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Summer Heat, Sports and Nutrition

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As we head into the intensity of summer sun and look to have fun, it's wise to have both common sense and access to knowledge from studies of exercising in warm temperatures. Let's outline a few basic nutrition pointers for athletes, weekend warriors, and families:

☐- Dehydration -

☐ Most people are slightly dehydrated, especially if coffee and alcohol are on their list of daily consumed beverages. It's a little known fact that fluid loss of as little as 2% of body mass cause changes in body temperature. Unfortunately, the sensation of thirst often lags behind the hydration levels needed for health and good athletic performance. Water may be an adequate replacement fluid for shorter events, but for longer ones a good electrolyte, carbohydrate and protein replacement drink is much better. Studies show that pre-exercise hyperhydration can significantly improve endurance and performance. Note though, that it is also

harmful to drink excessive water, which can cause a dangerous condition known as hyponatremia. How much is enough and not too much? One way is to observe your urine output. If it is dark yellow, there is probably dehydration. If the urine is light yellow and no weight loss of over 2% after exercise, fluid intake is probably at a good level. Weight gain after exercise and symptoms such as nausea, vomiting, headache and malaise are symptoms of hyponatremia, which demands medical attention. Electrolyte sports drinks, when consumed moderately, can balance body fluids and help maintain energy. Some of those drinks are healthier than others (hint: look for ones without a litany of dyes, artificial flavors and colors). The critical key here though, is moderation and monitoring of symptoms.

☐- Magnesium - Many adults do not consume even the RDA (350 mg. elemental) for magnesium, but

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☐this mineral plays a critical part in

☐over 300 chemical reactions in the body. Some symptoms of magnesium deficiency are migraines, muscle cramps, PMS, joint pain, palpitations, and anxiety. Exercise further depletes magnesium stores, but most sports drinks don't include it because it can cause diarrhea. The average American diet is deficient, since magnesium is found in small amounts in nuts, seeds, vegetables and whole grains. The solution? Supplement with an absorbable form such as magnesium glycinate, aspartate or chelated magnesium. When inspecting a supplement bottle, note that the "elemental magnesium" amount listed is the relevant number. Taking 400 to 600 mg. of elemental magnesium in divided doses can alleviate deficiencies; consult with a nutritionist or medical doctor if you have any preexisting conditions.

☐- Protein - Muscles can break down during exercise and be converted to sugar for the brain's energy supplies. This muscle protein can provide up to 10% of the energy of sustained exercise if not prevented. To avoid this situation, supplement via small amounts of amino acids in a sports beverage. Among the preferred forms are branched-chain amino acids (valine, leucine, and isoleucine), which readily convert into fuel and therefore help spare muscle breakdown. In the critical two hour time period after exercise, studies have shown that refueling with both carbohydrates and protein results in significantly greater muscle gain and recuperation than with carbohydrates alone. Other considerations regarding muscle building and repair include the body's ability to digest protein. If one of your goals of exercise is muscle building and it is not happening, digestive enzymes may help.

☐ Summer fun is what great memories are made of. Add to that fun by following sunscreen advice and keeping yourself healthy from a nutrition perspective!

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