



SPORT NUTRITION AND HYDRATION FOR ATHLETES

fortius
sport & health

WHAT TO EAT BEFORE TRAINING

High-carbohydrate, moderate protein, low-fat meals and snacks.

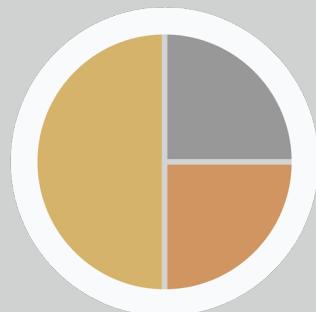
2-3 HOURS BEFORE TRAINING

FULL MEAL

Plate rule: vegetables and fruit represent $\frac{1}{2}$, grains $\frac{1}{4}$, protein $\frac{1}{4}$

Examples:

- Peanut butter and banana sandwich with an apple or salad and a glass of milk
- Pita with sliced ham or canned tuna, low-fat cheese and lettuce, with a side salad (choose oil and vinegar dressings over creamy ones)
- One serving of lean meat (e.g., grilled chicken breast, lean steak, or sliced turkey) or legumes; two servings of whole grain pasta (1 cup), two servings of vegetables (e.g., carrot sticks, broccoli). Serve with a glass of milk or almond/soy milk.



	Fruit and Veg
	Grains
	Protein

1-2 HOURS BEFORE TRAINING

LIGHT SNACK THAT IS HIGH IN CARBOHYDRATES

Examples:

- Fresh fruit and some crackers (i.e., Triscuit whole-wheat crackers)
- Dried fruits, granola and a small yogurt
- $\frac{1}{2}$ a peanut butter sandwich and a fruit

* Refer to page 5 for more options.

30-45 MINUTES BEFORE TRAINING

IF NECESSARY

SMALL SNACK

Examples:

- $\frac{1}{2}$ cup juice mixed with $\frac{1}{2}$ cup water
- $\frac{1}{2}$ 1 banana or pear
- Small bowl of cereal with milk or almond/soy milk

WHAT TO EAT WHILE EXERCISING

30-90 g of carbohydrates per hour of exercise after 60 minutes.

DURING TRAINING

Snacks that provides 30g carbohydrate include:

- Banana or other medium size fruit
- 3 fig newtons
- 1/3 cup of dried apricots
- 1 small bagel
- 4 – 6 crackers
- 500 mL sports drink

* Homemade sports drink recipe on page 4.

WHAT TO EAT AFTER TRAINING

Carbohydrate-rich snacks and/or a meal with carbohydrate and protein

IMMEDIATELY AFTER

WITHIN THE FIRST HALF HOUR AFTER TRAINING

- Fruit
- bread/bagel with jam and peanut butter
- sports recovery drink
- sports bar

WHEN YOU GET HOME

WITHIN THE FIRST 2 HOURS AFTER TRAINING

- Peanut butter and banana sandwich with a glass of milk
- A full meal following the 1/2 plate fruits/vegetables, 1/4 plate protein, 1/4 plate grains rule (e.g., salad, grilled chicken breast, rice)

HYDRATION FOR ATHLETES

THE ROLE OF FLUIDS FOR ACTIVE INDIVIDUALS

- To replace water lost during exercise
- To avoid decreases in performance due to dehydration
- To help maintain core body temperature
- To provide electrolytes lost through sweat (i.e., sports drink)

TIPS ON STAYING HYDRATED

- Aim to have 2-3L of fluids throughout the day, not including “workout water”
- Set small hydration goals
- Buy a 1L bottle to bring with you – aim to finish this by lunch; refill after lunch and finish this before bed
- Keep fluids visible...out of sight, out of mind!
- Set an alarm to remind you to drink – on your phone, computer, watch, etc.
- Should be going to the bathroom approx every 3 hours
- Work up gradually and have fluid with meals and snacks to reduce frequent trips to the bathroom

MONITOR YOUR FLUID LOSSES

Colour

- Ample, light coloured urine indicates that you are well hydrated
- Dark, scant urine indicates dehydration

Pre and post exercise weight

- Weigh yourself before and after training
- Replace 1.5L of water for every kg of weight lost

SPORTS DRINKS

WHAT TO LOOK FOR IN A SPORTS DRINK

Look for sports drinks that contain the following:

- 6-8% carbohydrates (i.e., 30 – 40g carbohydrates in 500mL)
- 230-345 mg of sodium per 500mL
- Should not be too high in sugar, contain caffeine or be carbonated

Goal is to replace energy (carbohydrates), electrolytes (sodium) and fluids lost through sweat. Sodium helps the body hang on to fluids when rehydrating.

Remember: a sports drink is not necessary if you fuel properly before your workout or training session, or if your workout is shorter than 60-90 minutes.

HOMEMADE SPORTS DRINK

INGREDIENTS

- 1 cup of 100% fruit juice
- 1 cup of water
- 1/8 tsp salt

TIPS & HINTS

Use a fuel source during high intensity exercise lasting greater than 60min (i.e., for a basketball tournament)

NUTRITION FACTS

Servings:	1
Serving Size:	500mL (2 cups)
Total Calories:	115
Sodium:	250mg
Prep Time:	5min

HEALTHY MEALS AND SNACKS

WHAT TO EAT

Have three meals a day (breakfast, lunch and dinner) that include 3 – 4 food groups according to Canada's Food Guide.

For the other 2 – 3 snacks/meals, include at least one serving of vegetables and fruit combined with one serving of high fibre grains from the grain products food group, or a low fat dairy product from the milk and alternatives food group, or a serving of lean meat or vegetarian alternative from the meats and alternatives group.

WHAT IS ONE SERVING SIZE?

VEGETABLES & FRUIT	GRAIN PRODUCTS	MILK & ALTERNATIVES	MEAT & ALTERNATIVES
1 medium fruit Equal to: 1 tennis ball	½ cup of rice, pasta, cereal or various other grains Equal to: 1 small fist	1 cup of milk, fortified soy or almond milk Equal to: 1 small milk carton	75g meat, poultry or fish Equal to: 1 deck of cards
½ cup of fresh, frozen or canned fruit/veg Equal to: 1 small fist	¾ cup of hot cereal Equal to: 1 cupped hand	¾ cup of yogurt Equal to: 1 small yogurt container	¾ cup beans, chickpeas or lentils Equal to: 1 small fist
1 cup of raw greens or salad Equal to: 1 cupped hand	1 slice of bread	50g cheese Equal to: 2 thumbs	¼ cup of nuts/seeds or 2 tbsn nut butter Equal to: 1 ping pong ball
¼ cup of dried fruit Equal to: 1 ping pong ball			

DINNER IDEAS

Presto pasta - brown some onions and garlic in a large skillet. Add canned or bottled tomato-based pasta sauce and canned drained lentils or tuna. Serve over whole wheat pasta or couscous. A tossed green salad and a glass of milk or fortified soy beverage completes the meal.

Easy fish dish - place fish in a large frying pan over a pot of boiling water, add cut up broccoli, green beans or asparagus. Cover and cook for 4-8 minutes per side or until fish flakes easily with a fork. Serve with brown rice.

Hot and spicy - cook boneless chicken strips in a skillet until juices run clear and meat is browned. Add sliced carrots and red peppers and cook until soft. Add curry paste to taste and a bit of water and heat through. Serve with whole wheat couscous or brown rice.

Fast chili - brown extra lean ground beef (or vegetarian alternative) and drain off the fat. Add chopped onions and green peppers and sauté for several minutes. Stir in a large can of stewed tomatoes, one can of tomato soup, one large can of kidney beans and 15mL (1 Tbsp) of chili powder. Serve with whole grain toast.

Easy omelettes - choose your own fillings - ham, cheese, peppers, green onions, etc. Spice it up with salsa or hot sauce. Serve with whole grain bagels or toast. Have fruit on the side.

Healthy beans - mix black or kidney beans with corn, chopped tomatoes, onions, red and yellow peppers, cooked brown rice, grated lower fat cheese and serve. Have with a glass of water with lime and lemon wedges.

Chicken express - mix up some cooked chicken with whole wheat couscous or quinoa and a variety of vegetables. Add some garlic if you like. Enjoy with a glass of milk.

For a more detailed nutrition plan from our sports dietitian please contact the Fortius Sports Medicine Clinic at 604 292 2501