Exercise and Refueling in the cold

Each season and sport brings its own set of challenges – from temperature regulation, to adequate nutrition and fluids for peak athletic performance. While major concerns for cold weather exercisers include dressing appropriately to avoid hypothermia and excessive sweating, what you eat and drink before and during exercise can help you perform your best while staying comfortable and safe in extreme temperatures. In fact, proper nutrition helps regulate your core temperature and provide fuel for working muscles.

When exercising in cold temperatures, your metabolism increases slightly to warm the body and keep your internal temperature in the normal range. A slight drop in body temperature stimulates appetite. While this appetite stimulation is typically not enough to substantially increase hunger, you may want to have an extra snack for cold days when practices or games are scheduled outdoors.

Contrary to what you may think, the biggest nutritional challenge for cold weather athletes is ample fluids. Dehydration is one of the main reasons for poorer performance in cold weather. Cold weather often blunts our thirst mechanism. A decreased desire to drink fluids because of lower perspiration rates makes it difficult to stay properly hydrated. However, you need about the same amount of fluid in cold weather as you would when the weather is mild. Additionally, in colder temperatures, the body has to work extra hard to warm the cold air we breathe in and humidify it – another reason for plenty of fluids.

So how much should you drink? To stay hydrated and perform your best, follow this simple rule: Take a fluid break every 15 to 20 minutes and drink two to three big gulps of water. Another way to monitor hydration status is to take a peek at your urine. What color is it? If it’s dark and there’s not much of it, you need to drink more. If it’s pale yellow (think lemonade), you’re probably close to proper hydration. For exercise lasting less than 60 minutes, water is adequate. For activities longer than 60 minutes in duration, choose a sports drink with carbohydrates and electrolytes.

When exercising in cold weather, warm foods and fluids are ideal – yet not always practical. Carbohydrate-rich foods and drinks such as hot cocoa made with milk, cider, soup, chili or oatmeal are great choices as the warmth is thought to assist with body temperature regulation in addition to increasing blood flow. Cold fluids chill the body more than it already is (a desirable trait in the heat of summer, not in the cool of winter). If warm foods and fluids are not possible during your activity, focus on carbohydrates, the most important fuel for athletes active in cold weather. Try these ideas...

- Peanut butter and jelly sandwich
- Fresh fruit – bananas, grapes and clementines are easy on-the-go fruits
- Pretzels
- Dry breakfast cereals
- Trail mix
- Rice cakes or crackers
Take advantage of the recovery benefits of milk by warming up with hot cocoa or oatmeal made with milk post-exercise. Both provide sufficient carbohydrates to refuel the muscle's energy stores, in addition to protein necessary to rebuild and repair muscles after activity.

Athletes can train harder and perform better with proper nutrition. Visit http://westerndairyassociation.org/health-and-nutrition/milk-and-sports-nutrition/ to read more about milk as an exercise recovery beverage and learn how to eat for peak athletic performance.