

## **WATER -- Too little or too much?**

Most people, especially athletes, are familiar with dehydration; the lack of enough water and electrolytes (salts) in the body. Few people understand or recognize another problem-- hyponatraemia; too much water in the body. Let's look at dehydration first.

*What causes dehydration? Who is at risk?*

Our bodies are 70% water; therefore dehydration can lead to very serious illnesses and even death. Children, can die from dehydration within a matter of days. Dehydration is the lack of enough water. This can be caused by simply not drinking enough or not drinking enough coupled with extreme hot weather or an increase in exercise that overheats the body. Dehydration in the extreme can cause the body to overheat leading to heat exhaustion or worse heat stroke. Untreated dehydration can lead to a stroke and death.

Other causes of dehydration are; illness (vomiting, diarrhea) several digestive problems, too much alcohol, coffee, and some medications.

Dehydrations ranges from mild to severe as do the symptoms. Mild symptoms could be lack of energy, dry mouth slight dizziness. Advance symptoms can include; dizziness, dark urine, dry mouth, flatness of the skin (when pinched it stays flat, does not rebound like normal) weakness, disorientation, confusion, fainting, nausea and vomiting.

Prevention of dehydration is the best treatment. Drink plenty of water regularly and if you know you will be involved in an activity that could cause dehydration prepare in advance by drinking extra water. If you believe you or someone else to be dehydrated seek medical attention immediately.

*Too much water can kill.*

Unfortunately, too much water in the body is as bad for you as too little. Too much water dilutes the blood salts thereby reducing the electrolytes in the body just as dehydration does. However the results are very different from dehydration. Too much water dilutes the blood so the water moves into the cells and causes them to swell; this is very dangerous in the brain because there is very little room for expansion. Consequently, the symptoms and illness of too much water are those of brain dysfunction: bizarre behavior, ultimately seizures, coma and death. Again this is the case with extreme hyponatraemia.

The individual typically at risk of hyponatraemia is the athlete. However, everyone should be aware of the symptoms as to avoid the dangers.

When preparing for an event where you are concerned about dehydration; be sure not to over drink. Over drinking is the most common reason for hyponatraemia; however water retention caused by your body not eliminating the water as it normally does can happen without any exact reason. One sign you should watch for is the lack of need to urinate. Additional signs that are most common are bloating, puffiness at ankles, headache and shinning or tight skin. The main treatment for hyponatraemia, if you notice these signs, is to stop drinking until you urinate the excess. Of course, prevention should always be the first treatment.

There is wisdom in the teaching, “too much of even a good thing is not good for you.” Drink wisely and appropriately.