

Complete and Incomplete Proteins

Nutrition tips from DuPage Senior Citizens Council and Kane Senior Council

May 2023

So, What Can I Do?

Eat protein! Eating protein at meals as part of a balanced diet that also includes fruit, vegetables, grains, and diary is key to good health.

The National Academy of Medicine recommends that adults get a minimum of 0.8 grams of protein for every kilogram of body weight per day, or just over 7 grams for every 20 pounds of body weight.

But, this amount can vary based on activity level and the presence of certain diseases.

Check with your doctor if you think you might need more or less protein in your diet.

What's the Big Deal About Protein?

Protein is found throughout our bodies in muscle, bone, skin, hair, and pretty much every other body tissue. Every cell in the human body contains protein. At least 10,000 different proteins make us who we are.

It makes up the enzymes that power many chemical reactions, as well as the hemoglobin that carries the oxygen through our blood.

Protein is made from twenty-plus building blocks called amino acids. The nine essential amino acids are only found in food.

We need protein is our diets to help our bodies repair cells and make new ones. Protein is also important for our growth and development.

With adequate protein received from complete or combined incomplete sources, our bodies can run efficiently.

Complete and Incomplete Proteins



Kane Senior Council

Complete Proteins

- Have everything that we need on their own.
- A food is considered a complete protein when it contains all nine essential amino acids that our bodies can't produce on its own.
- Can be found in fish, poultry, eggs, beef, pork, dairy, and whole sources of soy (like tofu, edamame, tempeh, and miso).

Incomplete Proteins

- Contain some, but not all, of the essential amino acids, and in various amounts.
- Must be eaten in combination with other proteins to ensure that all parts are consumed.
- Include more vegetarian- and vegan-friendly foods like legumes (beans, peas, lentils), nuts, seeds, whole grains, and vegetables.



How to Make a Complete Protein

- When combined, incomplete proteins form a complete protein.
- Examples of incomplete protein combinations that together form a complete protein include: nuts or seeds with whole graisn (peanut butter on whole toast), whole grains with beans (beans and rice; hummus and pita bread; bean-based chili and crackers; refried beans and tortillas), and beans with nuts or seeds (salad with chickpeas and sunflower seeds).

With adequate protein received from complete or combined incomplete sources, our bodies can run efficiently.