



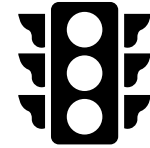
# Protein Needs for Cancer Survivors

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6/6/26

**1** Protein defined

**2** Protein needs by population

**3** Protein sources in the US food supply



**4** Practically meeting your protein needs

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# Protein defined

# Protein

What is it? Per Merriam-Webster dictionary:

## protein noun

pro·tein 'prō-ˌtēn also 'prō-tē-ən

plural proteins

**NEW**  
Simple Definition  ⓘ

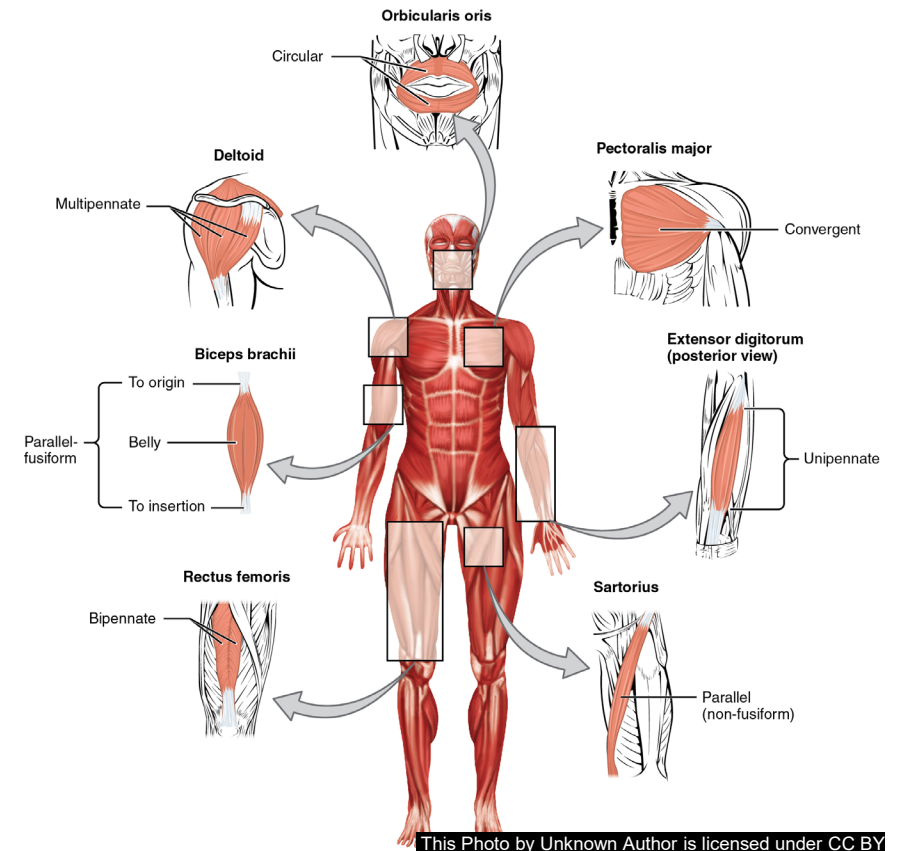
- 1 : any of various naturally occurring extremely complex substances that consist of amino-acid residues joined by peptide bonds, contain the elements carbon, hydrogen, nitrogen, oxygen, usually sulfur, and occasionally other elements (such as phosphorus or iron), and include many essential biological compounds (such as enzymes, hormones, or antibodies)
- 2 : the total nitrogenous material in plant or animal substances
- 3 : a food (such as meat or tofu) that is rich in protein



# Protein's role in our health

## The building block of every cell in the body

- Maintenance of lean body mass
- Structural integrity (health skin, hair, etc.)
- Supporting adequate blood counts (red and white blood cells, platelets, etc.)



# Protein needs


# Protein needs for adults

We are living in a time of confusion and shifting guidelines

- The National Academy of Medicine RDA
- 2025 Dietary Guidelines for Americans
- National Academy of Medicine AMDRs
- Cancer Survivors



# National Academy of Medicine

- Minimum of 0.8 grams of protein for every kilogram of body weight per day
  - For a 140# person, 50 grams per day
  - For a 200# person, 70 grams per day
- $140/2.2 = 63.6 \text{ kg} \times 0.8 = 50.9$   50 grams of protein per day

# 2025 Dietary Guidelines for Americans

- 1.2-1.6 grams of protein for every kilogram of body weight per day
  - For a 140# person, 75-100 grams per day
  - For a 200# person, 110-145 grams per day

# National Academy of Medicine AMDRs

- 10-35% of total calories
  - For a 2000 calorie diet 50-175 grams per day
  - For a 3000 calorie diet 75-265 grams per day

# Cancer Survivors – NCCN Guidelines for Nutrition and Weight Management

- There are no guidelines regarding amount of protein to consume
- Follow a predominantly nutrient-rich plant-based diet, including vegetables, fruit, beans/legumes, whole grains, nuts and seeds
- Limit consumption of red meat such as beef, pork, or lamb to no more than 18 oz (cooked) per week.
- It is best to avoid processed meats such as ham, hot dogs, deli cuts, bacon, and sausage.
- Protein should comprise one-third or less of the plate
- Recommended sources of dietary component:
  - Protein: poultry, fish, legumes, low-fat dairy foods, eggs, nuts and seeds
- While the risks and benefits of soy foods for cancer survivors have been debated for many years, most studies to date show that moderate consumption of soy foods (up to 3 servings per day) are beneficial in promoting overall health and survival, with the strongest evidence existing for prevention of lung cancer and reduction of breast cancer recurrence

# Protein needs for adult cancer survivors

Mirror needs for the general population



How it started



How it ended

## MORE?

Factors increasing needs:

- Treatment related loss of lean body mass
- Long term blood count deficiencies
- Higher than average physical activity
- Age

## LESS?

Factors lowering needs:

- Kidney or liver dysfunction
- Important to discuss this with Medical Doctor, kidney/liver specialist

# Protein sources

# Protein Sources in the US Food Supply

## Food sources

- **Plant:** beans, lentils, legumes (including soy); nuts and seeds; higher protein grains (quinoa); higher protein vegetables (spinach, broccoli, peas)
- **Animal:** fish
- **Animal:** dairy, eggs, poultry, red meat in moderation
- **Animal:** processed meats, red meat above 18 ounces cooked weight/week
- Supplemental: protein powders, protein shakes, liquid nutritional supplements
  - Best utilized when we cannot eat enough protein rich food to meet our goals
  - Also useful for maintenance of lean body mass in reduced calorie diets



# Practical tips to meet your protein needs

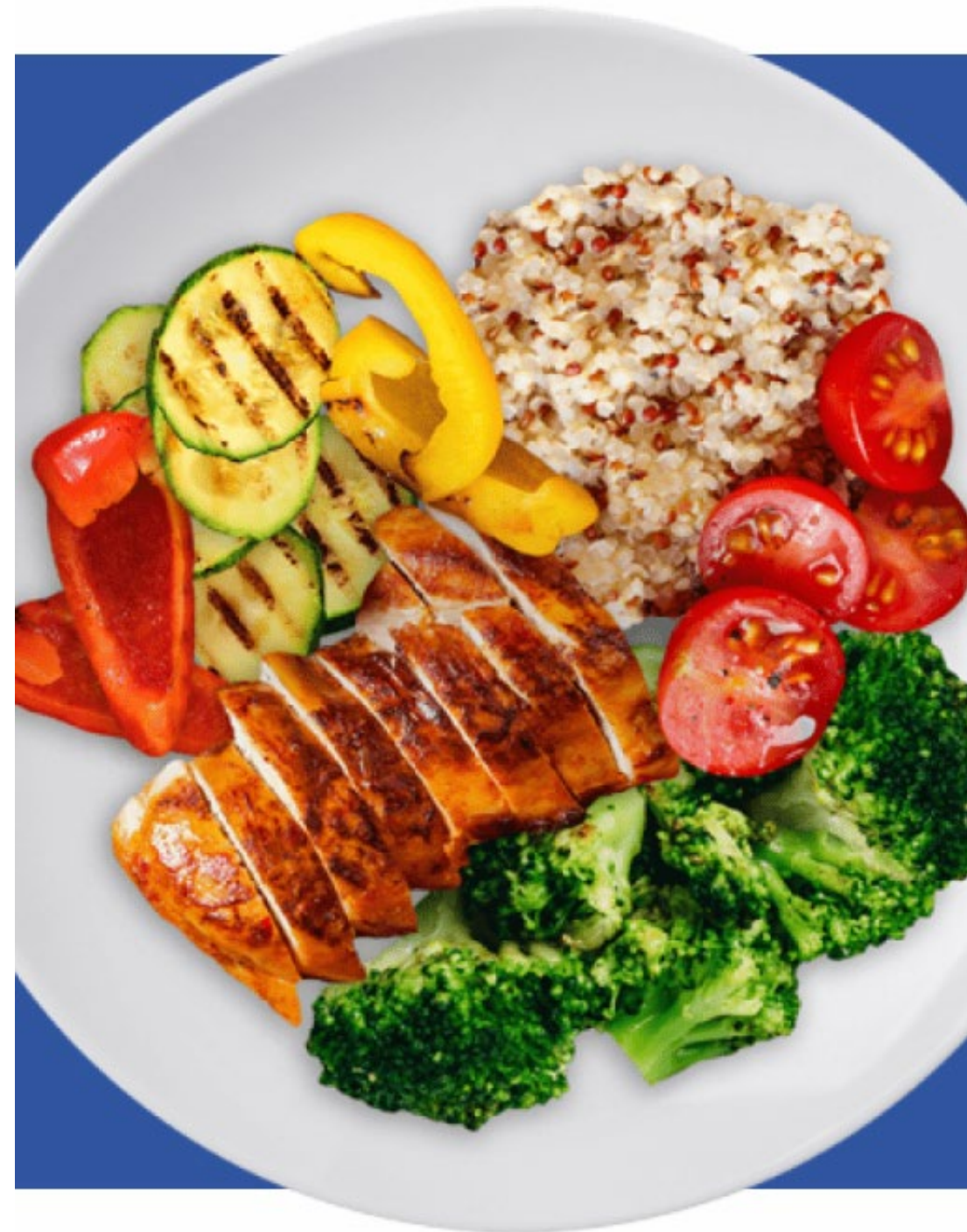
# Sample Menus

Non-vegetarian	Vegetarian
<b>Breakfast:</b> 1 cup oatmeal 8 ounces milk 1 banana	<b>Breakfast:</b> 1 piece whole grain toast 1 tablespoon peanut butter
<b>Snack:</b> 8 ounces yogurt with ½ cup blueberries	<b>Snack:</b> 8 ounces yogurt with ½ cup diced peaches
<b>Lunch:</b> 2 pieces whole wheat toast 3 ounces tuna salad 1 ounce cheddar cheese 1 cup carrot, cucumber and tomato salad	<b>Lunch:</b> 1 serving lentil soup 1 piece whole grain toast
<b>Dinner:</b> 4 ounces chicken breast 1 cup cooked broccoli 1 cup mixed green salad ¾ cup brown rice	<b>Dinner:</b> Pasta with tofu and walnuts 1 cup mixed green salad
<b>Total: 90 grams protein</b>	<b>Total: 82 grams protein</b>

# Practical Tips

## Complete proteins/plant-based diets

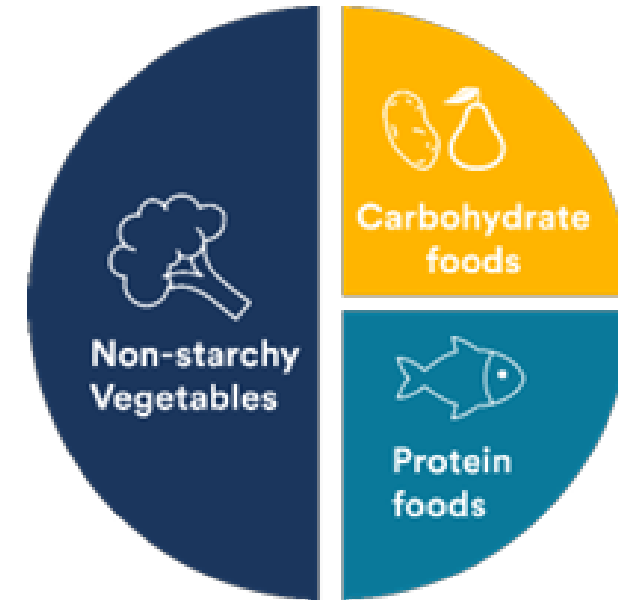
- It was once thought that plant forms of protein needed to be eaten in combination
- This is an outdated concept
- Vegetarian/vegan/plant-based diets contain adequate protein, provided they are balanced
- Plant forms of protein are less dense than animal-based forms, so additional volume may be necessary
- There is no uniformly accepted definition of plant-based diet; for cancer risk reduction purposes, a plant-based diet is ~2/3 foods of plant origin, 1/3 or less food of animal origin



# Practical Tips

## For meeting protein needs

- 3 meals per day with a protein rich food at each
- If eating small/frequent meals, be sure to include at least 3 protein rich portions throughout the day
- If eating less than 3 meals, add protein supplementation to be a third eating occasion
- A palm sized portion/size of a deck of playing cards of meat/fish will contain ~25 grams of protein
- 1.5 cups of beans/lentils/legumes will provide ~25 grams of protein
- Balanced meals allow for best absorption and utilization of protein



### **The Diabetes Plate Method**

Image: [diabetes.org/food-nutrition/eating-health](https://diabetes.org/food-nutrition/eating-health) (Used with permission)

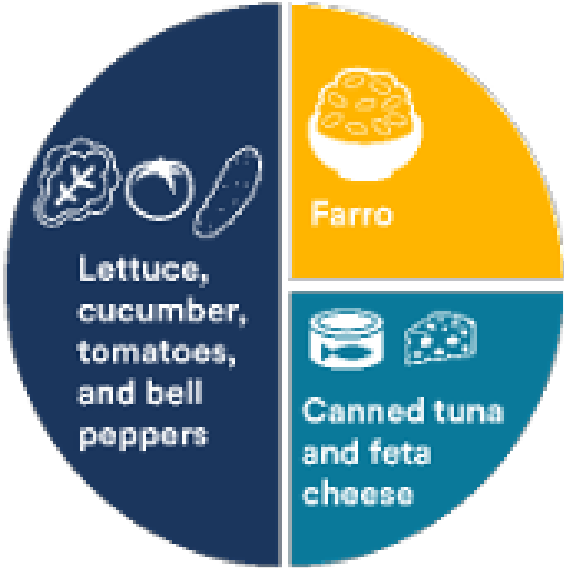
# Proof!



# Protein at all 3 Meals



**Breakfast Wrap**



**Greek-style salad with tuna and farro**



**Grilled chicken, greens and sweet potato**

# Practical Tips from Fred Hutch RDs



# Lindsay

Boxed cereal is often breakfast

Adding a handful of pumpkin seeds and walnuts raise the protein content



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# Patty

Apple o'clock is in the am

Apple for breakfast plus peanut butter, almond butter, cashews or cheddar cheese



# Me



- 25 grams of whey protein powder mixed with water, down the hatch at start of day

# Paula

Smoothies!

Non-fat, Greek yogurt plus fruit and leafy greens



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# Kerry

- Protein rich snacks
- Nuts, trail mix, cheese and nut butters



# Maria



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- Often has a craving for salty and crunchy
- Chooses roasted chickpeas vs. chips/crackers for more protein and fiber

# Suz



- Snacks on roasted edamame, chickpeas or broad beans
- Loves to roast her own and wants you to have a recipe:
  - <https://www.loveandlemons.com/roasted-chickpeas/>

# Hailey



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- Protein is the most labor-intensive part of food prep
- At the start of the week, she prepares grilled or slow cooker chicken or a sheet pan of tofu
- Adds to salads, sandwiches, grain bowls or soups
- Changing the vegetables or sauces throughout the week makes each day feel like a new meal, not leftovers

# Erin

Super busy weeks lead to prepping 1 protein to add to many meals  
A dozen eggs, a pound of chickpeas in the Instapot or a roasted tray of cubed tofu



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# Tal

Sweet treat cravings happen

Faux cookie dough made from chickpeas and peanut butter (can't forget the chocolate chips!)



# Practical Tips - Snacks

Protein rich snack formula: protein rich items paired with fruit/vegetable/whole grain

- Cottage cheese and pineapple
- Almond butter and whole grain crackers
- Dill-yogurt dip with carrots, cucumber and bell pepper
- Peanut butter and apple slices
- Cheese and crackers
- Side salad with hard boiled egg
- Yogurt and berries
- ¼ tuna salad sandwich on whole wheat bread
- Cheese cubes and cherry tomatoes

## Take Away Points

- Yes, protein intake is important
- So is your entire diet, the sum of all food and beverages you ingest
- Cancer risk reduction through diet is achieved with plant rich diets
- Plant rich diets and adequate (or even high) protein diets are not mutually exclusive
- Don't skip the veggies, fruits and whole grains for the protein rich foods, eat them all, in balance

Publicly available nutrition claims  
often exceed existing evidence.



**Questions?**

**Thank you!**