

PROTEIN

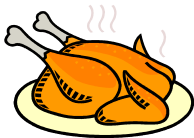
Protein is the basic building block of living cells. Protein is needed for growth, building new tissues and repairing injured tissues. Proteins are also part of our immune system and carry many nutrients to other parts of the body.

When your body uses protein the excess or waste is excreted in your urine. With kidney disease your kidney function slows down so you cannot get rid of this waste product as effectively so the level of waste in your blood becomes elevated. This waste is urea and can be measured in your blood and is used to help determine how well you are managing with your diet.

Most foods have some protein but the major sources are:

Animal Sources

Eggs
Meat
Fish
Poultry
Cheese
Milk



Vegetable Sources

Cereals
Bread
Vegetables
Rice
Pasta
Nuts and Seeds



Animal sources provide the best quality protein call **High Biological Value Protein**. To ensure good nutrition, most (65-75%) of your protein intake should be from animal sources.

Vegetable sources such as grains and vegetables provide a lower quality protein called **Low Biological Value Protein**. Only a small amount (25%-35%) of your dietary protein will come from vegetable sources. Since the amount of protein you need depends on body size, your body weight is used to determine your individual needs.

Quick Nutrition Check for Protein

How much protein do I need on dialysis?

Adults over 19 years of age need 1.2 to 1.3 grams protein per kilogram of body weight

You can figure this out using the following formula:

$$\frac{\text{Weight in pounds}}{2.2} = \text{___ Kg} \quad \times \quad 1.2 \text{ or } 1.3 = \text{Average Protein Needs}$$

$$\frac{\text{___}}{2.2} = \text{___ Kg} \quad \times \quad 1.2 \text{ or } 1.3 = \text{___}$$

___ ounces of protein per day or ___ servings of protein per day

EG An average 70kg adult male needs 84 to 91 grams per day

An average 60kg adult female needs 72 to 78 grams per day

What are good sources of protein in the diet?

Protein is found in meats, fish, poultry, milk, eggs, cheese, and peanut butter. Grain foods and vegetables will also contribute small amounts of protein to the diet. Eat protein from a wide variety of food sources, so that you meet your needs. Protein will also provide iron, zinc, Vitamin B12, calcium and Vitamin D.

FOOD	MEASURE	PROTEIN (G)
Meat, fish or poultry (size of a deck of cards)	100g (3 oz)	21
Canned Fish (rinsed and drained)	1/4 cup	7
Egg	1	6
Milk	1/2 cup	4
Milk	3/4 cup	6
Cheese	30g (1 oz)	7
Peanut Butter	30 ml (1 Tbsp)	8

Breads	1 slice	2
Cereals, pasta, rice, vegetables	125 ml (1/2 cup)	2

Tips on Equivalents

Fluid measures:

3 tsp = 1 Tbsp = 1/2 fl.oz = 15 ml

1/2 cup = 8 Tbsp = 4 fl. oz = 125 ml

1 cup = 16 Tbsp = 8 fl.oz = 250 ml

Weight measures:

1 oz = 30g

Key

g = gram

ml = milliliters

oz = ounces

Tbsp = tablespoon

tsp = teaspoon

Quick Nutrition Check for Protein

How much protein do I need with kidney problems?

Adults over 19 years of age need .8 grams protein per kilogram of body weight

You can figure this out using the following formula:

$$\frac{\text{Weight in pounds}}{2.2} = \text{Kg} \quad \times \quad .8 = \text{Average Protein Needs}$$

$$\frac{\text{_____}}{2.2} = \text{Kg} \quad \times \quad .8 = \text{_____}$$

_____ ounces of protein per day or _____ servings of protein per day

EG An average 70kg adult male needs 56 grams per day

An average 60kg adult female needs 48 grams per day

What are good sources of protein in the diet?

Protein is found in meats, fish, poultry, milk, eggs, cheese, and peanut butter. Grain foods and vegetables will also contribute small amounts of protein to the diet. Eat protein from a wide variety of food sources, so that you meet your needs. Protein will also provide iron, zinc, Vitamin B12, calcium and Vitamin D.

FOOD	MEASURE	PROTEIN (G)
Meat, fish or poultry (size of a deck of cards)	100g (3 oz)	21
Canned Fish (rinsed and drained)	¼ cup	7
Egg	1	6
Milk	½ cup	4
Milk	¾ cup	6
Cheese	30g (1 oz)	7
Peanut Butter	30 ml (1 Tbsp)	8

Breads	1 slice	2
Cereals, pasta, rice, vegetables	125 ml (1/2 cup)	2

Tips on Equivalents

Fluid measures:

3 tsp = 1 Tbsp = ½ fl.oz = 15 ml

½ cup = 8 Tbsp = 4 fl. oz = 125 ml

1 cup = 16 Tbsp = 8 fl.oz = 250 ml

Weight measures:

1 oz = 30g

Key

g = gram

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Tbsp = tablespoon

tsp = teaspoon