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Pre and Post Workout Nutrition
John Bosse, MS, RD, CD, NSCA-CPT,
USANA Research and Development

What is Nutrition?

A competitive speedskater's definition of nutrition is different from the average Joe. Proper sports nutrition is a consistent, repetitive, and individualized approach to fueling the body for exercise, helping it recover, and ultimately, improving its ability to perform. Timing of fluids, carbs, and proteins is critical with the long multi-session days of speedskaters.

Due to the demands speedskaters place on their bodies, their nutritional requirements are much greater. Thus, it's no surprise that more and more speedskaters are turning to nutritional supplements to support their performance and recovery. Nutritional supplements play an increasingly important role the more advanced a speedskater becomes. Most importantly, however, is attention to proper pre- and post-workout nutrition (i.e. fluids, carbohydrates/carbs, and low-fat proteins).

Why Does Getting the Proper Nutrition Before/After a Race Matter?

Our bodies perform best when at homeostasis, or in good balance, at a normal body temperature with a full fuel tank. Exercise is an additional stressor to the body, and the body must be adequately nourished to overcome its challenges. A huge part of maintaining homeostasis is ensuring that the body is hydrated.

Being hydrated ensures peak performance because it allows the body to sweat adequately, maintain proper body temperature, and efficiently deliver nutrients to working muscles. Research shows that losing just two percent of one's bodyweight in sweat leads to a noticeable decrease in performance, and likely points to an impaired ability of the body to maintain temperature and deliver nutrients. Just because you're on ice does not mean you're not sweating, so drink up!

A full fuel tank refers to having enough muscle glycogen and phosphocreatine (short-term energy reserve). Muscle glycogen is the carbohydrate fuel reserve our bodies stash

away in the muscles we use to exercise. Phosphocreatine and muscle glycogen are the main fuel sources for speedskating. Having enough phosphocreatine in the body is particularly critical in the 500 and 1,000 meters. Having enough muscle glycogen will ensure enough fuel to race at a high level throughout a 5,000 or 10,000. Having enough muscle glycogen and consuming protein before exercise minimizes the amount of muscle protein that will be broken down during the race. This pre-exercise protein may even help speed muscle recovery when the race is done.

What Should a Speedskater's Pre-Workout Nutrition Consist Of?

Roughly 60 to 180 minutes before a workout or race, a speedskater should eat a healthy meal with plenty of carbohydrates and some protein. The earlier you eat, the more you can eat. The closer you are to the start of exercise, the less you should eat. Allowing time for digestion before exercise reduces the chance of an upset stomach and gives carbs more time to get to the muscles they will be fueling. Start drinking fluids several hours before exercise. If you haven't relieved yourself within a couple hours, drink more before beginning the race. Our bodies repair and refuel best the sooner we provide them with recovery nutrition. Timely post-workout nutrition also boosts our immune system.

What Should a Speedskater's Post-Workout Nutrition Consist Of?

Carbohydrates—If you're not currently paying attention to refueling after exercise, a good starting point is about 50 to 60 grams for most women and 60 to 80 grams for most men. Avoid high-fat carb sources (pasta in cream sauces, fried rice, chips, cookies) as fat will slow absorption and delay delivery of carbs to your muscles to top off your glycogen tank. Good options include sports drinks, fruit, cereal, bagels, and various granola and sports bars, such as USANA bars. Your body composition and energy level in your next workouts guide whether more or less carbs should be consumed as your tailor you sports nutrition plan to you.

Protein—Avoid high-fat sources (most red meats, fried chicken). A good target is 15 to 30 grams. Smaller speedskaters should shoot for the low end of this range, and larger speedskaters should shoot for the high end. This may also vary according to the difficulty and duration of the exercise. Good options include chicken or turkey breast, low-fat milk, chocolate milk, and yogurt, or various high protein shakes and bars.

Fluids—Drink slightly more fluids than you might normally, such as a tall glass or two, with all post-exercise meals.

With the short periods of time between training sessions and trials on race day, post-workout nutrition turns into pre-workout nutrition for the next training session or event. Thus, timely ingestion of carbs, protein, and fluids becomes increasingly important.

What Supplements Do You Recommend Speedskaters Take?

Supplements play increasingly important roles for advanced athletes. As skills are perfected and attention to proper training and diet are maximized, the athlete must increasingly look to other avenues to improve their performance.

USANA recommends consuming the basic, essential vitamins and minerals, such as USANA [Essentials™](#)— to assist athletes and everyday people in reaching their performance potential. USANA has found that separating vitamins and the minerals enhances effectiveness. Therefore, USANA's Chelated Mineral and Mega Antioxidant are a great “insurance policy” to make sure enough micronutrients are consumed daily.

Carbohydrate and protein shakes and bars are convenient and usually well tolerated before and after exercise. Shakes provide additional fluids and are absorbed rapidly, helping you gear up for and recover from exercise when time is tight.

Vitamin D helps keep the bones and immune system strong, and likely plays other roles in our muscles, which scientists are still discovering. Since sun exposure produces vitamin D for the body and speedskaters spend a great deal of time training inside, a daily supplement, such as USANA's [Vitamin D](#)—can be beneficial. More specific doses can be determined based on blood testing.

[Procosa®](#) — The rigorous plyometric training of speedskating can take its toll on the joints. Glucosamine, the primary ingredient in USANA's Procosa, has been shown to be highly effective in maintaining healthy cartilage. Healthy cartilage is crucial for healthy joints, and Procosa includes additional components for joint health.

Creatine—Competing in shorter events like the 500 and 1000 meters demands a great deal on the body's limited phosphocreatine energy reserves. About 5 grams of creatine per day can help a speedskater recover explosiveness heading into the next session. Consume half before with your pre-exercise meal and half after exercise, or have it all after.

Sodium bicarbonate - Training for and competing in events like the 3000 to 10000 meters generates metabolic by products that can put a damper on your performance. Supplementation with 15-25 grams of sodium bicarbonate about 90 minutes before a 3000-10000 can aid in lessening the effects of metabolic by products. Do not try sodium bicarbonate for the first time on a race day. Determine the dose that does not upset your stomach and gives you greater endurance during practice so you are comfortable on race day.

If There's One Thing People Should Remember To Do Pre and Post Workout, What Would That Be?

Be your own Head Performance Coach (HPC) – Hydrate, Protein, Carbs.

These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.