

Healthy eating after you exercise, especially after intense exercise or an event, is important to replace the energy, fluids, salts (electrolytes) and carbohydrates that are lost or burned. Well-chosen and well-timed meals and snacks can help your body recover, adapt and perform its best. Including protein in your diet helps your body to stimulate muscle growth.

## Steps you can take

### Who needs a recovery meal or snack?

You may need to eat for recovery if:

- You regularly exercise on 2 days in a row or twice in one day. Most people can naturally recover from exercise or training in about 2 days. Eating a recovery meal or snack can speed this process, which can be important if you exercise often.
- Your exercise is very intense. Heavy weight lifting or long-distance running can cause muscle damage. Eating a well-planned meal or snack after you exercise can help to repair this damage, making your muscles stronger over time.

Eating after exercise is less important if your exercise is lower intensity, like walking or easy cycling.

### Recovery Tips

- Have your recovery meal or snack within 30 minutes of finishing your exercise. This helps to speed up muscle repair and refill energy stores in the muscle. If you exercise for a long time or intensely, you may need to eat every 2 hours for up to 6 hours after your workout to fully recover.
- Include carbohydrate-rich foods. This will help to refill carbohydrate stores, also known as glycogen, in the muscle and liver. Examples include:
  - whole grains, such as bread, bagels, tortillas, pitas, crackers, pasta, rice, and quinoa
  - whole fruit or 100% fruit juice
  - milk, yogurt, and smoothies
  - starchy vegetables, like potatoes, sweet potatoes, yams, winter squash and corn
  - legumes, such as chickpeas, black-eyed peas, lentils and kidney or black beans.

Non-starchy vegetables like salad greens, broccoli, asparagus, sweet peppers, and spinach are nutritious and contain water that can help with rehydration, but are low in carbohydrates. This can make it hard to meet your recovery needs, if eaten on their own. Combine them with some carbohydrate-rich foods listed above to help with recovery.



- Include protein-rich foods. Protein is important to repair, maintain and build new muscles. Protein provides amino acids, which are the building blocks of muscles. Aim for about 15 to 25 g of protein after you exercise.
- Good choices include:
  - lean meats, poultry, and fish, seafood
  - milk, yogurt, cheese, or cottage cheese
  - eggs
  - nuts and seeds and their butters
  - beans, peas, and lentils
  - tofu, soy products and fortified soy beverage.

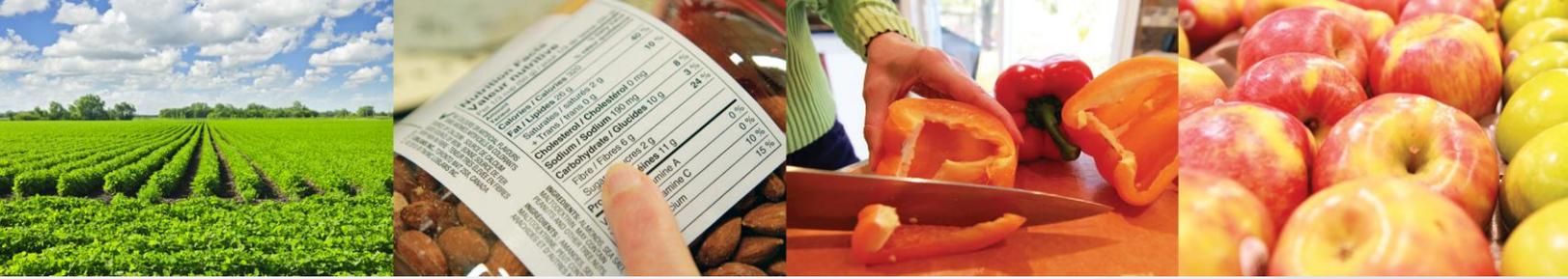
For more information on protein see additional resources section.

Eating more carbohydrate or protein than you need does not mean that you will build more muscle. Too much protein, carbohydrate or fat is stored as fat in the body.

- Drink enough fluids to replace what you lost in sweat during exercise. Aim for 500 to 750 mL (2 to 3 cups) for every pound (0.5 kg) of weight you lose during exercise. This is especially important if you plan to exercise again within the next day. If you don't know how much weight you lost, use your thirst as a guide. If you don't exercise intensely, choose water to rehydrate. Sports drinks are a good choice if you sweat a lot or exercise intensely.

### Recovery meal and snack ideas to try:

- Greek-style yogurt with low-fat granola
- whole grain cereal or oatmeal with low-fat milk or fortified soy beverage
- whole grain pita with tuna and low-fat mayonnaise
- a medium-sized baked potato with lean steak or grilled tofu and a side salad
- grilled or roasted chicken on a whole wheat tortilla with lower-fat cheese and mixed raw vegetables
- brown rice or quinoa with grilled fish and steamed vegetables
- smoothie made with silken tofu or Greek-style yogurt, soy beverage or low-fat milk, banana, and mixed berries.

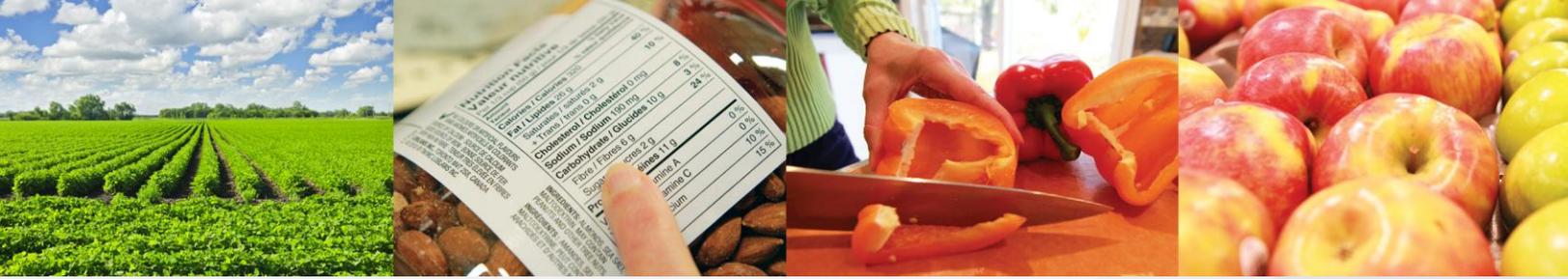


## Special Considerations

### What if I train or compete more than once a day?

Recovery nutrition becomes very important if you train or compete more than once a day. Examples include a swim meet, rowing regatta, hockey or soccer tournament. To speed up recovery, eat a snack within the first 30 minutes of finishing each session or competition, and continue to eat every 2 hours until your next event. The size and make-up of your meal or snack should depend on when your next session or event starts. In general:

- Choose smaller meals and snacks that are easy to digest if you don't have much time until your next event. Eating lightly will speed digestion, can prevent an upset stomach and will help you to refuel quickly for your next event without feeling too full. Good options include bananas, soda crackers, raisins, bagels or a sports drink.
- Choose a balanced meal or snack that includes protein and carbohydrates if you have more than an hour before your next session or event. Including both protein and carbohydrates will help with muscle repair, blood glucose (sugar) control, and help you feel satisfied. Keep fat and fibre low as they tend to digest slowly and can cause an upset stomach during exercise. See the recovery meal and snack ideas above for suggestions.
- Drink fluids to rehydrate. While water is an excellent choice for hydration, you may wish to use a sports drink that provides carbohydrates and electrolytes (salts) between training or events. Sports drinks can be especially important if you sweat a lot, have a salty sweat (white powder on your skin and clothes is a sign), it is hot or humid outside, or if you don't have enough time to eat.



## Additional resources

[Nutrition for Athletic Performance- Position Paper](#)

[Fuelling up before exercise](#)

[Sports Hydration - Get the facts](#)

[Sports Supplements - Get the Facts](#)

[Vitamins and Minerals for Athletes](#)

[Eating Well for Vegetarian Athletes](#)



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