**WHAT IS PROTEIN?**
Protein is the foundation of a good diet and is made up of amino acids. Amino acids can be thought of as the “building blocks” of protein. Proteins are long “necklaces” of amino acids linked together. Dietary sources of protein are either complete or incomplete protein. Complete proteins contain all the essential amino acids our bodies cannot make and are therefore vital in our diets in small amounts. By contrast, incomplete proteins, which come from mainly plant sources, can be combined to make a complete protein.

**WHY IS PROTEIN IMPORTANT IN YOUR DIET?**
Protein makes up the largest percentage of material in the human body next to water, approximately 45%. Protein is vital to maintaining immune function, producing hormones and enzymes, healing tissue, and have a role in athletic performance as a component of hemoglobin and myoglobin. These tissues are involved in oxygen transport to muscles. Protein can also supply the body with energy during starvation or intense exercise. For example, in aerobic sports, amino acids may supply up to 15% of the total energy used. An inadequate supply of protein in one’s diet can obviously harm one’s health or performance!

**HOW MUCH PROTEIN DOES YOUR BODY NEED?**
♦ How much protein your body needs is dependent on your weight, the amount of calories you consume, and your degree and intensity of training. If overall calorie or energy needs are not met, then the protein you eat will be used by the body for energy instead of for vital functions. When the body gets enough energy (calories) and protein daily, it can provide all the necessary body functions, maintain strength and heal effectively.
♦ Protein needs are greatest for endurance athletes such as distance runners, swimmers, soccer players, cross-country skiers, triathletes, and road cyclists. Strength-training athletes also have increased protein needs (to a lesser degree than endurance athletes).
♦ A rule of thumb method for determining protein needs for a healthy, active person (male or female) would be the following: **Multiply your weight in pounds by 0.5 - 0.7 grams protein per pound.** Example: If you weigh 120 lbs, multiply 120 x 0.5 - 0.7 = 60-84 grams protein per day (4-6 protein equivalents). In addition to protein foods, a 120 lb person would require 2-3 calcium/dairy servings and 6 servings of carbohydrate per day.
WHAT IS CONSIDERED A PROTEIN EQUIVALENT?
(Each Protein equivalent = 7 grams Protein)

♦ Meat/Poultry/Fish 1 oz.  Egg 1 or 2 whites
♦ Canned Tuna or Salmon 1/4 cup  Beans/Peas/Lentils 1/2 cup
♦ Cheese 1 oz.  Soybeans, cooked 1/4 cup
♦ Ricotta or Cottage Cheese 1/4 cup  Peanut Butter 2 Tbs.
♦ Grated Parmesan 2 Tbs.  Tofu 4 oz.

WHAT IS CONSIDERED A CALCIUM/DAIRY EQUIVALENT?
(Each Calcium equivalent = 8 grams Protein)

♦ Skim/1%/2%/Whole milk 1 cup
♦ Yogurt (lowfat, nonfat, regular) 1 cup
♦ Cheese, hard 1 1/2 ounces
♦ Ricotta cheese, part skim, regular 1/2 cup
♦ Cottage cheese 2 cups
♦ Powdered skim milk 1/4 cup
♦ Frozen yogurt, milk based 1 1/2 cup
♦ Pudding, lowfat, nonfat, regular 1 cup

Most women require a minimum of 4-6 protein equivalents and 3 calcium/dairy equivalents in their diets daily to maintain muscle strength, bone density, health and nutritional status. Athletes’ protein needs will vary, and may be greater depending on degree and type of training or sport. A nutritionist can help you determine your exact protein needs.