



National
Defence

Défense
nationale

Canada

Fueling for Energy, Performance & Recovery

	Before Exercise			Exercise Duration		After Exercise
When	2-4 hrs	1-2 hrs	<1 hr	1-3 hrs	3+ hrs	0-2 hrs Post Exercise
Drink ¹	300-600 mL water	150-350 mL water	Water to thirst	400-800 mL/hr Sip every 15-20 min	400-800 mL/hr Sip every 15-20 min Add 500-700 mg sodium (1/4 tsp salt)/L fluid	Replace fluids as soon as possible Gradually drink 1.25-1.5 L for every kg lost during exercise
Eat	Balanced meal ² Time to digest	Easy to digest foods with carbs (low fat, low protein)	Not needed (unless you have not eaten in the past 4+ hours)	30-60 g carbs/hr	30-60 g carbs/hr Up to 90 g carbs/hr for Ultra-endurance exercise + salty foods	1+ hr 60-90 g carbs + 20-30 g protein
Suggestions	<ul style="list-style-type: none"> Rice, vegetables, fruit, lean meat/legumes, yogurt Sandwich, salad, milk 	<ul style="list-style-type: none"> Cereal, milk Toast, peanut butter, juice Smoothie with fruit and milk 	See your local Health Promotion office for the next Top Fuel for Top Performance course.	<ul style="list-style-type: none"> Sports drink^{3 4} Bananas, oranges Dried fruit Granola bar Fig bars Sport gel 	<ul style="list-style-type: none"> See 1-3 hrs suggestions Pretzels Dried cereal 	<ul style="list-style-type: none"> Balanced meal² Bagel and chocolate milk Sandwich and juice Granola bar and yogurt Pasta, lean meat/legumes, vegetables, fruit Crackers, cheese, fruit

Tips

Avoid trying new foods or drinks before or during competition to avoid digestive issues.

Food tolerance is individual and can be affected by the type of exercise: muscular strength, cardiovascular or endurance.

¹ **Drink/fluid** needs will vary due to individual sweat rates. **Urine amount** and **colour** are good indicators of hydration status. Aim for pale yellow lemonade colour.

² **Balanced meal:** Fill your plate - 1/2 with vegetables and fruit, 1/4 protein foods, 1/4 whole grains. **Water** as drink of choice.

³ **Sports drinks, commercial or homemade,** should contain 4-8 g carbs and 50-70 mg sodium/100 mL fluid. Use a water chaser immediately after consuming a sports drink to rinse the mouth out to help reduce the impact on dental health.

⁴ **Sports Drink Recipe** 500 mL (2 cups) 100% fruit juice | 500 mL (2 cups) water | 1.5 mL (1/4 tsp) salt.
Nutrition Information Per 250 mL (1 cup) | 58 kcal, 13 g carb (5%), 150 mg sodium.



STRENGTHENING THE FORCES
ENERGISER LES FORCES