



Signs and Symptoms of Dehydration

- Dizziness on sitting or standing
- Confusion, Mental State Change, Irritability
- Weakness and Decreased Performance
- Nausea
- Headache
- Thirst, Dry Mouth, Dry Eyes
- Decreased urine output and skin flexibility
- Constipation
- Fever

Consequences of Dehydration

- Decreased physical and mental ability within one hour
- Loss of 1%-2% of body weight negatively affects performance
- Loss of >3% of body weight increases risk for heat stroke, cramps, and heat exhaustion
- Predisposes to falls
- Predisposes to infection
- Vitamin, Mineral and Electrolyte Imbalance
- Death

Do Not Drink Liquids with:

- Caffeine, Alcohol, and Carbonation because these stimulate urine output and/or decrease voluntary fluid intake
- High sugar content like fruit juices, soda, carbohydrate gels, sports drinks that have >10% carbohydrate (10 grams/100 cc or 50 grams/500 cc, etc).
- High sodium because it causes dehydration and thirst. Slow absorption and cramps occur if a drink has a high salt pressure – an osmolality >330.
- Water alone, especially large volumes, because water can dilute the bloodstream of electrolytes causing cardiac and neurological problems.
- Extreme temperatures – liquids that are too cold or too hot can adversely affect the heart's electrical system as it passes to the stomach. Also, very cold liquid can swell the stomach's lining that impedes the liquid's entry into the bloodstream. Use an insulated container.

Hydration in Cold Weather

Cold weather can suppress your thirst and your perception of how much you actually sweat, especially when you wear multiple layers of

clothing. So hydrate often even though you don't perceive thirst or feel sweat because dehydration can occur quickly before you realize it.

Drink Liquids That Contain

Complex Carbohydrates	Essential to fuel muscles
Protein	Essential for the body and muscles
Sodium & Potassium	The proper ratio is critical for function
Vitamins 100%	Replace all daily vitamins
Antioxidants	Neutralize free radicals generated by muscles
Amino Acids Branched Chain	Essential for building muscles
Energy Enhancers	Allow efficient use of energy source
Nerve & Muscle Enhancers	Provide efficient communication between nerve and muscle
Lactic Acid and Ammonia Neutralizers	Neutralize harmful buildup in muscle that impede performance
Methyl Donors	Essential for muscle performance
Membrane Stabilizers	Clean membranes to optimize transport of cellular materials

Drink Before, During, and After Exercise

- Mix one scoop of orange flavored **Simone Super Energy** in 16.9 ounces water (500 cc). This has a 6.4% carbohydrate level and an osmolality less than 300.
- Drink 8-12 ounces about 20-30 minutes before competition/work-out.
- Drink about 6 ounces every 15-20 minutes during competition /work-out.
- Drink as much as is needed after the competition /work-out.
- Drink on a schedule, because by the time you become thirsty, you are already dehydrated.

Studies clearly show that proper nutrition and hydration allow for better mental and physical performance – you run harder, faster, farther, have better acceleration and agility, more endurance, less injuries, less mental fatigue, and better recovery. You even win and score more often.



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