

## CONSIDERATIONS TO MAINTAIN WINTER COMFORT AND PERFORMANCE

- ◆ Eat and drink often, even if you're not hungry or thirsty—this is critical to maintaining performance and staying warm
- ◆ Take short and frequent breaks, so you can eat and drink standing up with your pack on
- ◆ Avoid long breaks as these will make you feel chilled, forcing you to take off your pack and layer up. Long breaks can be appropriate if conditions are mild, you have access to shelter, or if needed every few hours to rest
- ◆ Your body heats all food and water you consume to body temperature (around 37°C / 98.6°F). Ingesting cold food and water will remove heat from your body and leave you chilled. Still, cold food and water is better than no food or water
- ◆ If your food and water are cold or frozen you will consume less, contributing to low energy, dehydration and hypothermia
- ◆ Cold weather will make you feel less thirsty, even though you may be getting dehydrated from exercise or breathing dry air
- ◆ Dehydration should be avoided because it impairs judgment and physical performance, and increases the risk of cold injuries

### FOOD

*To keep up your energy levels and stay warm:*

- ◆ Choose snacks with low moisture content that will not freeze solid. Some energy and candy bars, such as Clif energy bars or Snickers, are very difficult to chew when frozen. If you wish to bring these, keep them warm inside an inner pocket or cut them into small pieces before you leave home
- ◆ Choose food that is ready-to-eat and does not require preparation, assembly, cooking or utensils once in the field
- ◆ Bring a variety of items that you enjoy eating, and that remain tasty when cold
- ◆ Focus on foods that provide both immediate and sustained energy from a mix of carbs (+/-60%), fats (+/-20%) and proteins (+/-20%)
- ◆ Repackage snacks into containers or bags that are easy to open with gloves or mitts
- ◆ Pack small portions that can be eaten quickly
- ◆ Carry snacks so they are easily accessible, such as in the pockets of your pants, jacket, backpack waist belt, or chest pouch
- ◆ Frequently eat small amounts



Bring snacks that you like to eat



Some foods are difficult to chew frozen



Choose items that are ready-to-eat



Use insulating carriers or containers



Keep snacks and drinks accessible



Insulate any extra bottles in your pack

### WATER

*To stay hydrated and maintain performance:*

- ◆ Add Gatorade or other drink mixes to your water to lower its freezing point. This may allow the drink to stay in liquid form a bit longer before turning to ice
- ◆ Heat your water at home or in camp before filling into bottles (may delay your first drink)
- ◆ Use wide-mouthed bottles as the opening will not freeze over as fast
- ◆ Keep your water bottle inside an insulating carrier, holster, parka or sleeve
- ◆ Activate a chemical hand warmer and place it in the carrier under the bottle
- ◆ Carry your main water bottle in an easily accessible spot, such as on the waist belt—or in a side pocket—of your backpack
- ◆ Frequently sip small amounts of liquids
- ◆ Remove ice from the bottle's mouth as soon as it forms to keep the opening free
- ◆ Keep any extra water bottles inside your pack and insulate by wrapping in spare socks or clothing (use leakproof bottles only)
- ◆ Carry spare bottles with the opening down, as ice forms at the upper end first
- ◆ If pack weight is not a consideration, a steel vacuum thermos is rugged and will keep beverages hot for many hours. Pre-heat the thermos with hot water before adding drinks
- ◆ A hydration bladder should be used only if temperatures are above freezing. Insulate the water reservoir and use an insulated drinking hose. Below freezing, even an insulated hose will quickly freeze solid
- ◆ Do not use uninsulated bottles

### Examples of Foods to **Bring**:

- ◆ Trail mix (also known as GORP)
- ◆ Nuts, such as almonds or cashews
- ◆ Dried fruit, such as raisins or cherries
- ◆ Granola, energy or candy bars
- ◆ Pieces of chocolate, fudge or marzipan
- ◆ Jelly beans or energy Sport Beans
- ◆ Energy gel packs, such as PowerGel or Gu
- ◆ Cheese strings, cubes or Babybel cheeses
- ◆ Pepperoni sticks, beef jerky or small chunks of salami or sausage
- ◆ Pre-made sandwiches, cut into pieces
- ◆ Small pieces of pizza, panzerotti or calzone
- ◆ Baking, such as cookies, banana bread, butter tarts, mini muffins or breakfast pitas

### Examples of Foods to **Avoid**:

- ◆ Fresh fruit, such as apples or oranges
- ◆ Fresh vegetables, such as carrots and dip
- ◆ Pudding or fruit cups
- ◆ Pouches of applesauce or fruit purée
- ◆ Bread or cheese with high moisture content
- ◆ Canned goods, such as tuna
- ◆ Dense protein, fruit, energy or candy bars, unless they are kept warm or cut into pieces

### Examples of Drinks to **Bring**:

- ◆ Pure water
- ◆ Sports drinks or flavoured drinks, such as Gatorade or Kool-Aid
- ◆ Tea (ideally caffeine-free or low in caffeine)
- ◆ Hot chocolate
- ◆ Mulled apple cider (non-alcoholic only)
- ◆ Thin soup or broth

### Examples of Drinks to **Avoid**:

- ◆ Canned, carbonated or very sugary drinks
- ◆ Coffee or other heavily caffeinated drinks
- ◆ Energy drinks
- ◆ Alcohol of any kind, including mulled wine