

IMPORTANCE OF WATER TO THE SERIOUS ATHLETES

Water makes up more than 60% of the human body. It is a very basic but important nutrient for normal bodily functions. Particularly, a sportsman's body needs to be functioning optimally. As such, the sportsman should be well hydrated to enhance performance.

FUNCTIONS

Below are some of the main functions of Water:

TRANSPORTATION

Water transports body wastes produced from respiration

During exercises, the body uses muscles. Residue waste products are produced and the body has to get rid of them. Good clean water helps us to do so. Without enough water, we will not be able to get rid of these waste products, which may inhibit activities and even be harmful if remained in the body.

Water transports body wastes from digestion

Together with fibre in the diet, water moves food substances through the digestive system. Increasing water intake along with plenty of fibre-rich foods will maintain an efficient digestive system and help to prevent constipation.

Water helps to transport disease- fighting cells through the bloodstream

Water increases our body's resistance to stress. It thins the blood and fights fatigue.

Water helps to transport oxygen carrying red-blood cells through the bloodstream

Red blood cells are transported round the body through the bloodstream. With a well-hydrated body and its subsequent thinner blood, oxygen can transported efficiently round the body.

THERMAL REGULATION

Water keeps our body temperature stable

Water helps to keep our core body temperature from rising to dangerous levels by playing an important role in the cooling process. When we exercise, our body heats up very quickly. To get rid of most of this heat, our body starts sweating. As the sweat evaporates, our blood and body cools. However, if the fluids and salts lost through sweat are not replaced, the body becomes dehydrated and can no longer cool itself. As a result, our performance drops and we can be at risk for dangerous heat-related illnesses such as heat exhaustion and heat stroke.

PROTECTION

Water forms a part of cells, which lubricates our body joints

It serves as a lubricant that surrounds the joints and allows them to move smoothly and painlessly.

ENERGY PRODUCTION

Water is needed for respiration

Our body gets energy through the process of respiration. When we respire, carbon dioxide and water are given off as waste products. So we need to replace this loss of water constantly to prevent dehydration.

CONSEQUENCES

What happens when our body is dehydrated?

A mere 2% drop in body water can trigger short-term memory, trouble with basic math, and difficulty focusing on the computer screen or on a printed page.

When we become dehydrated, our blood volume decreases and less blood is pumped with each heartbeat. This will cause our heart to beat faster, leading to inefficiency as more effort is required to circulate the same amount of blood.

The body knows what is best for it and when fluid levels get below a certain amount, the body protests by slowing down in hopes of lowering the stress that is leading to the loss of fluid (this is when you feel giddy or having blur vision). If fluid levels get low enough, the body will just about stop functioning and we will pass out (lowering functions to a very low level in hopes of continuing on a little longer).

TIPS

How much water does our body need?

Thirst is not a good indicator of our fluid needs. If we wait till we are thirsty to replenish our fluids, we are already dehydrated. So we must constantly drink as much water as possible. To enhance water retention in the body, include isotonic drinks or fruit juices instead of drinking solely plain water. The urine should be colourless.

Normal people: 8 - 10 cups (2 litres) per day

Sports people: 4 - 8 litres per day (depending on various factors)

During exercising: 1 cup every 15 minutes

SPECIAL ADVICE FOR ATHLETES

Several days before an event, competitive athletes should 'hyper-hydrate'. Hyper-hydration is the process of drinking plenty of water for two to three days before an athletic event. The body is about 60 percent water and it needs to be fully hydrated to perform optimally. **In fact, sensible athletes should have a well-hydrated system not only prior to competitions, but at all times. The body will then be able to stay healthy and reap the benefits of the efforts put into the daily training.**

In Singapore, where the temperature and humidity outside is especially high, the body requires even more water because it must work harder to cool itself.

From - <http://msn.foxsports.com/name/public/tourdeFrance>

Lance Armstrong suffered from dehydration in 2003 - a problem he is taking care to avoid again this year (2005). Hot weather is forecast to continue Saturday.

"I'm more aware that of this idea that dehydration starts days out. You can't get on your bike in the morning and say 'OK, I'm going to drink a bunch of water,'" Armstrong said, taking sips from a bottle during a press conference. "I knew the Pyrenees were forecast to be extremely hot, so I tried to get ahead of it two or three days ago.

"Everybody's performance suffers in the heat," Armstrong added. "But some riders, of course, handle it better than others."