

Drinking too much water can become dangerous

Marathon running can lead to dehydration especially during hot environmental conditions as a result of fluid loss through sweat which can be as much as eight to ten litres during ultra-marathons. Runners often consume too much water especially in a long distance event like the Comrades marathon in the fear of becoming dehydrated. Severe overhydration is also known as water intoxication, where the very thing we rely on for life can actually become toxic and dangerous to your health. When water is absorbed into the bloodstream from the digestive tract, electrolytes in the blood are diluted, especially sodium (salt) which you are already losing through sweating.

The condition where blood sodium levels become dangerously diluted is known as hyponatremia. Exercise-associated hyponatremia is not a rampant problem, but it's far more common than symptoms of dehydration particularly amongst the slower back-markers in endurance events. The concentration of sodium in the blood plasma depends on the total amount of sodium and water in the circulatory system. Water moves from the bloodstream into the cells by a process known as osmosis, when one is dehydrated, this shift will correct any water deficit. However, if you drink water when already well hydrated, this shift can lead to cellular swelling, including swelling of the brain (hyponatremia encephalopathy). This in turn can lead to headaches, dizziness, stomach problems and nausea. In worst case scenarios, hyponatremia can result in seizures or one can go into a coma and even death. Studies show that about 30 percent of marathon runners experience mild hyponatremia during a race. Fortunately, your kidneys normally filter out excess water and it is eliminated by urinating. However, if you drink large quantities of water in a relatively short amount of time, like guzzling down a litre of water at every water table during a marathon, the kidneys reach a point where they can no longer filter out so much water quickly enough to prevent cellular swelling.

Despite all these overwhelming stats about the harmful effects of hyponatremia, it is still just as important to stay hydrated during physical activity. Research has shown that drinking based on your thirst is the best guideline; thirst will actually protect you from the hazards of both over and under drinking by providing essential feedback on your internal fluid balance. Drink small amounts of fluids regularly during a long event to prevent dehydration but do not follow a strict protocol for drinking fluids and end up over drinking. If you are not thirsty, you should not feel compelled to drink at every water table in a race.

The Mazda Athletic Club half marathon & 10 km race will take place this coming Saturday at the Ford Sport and Recreation Centre in Watloo, Silverton. The start time for the event is 6:30 am and wheelchair athletes are welcome to enter for the fun run.