



Nutrition for B group and Transition group athletes – Fuel

What does my body use for fuel?

Carbohydrate from your food is turned into glycogen, which is your body's most important fuel during exercise. Part of your training is to train your muscles to store **more** glycogen. To do this, you need to make sure that you eat enough carbohydrate every day while you are training. The most common reason to have a "bad workout" is not eating enough carbohydrate to give fuel to your muscles.

How much carbohydrate do I need in a day?

You need between 8 and 10 grams of carbohydrate per kilogram of your body weight. Multiply your weight in kilograms by 8 and then by 10 to find the range of carbohydrate that you should aim for each day.

For example, a B group swimmer who weighs 50 kilograms (110 pounds) needs between 400 and 500 grams of carbohydrate each day.

Does it matter when I eat this?

Morning workouts (and races) use last night's dinner and snacks for fuel. Evening workouts rely on fuel that you've stored from breakfast and lunch. Don't miss these opportunities!

You can improve the ability of your body to store fuel, by eating within 30 minutes after a workout. Have a small amount of protein too. This will help you to build muscle or to keep the muscle that you have strong.

Eating soon after workout is **especially** important when you have another workout within 10-12 hours.

What should I have after workout?

Here are a few ideas for an "after workout" snack:

Chocolate milk (500 ml.)
Kozy Shack rice pudding or yogurt (180-250 ml.)
A Yop and a few arrowroot cookies
A peanut butter sandwich and a glass of juice
Cheese and Stoned Wheat Thins
Cereal with milk

It is a good idea to have rice or potato with your dinner sometimes. The carbohydrate from these will allow you to store glycogen a little faster than pasta or bread. Try to have something with salt in it, or add a bit of salt to your dinner.

Sports drinks are **not** the best choice after a workout.

Is there anything special I should have after school?

You should have two large glasses of fluid as well as a snack. This is a good time to have a high carbohydrate fluid like juice or lemonade.

Do I need to eat before morning workout?

It is a good idea to eat a little bit before a morning workout. Your body will have used all of your liver glycogen for energy while you slept. This meal should contain some carbohydrate and a little protein, but not much fat.

Do I need to take carbohydrate during workouts?

Having a drink with carbohydrate is better than having plain water during any workout that is over one hour long. The carbohydrate helps your glycogen to last longer and increases your ability to swim well. It also helps to keep your immune system stronger, so that you are less likely to get sick. Sports drinks like PowerAde, Gatorade or homemade versions of these, are formulated to empty quickly from your stomach. They have salt in them and a lower concentration of carbohydrate than fruit juice. The type of sugar they contain is more quickly converted to energy than the sugar from fruit juice.

What if I don't have time to drink during workout?

There will be some times when you don't have enough time between sets to drink. Don't let that stop you from taking the drink when you do have time. Try to make sure that you have about 250 ml. of a sports drink before you start to swim – immediately after "dry land". Putting this much fluid in your stomach helps it to empty faster than if you just take small sips.

Carbohydrates(in grams) for some sample foods and snacks

Food	Amount	Carbohydrate (grams)
Pizza - cheese	1 slice	28
Bagel	1 four inch	49
White rice, cooked	1 cup	45
Potatoes, mashed	1 cup	35
Pasta, linguine, cooked	1 cup	40
Stoned Wheat Thins	6	16
Soda crackers	6	13
Hamburger bun	1 whole	22
Pita pocket, whole wheat	1 whole	25
Eggo waffle	2 waffles	29
Pumpkin loaf	1 slice	25
Fig Newton Cookies	4 cookies	40
Oatmeal cookie	1 large	25
Kellogg's Frosted Flakes	1 cup	37
Honey Nut Cheerios	1 cup	24
Oatmeal, instant	1 package	36
Rice Krispie Square	1 package	30
Corn	1/2 cup	17
Baked beans	1/2 cup	26
Peach	1 small	11
Plums	2 medium	17
Apple	1 medium	22
Fruit cocktail in light syrup	1 cup	36
Milk, 2%	1 cup (250 ml.)	12
Chocolate milk	1 cup	27
Chocolate pudding	1/2 cup	25
Vanilla ice cream	1 cup	30
Yogurt, with fruit	1 cup	40
Yop	One (200 ml.)	26
Rice pudding, Kozy Shack	3/4 cup	44
Lemonade	1 cup	36
Cranberry juice	1 cup	37
Sun Rype fruit and veggie juice	1 cup	29
Gatorade	1 cup	15
Powerade	1 cup	22