# What is Protein?

Protein is a vital macronutrient essential for the growth and development of children, especially during early childhood.

Protein is mostly associated with muscle-mass but it does so much more than this and is essential for life.

Protein foods are more varied than you may think - it's not all about meat and fish, it's super important to include plant-proteins even for your meat-eaters.

## Growth & Development

Protein plays a crucial role in numerous physiological processes, supporting the rapid growth and development that occurs during early childhood

## Cell Growth

Protein is the building block of all cells in the body, including muscles, skin, organs, and bones. It is essential for the creation and maintenance of each and every cell

## Tissue Repair

In growing children, tissues are constantly being repaired and replaced. Protein helps in the repair of damaged tissues and the formation of new ones

## Antibodies

Some proteins are antibodies – your body uses these to fight infections. A strong immune system is vital for children as they are more susceptible to illnesses.

## Messages

There are receptor proteins – these enable your cells to talk to each other -this communication between cells, allows the body to coordinate and regulate complex processes such as growth and immune responses.

## Nutrition

In nutrition Protein is a Macronutrient (contains energy).
Protein sources contain Amino Acids.
Some proteins are complete and some are incomplete.

## Amino Acids

Amino acids are vital for growth, repair, and maintenance of body tissues, enzyme and hormone production, immune function, and overall health.
Nutrition is incredibly important as dietary intake can provide the body with all of the essential amino acids.

## Essential Amino Acids

Humans need to eat a combination of 20 amino acids – 10 of these are essential to obtain from food as we cannot make them in our body. For exclusion diets extra care is needed to get complete proteins.

Protein & Childhood Development infographic from Tiny Tums

www.tinytumshealthkick.com