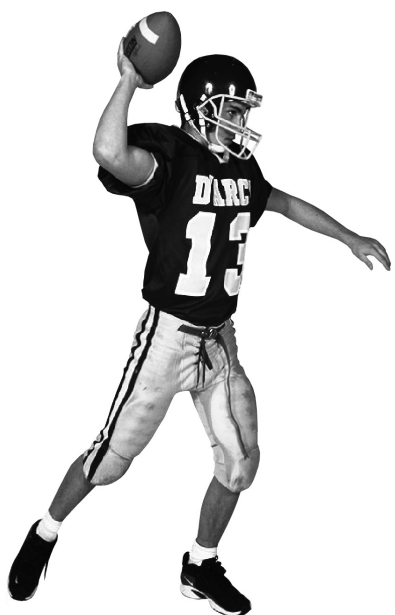


eat to compete:



What you should know about training diets...

Carbohydrates...

- are the best fuel source to support physical activity
- are stored in the body and used during exercise
- in inadequate amounts can lead to exhaustion during exercise
- must be consumed every day before and after exercise to maintain carbohydrate levels in the body

Carbohydrate needs

Carbohydrate needs are based on body weight. Athletes need 3-4.5 g carbohydrate/lb of body weight per day. The following show the minimum amount of carbohydrate athletes at various weights should have throughout a day.

- 125 lbs. – 375 grams/day
- 150 lbs. – 450 grams/day
- 175 lbs. – 525 grams/day

Before practice/competition:

- **day before:** consume plenty of complex carbohydrates
Examples: spaghetti with a meat sauce, wild or brown rice with vegetables
- **3 to 4 hours before:** about $\frac{2}{3}$ of your meal/snack should be complex carbohydrates that are low in fat while the rest is protein
Examples: brown rice, bread (whole wheat, oatmeal, rye)
- **foods to avoid:** high-fat foods, foods high in simple carbohydrates, and any new foods
Examples: fried foods, snack or baked goods from white flour, candy, soda

After practice/competition:

- **within 30 minutes:** any type of liquid carbohydrate
Examples: juice, milk or sports drink
- **within 2 hours:** consume 100 to 200 grams of carbohydrate, preferably a complex carbohydrate combined with a low-fat protein
Examples: pasta with lean meat, chocolate milk, bagel, muffin

| Food | Amount | Grams of carbohydrates |
|-----------------------|------------------------------------|------------------------|
| Whole grain bread | 1 slice | 12 to 18 g |
| Tortilla | 1 | 20 to 22 g |
| Cooked pasta | $\frac{1}{2}$ cup | 18 to 20 g |
| Dry cereal | $\frac{1}{2}$ to $\frac{1}{4}$ cup | 22 to 28 g |
| Bagel, English muffin | $\frac{1}{2}$ | 15 to 20 g |
| Pancake | 1 | 11 to 13 g |
| Apple | 1 medium | 21 g |
| Banana | 1 medium | 26 g |
| Grapes | 1 cup | 16 g |
| Melon | 1 cup | 14 g |
| Milk | 1 cup | 12 g |
| Yogurt | 6 ounce container | 1 to 22 g |

Did you know...

- Low-carbohydrate diets decrease athletes' ability to perform.
- Complex and simple carbohydrates are equally effective in providing energy; however, complex carbohydrates are also packed with fiber, vitamins, and minerals.
- Carbohydrate loading (70 to 80% of total calories) only benefits athletes exercising hard for more than 90 minutes.

Proteins...

- are made up of amino acids
- are important for growth, development, maintenance, and repair of body tissues
- are easily provided in ordinary foods; supplementation is not needed
- contribute less than 5 percent of energy needs

Protein requirements (14- to 18-year-olds):

The Dietary Reference Intake (DRIs) recommend .4 grams per pound per day (.8 grams per kilogram).

Highly competitive athletes (those training 3 or more hours daily) have higher protein needs of .5 to .7 grams per pound per day (1.2 to 1.6 grams per kilogram per day). These protein needs can be met easily through food intake because of the extra calories needed.

Daily protein needs based on weight (0.5 to 0.7 grams per pound) are as follows:

- 130 lbs = 70 to 95 g/day
- 155 lbs = 84 to 113 g/day
- 180 lbs = 97 to 131 g/day
- 200 lbs = 108 to 146 g/day

| Food | Amount | Grams of protein |
|-----------------------------|---------------------------|------------------|
| Lean beef, pork, or poultry | 3 to 4 oz | 25 to 30 g |
| Fish (salmon, tuna) | 3 to 4 oz | 18 to 22 g |
| Eggs | 3 eggs | 18 g |
| Peanut butter | ¼ cup (2 ping-pong balls) | 16 g |
| Nuts | ⅓ cup (handful) | 7 to 10 g |
| Milk | 1 cup | 8 g |
| Cooked beans | ½ cup | 8 g |

Before practice/competition:

- **day before:** consume a moderate amount of low-fat protein
Examples: spaghetti with a lean meat sauce, grilled chicken sandwich
- **3 to 4 hours before:** about ⅓ of your meal/snack should be proteins while the rest (⅔) is complex carbohydrates that are low in fat
Examples: low-fat yogurt, peanut butter and jelly sandwich

After practice/competition:

- Consuming some protein with carbohydrate will help with building, maintenance, and repair of muscle.
- 7-10 grams of protein with carbohydrate within 30 minutes of exercise is enough to start muscle protein synthesis.
- About 20 grams of protein is the maximum amount needed to stimulate synthesis and repair of muscle.

Did you know...

- Eating large quantities of protein will NOT increase muscle size or strength.
- The typical American diet exceeds the protein needs of sedentary people and generally meets the protein needs of active people.
- Protein is not a primary source of fuel for muscle performance.

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... and justice for all

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