

_ Eating and Drinking for Recovery

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Why is eating and drinking after training important?

During training or competition, your body loses fluids and uses a lot of muscle glycogen. Carbohydrates and water are what the body needs to replenish. If an athlete is dehydrated and glycogen-depleted, their body cannot recover and perform well during subsequent training.

When should I eat for optimal recovery?

It is recommended that athletes consume food and fluids **within 30 minutes of completing exercise** because blood flow to the muscles is greater and muscle cells are more insulin-sensitive. At this time the body is able to maximize its ability to replace glycogen - this is especially important when athletes train more than once a day.

What should I eat?

Athletes should consume **carbohydrate-rich foods** (see list on back of sheet) that they enjoy, and emphasize fluid replacement. It doesn't matter whether you prefer liquids or solid foods. Foods with a **high glycemic index** can be absorbed more quickly and recent studies have shown that including **some protein** (as little as 10 grams) after exercise may enhance glycogen re-synthesis by aiding the stimulation of insulin. After resistance training, protein may also help stimulate muscle growth due to the release of insulin and growth hormone.

How much should I eat?

It is recommended that athletes consume **1.0-1.5 grams of carbohydrate per kg of body weight immediately** after exercise, and then follow that with an **additional 1.5-2.0 grams of carbohydrate per kg at a meal or snack within 2 hours**.

Example: A 160lb (160 x 0.45 = 72kg) athlete

Timing	Food & Amount	Carb (g)	Protein (g)	Fluids (ml)
Within 30 minutes	500 ml Gatorade	28	0	500ml
post-workout	500 ml water	0	0	500ml
(goal 72-108g carb)	PBJ sandwich:			
	2 tbsp jam	26	0	
	2 sl. whole wheat bread	24	4	
	2 tbsp peanut butter	6	9	
	Totals:	84 g	13 g	1 litre
1 hour later at a	Deli turkey 6" sub sandwich	40	16	
meal	with	1	0	
(goal 72-144g carb)	1 tbsp light mayo	2	3	
	1 slice cheese	57	6	
	pretzels (70g bag)	43	0	300ml
	cranberry cocktail (300ml)	0	0	340ml
	water (340ml)			
	Totals:	143 g	25 g	640ml



Take home message:

- Commit to establish a regular habit of eating & drinking immediately after training.
- Choose carbohydrate-rich foods that you like and drink plenty of fluids.
- Include a little protein (e.a. milk or protein bar) to maximize alvcoae uptake.

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Common Carbohydrate Foods for Recovery

Food	Amount	Carbs (g)
Bagel	1 medium	35
English muffin	1	27
Whole wheat bread	1 slice	13
Hamburger bun	1	21
Pancakes	2 (4" diameter)	18
Bread sticks	4 sticks	28
Bran muffin	1 lrg (100g)	46
Rice, cooked*	1 cup	50
Pasta, cooked *	1 cup	35
Oatmeal, flavoured	1 package	26
Oatmeal, regular	1 package	19
Vector cereal	1 cup	36
Raisin bran	1 cup	42
Muslix, banana nut	1 cup	45
Low fat granola	1 cup	85
Crunchy granola bar	1 bar (46g)	16
Chewy granola bar	1 bar (28g)	23
Fig cookie	3 squares	28
Oatmeal raisin cookie	1	10
Banana bread	1 slice (60g)	33
Crackers	3-4 squares	15
Raisins, dried apricots	½ cup	59
Applesauce	1 cup	60
Grapes	1 cup	37
Fruit cocktail	1 cup	28
Banana	1 medium	27
Baked potato	1 large	50
Mashed potato	1 cup	35
Sweet potato	1 large	28
Corn	1 cup	42
Green peas *	1 cup	24
Chili, restaurant	1 cup	22
Soft bean burrito *	1 fast food	60
Baked beans *	1 cup	52
Split pea, lentil soup *	1 cup	28
Milk ☺	1 cup	12
Pudding, chocolate	1 cup	60
Low fat fruit yogurt *	1 cup	44
Fruit smoothie *	24 oz	95
Gatorade ☺	16 oz	28
Powerade ☺	16 oz	38
Orange or apple juice ☺	1 cup	28
Cranberry cocktail ☺	1 cup	36
Cola, regular ☺	1 cup	26
Powerbar	1	41
Clif Bar	1	44
Meal replacement drink ☺ *	1 can (240ml)	41



Practical Steps

To make eating for recovery into a habit, you need to be organized. Use these steps to get started:

1. Calculate the amount of carbs you need for recovery. (see over page)
2. Choose a food from the list that you like. Answer these questions:

Can I pack this in my workout bag? Yes or No

Will this food appeal to me after an intense workout? Yes or No

Do I need a utensil (spoon, fork) for this food and if so, will I pack it? Yes or No

Does this food and the amount I would eat provide enough carbs for me? Yes or No

Is this food affordable for me? Yes or No

If you answered Yes for all the questions, then this is a good recovery food for you.

3. Now repeat step 2 for three other foods so you have some variety.

4. Take a water bottle to practice and re-hydrate.

5. Plan for a regular meal or snack within 2 hours.

☺ denotes added benefit because also provides fluids

* indicates low glycemic index food