



## Eat Healthy Proteins

**CHALLENGE**  
Eat healthy  
proteins this  
month.

### Requirements to Complete this HEALTH CHALLENGE™

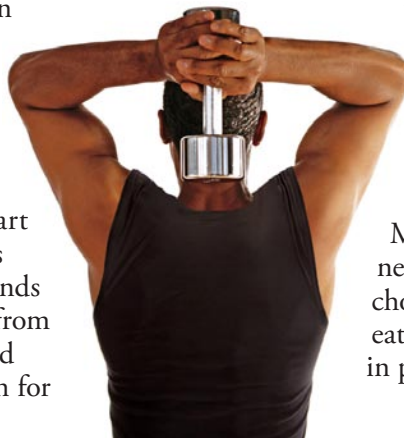
1. Read "Protein is Essential" and "Protein Basics."
2. To complete the Challenge, you must eat healthy proteins in place of red meats.
3. Keep records of your completed Challenge in case your organization requires documentation.

### Protein is Essential

Your body needs protein to build, repair, and maintain itself. For instance, your body uses protein to make hemoglobin – the blood cells that carry oxygen throughout your body. Your muscles, bones, skin, heart, and other organs are made up mostly of proteins. Your immune system and hormones also need protein to function.

Eating more protein-rich foods and healthy fats in place of refined carbohydrates (e.g., white bread, refined cereals, sugar, white rice, white potatoes), improves triglyceride and HDL levels, which may reduce your chances of having a heart attack, stroke, or other form of cardiovascular disease. In the Nurses' Health Study, women who ate less refined carbohydrates (a lower glycemic diet) cut the risk of disease by 51% compared to women who ate high glycemic meals. Eating this way may also make you feel full longer, so you don't snack or overeat.

On the other hand, not eating enough protein can cause loss of muscle mass, decreased immunity, weakening of the heart and respiratory system, and death. It takes about 8 grams of protein for every 20 pounds of body weight to keep your body tissues from slowly breaking down. If you want to build muscle, it may take 10-12 grams of protein for every 20 pounds of body weight.



### Muscles need protein

You may be a young healthy athlete interested in building muscle. Or, you may be a retired person who wants adequate muscle strength to climb stairs, lift a grocery bag at the store, and maintain independent living. In either case, there are two key principles for maintaining good muscle strength:

#### 1. Muscles need to be challenged to grow stronger.

The best way to build strength is by weight lifting, working out on resistance machines, or using your own body weight as in doing push-ups and curl-ups.

**2. Muscles need adequate protein.** Research shows that muscles are most efficient at using protein and rebuilding muscle tissue immediately after strength-building exercise. A recent study found that drinking 2 glasses of milk or soy milk (18g of protein) immediately after a workout raised the amino acids in the blood to a level that maximized protein uptake for muscle building. Both the strength exercises and the increased amino acids in the blood stimulate muscle growth. Getting the protein into the system at the right time resulted in the best rate of muscle growth.

### How much protein?

The Institute of Medicine recommends that adults should get 10-35% of their daily calories from protein. To achieve this goal, aim to eat protein-rich food at every meal. Athletes in training need 20-40% more protein per day to repair and build muscle after a hard workout. In addition, anyone trying to build muscle should eat a protein-rich food within an hour or so of strength training.

Most Americans get adequate protein but need to make leaner (less saturated fat) choices. It is not difficult to do if you mostly eat unrefined foods and at least 3 foods high in protein daily.

An average male needs at least 2400 calories a day – which means he should be eating 72-90 grams of protein per day for adequate health.

## Protein Basics

Protein foods such as legumes, nuts, and whole grain/legume combinations also have fiber, healthy fats, and other nutrients. On the other hand, protein foods, like steaks, processed luncheon meats, and whole milk, come “packaged” with unhealthy fats. If you eat animal products, fish and skinless poultry are your best choices. If you choose to eat beef, pork, or lamb, do so only occasionally. And when you do, select the leanest cuts.

### Animal-based proteins

The U.S. Department of Agriculture recommends the following actions for choosing healthier animal proteins:

#### Start with a lean choice.

- Buy skinless chicken parts, or take off the skin before cooking.
- Boneless skinless chicken breasts and turkey cutlets are the leanest poultry choices.
- For sandwiches, choose lean turkey slices instead of high-fat luncheon meats such as bologna or salami.
- Eat more fish, which has a healthy fat and is protective against heart disease.

#### Keep it lean.

- Trim away all visible fat from meats and poultry before cooking.
- Broil, grill, roast, poach, or boil meat, poultry, or fish. No frying!
- Drain off any fat that appears during cooking.
- Skip or limit the breading on meat, poultry, or fish. Breading adds fat and calories. It will also cause the food to soak up more fat during frying.
- Prepare dry beans and peas without added fats.
- Choose and prepare foods without high-fat sauces or gravies.



### Dairy and Eggs

If you eat cheese and dairy, make sure it's low-fat or nonfat. Regular cheese omelets and vegetarian pizzas are good protein sources, but they can also be high in saturated fat and cholesterol.

*Lacto-vegetarians* include dairy in their diet. For them, other healthy protein sources are low-fat and nonfat milk, yogurt, and cottage cheese and other low-fat cheese.

*Lacto-ovo-vegetarians* include eggs (or egg replacers, such as Egg Beaters®) as well as dairy in their diet. If you eat eggs, limit egg yolks to 3-4 per week.

### Plant-based proteins

Plant-based proteins are healthier alternatives to red meat and poultry. Getting adequate protein in a plant-based diet is not difficult to do if you follow 3 important principles:

- 1) Eat a wide variety of unrefined, whole foods.
- 2) Plan for at least one serving of healthy protein at every meal.
- 3) Eat enough to maintain a healthy weight.



Whole foods include oats, whole-grain breads, brown rice, nuts, seeds, nut butters, fruits, vegetables, peas, beans, lentils, garbanzo beans, soy, tofu, and soymilk fortified with calcium and vitamin B-12. Even though tofu and other soy foods are an excellent red meat alternative, don't go overboard. Eat a variety of protein sources. Plant proteins are cholesterol-free, and low in saturated fat. They are also high in protein, fiber, and other key nutrients such as folic acid.

#### Combining proteins

When you eat whole foods throughout the day, the proteins in the food complement each other. This means that eating a variety of plant-based protein foods provides you with the same high-quality protein found in meat. Soy protein – even by itself – is as high in protein as meat and dairy – but without the cholesterol.



### Beans, beans...

Food stores that specialize in vegetarian options offer a variety of meat-alternate entrees. These foods, as well as all legumes and soy products, are high in protein.

As much as possible, choose dry beans or peas as a main dish or part of a meal. Some choices are:

- Meatless chili with kidney or pinto beans
- Split pea, lentil, minestrone, or white bean soups
- Stir-fried tofu
- Baked beans
- Black bean enchiladas
- Garbanzo or kidney beans on a salad
- Rice and beans
- Meatless burgers
- Hummus (chickpeas) spread on pita bread



### Nuts

Use nuts to replace meat or poultry, not in addition to them. Eat nuts as a snack, in salads, or in main dishes.

- Use pesto sauce – made with pine nuts – on top of pasta.
- Add slivered almonds to steamed vegetables.
- Instead of meat, add toasted peanuts or cashews to a vegetable stir fry.
- Sprinkle a few nuts on top of low-fat ice cream or frozen yogurt.
- In place of cheese or meat, add walnuts or pecans to a green salad.



**Here is an example of how easy it is to get adequate protein in a vegetarian diet:**



**Breakfast**

Tofu scrambled with onions, peppers, and spinach, 5.5 oz;  
1 slice whole-grain toast with 2 tbsp peanut butter;  
1 cup orange juice



**Lunch**

Gardenburger® or Boca® Burger with lettuce and tomato on whole-grain bun;  
2 tbsp hummus; apple;  
1 cup skim milk or soy milk



**Dinner**

Bowl of lentils; 1 cup brown rice baked with soy protein;  
1 cup squash; ½ cup fruit salad with 23 almonds for dessert

**Total protein for the day: 96.7 grams**

Fat 56.9g, Saturated fat 9.6g, Cholesterol 30mg, Fiber 45.8g

**Protein Content of Common Foods**

Serving	Food	Protein (grams)	Fat (grams)	Saturated Fat (grams)	Cholesterol (mg)	Fiber (grams)
1 cup	Cottage cheese, low-fat, 1%	28.0	2.3	1.5	9	0
3 oz	Chicken, breast, skinless, roasted	26.3	3.0	0.9	72	0
3 oz	Turkey, skinless, roasted	25.4	2.7	0.9	59	0
3 oz	Chicken, leg, skinless, roasted	22.9	7.1	1.9	80	0
3 oz	Top sirloin steak, trimmed to 1/8" fat	22.8	13.4	5.3	71	0
3 oz	Halibut, cooked, baked	22.6	2.5	0.4	35	0
3 oz	Tuna, light, canned in water, drained	21.7	0.7	0.2	26	0
3 oz	Wild Coho salmon, baked	19.9	3.7	0.9	47	0
4 oz	Tofu, firm	19.9	11.0	1.5	0	2.9
3 oz	Shrimp, steamed	17.7	0.9	0.2	166	0
1 cup	Lentils, cooked	17.9	0.8	0.1	0	15.6
1 cup	Pinto beans, cooked	15.4	1.1	0.2	0	15.4
1 cup	Black beans, cooked	15.2	0.9	0.2	0	15.0
2 oz	Cheese, low-fat, cheddar or colby	13.8	3.9	2.4	12	0
1 patty	Boca® Burger, original	13.0	0.5	0	0	4.0
½ cup	Sunflower seeds, dry roasted	12.3	31.8	3.3	0	7.1
1 cup	Yogurt, low-fat	11.0	3.2	2.0	14	0
½ cup	Hummus	9.8	12.0	1.7	0	7.5
1 patty	Gardenburger®, original	9.0	4.0	2.0	30	4.0
1 cup	Milk, low-fat, 1%	8.2	2.4	1.5	12	0
2 oz	Feta cheese	8.1	12.1	8.5	50	0
2 tbsp	Peanut butter, smooth	8.0	16.1	3.4	0	1.9
1 large	Egg, hard-boiled	6.3	5.3	1.6	212	0
1 oz (23 nuts)	Almonds	6.0	14.0	1.1	0	3.5
1 cup	Oatmeal, cooked	5.9	3.6	0.7	0	4.0
1 cup	Brown rice, cooked	4.5	1.6	0.3	0	3.5
1 oz (14 halves)	Walnuts	4.3	18.5	1.7	0	1.9

*Sources:*

- *USDA National Nutrient Database. Standard Reference Release SR20.*
- *Harvard School of Public Health. Protein: Moving Closer to Center Stage. Accessed August 2008.*
- *U.S. Department of Agriculture. National Nutrient Database. Standard Reference Release SR20. Accessed August 2008.*
- *Wilkinson SB et al. Milk and Soy Proteins after Weight Lifting. American Journal of Clinical Nutrition. 2007;85:1031-40*





# Eat Healthy Proteins

## Instructions

1. Post this calendar where you will see it daily (bathroom, kitchen, bedroom, etc.).
2. At the end of the month, total the number of days you ate healthy proteins. You must eat healthy proteins at least 22 days during the month to complete the Challenge. Then keep up this practice for a lifetime of good health and wellbeing.
3. Turn in your Health Challenge™ form if requested, or enter your completion of this Challenge on the Health Activity Tracker report for the month, if applicable. Keep this record for evidence of completion.

**CHALLENGE**  
**Eat healthy proteins this month.**

MONTH:							HC = Health Challenge	ex. min. = exercise minutes
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	Weight & weekly summary	
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\_\_\_\_\_ Number of days this month I ate healthy proteins

\_\_\_\_\_ Number of days this month I got 30+ minutes of physical activity such as brisk walking

### Other wellness projects completed this month:

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Name \_\_\_\_\_ Date \_\_\_\_\_

