

# EATING WELL BEFORE, DURING & AFTER ACTIVITY

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## 2.1 Fueling up

Athletes need to fuel up before activity to ensure they have the energy they need to perform. Eating the right amounts of the right foods can help you perform at your best.

Athletes should eat pre-activity meals or snacks that are **rich in carbohydrates (65 to 70% of total calories), low in fat and moderate in protein**. Foods with carbohydrates provide fuel and are easy to digest. Foods high in fat and protein take longer to digest.

Pre-activity meals should also be **appropriate for the type of effort**. The amount athletes should eat depends on the duration and intensity of the activity they're doing.

**Pre-competition nerves can upset the stomach. Eat foods they're familiar and comfortable with before activity.**

## 2.2 Foods to avoid

Athletes should avoid certain types of foods before activity

**Fatty foods** take longer to digest

**Protein-rich foods** take longer to digest & don't provide fuel for activity

**Spicy foods** may be hard to digest

**Fibre-rich foods** can cause stomach upset & may induce elimination

**Gas-producing foods** can cause bloating

**High-fructose fruits, drinks or snacks** can lead to a drop in blood sugar.

## 2.3 Eating before activity

### 2.3.1 Breakfast

Athletes should eat and limit certain foods when breakfast is the pre-activity meal.

## EAT

**Carbohydrate-rich,  
low-fat foods**

Egg dishes (NOT FRIED)

French toast &/or pancakes

Fruit

Lean proteins, poultry or jerky

Low fat yogurt

Low fibre cereal w/low fat milk

Low fat, low fibre muffins

Meal replacement drinks

Mush

Noodles or pasta

Oatmeal

Potato (NOT FRIED)

Rice (NOT FRIED)

Toast (VERY LITTLE butter or marg)

## LIMIT

**High-fat,  
nutrient-poor foods**

Bacon

Butter or marg

Commercial muffins

Cream

Cream or butter sauces

Croissants, danishes & doughnuts

French fries

Fried eggs

Fried rice

Sausage

**High-fibre foods**

Dried fruits

Whole grain breads

Whole wheat cereals

### 2.3.2 Lunch or Dinner

Athletes should eat and limit certain foods when lunch or dinner is the pre-activity meal.

## EAT

### Low-fat, nutrient-rich foods

Bannock
Bread
Broth or bone-based soups
Cheese (in moderation)
Fish (broiled, roasted, poached)
Fruit or fruit salad
Low-fat cottage cheese
Low-fat yogurt
Lean cold cuts
Meat (broiled, roasted, BBQ, poached w/fat trimmed & skin removed)
Pasta (plain or w/tomato sauce)
Potatoes (without butter or marg)
Rice (steamed)
Salads (w/small amount of dressing)
Vegetables (steamed, boiled, baked)

## LIMIT

### High-fat, nutrient-poor foods

Butter or cream sauces
Buttered, sautéed or creamed veggies
Chips
Cookies, pies, pastries
Cream soups
Creamy coleslaw
Egg salad made with mayo
Fried fish, meat or poultry
Fried potatoes
Ice cream
Potato or macaroni salad (commercially made)
Processed meats
Salad dressing
Sausage

### Gas producing foods

Broccoli
Cabbage
Carbonated drinks
Garlic
Kimchi
Onions

### 2.3.3 Allowing for digestion

Athletes need time to properly digest when eating before activity. The time required depends on the **type** and **amount** of food eaten.

This table provides guidelines for planning meals before activity.

Time before activity (hours)	Portion size	# of carbs servings	# of protein servings	Example
3 to 4	Large meal 500 to 800 calories	5 to 8	1 to 2	2 Cups of stir fry (1 cup rice or pasta w/1 cup tofu, beans or meat) 1 slice of bread 1 Cup of veggies 1 Cup of fruit 1 Cup of milk
2 to 3	Small meal 300 to 500 calories	3 to 6	1 to 2	Chicken wrap 1 Cup fruit ½ Cup of carrot sticks ½ Cup of water
1 to 2	Snack or blender/liquid meal	2 to 4	0.5 to 1	1 sport bar 1 Cup of fruit 1 Cup of sport drink 100 g of yogurt
0.5 to 1	Snack	2 to 3	0	1 medium banana 1 Cup water
0.5	Light snack	1 to 2	0	1 Cup of sport drink

## 2.4 Eating during activity

There may be limited opportunity or need to eat during many sports. However, consuming carbohydrates in some circumstances can improve performance.

Activity level	Activity duration	Carbohydrate needs	Recommendation
Brief activity	Less than 45 minutes	Not required	N/A
Sustained, high intensity activity	45 to 75 minutes	Small amounts	Drinks w/carbohydrates such as 100% fruit juices or sport drinks
Endurance activity	1 to 1.5 hours	30 to 60 grams per hour	A range of everyday foods and specialized sport products (such as sport gels, gummies, drinks, bars or dried fruits) may be appropriate depending on the sport

## 2.5 Promoting recovery

Athletes need to refuel after activity, especially if more activity is scheduled the next day. To promote recovery, athletes should **drink plenty of fluids** and eat a post-activity meal that's **high in carbohydrates, adequate in protein and relatively low in fat**.

To refuel **between competitions** on the same day, athletes should eat **high-carbohydrate snacks** and wait until the end of the day to eat a more substantial meal.

### Athletes can also promote recovery by eating:

Primarily **carbohydrates** (40-60 g) and some protein (20 to 35 g) within an hour of activity.

A few portions of **salty food** such as tomato or vegetable juice, canned soup or bouillon, pickles, ketchup, soy sauce, salsa, cheese or salted nuts.

At least 3 portions of **potassium-rich foods** such as vegetables, potatoes, fresh fruit or dried fruit.

## 2.6 Recovery foods

Athletes can eat a variety of foods to promote recovery after activity.

Recovery Stage	Examples of good recovery foods choices
Within one hour after activity	Chocolate milk/soy beverage, granola bar, pear and water
	Cottage cheese/Lebneh with fruit and a scoop of granola
	Oatmeal with berries and milk/soy beverage
	Peanut butter sandwich, milk/soy beverage, cup of fruit
	Smoothie made with yogurt and half a bagel
	Hummus with cracker, milk/soy beverage or water
Within two hours after activity	Sports bar, grapes and juice or water
	Baked fish, wild rice with squash and corn and milk/soy beverage or water
	Beans or lentils in a tortilla wrap with milk/soy beverage
	Grilled chicken fajita wraps with veggies, side salad and milk/soy beverage or water
	Pasta with meat sauce, side salad and milk/soy beverage or water
	Cottage cheese or Greek yogurt, fruit salad, low fat muffin and juice
	Omelette with vegetables and low-fat cheese, whole grain toast, fruit and water
	Tuna sandwich with lettuce, fruit, milk/soy beverage
Yogurt with low-fat granola, fruit salad and juice or water	

## **2.6.1 Eating before sleep**

Does eating before sleep promote recovery? There has been a lot of debate surrounding this question. Recent studies suggest that having a protein drink 2 hours after the last meal and 30 minutes before sleep can help with muscle recovery, repair and growth as well as with overall metabolism.