



Salt

by Alexis Williams, RD

—A Runner's Friend or Foe?



It has been referred to as “white death” by the media, the health industry is constantly publishing new research on its negative effects and nutrition lobbyists are urging the food production sector to find alternatives. It's not a narcotic; it's sodium, or, in its most common form, salt. Behind this uprising is the fact that North Americans are eating more sodium than ever before, and many don't even realize it. The consequences of excessive intake are undisputable with clear links established to heart disease, kidney disease and high blood pressure. The current guidance for the general population is to limit sodium intake to less than 2400 mg per day, but many experts speculate the average person gets three to four times this amount each day.

Where does all the sodium come from?

While many profess to have a low sodium diet because they don't add salt to their food, they are often surprised when they look closer. Salt added while cooking represents about 5% of our total intake and salt added at the table is about 6%. The real culprit lies in your boxes, cans and take-out containers, which contribute over 70%. To monitor your intake, be sure to read labels and research fast foods online to understand just how much sodium is in your food. Keep track of your own intake for three days to understand your patterns. While some sodium is difficult to eliminate, such as the naturally occurring sodium in dairy products, there are other sources that can be controlled. Here are some of the most significant sources of sodium in our diets:

Canned soups (can be as much as 1000 mg per serving)—look for those with 500 mg or less per serving.

Canned tomato products, such as pasta sauce, tomato and vegetable juice (look for low sodium types).

Fast foods (even the healthy salads with chicken soaked in salt brine and sodium laden dressings).

Condiments (salad dressings, sauces, marinades, spice blends)—look for spice blends with no added sodium that use more herbs.

Packaged crackers, chips and many breakfast cereals.

So what does this mean for runners and other athletes?

Runners sweat, some more than others, and the amount of sodium in one person's sweat can vary substantially. This makes establishing sodium guidelines for athletes virtually impossible. For example, in a study of soccer players practicing for 90 minutes, salt losses from sweat varied from under 2 g to as much as 10 g! Factors that influence sweat sodium losses include the total amount of sweat (fluid) lost, duration of the workout, weather conditions and also the individual's regulatory processes. Heavy sweat losses during activity have been thought to lead to muscle cramping (although the evidence for this is poor) as well as the condition hyponatremia (low blood sodium), a fatal condition that

normally results from excessive water drinking but can be exacerbated by heavy sodium losses in sweat.

You can detect if you're a “salty sweater” by whether you get white streaks on your clothing, have a lot of grainy residue on your skin after training or simply sweat large volumes. Ultimately, if you lose a lot of fluid during your training sessions, you are likely losing more sodium than someone who sweats very little. Measuring your body weight before and after training can help you understand how much fluid you are losing. Unfortunately, this won't tell you the exact amount of sodium you're losing in your sweat. If you want to know more accurately, you can even have your sweat sodium level tested through a university lab or through www.medioncorp.com. Knowing this information will allow you to adjust your sodium intake to compensate your workouts.

So do I need more sodium?

If you are training for 30 to 60 minutes several times per week, then you should follow the guidelines for the general population and limit your sodium intake to 2400 mg (unless you have been advised otherwise by a health care professional). However, if you do half or full marathon training, train in a hot/humid environment or train at higher volumes for shorter distances, then consider being less restrictive with your sodium intake the day before, day of and possibly the day after longer runs, especially in the hotter months. I have noticed many health conscious endurance athletes avoid salt like the plague and eat very few high sodium foods. If you fall into the latter scenario, then you may need to add salt to your diet during heavy training periods. If you have been advised to limit your sodium intake because of a health condition, then follow the advice of your provider.

What about sodium in sports foods?

Taking in sodium during long workouts is important for many athletes. Sodium is the main electrolyte in sweat and therefore needs replacement. Many sport drinks and gels contain limited amounts of sodium, so it's often necessary to consume additional electrolytes in the form of capsules and higher electrolyte drink mixes (such as those providing more than 600 mg per litre when properly diluted). Experimenting with these products is key to find an amount that fits for you. Remember that you don't necessarily need to load up on sodium all of the time, just surrounding your heavy endurance activities.

If sodium intake or sodium loss is an issue for you, consider meeting with a registered dietitian specializing in sports nutrition who can help you customize your own sodium strategy. Visit www.dietitians.ca to learn how to find a dietitian in your area. ❖

About Alexis

Alexis Williams is a registered dietitian and personal trainer in Burlington, Ontario. She is an avid runner and will race Ironman Louisville 2009. Visit her website www.transitionhealth.ca for more information or to contact Alexis for nutrition coaching services.

