothing, cool baths, and over-the-counter lotions may ease the pain and itching. If large areas of the skin are affected, medical attention may be required.

Heat cramps- Results from a loss of water and salt. Produces pains in the legs and heavy sweating. Occurs in people who are not acclimatized to their environment.

Heat exhaustion- Results from a loss of water and low blood flow to the brain. Symptoms are clammy skin, headaches, nausea, excessive sweating. In the event of heat exhaustion, rest in a cool area and drink an electrolyte-replacing solution, like a sports drink. In the event that someone has vomited or fainted, seek medical attention.

Heat stroke- The most serious heat strain disorder, heat stroke happens when the body's heat regulating mechanisms shut down. Symptoms include red skin, core body temperature of 104°F, lack of sweat production, and mental confusion.



So, what can you do to protect yourself? Drink plenty of water, avoid alcohol, eat a balanced diet, dress appropriately, and acclimatize yourself to the surrounding environment as much as you can. Have a happy and safe summer!

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