



Protein Source Information

Protein is a major key to success!

Protein contains the essential building blocks of the human body. It is beneficial in that it helps to delay hunger and aids with weight loss.

Effects of Insufficient Protein

- Muscle loss
- Poor immune function
- Poor wound healing
- Lack of energy
- Hair loss

Food Sources of Protein

- Animal Sources: meat, fish, chicken, eggs
- Dairy Products: milk, cheese, and yogurt
- Plant Sources: legumes (dried beans, peas, lentils) and soy

Supplemental Protein

- Many patients find it difficult to meet their daily protein needs with only food sources of protein.
- Protein supplements (protein powder) or meal replacements (Ensure High Pro, Boost High Pro, Premier Protein, Glucerna, Diabetic Boost, Carnation Instant Breakfast) can be helpful in helping you to meet your needs.

*Protein bars are not recommended as part of this program.

Choosing a Protein Powder

- Choose whey isolate or isolate concentrate blend rather than concentrates as they
 are more nutritious, and patients seem to enjoy the taste better
- If you are lactose intolerant, choose soy-based protein powder
- You can purchase protein powder at GNC, grocery stores, Costco, Walmart, Popeye's
- Some places such as GNC will allow you to return the product if you do not like the taste. Also, some supplement stores such as Life & Sport and Popeye's will offer a sample before you purchase it. Check stores in your area
- Places like Canadian Protein carry vegan protein options as well as egg white protein for those with dairy allergies

^{*}Animal sources of proteins are more concentrated & higher quality

Not all Liquid Meal Replacements are Created Equal

- Read labels carefully to understand nutritional content such as serving size, carbohydrates, fat, protein, and calories.
- Here is a comparison of some of the chocolate flavored nutritional shakes currently available in stores
- Most nutritional shakes are between 235-237ml which is 1cup serving sizes can vary between products

BOOST Products

Product Name	Serving	Carbs	Fat	Protein	Calories
Original Nutritional Drink	237ml	37g	6g	10g	240
High Protein Nutritional Drink	237ml	28g	6g	20g	250
Plus Nutritional Drink	237ml	45g	14g	14g	360
Women Nutritional Drink	237ml	14g	7g	15g	180
Breeze Nutritional Drink	237ml	54g	0g	9g	250

ENSURE Products

Product Name	Serving	Carbs	Fat	Protein	Calories
High Protein	235ml	31g	6g	12g	225
Regular	235ml	35g	16.7g	9.4g	235
Protein Max with 1g sugar	<mark>330ml</mark>	6g	1.5g	14g	150
Protein Max	235ml	44.2g	11g	20g	350
High Protein 50% less sugar	235ml	19g	2g	16g	160

PREMIER PROTEIN Products

Product Name	Serving	Carbs	Fat	Protein	Calories
Protein Shake	<mark>325ml</mark>	5g	3g	30g	160

SPERRI (Plant-Based) Products

Product Name	Serving	Carbs	Fat	Protein	Calories
Protein Shake	330ml	39g	11g	16g	330

PRESIDENT'S CHOICE Products

Product Name	Serving	Carbs	Fat	Protein	Calories
Ultra Shake Meal Replacement	237ml	41g	4g	10g	240

CARNATION BREAKFAST ESSENTIALS Products

Product Name	Serving	Carbs	Fat	Protein	Calories
Original Nutritional Drink	237ml	4g	4g	10g	240
High Protein Nutritional Drink	237ml	27g	6g	15g	220
Light Start Nutritional Drink	237ml	16g	4g	13g	150

FAIRLIFE Products

Product Name	Serving	Carbs	Fat	Protein	Calories
Nutrition Plan (Lactose Free)	<mark>340ml</mark>	4g	2.5g	30g	150

"Meatless" vs Meat Protein

There has been an increase in the marketing and availability of "meatless" meat substitutes.

"Meatless" protein is often made from pea or legume protein.

Here is a comparison of a currently available grocery store "meatless" product and ground beef.

"Meatless" Ground Beef

Ingredients	Serving	Carbs	Fat	Protein	Calories
water, pea protein, canola	100g/3.5oz	4g	17g	18g	250
oil, coconut oil, rice protein,					
cocoa butter, yeast, mung					
bean protein,					
methylcellulose, potato					
starch, sugars, potassium					
chloride, yeast extract, beet					
juice, salt, sunflower lecithin,					
vinegar, concentrated lemon					
juice, carrot powder,					
vitamins and minerals					

Ground Beef

Ingredients	Serving	Carbs	Fat	Protein	Calories
Lean beef	100g/3.5oz	0g	11g	27g	220

High Protein Foods

Use the following chart to help guide your food choices to maximize your protein intake. Have one of the following foods as part of each meal/snack.

Goal: 60 – 80 grams each day

Meat and Chicken:

Protein Source	Amount	Protein Grams
Beef (Roast or steak)	3 oz	25
Beef (Hamburger – lean)	½ cup crumbled	18
Chicken	3 oz	28
Chicken thigh	2	24
Chicken (ground)	½ cup	14
Turkey	3 oz	28
Turkey (ground)	½ cup	23
Pork	3 oz	23
Deli ham	2 slices	11
Deli turkey breast	2 slices	8

^{*}Rule of thumb: 1oz = 7g protein/3oz (21g) = the size of a deck of cards

Fish:

Protein Source	Amount	Protein Grams
Salmon (Filet)	3 oz	19
Salmon (canned)	½ cup	17
Tuna (canned)	½ cup	20
Fish (all other varieties)	3 oz	21
Shrimp	½ cup	16
Scallops	½ cup	16

^{*}Rule of thumb: 1oz = 7g protein/3oz (21g) = the size of a deck of cards

Meat Alternatives:

Protein Source	Amount	Protein Grams
Peanut butter	1 Tbsp	4 (90 calories)
Nuts	½ cup	6 (200 calories)
Chickpeas	¾ cup	18
Kidney beans	¾ cup	12
Lentils	¾ cup	13
Baked beans (Canned)	¾ cup	10
Bean or split pea soup	1 cup	18
Chili	1 cup	18
Hummus	½ cup	5
Edamame (Soybeans)	½ cup	12
Tofu (Soft)	3 oz (½ cup)	6
Tofu (Firm)	3oz (½ cup)	10
Textured vegetable protein	½ cup dry	24
Meatless ground meat	1/3 cup	16
Egg, whole	1 (¼ cup)	6
Egg, yolk only	1	3
Egg, white only	1	3

Milk and Milk Alternatives:

Protein Source	Amount	Protein Grams
Milk (Skim, 1%)	1 cup	8
Soy beverage, plain	1 cup	6
Yogurt, low fat (plain or flavoured)	100 g (1/3 cup)	4
Greek yogurt (Plain)	100 g (1/3 cup)	8
Cheddar cheese	1" cube (30 g/1oz/4tbsp)	7 (116 calories)
Cheese slices, processed, regular	1 slice	3
Cheese slices, processed, light	1 slice	4
Mozzarella, regular	1" cube (30 g)	6
Mozzarella, light	1" cube (30 g)	7
Mini Babybel, regular	1 serving (20 g)	4
Mini Babybel, light	1 serving (20 g)	6
Laughing Cow cheese wedge,	1 serving (16 g)	5
regular		
Laughing Cow cheese wedge, light	1 serving (16 g)	6
Black Diamond cheese strings	1 string (21 g)	6
Cottage cheese, 1%, or 2%	½ cup	14
Ricotta cheese, whole or part-skim	½ cup	7
Skim milk powder	2 Tbsp	5

What does 1 serving of protein look like?

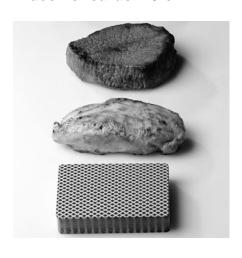
1 golf ball = 2 Tbsp



A pair of dice = 1 oz



A deck of cards = 3 oz



1 egg = 1/4 cup



1 billiard ball - 1/2 cup

