



# The **HIKER'S GUIDE** to Energy and Hydration

Hiking is a healthy, low-cost, and fun activity that the whole family can enjoy. But before you venture out, take some time to prepare and plan your journey. Plan to bring adequate and appropriate snacks and drinks so that everyone in your group can get the most out of the hike by meeting their energy and hydration needs.



## Eating for Energy

To keep moving, your body requires energy. A hike can be short over flat surfaces, longer over hilly terrain, or anywhere in between. No matter what the distance or terrain, it is important that you plan for your energy needs. Energy to think clearly and to fuel your working muscles is provided primarily by carbohydrates and fat. You typically have enough fat stored in your body to support some of your energy requirements, but carbohydrates are present in the body in limited amounts that need to be replaced regularly throughout the day.

Ensure everyone has a good balanced breakfast with plenty of grains, fruit, fluids and a protein source (e.g. eggs, lean meat) before heading out. Take plenty of snacks to meet your increased energy needs and eat them throughout the hike.

## Snack Checklist

Use the checklist below to help pick healthy and suitable snacks:

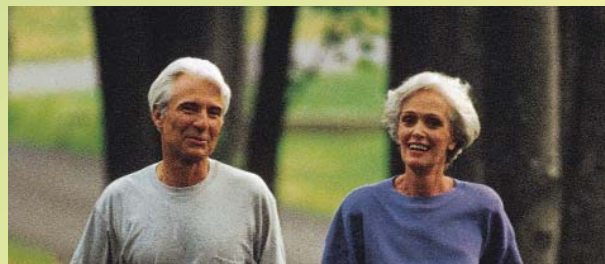
- Contains at least 2 of the 4 food groups from *Canada's Food Guide to Healthy Eating*
- Compact and lightweight
- Easy to prepare
- Do not need to keep refrigerated or can be kept at a safe temperature with an ice pack
- Tasty foods that you enjoy

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## Portable Snack Ideas

### Grain Products

Whole grain bagels, pitas, English muffins, graham wafers, low-fat muffins, rice cakes, popcorn (plain or lightly “dressed”), dry cereals, whole grain and lower-fat granola bars or crackers.

### Vegetables and Fruit

Baby carrots, bananas, cauliflower chunks, apples, pepper strips, pears, oranges, grapes, zucchini coins, grape tomatoes, individual fruit cups or applesauce, dried fruit.

### Milk Products (keep cold with a thermos or an ice pack)

Cheese chunks (hard cheese keeps longer than soft), yogurt, milk, skim milk powder (mix with clean water as you need it).

### Meat and Alternatives

Nuts and seeds, peanut butter sandwiches, roasted soybeans, canned meats, fish, and poultry (discard uneaten portions).

### Water to Go

When muscles are active they heat up your body's core temperature. To cool down, your body increases its rate of sweating, and begins to lose water. To prevent dehydration and keep your energy levels high, it's important to drink water before, during, and after the hike. Don't wait until you are thirsty or have signs of dehydration – this is important.



## TRAIL MIX RECIPE

Trail mixes are flavourful mixtures of cereal, dried fruit, and nuts that are easy to prepare and great for maintaining energy levels on a hike. Commercial trail mix recipes are often expensive and too high in fat. For a simple heart healthy and inexpensive trail mix, follow the recipe below.

In a large bowl, mix together:  
500 mL (2 c) cereal (Crispix®, Cheerios®, Shreddies®, Corn Bran®, or any cereal that always stays crunchy.) Use a mixture for variety.  
250 mL (1 c) pretzels  
250 mL (1 c) dried fruit (raisins or mixed dried fruit according to preference)  
125 mL (½ c) nuts (peanuts, almonds, sunflower seeds or other nuts)

The mixture makes approximately 1.25 L (5 c) and can be stored in a tightly sealed container in the cupboard for up to one month.

PER SERVING 125 mL (½ c)	
Calories 157	Fat 6 g
Carbohydrate 17 g	Fibre 2 g

## What are the signs of dehydration?

Fatigue, nausea, reduced sweating, dark-coloured urine, headache, and irritability are some of the indicators that you may be becoming dehydrated. Dehydration can lead to serious heat illness (e.g. muscle cramps, heat exhaustion, heat stroke) which can be fatal. To avoid dehydration, adults should drink at least 500 mL (2 c) of fluid two hours before activity. During activity, 150-250 mL (½-1 c) of fluid should be consumed every fifteen to twenty minutes. After activity, another 500 mL (2 c) of fluid should be consumed. Children should be encouraged to drink about 400-600 mL (2-2½ c) per hour.

## The Sports Drink Question

Water is the only fluid you'll need if you are going to be lightly or moderately active for 45 minutes or less. For intense activity that lasts more than 45-50 minutes, you need to provide your body with a constant source of carbohydrates. In addition to water, sports drinks typically provide carbohydrates at a concentration that is easily absorbed and used by your body. They also have small amounts of electrolytes (sodium and potassium) that help with the absorption of the water and carbohydrate. The electrolytes lost through sweat are best replaced by eating a variety of snacks that contains sodium (e.g. salted nuts and seeds) and potassium (e.g. vegetables, fruit, and grain products). If you choose to consume sports drinks, consider making your own: choose any 100% fruit juice and simply mix  
500 mL (2 c) juice,  
500 mL (2 c) water, and  
1 mL (¼ tsp) salt  
**voilà!**

## Healthy Fluid Options

- Water – pack your own water – ensure it is clean, cool, and safe. For longer trips where you may be required to drink from unknown water sources, you should contact a Public Health Agency to find out how to sanitize water in the wilderness.
- Fruit juice or tetra pack lower-fat milk or chocolate milk (1 or 2% milk fat)
- Avoid alcoholic drinks that can zap your energy, cloud your thinking, and cause dehydration.

Reference:

Niagara Region Public Health. (2005). Health News...you can use! – What to Eat When Using Your Feet!

Clark, N. (1997). Nancy Clark's sport nutrition guidebook (2nd ed.). United States: Human Kinetics.