

## Low Protein Diet



[www.gicare.com](http://www.gicare.com)

### **Purpose**

Protein is a nutrient needed by the body for normal growth, wound healing, and the ability to fight infection. People with severe kidney or liver disease often must limit the amount of protein they eat because their bodies cannot use the protein properly. Dangerous waste products can build up in the blood from eating too much protein.

The major food sources of protein are:

### **Highest Amount of Protein**

- Meat, fish, poultry, eggs
- Milk, yogurt, cheese, peanut butter

### **Small Amount of Protein**

- Vegetables
- Starches such as breads, cereals, and pasta (the protein in these foods is of poorer but still good quality)

### **Trace Amount of Protein**

- Fruits
- Fats
- Sugars

### **Nutrition Facts**

For the healthy person, between 40-60 grams of protein are needed each day to achieve and maintain good health. This, of course, will depend on the weight and health of an individual. A person recovering from an illness or injury often needs more. It is satisfactory to eat less than this amount for a short period of time, depending on health and diet objectives. A low protein diet should meet the National Research Council's Recommended Dietary Allowances (RDA) for nutrients.

Special Considerations

1. Protein is never completely eliminated from the diet. The physician and dietitian can determine how much protein the body is able to handle. However, since the amount of protein is limited, it is important to eat foods that contain high quality protein (meat, milk, fish, poultry, eggs, and peanut butter). These proteins are complete. They contain all the essential amino acids (building blocks of protein). Even though the protein in vegetables and starches is incomplete, it is still important to include these foods in a daily meal plan for a well-balanced diet.
2. Salt and Sodium: Many people with serious kidney or liver disease may also need to limit salt or sodium intake because of high blood pressure or fluid retention. The greatest source of sodium in the diet is table salt. Therefore, the first step in reducing sodium intake is to limit the use of table salt. Certain other foods have a high sodium content and will also need to be limited.

Fats

One serving contains: virtually no protein, 55 mg sodium

One serving equals:	
regular butter or margarine	1 tsp
mayonnaise	1 tsp
vegetable oil	1 tsp
gravy	1 Tbsp
reduced calorie margarine	1 Tbsp
reduced calorie mayonnaise	1 Tbsp
salad dressing (oil type)	2 Tbsp
low calorie salad dressing (oil type)	2 Tbsp
low calorie salad dressing (mayonnaise type)	2 Tbsp
tartar sauce	1 1/2 tsp

Avoid the following if you are reducing sodium intake: commercially prepared gravy, gravy mixes, bacon fat  
Remember, fats are a substantial source of calories. Some people may need additional calories and should therefore use fats freely. Those who need to lose weight should use fats sparingly.

Fruit

One serving contains virtually no protein or sodium

One serving equals:	
fresh, frozen, or canned fruit or fruit juice	1/2 cup
dried fruit	1/4 cup

Meat and Meat Substitutes

One serving contains 7 gm protein, 25 mg sodium.

One serving equals:	
lean beef	1 oz
chicken	1 oz
fish	1 oz
lamb	1 oz
fresh pork	1 oz
low-sodium tuna	1/4 cup
turkey	1 oz
veal	1 oz
egg	1
peanut butter*	2 Tbsp
kidney beans	1/4 cup dry
soybeans	1/2 cup
garbanzo beans*	1/2 cup
lentils	1/2 cup
low-sodium cheese*	1 oz

Avoid the following if you are also reducing sodium intake:

- bacon
- cold cuts (bologna, salami, loaf-type luncheon meats, or processed meats)
- corned beef
- ham
- sausage
- low-salt ham or cold cuts
- hot dogs, chicken dogs
- turkey ham, turkey bologna
- regular canned tuna
- regular TV dinners (special low-sodium dinners may be acceptable -- check protein content)
- cottage cheese
- processed cheeses such as American, Velveeta, cheese spreads
- canned kidney beans

\*higher in sodium

**Breads, Starches, Cereals, and Desserts**  
One serving contains 2 gm protein, 80 mg sodium 42

<b>Breads</b> - One serving equals:	
white, wheat	1 slice
rye or pumpernickel	1 slice
Italian or French bread	1 slice
dinner roll	1
croissant	1

pita pocket	1
hamburger roll	1/2
hot dog roll	1/2
bagel	1/2
English muffin	1/2
biscuit	1
doughnut	1
muffin	1
unsalted breadsticks	2
Melba toast	4 slices
unsalted crackers	4
unsalted pretzels	4
unsalted potato chips	15 chips
rice cakes	2
<b>Starches, cooked</b> - One serving equals:	
noodles, macaroni, pasta	1/2 cup
rice	1/2 cup
unsalted popcorn	1 1/2 cups
homemade bread filling	1/2 cup
potatoes	1/2 cup or 1 medium
pancake (homemade)	1 medium
<b>Cereals</b> - One serving equals:	
unsalted cooked cereal (cream of wheat, cream of rice, oatmeal, Farina)	1/2 cup
ready-to-eat cereal*	3/4 cup
shredded wheat	1 biscuit
*may be high in sodium	
<b>Cakes, Pastries, and Desserts</b> - One serving equals:	
cake	1 piece (2 1/2" square)
coffee cake	1 piece
Danish	1 piece
fruit pie	1 slice (1/6 of 9" pie)
cookies	1 medium
granola bars	1
Avoid the following if you are reducing sodium intake:	

- instant hot cereals
- cornflakes, Rice Krispies, Total, Wheaties
- salted snack crackers, pretzels, potato chips
- packaged noodles, pasta, rice, or potato mixes
- stuffing mixes
- pancake mixes
- baking mixes
- croissants, rolls, biscuits made from commercially packaged refrigerator dough
- waffles

Special low-protein pasta, bread, crackers, cookies, and baking mixes are available. A dietitian can discuss these with you.

#### Vegetables

One serving contains 1 gm protein, 15 mg sodium

One serving equals:

fresh, frozen, or low-salt canned vegetables	1/2 cup
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Avoid the following if you are reducing sodium intake:

- canned vegetables
- sauerkraut
- pickles
- canned tomato juice or vegetable juice
- canned or bottled tomato sauce or spaghetti sauce

#### Milk Products

One serving contains 4 gm protein, 80 mg sodium

One serving equals:

whole, lowfat, or skim milk	1/2 cup
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homemade pudding	1/2 cup
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ice milk, ice cream	1/2 cup
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yogurt, plain or fruit flavored	1/2 cup
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sherbet	1 cup
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sour cream	4 Tbsp
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cream cheese	3 Tbsp
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light cream or half & half	1/2 cup
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The following may be used as a milk substitute:

One serving contains 1.0 gm protein, 40 mg sodium

liquid non-dairy cream, polyunsaturated	1/2 cup
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dessert, non-dairy frozen	1/2 cup
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dessert topping, non-dairy frozen	1/2 cup
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#### Sweets

One serving contains virtually no protein or sodium	
hard candy	4 pieces
gum drops	15 small
Gummi Bears	1 small pouch
jelly beans	10
lollipops	2
marshmallows	5 large
butter mints	14
water ice	1/2 cup
popsicle	3 oz = 1 bar
gelatin	1/2 cup
sugar (brown or white)	2 Tbsp
honey	2 Tbsp
jelly, jam, marmalade	2 Tbsp
Remember, sweets are a source of calories. Some people may need additional calories and should therefore use sweets freely. Those who need to lose weight should use sweets sparingly.	
Beverages	
One serving contains virtually no protein, <50 mg sodium	
coffee	fruit juices or fruit drinks
tea	lemonade
soft drinks	mineral water
Avoid milk-based beverages unless counted as part of milk allowance.	
Low-Protein Shake Recipe:	
marshmallows	4 oz
fruit ice or Italian ice	4 oz
corn syrup	1/4 cup
vegetable oil	1 Tbsp
vanilla ice cream	1/2 cup
Place all ingredients in a blender and mix thoroughly. 600 calories - 2.5 gm protein - 170 mg sodium	
Condiments	
<b>Recommend:</b>	
pepper fresh or dried herbs flavored powders (garlic, onion, etc.) lemon juice vinegar	

<b>Avoid:</b>
<ul style="list-style-type: none"> <li>bacon bits</li> <li>barbecue sauce</li> <li>chili sauce</li> <li>cooking wine</li> <li>ketchup</li> <li>meat tenderizers</li> <li>monosodium glutamate</li> <li>prepared mustard</li> <li>regular salad dressings</li> <li>seasoned salt (e.g., celery salt, garlic salt, onion salt)</li> <li>sea salt</li> <li>soy sauce</li> <li>steak sauce</li> <li>tartar sauce</li> </ul>

<b>Special Low-Protein Products</b>
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The following product is low in protein, electrolytes, and fluid, it can be ordered by calling Ross Laboratories at 1-800-544-7495.

- SUPLENA

The following low-protein products can be ordered by calling Dietary Specialities at (716) 2673-2787.

- Low-Protein Bread
- Low-Protein Crackers & Rusks
- Low-Protein Cookies
- Low-Protein Pasta
- Low-Protein Baking Mix
- Low-Protein Wheat Starch
- Low-Protein Gelatin
- Low-Protein Cracker Toast
- Low-Protein Cheese Sauce Mix

<b>Sample Menu Low Protein</b>		
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<b>Breakfast</b>	<b>Lunch</b>	<b>Dinner</b>
<ul style="list-style-type: none"> <li>• Cheerios cereal <i>3/4 cup</i></li> <li>• non-dairy creamer <i>1/2 cup</i></li> <li>• orange juice <i>1/2 cup</i></li> <li>• banana <i>1/2 med</i></li> </ul>	<ul style="list-style-type: none"> <li>• white bread <i>2 slices</i></li> <li>• turkey breast <i>1 oz</i></li> <li>lettuce</li> <li>• tomato <i>1/2 cup</i></li> <li>• green beans <i>1/2 cup</i></li> <li>• mayonnaise <i>3 tsp</i></li> <li>• apple <i>1 med</i></li> <li>• fruit punch <i>4 oz</i></li> </ul>	<ul style="list-style-type: none"> <li>• lean hamburger <i>2 oz</i></li> <li>• white rice <i>1/2 cup</i></li> <li>• broccoli <i>1/4 cup</i></li> <li>• cauliflower <i>1/4 cup</i></li> <li>• tossed salad ranch dressing <i>2 Tbsp</i></li> <li>• pineapple <i>1/2 cup</i></li> </ul>

<b>Snack</b>	<b>Snack</b>	<b>Snack</b>	
cherry fruit roll up <i>1</i>	popsicle <i>1</i>	gum drops <i>1 oz</i>	
<b>This Sample Diet Provides the Following</b>			
Calories	1476	Fat	48 gm
Protein	39 gm	Sodium	1270 mg
Carbohydrates	237 gm	Potassium	2282 mg