

# Fluids and Foods *BEFORE* Training/Competition



## Pre-exercise nutrition provides:

- Energy
- Physical comfort
- Mental alertness

## Targets:

- Optimal fluid intake
- High carbohydrate, moderate protein, and low fat

## Why?

- To start exercise with optimal fluid levels.
- To prevent dehydration.
- To supply food that is quickly and easily digested.
- To ensure energy to train or compete.
- To prevent hunger before and during exercise.

## Timing and meal/snack size are related.

Generally allow:

- 3–4 hours for a large meal to digest
- 2–3 hours for a smaller meal
- 1–2 hours for a small snack or blender/liquid meal or, whatever your own tolerance indicates

**CAUTION:** Spicy, gas producing, fatty, and/or fibre-rich foods may cause bloating or discomfort. Products containing caffeine have a laxative effect.

## *BEFORE* exercise:

- Drink 5–7 mL of fluid per kg body weight (about 300–500 mL) 4 hours prior.
- Drink 3–5 mL of fluid per kg body weight (about 150–350 mL) fluid about 2 hours before exercise, if you have not produced any urine or if your urine is still bright yellow.
- Eat a meal or snack, high in carbohydrate, 2 to 4 hours prior. Ideal carbohydrate foods include vegetables, fruit, juices, whole grains, milk, yogurt, soy drinks, and legumes. Legumes are fibre-rich and can be gas-producing.

- Include foods that contain some salt or choose a beverage with 0.5–0.7 g/L to help promote thirst and to retain the fluid.
- If you have a “nervous stomach” before events, choose juice, pureed foods (e.g. applesauce, mashed potatoes), lower-fibre grain products (cereal bar), or a meal replacement beverage.

***Experiment with fluids and foods in training to find out what, and how much, is comfortable for you.***

***Never try new foods or drinks before or during competition.***

**CONVERSION:** 250 mL = 1 cup = 8 oz.

## ***BEFORE*** – Focus on Fluid and Carbohydrate

### Meal ideas – from home or on the go:

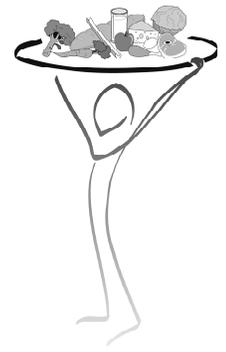
The amount and type of food will vary according to the amount of time available between the meal/snack and the start of training or competition. Allow time for digestion.

- Toast/bagel with jam, peanut butter, juice, yogurt
- Oatmeal/cereal, milk, raisins, juice
- Pancakes with a little syrup/spread, ham, juice
- Grilled chicken sandwich, juice
- Lean meat sandwich, carrots, milk, oatmeal raisin cookie, fruit
- Minestrone soup, cheese, crackers, vegetable juice
- Chili, bagel, milk
- Pasta with tomato/lean meat sauce, applesauce, chocolate milk
- Lentil soup, crusty roll, salad with a little dressing, soy beverage

**SNAC** Sport Nutrition Advisory Committee  
Comité consultatif sur la nutrition sportive



# Fluids and Foods *BEFORE* Training/Competition



## Page 2

### Snack ideas:

- Fruit (fresh, canned, or juice)
- Fruit yogurt
- Low-fat muffin, juice, or applesauce
- Yogurt, social tea biscuits, juice
- Pita with hummus, vegetable juice
- Fig or oatmeal cookies, fruit, milk

### Snacks for backpack or car:

- Dried fruit
- Juice boxes or fruit cup
- Dry cereal
- Cereal, sport, or energy bars
- Crackers
- Trail mix with added raisins or cereal

### ***From these guidelines, make a list of the drinks and foods that work for you.***

- Plan ahead and be prepared.
- Carry pre-exercise food.

Avoid bacterial contamination of meals and snacks. Keep cold foods cold and hot foods hot. Bacteria reproduce quickly at room temperature.

Before exercise, choose foods which are higher in carbohydrate and lower in protein and fat. This will allow quick absorption of carbohydrate energy from the food into the body. Include protein and fat sources during meals and snacks at other times during the day.

For information on planning your meals and snacks, see these CAC resources:

- For an overview of your nutrition needs during training, refer to [Training Diet: Everyday Eating](#).
- For a list of examples of high carbohydrate foods, refer to [Energize with Carbohydrate!](#)
- To learn how to meet your fluid needs during exercise, review [Fluids for Athletes](#).
- To create a meal plan for your training needs, see [From Training Diet to Meal Plans](#).

For help with planning your snacks before exercise, contact the dietitian at your [Canadian Sport Centre](#) or someone listed under the [Sport Nutrition Registry](#) on the CAC website. If there is no dietitian with expertise in sport listed in your area, [Dietitians of Canada](#) may list a dietitian near where you live.

