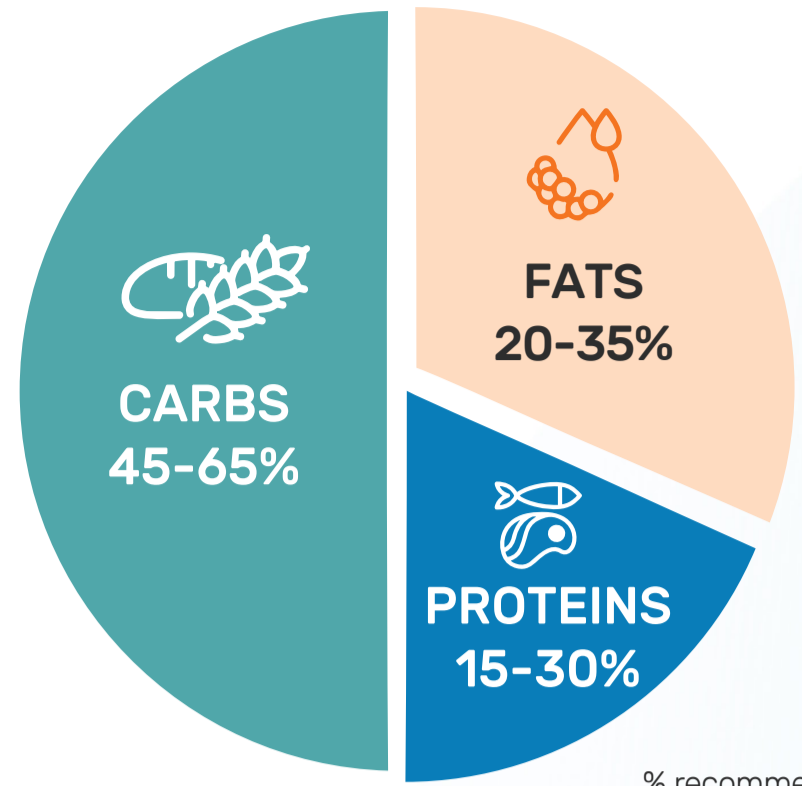


Protein Key Facts

Plant Protein: for health and planet

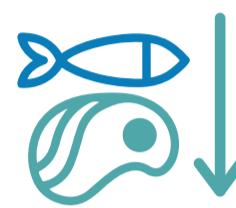
Europeans have a high protein intake. Alongside fat and carbohydrates, protein is a macronutrient that is required in relatively large quantities in our diet as it provides the building blocks for life.



% recommended energy contributions of macronutrients in the diet



Protein provides the building blocks for life and is an essential macronutrient for tissue growth, maintenance and repair as well as almost all biological processes.



Those consuming **plantbased diets tend to have lower total protein intakes**, but this is not of concern in the context of overconsumption in developed countries when consuming sufficient energy and a variety of plant proteins.



Proteins are made of building blocks called amino acids. There are 20 different amino acids but 9 are essential where we must eat them from food. These are all contained in both plant and animal protein sources.



Moving towards an increased intake of plant protein vs animal based **has multiple benefits for population health through reduction of non-communicable disease.** This is partly due to the high fibre and healthy fat content of plant-based foods.



Plant protein sources use less land and water, emit less pollutants, less greenhouse gases and use less land vs animal protein, making them a crucial component of a sustainable dietary pattern for planetary health.



A key barrier to including more plant foods in the diet is a lack of knowledge of how to prepare and incorporate them into usual day-to-day patterns. Guidance on many easy meals ideas that can be made as part of a varied and flexitarian dietary pattern is important for supporting a plant-based dietary



Plant foods high in protein include soy and soy products such as tofu, tempeh, soy drinks and soy alternatives to yogurt, as well as peanuts, peas, pulses, nuts, seeds, mycoprotein and quinoa.



Choosing protein from plant sources is **beneficial for both people and planet**

Amino acids

Protein molecules are made from chains of amino acids that are woven together in unique sequences, ultimately determining their structure and function. Of the 20 known amino acids, our bodies can synthesise 11, and these are referred to as non-essential amino acids (NEAA). The remaining 9 can only be sourced from our diet and are referred to as essential amino acids (EAAs). With countless combinations of the 20 amino acids available, proteins vary widely in their actions. From tissue growth and repair to enzyme activity and immune function, proteins are involved in virtually every biological process and so are essential for sustaining life and optimal health.

Histidine			Isoleucine	Leucine
		Lysine		
Methionine		Phenylalanine		Threonine
	Tryptophan		Valine	

11 are non-essential amino acids (NEAAs) which are synthesised by our own bodies.
 9 are essential amino acids (EAAs) and can only be obtained by the food we eat.