

TRAINING MEALS

POWER YOUR PERFORMANCE

“Just tell me what to eat and I’ll do it!” This sounds like a simple enough request from an athlete seeking nutrition advice, but leaves out one very important fact: what foods you like to eat! Taste is an important consideration in choosing foods to power your sports performance. You’ll be more likely to stick with high-powered foods if you can eat the ones you enjoy.

Think of the food you eat in terms of the preventive maintenance you’d give a car. Oil changes are routine, as is changing the air filter, adding windshield washer solvent, and checking the antifreeze in the radiator. Routinely choosing appropriate foods for your training meals will be the preventive maintenance you use to keep your body running smoothly and powerfully all season long.

Where Do You Start?

The Food Guide Pyramid is a general outline to help Americans choose a healthful diet. It guides you in selecting what and how much to eat from each food group to get the nutrients you need. Using the pyramid also helps regulate the amount of calories, fat, saturated fat, cholesterol, sugar, sodium, or alcohol you consume. As an athlete, the pyramid should be the foundation of your training diet.

Foods are grouped by common nutrients. Eating the appropriate numbers of servings from each food group makes it easy for you to get the nutrients to keep you fit and improve your sports performance. (See *Nutrition, The Athletic Advantage* handout for pyramid information.)

Food provides carbohydrates, proteins, and fats for energy (calories). As an athlete, you need to divide your total daily calories into these proportions:

Carbohydrates	60-65%
Proteins	15-20%
Fats	< 20%

Athletes’ carbohydrate requirements are higher than a less active teenager. A moderate amount of protein will maintain muscle mass and strength. Too much fat can slow you down during competition. To reach these percentage goals, eat more servings from the grain, fruit, and vegetable groups.

Picture your plate of food as you begin to eat. Almost two-thirds of the plate should be covered with high carbohydrate foods. Less than one-fourth of the plate should contain high protein foods (from the meat group). Eat only small amounts of fat, which may come either from the food itself or from the way it is prepared.



How Much Fuel Do You Need?

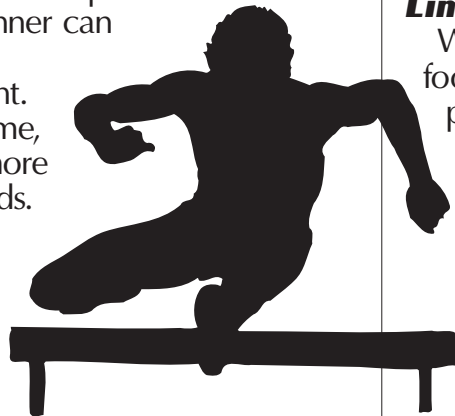
A car’s fuel is measured in gallons. Your body’s fuel is measured in calories. Your calorie requirement is determined by body size, age, gender, sport, and conditioning. You need to eat enough food so as not to compromise growth and health while training. Athletes need tremendous amounts of energy to practice and compete, so you may need to eat even more than the number of servings recommended on the pyramid. This is true even in sports where athletes try to keep their weight low (wrestling, gymnastics, cross country, diving).

Refer to the chart on page 6 to estimate your daily calorie needs. From the “What’s My Number?” chart, identify the minimum number of servings you need from each of the Five Food Groups.

Be a Winner With Breakfast, Lunch, and Dinner

You can increase your strength and energy for practice or events by spreading your calories throughout the day. It is best to divide your calories into thirds. Try to consume one-third of your calories in the morning, one-third in the afternoon and another third in the evening.

In the morning you can have both breakfast and a snack. Some athletes who work out in the morning eat a light breakfast before their activity and a heavier snack afterwards. Lunch and a light afternoon snack are essential to power after-school practices. Dinner can help you refuel from an afternoon practice or event. If you have an evening game, eat a light dinner then a more substantial snack afterwards.



Eat To Compete

What you eat all season can make the difference between winning and losing. Your best bet is to eat a low fat, high carbohydrate diet. Extra carbohydrate increases the amount of carbohydrate (called glycogen) in your muscles.

Timing is Everything

Most of the glycogen your body uses during competition is stored in the muscles 24 to 48 hours before the event. Eating high-carbohydrate meals *at least a few days before* an event will help you achieve maximum strength, energy and endurance. Eating a high carbohydrate food or meal *right before* an event will give you a little boost if you are competing for more than one hour. However, it alone will not provide you with all the energy you need for the entire event. *That’s why it pays to plan in advance.*

To plan in advance means:

- determining which high carbohydrate, low fat meals you enjoy most
- knowing which foods are convenient and portable for away meets, day-long tournaments or super busy days
- shopping for those foods so you have a constant supply on hand



High-Carb Foods

Foods that are good sources of carbohydrates are mainly found in the bottom half of the Food Guide Pyramid in the grain, fruit and vegetable groups. Other good sources of carbohydrates include milk, yogurt, nuts, dried beans and peas.

Limit the Fat

When limiting fat, the first step is to go easy on foods in the “Others” Group (at the tip of the pyramid) such as regular salad dressings, mayonnaise, butter, margarine, snack chips, and candy. Be aware some foods in the other five food groups can also be high in fat. For example, when choosing foods in the grain group, choose whole grains often and eat fewer dessert-type breads like donuts, danishes, cake, and cookies. Foods in the fruit and vegetable groups naturally contain little or no fat, but are chock full of vitamins and minerals. This is another good reason to enjoy a variety of fruits and vegetables.

Food Preparation Tips To Reduce Fat Intake

- Make dips with nonfat yogurt and salad seasoning packets.
- Try baked, not fried, snack foods.
- Use lower fat versions of food: Canadian bacon instead of bacon or sausage, turkey-based cold cuts instead of beef or pork.
- Air pop popcorn rather than oil pop.
- Substitute mustard, catsup, salsa, fresh veggies for mayonnaise-based condiments.
- Use smaller quantities of high fat toppings on salads, baked potatoes, and bread products.
- Use lower fat cooking methods: microwaving, broiling, grilling, roasting—instead of frying.
- If you do fry, use cooking spray in place of oil.
- Drain grease from cooked meats before adding to tacos, chili, spaghetti sauce, etc.
- Use more vegetables and less meat in stir-fry meals and casseroles.

Meal Deals

The following meals are a few examples of high carbohydrate, low fat choices.

Training Meals

breakfast

granola cereal with raisins
lower fat milk
apple juice

OR

fruit-flavored yogurt
whole wheat bagel
orange juice

lunch

bean burrito
fruit salad
iced tea

OR

pizza with ham and veggies
fresh fruit
lower fat milk

dinner

grilled pork chop
baked potato
wheat roll
broccoli
baked apple
lower fat milk

OR

baked chicken
rice, long grain
tossed salad
bread sticks
peas
lower fat milk

But I Don't Eat Breakfast!

Skipping breakfast is like trying to run your engine without fuel. Even while you sleep, your body's engine is idling. By morning, your gas tank is empty and you need to refuel. You can choose usual breakfast foods like cereal, waffles or eggs and toast. You can try unique breakfast combos like peanut butter and jelly on your pancakes. If those foods don't satisfy your cravings, try cold pizza or other leftovers. Remember to refuel!

Breakfast is the most critical refueling time of the day, but when you skip lunch or dinner your performance and training still suffer. Your engine gradually runs out of fuel and rolls to a stop.

You get into double trouble when you skip two meals. For example, you get up late and rush to school without breakfast. Then you're busy at school and don't eat much lunch or a snack. By the end of the school day your engine is running on fumes—not the way to start your practice or a game.

The Lunch Munch

Taking a lunch to school can solve many problems. It's faster than waiting in the school



cafeteria line or at a restaurant. You can be sure it includes your favorite foods and foods that are high in carbohydrates and low in fat. Pack your lunch the night before so you won't have to rush in the morning. Use leftovers from dinner, if available, and add your favorite combinations of the following portable, high-energy, healthful foods:

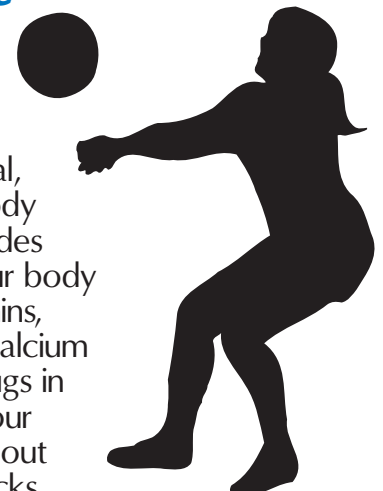
- peanut butter sandwich
- lean meat and cheese sandwich with mustard
- fresh fruit
- yogurt
- raw vegetables
- pasta salad
- soup in a thermos
- dried fruit
- wheat or rye crackers
- applesauce
- homemade popcorn
- vanilla wafers
- graham crackers
- ginger snaps
- animal crackers/cookies

Tips

- For a sandwich switch, instead of plain bread, use pancakes, waffles, english muffins, soft tortillas, pita bread, sub rolls, hamburger buns, hotdog buns, bagels, banana bread or raisin bread.
- Sandwiches can be made ahead of time and frozen. Peanut butter, meat, chicken and turkey freeze well (mayonnaise and lettuce do not).
- To keep foods cold, freeze a can or box of juice and add it to your lunch container.

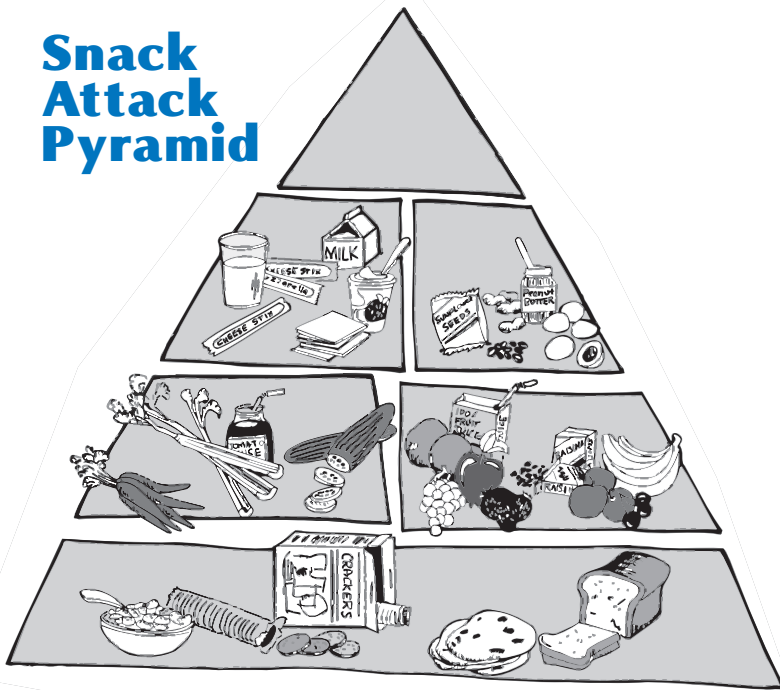
Snack Sense

One way to keep your gas tank full is with nutritious snacks. Even when you don't have time for a big meal, snacks provide your body with extra power. Besides energy, snacks give your body nutrients, such as vitamins, electrolytes, iron, and calcium which are like spark plugs in your body's engine. Your engine won't start without spark plugs, so use snacks to fire it up.



The secret to snack sense is choosing from the Food Guide Pyramid. Check out the “Snack Attack” pyramid below for ideas. Think of other snacks you would add to each of the food groups.

Snack Attack Pyramid



By combining three or more food groups, you can create some super power-packed snacks. Here are some examples:

- Yogurt, topped with cereal, sunflower seeds and raisins
- Pita bread filled with veggies, cheese, and ham or chicken; add fruit juice
- Crackers and peanut butter with a glass of milk
- String cheese, plus a mixture of peanuts and raisins

Nutritious snacks taste great and give your body what it needs! Use your snack sense. Get creative.

About Eating Out...

Eating at fast food restaurants can *occasionally* fit into a training diet. The key is to make high carbohydrate, lower fat choices. Greasy food before practice or competition will most likely give you stomach problems.

breakfast choices

- pancakes
- hot or cold cereal
- juice
- bagels & low-fat muffins
- non-fat or light milk

lunch and dinner choices

- thick-crust pizza
- chili
- baked potato (add small amounts of toppings)
- salad bar (go easy on the high-fat toppings and dressings)
- spaghetti and other pastas
- soups (broth or beany ones)
- roast or grilled chicken (no mayo on the sandwiches)
- lean roast beef sandwich
- non-fat or light milk

vending machine choices

- pretzels
- fruit bars
- vanilla wafers
- cheese or peanut butter and crackers
- milk
- juice

Pre-Competition Meals

Eating before competition helps your body in many ways. It will prevent low blood sugar (which can cause dizziness, fatigue, blurred vision and indecisiveness), help settle your stomach and stave off hunger. Food eaten 24 to 48 hours in advance and stored as glycogen will fuel your muscles. Food eaten within an hour of competition will give you extra energy for longer events.

There are general recommendations for the kinds of food and

beverages that work well for many athletes before and after competition, however, what works best for you may vary slightly. Some athletes can only tolerate liquids before events; others swear by particular foods like cereal and a banana.

You'll discover what works for you by trial and error during training.



Pre-Competition Meal Guidelines

- high carbohydrate
- low fat
- small amounts—just enough to keep yourself from being hungry during the meet
- include fluids (see *Fluids: Solutions for Competition* handout)
- low salt (to help avoid dehydration)
- last meal eaten 3 to 4 hours prior to competition

The rule of thumb is: closer to the event eat a smaller quantity of food in a more liquid form.

Here are some particulars:

One hour or less before competition:

- fruit and vegetable juices such as orange, tomato, or V-8 juices and/or
- fresh fruit such as apples, watermelon, peaches, grapes or oranges

Two to three hours before competition:

- fruit juices and fresh fruit, and/or
- breads, bagels or muffins, with a limited amount of butter or cream cheese

Three to four hours before competition:

- fruit juices and fresh fruit, and
- breads, bagels or muffins, and
- a light spread of peanut butter or slice of cheese for breads, or a light spread of cream cheese or butter for bagels and/or
- bowl of cereal with lower fat milk

Four hours or more before competition:

- sandwich with 2 slices of bread and 2 ounces of lean meat, and
- fresh fruit, and
- fresh vegetables, and
- lower fat milk

Post-Competition Meals

Your body's energy reserves will have been depleted after competition, so it's important to refuel your body immediately to prepare for the next practice or event.

The most effective way to replenish carbohydrate stores is to eat a high carbo-hydrate meal within 15 to 30 minutes. If drinking a beverage is preferred or the only option right away, eat a high carbohydrate meal within two hours. Athletes involved in intense daily training or repeated and closely-scheduled competitions should pay careful attention to immediate refueling.

Portable Power for the Road

Try these high carbohydrate, low fat foods that don't need refrigeration:

- juice in individual servings
- breakfast tarts
- combo-packs of cereal and milk
- dry cereal, granola, or trail mix
- pretzels
- popcorn
- fresh fruit (apples, oranges, bananas)
- dried fruit
- lowfat fruit bars
- bagels
- animal crackers
- veggie sticks
- graham crackers
- fig bars



Liquids and solid foods will refuel your muscles equally well. Here are some tried-and-true re-energizers:

- 1 cup orange juice and a medium bagel
- 16 oz. cranberry juice
- fruit yogurt and graham crackers
- bowl of corn flakes with milk and a banana

You can enjoy your favorite foods as part of your training when you plan ahead.

About How Many Calories Do I Need?
Which statement best describes your activity level?

Females, ages 11-18

weight (lbs)	I don't exercise at all	I walk, golf, bowl, and/or play games such as table tennis for exercise	I regularly get at least 30 minutes of aerobic activity daily	I am an elite competitive athlete or do heavy manual labor regularly
90-100	1700	1900	2000	2400
100-110	1700	2000	2100	2500
110-120	1800	2100	2200	2600
120-130	1900	2200	2400	2800
130-140	1900	2200	2400	2800
140-150	2000	2300	2500	2900
150-160	2100	2400	2600	3100

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Which statement best describes your activity level?

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90-100	1800	2300	2400	3000
100-110	1900	2400	2500	3100
110-120	2000	2500	2700	3300
120-130	2100	2600	2800	3500
130-140	2200	2800	2900	3600
140-150	2300	2900	3100	3800
150-160	2500	3000	3200	4000
160-200	2500-2800	3000-3500	3200-3700	4000-4600

Adapted from: National Dairy Council

Many factors determine individual calorie needs. These charts are only estimates. Your needs may be significantly different.

What's My Number?

If you need this many calories:

You should eat at least this number of servings:

Calories	Milk	Meat	Vegetable	Fruit	Grain
1500-1800	4	2	3	2	6
1801-2000	4	2-3	3	2	7
2001-2200	4	2-3	4	3	8
2201-2400	4	2-3	4	3	9
2401-2700	4	2-3	4	3	10
2701+	4	3	5+	4+	11+

Source: National Dairy Council

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