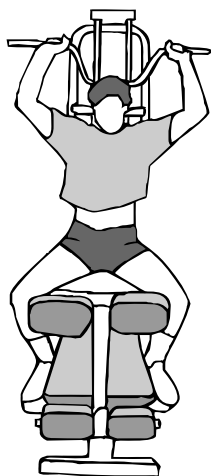




YOUR NUTRITION GAME PLAN



Zoning in on the Diet That's Right For You



It's often said that athletes need a certain percentage of dietary fat, carbohydrates and protein. But there is a problem with that approach. The problem is this - it assumes that we all need the same percentages. It assumes that we are all genetically and physically the same; that we all participate in the same sport, have identical training programs and identical lifestyles.

Of course, we are each unique. Using percentages is not individualized enough to meet the needs of different athletes.

How can you find a diet that works for you **and** meets your needs? Read on.

Protein

Do athletes need more protein than couch potatoes? Yes.

Research shows that 1.5 grams of protein per kilogram body weight (about 0.68 gm/pound) provides adequate protein for most athletes.

Almost twice the level recommended for non-athletes, this amount of protein takes into account the additional protein needed for long workouts and weight lifting.

TABLE 1: FACTORS INCREASING ATHLETES PROTEIN NEEDS:

- Eating no animal protein (vegan diet)
- Low calorie intake
- Growing taller

TABLE 2: DETERMINING DAILY PROTEIN REQUIREMENTS:

To get your estimated daily protein requirement:

Multiply your body weight (in pounds)
by 0.68

$$\text{_____} \times 0.68 = \text{_____} \text{ grams}$$

This is the average amount of protein you should eat each day. Meeting this number exactly every day is not necessary. Some days will be higher, and some lower.

Carbohydrates

Have you heard about "glycemic index"? Based on this grading system, carbohydrate foods are classified as high glycemic index if they make your blood sugar increase quickly, and as low glycemic index if they make your blood sugar increase slowly. It has been proposed that everybody should eat mostly low glycemic index food, like dried beans, fresh fruits and veggies and stay away from high glycemic foods, like pasta, bagels, potatoes, breakfast cereal and bread. What gives?

The effect food has on your blood sugar can be important if you have diabetes. But for athletes who don't have diabetes, it is less important.

The most important thing for athletes is to get the right **amount** of carbohydrate, from many foods, to support their particular training. Both high glycemic index and low glycemic index carbohydrates provide energy for high intensity workouts.

How much carbohydrate do you need? There's no exact number of grams and no "magic" percent, but there are some guidelines:

MODERATE AMOUNT:

5 grams per kilogram body weight per day
(2.3 grams per pound)

If your workouts are plyometrics, drills, sprints, weight lifting or skill training, your carbohydrate needs are moderate. Also, if your workouts include less than an hour of aerobic training (running or biking), you have moderate carbohydrate needs.

HIGH AMOUNT:

8 to 10 grams per kilogram body weight per day
(about 3.6 to 4.5 grams per pound).

You have high carbohydrate requirements if you are running, biking, swimming, skiing, climbing, rowing or doing other aerobic workouts for more than 60 minutes on most days.

ANOTHER EXAMPLE:

Let's say you run about two miles per day, work on fundamentals in practice, and lift weights four days per week. You would fall in the moderate category, needing about five grams carbohydrate per kg or 2.3 grams per pound.

Multiply your weight in pounds x 2.3

$$\begin{aligned} & \text{_____ pounds} \times 2.3 \\ = & \text{_____ grams carbohydrate per day.} \end{aligned}$$

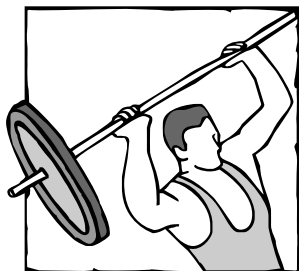
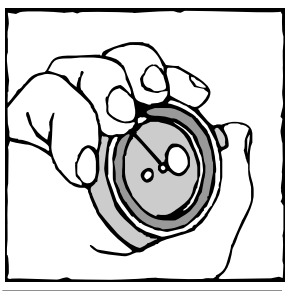
The food list to the right gives carbohydrate and protein content for common foods.

So what would happen if you ate more protein than you needed, and less carbohydrate? The body is very adaptable. Most likely, some of the protein would be burned for energy. If there were still extra protein hanging around that could not be used for muscle growth and repair, it would be converted to fat.

Conclusion

Running out of steam before practice is over? Check your carbohydrate intake. Not making strides in the weight room? Check to see if protein is in short supply.

Forget percentages. Knowing how many grams of protein and carbohydrate you need based on your body weight and training is a fundamental step toward reaching your peak performance.



Protein/Carbohydrate Guide

Protein

These foods - in the amounts shown - have 20-25 grams of protein:

- Hamburger - 1 small
- Steak - 3 oz.
- Pork chop - 1 small
- Tuna - 3 oz.
- Turkey - 3 oz.
- Chicken - 1/2 breast

These foods - in the amounts shown - have 7-8 grams of protein:

- Yogurt - 6 oz.
- Nuts - 1 oz.
- Sunflower seeds - 1 oz.
- Peanut butter - 2 tablespoons
- Legumes (pinto beans, kidney beans, etc.) - 1/2 cup
- Egg - 1 large
- Milk - 1 cup
- Cheese - 1 oz.

These foods - in the amounts shown - have 2-3 grams of protein:

- Bread - 1 slice
- Bun - 1/2
- Rice - 1/3 cup
- Ready-to-eat cereal - 3/4 cup
- Bagel - 1/2 (small)
- Pasta - 1/2 cup
- Potato - 1 medium
- Vegetables - 1/2 cup

Carbohydrate

These foods - in the amounts shown - have 15 grams of carbohydrate:

- Bread - 1 slice
- Bagel - 1/2
- Tortilla - 1
- Waffle - small
- Breakfast cereal - 3/4 cup
- Corn or peas - 1/2 cup
- Non-starchy vegetables - 1-1/2 cups
- Popcorn - 3 cups
- Chips - 15
- Pinto, kidney or white beans - 1/2 cup
- Yogurt, fruit-flavored - 3 oz.
- Cantaloupe, honeydew, or watermelon - 1 cup
- Apple, banana, orange or peach - 1 small
- Crackers - 6
- French fries - 16-25
- Taco shell - 2
- Small muffin
- Cookies - 2 small
- Small potato
- Fruit, canned - 1/2 cup
- Berries - 1 cup
- Juice - 1/2 cup
- Milk - 1 cup



International Center
for Sports Nutrition
505 Durham
Research Plaza
Omaha, NE 68105