

As marathon season gets underway, it's always good to be reminded of the danger of hyponatremia. Hyponatremia is a dilution or lowering of the sodium in blood most commonly from the over consumption of fluid to such an extent that the amount of water taken in exceeds that lost by the body.

This most famously occurs in foot races lasting over 4 hours in which runners actually gain (instead of lose) weight by the large amounts of salt free water they consume at the water stations. Yes, salt (sodium chloride) in the fluids you drink helps to slightly prevent this condition. However, a balanced approach to the consumption of fluids in a race is the most important issue to prevent hyponatremia from fluid overload and also prevent excessive fluid loss or dehydration.

- Please continue to drink water and salt your food. Preferably, drink an accepted electrolyte replacement drink during all your training runs to see what feels best for you. A single Dixie cup (less than 200cc) of fluid replacement every 15–20 minutes will be unlikely to cause excessive fluid intake.
- Determine how much fluid you need by weighing yourself immediately before and after exercise. Weight gain from fluid consumption is not advised. Find a fluid intake balance that will prevent more than 1 percent loss in body weight (less than 1.5 pounds in a 150 pound person) without the actual weight gain. Note that saltier fluids will lead to more water retained and less need for fluid consumption. Try to stay with commercially available electrolyte replacement drinks. Homemade concoctions should be closely supervised by a healthcare professional.
- Do not allow yourself to start a race dehydrated. You will need a pint (1/2 quart) of fluid to replace losses during sleep. A pinch (less than a ¼ teaspoon) of salt in the morning drink or the consumption of pretzels may be something to try before your training runs.
- **Most importantly**, be sure a physician who understands the medical issues of people who exercise and run long distances has adequately examined you. For example, high salt consumption is not a good idea with high blood pressure. Regardless of fluid replacement drinks, your mind and body will need to be in excellent overall health to participate in endurance exercise and sport.

—*Dr. Terry Nicola, Director of Sports Medicine and Rehabilitation at the Department of Orthopedics at the University of Illinois*