

# Electrolytes

Your body conserves electrolytes, no need to replace them directly after a workout.



By Dan Young



## ELECTROLYTES

In my view, electrolytes are one of the most critical nutritional components related to exercise, yet the one least understood by the sports enthusiast. It's no wonder sports drink manufacturers have foisted upon the fitness world so much misinformation over the last three to four decades. Most average workout warriors think that Sodium replacement is most important during and after exercise.

Potassium, Sodium and Chloride are the three main electrolytes in the human body and in that order. They perform a multitude of functions without which the whole electrochemical machine of man would stop working in a nanosecond. Replacing the correct ratios immediately after and during a workout can mean the difference between succeeding or bombing.

## SODIUM

The main "Cation" are (Positively Charged Electrolyte) outside the cells. It is everywhere in food and in the body. The problem is, over the last 50 years, it has become much more prevalent in the foods we eat than nature would provide normally. Yes it is true, your body is a salty bag of water and when you sweat it tastes salty; however sweat contains far more water than Sodium. You don't need to be supplementing with Sodium during or after exercise; on the contrary your body is on electrolyte overload because your body conserves its electrolytes. Consume no more than 1.2 - 2 grams a day.

## POTASSIUM

The main "Cation" (Positively Charged Electrolyte) are inside the cells. It interacts with Sodium and Chloride in conduction of nerve impulses and a host of other essential functions. The ratio of Potassium to Sodium in the body reflects our evolution. We have evolved on a high Potassium to low Sodium diet. Most fresh foods are built that way. Example, seafood, even though it is grown in a environment where the ratio of Potassium to Sodium is 1:24, is still a high Potassium/low Sodium food. Fresh tuna for instance is 100 parts potassium to 20 parts Sodium but canned tuna is 100 parts Potassium to 330 parts Sodium!

Processing reverses the ratios and screws with your ratios. Overall, the average ratio of Potassium to Sodium in fresh foods is about 1:7. In the American diet, that ratio is reversed to about 2:1. The average intake of Potassium for athletes can be up to 5 grams per day.

## CHLORIDE

Chloride is the main Anion (negatively charged Electrolyte) outside your cells. It works with the two main Cations, Sodium and Potassium to control fluids and electrolyte balance.

Because we consume too much salt we also consume too much Chloride. If you eat a low Sodium diet you will naturally consume less Chloride.

## TIPS

- If you like the salty taste in foods, never add salt, but look instead for salt substitutes like Morton's Light Salt which is made from Potassium.
- When you workout, always recover and rehydrate first with water and carbohydrates. A Recovery Shake is perfect means for delivering the proper ratios of Potassium, Sodium and Chloride while delivering the liquid needed to rehydrate.



## Eat well and remember, you are what your food eats!

Dan Young is President and CEO of Performance Food Centers, Corp. He is certified in personal training, sports nutrition and is a triathlete. He has competed in Body Building as well as Endurance Sports Activities. Accomplished in juice bar concept and design, he applies this knowledge to whole-foods nutrition and the efficiency to serving them.