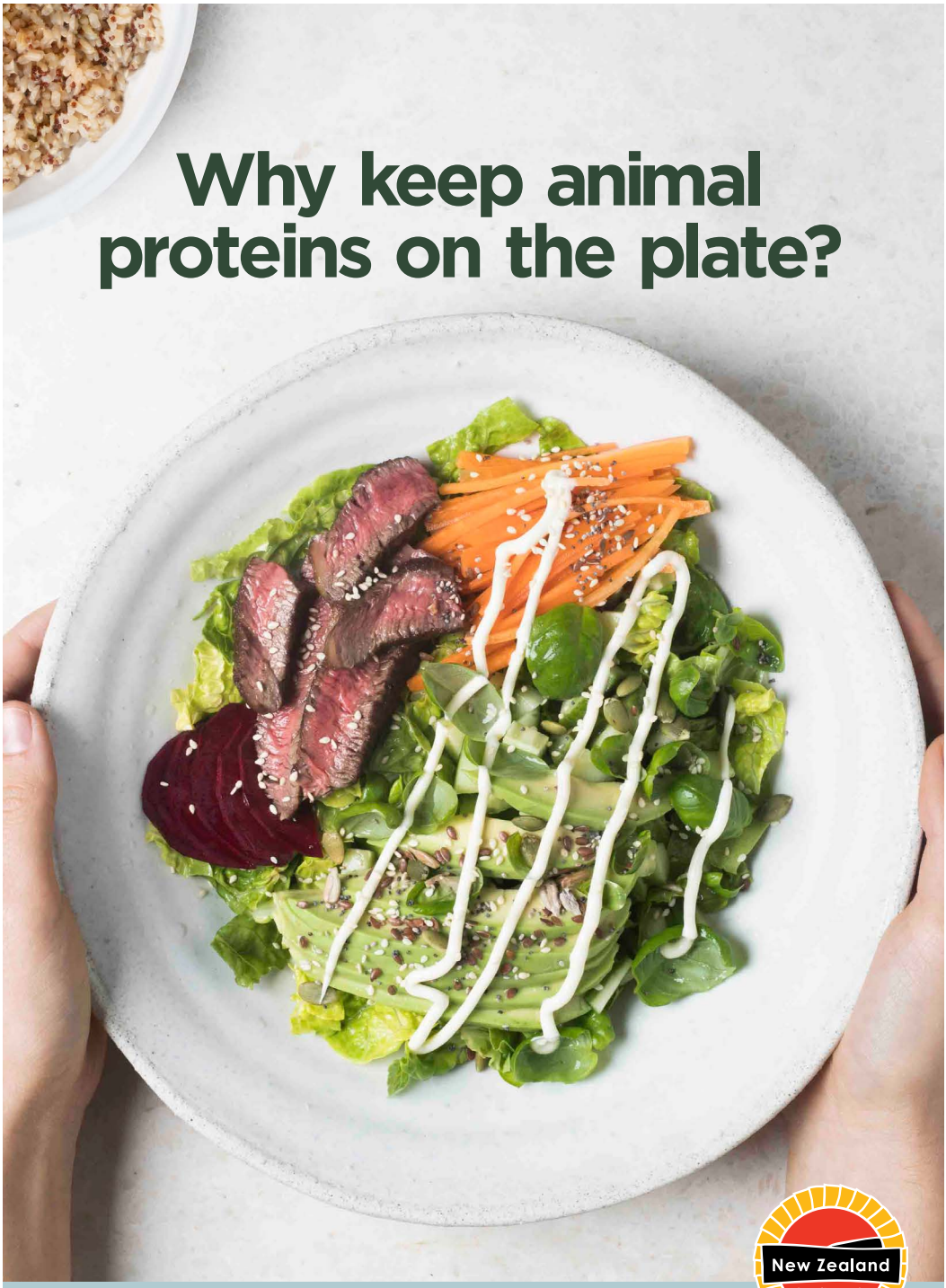
Why keep animal proteins on the plate?



Why keep animal proteins on the plate?

There's a lot of information about changing diets to be plant-based, to be better for both your health and the planet. You may feel confused with what a healthy, balanced diet that is sustainably produced looks like.

This resource aims to provide some New Zealand context why animal-based proteins still have an important place on the plate.

Why do we need protein?

Dietary protein is a macronutrient that we must have in our diet, along with carbohydrates and fats. The main purpose of macro-nutrients is to provide energy to fuel our bodies, however they also have other important functions.

Protein is an essential part of the body's tissues, organs and cells, so it's important to eat enough protein for general health, but in particular to assist with:

- **Optimal growth and development:** Protein is the building block of muscle, bone, hair, blood, organs and skin and is needed for growth and development.
- **Maintenance, growth and repair of lean muscle mass:** Protein is vital for muscle health, playing a part to support the maintenance, growth and repair of muscle. This is particularly important for athletes and older adults.
- **Bone health:** Along with calcium and vitamin D, protein has also been shown to be important for the development and maintenance of healthy, strong bones.
- **Weight management:** Studies have shown protein can help people feel fuller for longer and curb hunger cravings, which can contribute to weight management.

Did you know?

Beef and lamb are high-quality proteins that contain all nine of the essential amino acids needed for optimum health

Are all proteins the same?

All protein foods from animal and plants sources are important for a healthy and balanced diet, however, not all proteins are equal. Protein is made up of building blocks called amino acids. There are 20 amino acids, but only nine are considered essential, meaning they cannot be created by the body and must be obtained from the diet.

Not all proteins have the same quality - there are two types of proteins:

Complete proteins

If a protein food contains all nine of the essential amino acids, it is considered a complete or high-quality protein. These foods are **typically animal-based sources, such as red meats, poultry, dairy products, eggs, fish and seafood.** The plant protein exceptions are soy and quinoa.

Incomplete proteins

If a protein food does not contain all of the nine essential amino acids it is considered incomplete. These proteins come from **plant-based sources and include nuts, seeds, lentils, beans, peas, and some grains.** Although these protein foods are incomplete individually, when eaten in combination they can provide all nine essential amino acids.

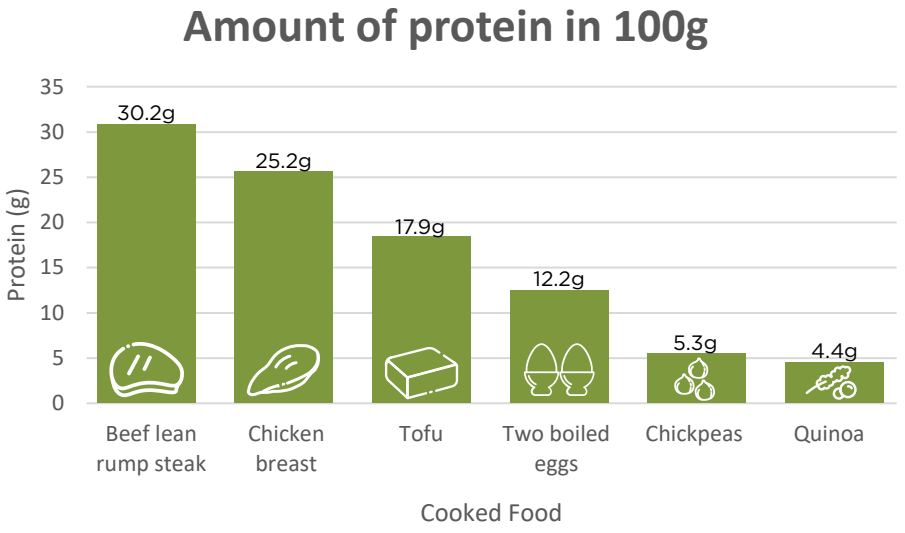
Protein quality goes beyond the amino acid content - how the body digests and absorbs protein also needs to be considered. Animal-sourced proteins rank higher for both digestibility and absorbability than most plant proteins.

With red meat, mince and slow-cooked, tender meat is also very easy for children, those with dental issues and older adults to chew and digest.

What about the amount of protein in food?

Eating a variety of protein foods are important for a balanced diet, however animal protein sources tend to contain more protein per gram. Animal sources tend to have more protein for the same amount of food or in a standard serve when compared to many plant-sourced foods. This can be seen in the serves of some commonly eaten meal-time protein foods below.

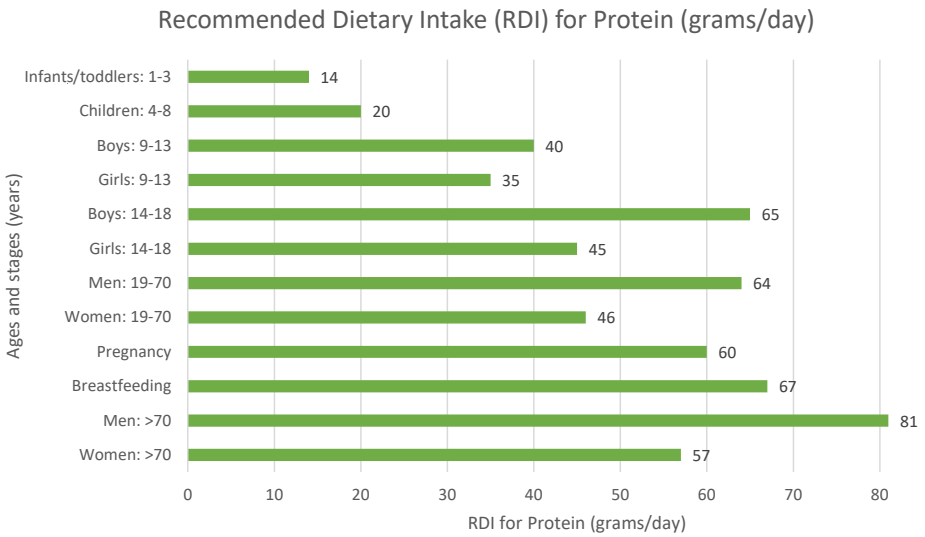
FACT:
You would need to eat one can of lentils (400g) to get the same amount of protein you could get from 100g of cooked lean rump steak.

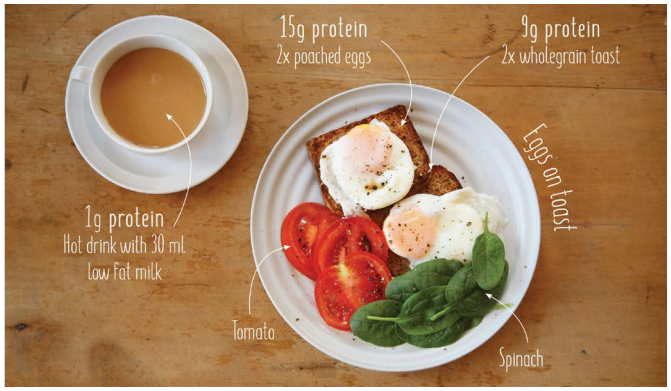


Source for protein amounts: https://www.foodcomposition.co.nz/search/food

Who is at risk of not getting enough protein?

The following graph shows the minimum amount of protein we need daily at different life stages.





SAMPLE MEAL
Eggy breakfast = 25g protein.
To see what 75g of protein looks like in a day check out www.beeflambnz.co.nz/health-nutrition-resources

Most New Zealanders get enough protein, however some people are at risk of not getting enough because they have higher requirements, including:

Pregnant and breastfeeding women who need more protein to support the growth and development of the baby, as well as to meet the mother's needs.

Athletes and sports people who need more protein depending on the type of sport or exercise they do. This is to support the maintenance and repair of muscles and general recovery.

Toddlers, children and teenagers who need extra protein to support rapid growth and development.

Older adults (70+ years) who tend to eat less but need extra protein to prevent the risk of muscle loss and osteoporosis (weak bones).

For these groups in particular, it's not just about having protein on the plate; it's about having protein that is good quality and is readily digested and absorbed. This is especially important for groups who don't eat a lot, such as children, older adults and those who are sick or ill. In some circumstances, protein requirements will need to be based on protein grams per kilogram of body weight, in which case consulting a Registered Nutritionist or Registered Dietitian is advisable.

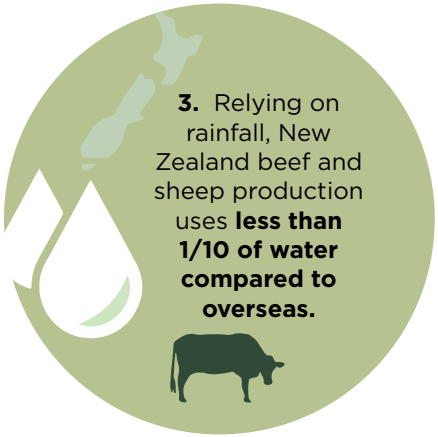
Do we need to switch completely to plant foods to save the planet?

Many people believe we need to reduce or cut out animal products from our diets to save the planet and prevent global warming. However, it doesn't need to be an all-or-nothing approach.

Here are five sustainability reasons to consider why you don't need to cut out New Zealand beef and lamb from the diet:

1. New Zealand beef and lamb are pasture-fed meaning they **produce less CO2 emissions per kilogram** than the global average.

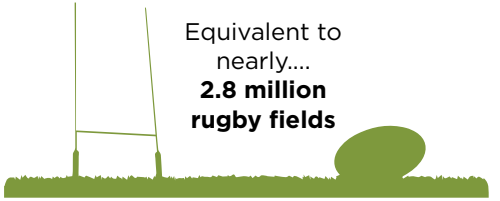
2. Since the 1990s, the **New Zealand sheep and beef sector have reduced greenhouse gas emissions by 30% with a goal to be carbon neutral by 2050.**



3. Relying on rainfall, New Zealand beef and sheep production uses **less than 1/10 of water compared to overseas.**

4. There is biodiversity on our New Zealand beef and sheep farms with 24% of native vegetation found on sheep and beef farms and 180,000 hectares of pine which help to offset carbon emissions.

Equivalent to nearly....
2.8 million rugby fields



5. Woody vegetation on New Zealand beef and sheep farms is estimated to be offsetting between 10,934 to 19,665 kiloton CO2e, **which is 63-118% of on-farm agricultural emissions. This means New Zealand beef and sheep farms are well on the way to being carbon neutral.**

Did you know?
93% of the land on NZ sheep and beef farms is hilly and best suited for rearing animals**.**

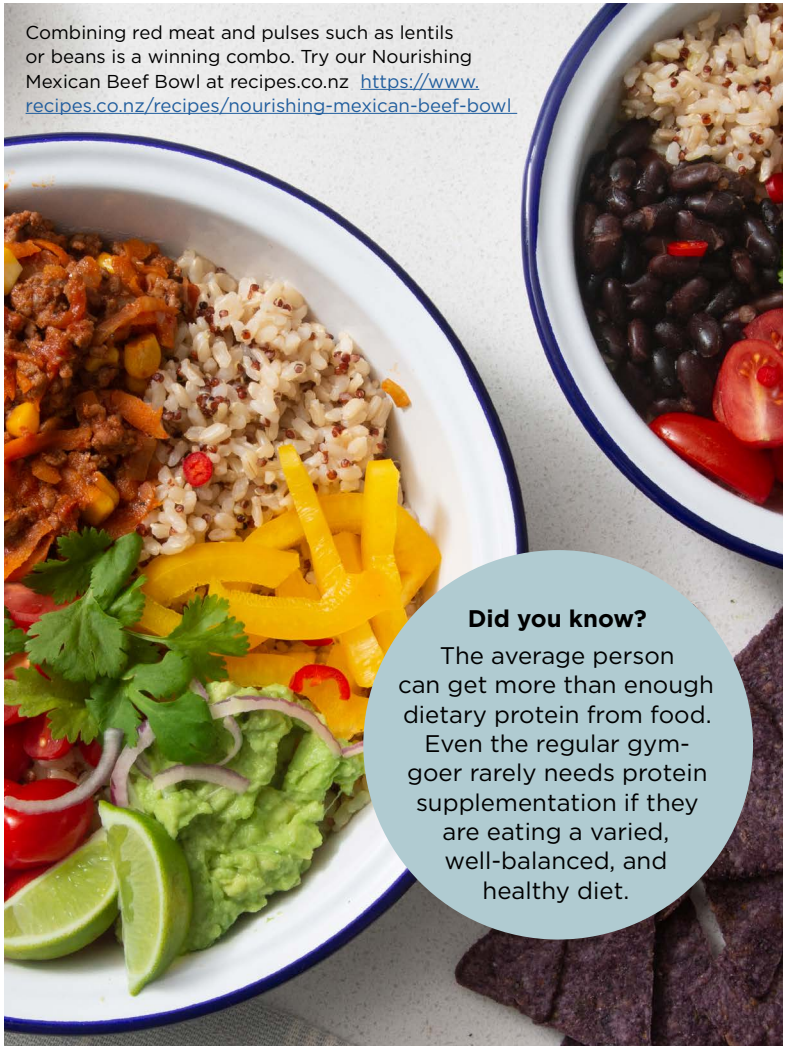
Why eat red meat?

- **PROTEIN-RICH:** Red meat, such as New Zealand pasture-fed beef and lamb, is a **high-quality source of protein**, due to its essential amino acid profile, high digestibility and absorption.
- **WINNING COMBO:** Red meat is **very protein dense** when compared to other protein sources. Eating a combination of lean red meat with plant foods, such as vegetables, beans and wholegrains can make a healthy, balanced meal.
- **A LOT IN A LITTLE:** Lean red meat, such as lean beef and lamb, is **light in calories for the amount of protein it provides.** This means you don't need to eat much of it to get sufficient amounts of protein.
- **NATURE'S POWER PACK:** Lean red meat is **packed full of other micronutrients** such as iron, zinc, B vitamins, which are all essential for health, including supporting immunity, energy levels and growth and development.

Can you get enough protein from plant-sourced foods alone?

Yes. With the right nutrition knowledge, you can get enough protein from plant foods alone, when you combine a wide variety of plant-based options to meet amino acid requirements. However, supplementation may be required for the likes of iron, zinc, calcium, omega-3 and vitamin B12.

To find out more go to: https://nutritionfoundation.org.nz/nutrition-facts/nutrition-a-z/vegetarian. For individualised nutrition support seek advice from a Registered Nutritionist or Registered Dietitian.



Combining red meat and pulses such as lentils or beans is a winning combo. Try our Nourishing Mexican Beef Bowl at recipes.co.nz https://www.recipes.co.nz/recipes/nourishing-mexican-beef-bowl

Did you know?

The average person can get more than enough dietary protein from food. Even the regular gym-goer rarely needs protein supplementation if they are eating a varied, well-balanced, and healthy diet.

For more information on nutrition and the sustainability of New Zealand beef and lamb visit www.makingmeatbetter.nz

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Health problems may result from an inadequate diet. They may also have a medical basis unrelated to diet. The information in this brochure is only general and is not to be taken as a substitute for medical advice in relation to specific symptoms or health concerns.

Information in this resource is derived from the Protein Quality: The Nutritional Advantage of Animal-sourced Foods fact sheet.

Acknowledgements

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