# Are You Getting Enough Protein?

## 1. Key vocabulary (Pre-reading)

Read the handed-out text and translate any words you do not know. Then find definitions for the following words:

| Term | Correct Definition |
|---|---|
| protein intake | The amount of protein consumed through food and drinks per day. |
| muscle mass | The total amount of muscle tissue in the body. |
| sarcopenia | Age-related loss of muscle mass and strength. |
| saturated fat | A type of fat mainly found in animal products that can increase blood lipid levels. |
| dietary guidelines | Official nutrition recommendations developed to promote health and prevent disease. |
| sedentary | Characterized by little physical activity. |
| excessive intake | Consumption of nutrients above the body's physiological needs. |

## 2. True or False Statements

False
→ Most adults in the U.S. *meet or exceed* their daily protein requirements.
False
→ Most athletes already get enough protein from food because they eat more calories.
True
False
→ Muscle growth requires *strength training*, not just higher protein intake.
False
→ The body cannot store protein; excess protein is used for energy or stored as fat.
True
False
→ Older adults require *more* protein to prevent muscle loss (sarcopenia).

## 3. Comprehension Questions

*Which factors influence individual protein needs?*
Protein needs depend on age, gender, physical activity, body weight, health status, and the use of weight-loss medications or supplements.

*Why can excessive protein intake be harmful to health?*
Excessive protein intake may increase blood lipid levels, raise the risk of heart disease, and strain the kidneys, especially in people predisposed to kidney disease.

*What happens to excess protein once the body's needs are met?*
Excess protein is either used for energy or stored as fat.

*Why is strength training more important than protein intake for muscle growth?*
Muscle growth occurs through resistance training; protein alone cannot stimulate muscle hypertrophy without exercise.

*Why should protein intake be spread evenly throughout the day?*
Even distribution supports muscle maintenance, reduces hunger, and improves overall weight management.

**4. Fill in the Gaps**

Completed text:
Protein should account for 10–35% of total daily calories.
For an average sedentary adult, the recommendation is 0.8 grams per kilograms of body weight.
From the age of 40–50, sarcopenia may occur, leading to loss of muscle mass.
Excess protein is either used for energy or stored as fat.
In general, whole foods are preferred over protein supplements.

**5. Choose the Correct Answer (Multiple Choice)**

Which group usually exceeds protein recommendations?
b) Adult men aged 19–59

Which intake is considered excessive?
d) More than 2 g/kg body weight

Which food is a healthy protein source?
c) Lentils

What is the recommended protein intake per meal?
b) 15–30 g

**6. Application Task – Sample Solution**

Case Study:
45-year-old person, 75 kg, exercises regularly

Recommended protein intake:
1.1–1.5 g/kg body weight
→ 75 kg × 1.1–1.5 = 83–113 g protein per day

Suitable whole-food protein sources (example):

- Grilled fish with vegetables
- Lentils with whole grains
- Low-fat dairy combined with eggs

Why supplements are not necessary:
This person can meet protein needs through a balanced diet with whole foods, which provide additional nutrients such as vitamins, minerals and fiber that supplements lack.

**7. Reflection / Discussion**

*Question 1: Why do many people overestimate their protein needs?*
Many people overestimate their protein needs due to misinformation, marketing strategies and social media influence. Protein supplements and high-protein diets are often promoted as essential for muscle growth and weight loss, even though scientific evidence shows that most people already meet or exceed their protein requirements through normal food intake. Additionally, fitness culture frequently emphasizes protein consumption without equally stressing the importance of physical activity, balanced meals and overall energy intake.

*Question 2: Should protein ever be the main component of a meal? Why or why not?*
Protein should not be the sole or main component of a meal. A balanced meal should include protein together with fruits, vegetables and whole grains to ensure an adequate intake of fiber, vitamins, minerals and carbohydrates. When protein dominates the meal, it may lead to excessive intake of saturated fat and calories, especially when animal-based sources are used. From a nutritional perspective, protein is most effective when consumed as part of a varied diet that supports overall metabolic health.

*Optional Extension Question (Higher-order thinking):*
How can protein intake be optimized without increasing health risks?
Protein intake can be optimized by spreading consumption evenly throughout the day, choosing lean and plant-based protein sources, and matching intake to individual needs based on age and physical activity. Combining protein with complex carbohydrates and vegetables improves nutrient density and reduces the risk of excessive fat intake. Avoiding unnecessary supplements also minimizes potential health risks.