The

Clean

Protein

Guide

Wholehearted Nutrition





# Introduction



There is a lot of conflicting information about nutrition at the moment so we would like to simplify this for you.

Are you overwhelmed by all the advice available and Just want to know what to eat?

We are on a Wholehearted mission to show you how to reclaim your vitality with food. We are clinical nutritionists who understand that no two people are the same, we all have different lifestyles, health concerns and goals. Our focus is to turn the great wave of nutrition information into practical, personalised guidance that you can actually use.

wholehearted

showing or characterised by complete sincerity and commitment.

'you have our wholehearted support'

adjective: wholehearted;

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# Introduction

#### About this Booklet

Protein is the most essential building block our bodies require for growth, repair, and overall well-being. It plays a crucial role in building and maintaining our muscles and our entire body structure; producing enzymes and hormones; and supporting immune function.

In this book, we will explore the different types of dietary of protein, the different sources, how much we need and how it affects our health. From understanding the building blocks of protein (amino acids), to learning about the benefits of different types of protein, this guide aims to provide a straightforward look at why dietary protein is vital and how to make the most of it in your diet.

You will also find some useful information on what to buy and what to do with it.





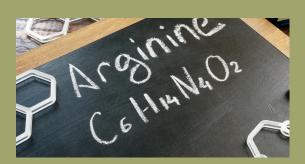
# What is Protein?

#### The who, what & why.

Protein is a vital part of our diet, needed for the proper function of the entire body. We eat foods containing protein and our digestive system breaks the protein down into smaller pieces called peptides, and even smaller pieces called of amino acids.

The proteins we eat are large, complex molecules made from individual amino acids. They have many essential roles in the body for our structure -muscles, bones, skin; our function – enzymes, growth, repair; and the regulation of metabolic processes throughout the body.

We need to break the protein down effectively for it to pass smoothly through the gut lining into our bloodstream. The large fully formed proteins in our food must be digested and broken down to be absorbed. If they are not properly digested they can cause damage to the gut lining or pass straight through our digestive tract without being absorbed. Poorly digested proteins can lead to a range of gut and health conditions such as autoimmune disease and food sensitivities.



Well digested protein is absorbed through our gut lining in the form of small peptides and single amino acids. Our body will prioritise its own needs and rebuild these peptides and amino acids into the required proteins (enzymes, hormones, new cells, etc.) and send them to the organ or tissue where they are needed. The body is very good at determining what is the most important destination for the new protein. Just because you want to build muscle, it doesn't mean your body is ready for that

The proteins we make from the individual amino acids that we absorbed from our food are complex, three-dimensional molecules each with a very specific destination and role. The sequence and number of amino acids in this structure will determine that function.

You could think of protein as a sentence. The sentence is made up of words (peptides), and the words are made up of letters (amino acids). All protein containing foods have different combinations and amounts of amino acids, just like every sentence has a different combination of letters in different words, so getting the right variety in the diet is crucial. We need to make sure we have all the necessary amino acids otherwise it would be like trying to write without important letters like the vowels 'a,e,i,o & u'. Imagine if we didn't have enough of the letter 'a' in our diet and we wanted to write the word SEAT, we could end up with SEET, SENT or SET! 'Would you like to have a sent?' Confusing??

# Why Do We Need To Eat Protein?

#### What's the big deal?

Dietary protein is essential for our health because of the critical role it has in building and repairing tissues, producing enzymes and hormones, and supporting immune function. Here is an incomplete list of the roles of protein and amino acids in our body.

- \*Growth of:
- -muscle
- -skin
- -hair & nails
- -blood vessels
- -connective tissue.
- \*Producing:
- -hormones
- -enzymes
- -neurotransmitters
- -blood cells
- -immune cells and more.
- \*Maintaining:
- -a healthy metabolism
- -aiding in weight management
- -providing sustained energy levels throughout the day
- -effective recovery and repair of cells.

So, you can see from this list that protein is vital for overall physical health and well-being. In order to construct these vital proteins, we must eat protein.



There is a total of 20 different amino acids, 11 of these we can make ourselves if we have the right nutrients, the other 9 are called 'essential' amino acids. This means it is 'essential' that we eat them because we cannot make them. We can only make proteins for all these tasks, from the protein and nutrients we eat, hence, consuming adequate amounts of dietary protein is essential for sustaining life, supporting bodily functions, and promoting optimal health.

As mentioned earlier, our body will prioritise certain tasks for the protein. Rightly so, this means organ function like heart, brain and liver will be taken care of while our some of our hormone production may be neglected. If our diet is lacking in nutrients or quality protein there are tasks that will not get done. Long term, deficiencies can produce complications such as sarcopenia (muscle wasting), poor hair, skin and nail growth, anemia, hormone disruption, reduced mental clarity, low energy, etc.

What happens if we eat too much protein? We will go into detail about how much protein you need in the next couple of pages. If you prioritise your protein target and then follow up with your complex carbs, essential fatty acids while including variety and colour, it's unlikely you will have much room for overconsuming protein.



# Choosing Which Protein to Eat

#### Animal, plant or both?

The bottom line when it comes to choosing protein is the quality and quantity of amino acids. As these are the building blocks of all proteins from all sources, this information is for everyone, omnivore, carnivore & herbivore.

Already mentioned briefly was the point that all proteins that you eat are made up of a different combination and number of amino acids and it is important to make sure you have all the amino acids available for your body to construct the proteins it needs. That is, you need the whole alphabet if you want to write a book.

There are twenty amino acids making up the protein our body needs.

11 nonessential - your body can make these. 7 conditionally essential - nonessential until times of stress or injury & your body can't make enough.

*9 essential* - Must come from our diet, some are harder to obtain than others.

Animal proteins, meat, eggs, dairy are considered to be complete proteins, meaning they contain all the essential amino acids. Plant sources such as soy, quinoa, buckwheat and hempseed are also considered complete proteins. There is, however, a difference in the amount of each essential amino acid in a particular food, this is called the amino acid profile.

The amino acid profile of animal protein is the closest to the needs of humans.



You will generally find the full range of essential amino acids in plant foods, however some are in such small quantities that they need to be combined with others plants to provide your body with the necessary amounts to construct the proteins we need.

This isn't a problem in a diet that contains a wide range of plant sources. For example, having some beans at breakfast could leave you short on the essential amino acid methionine, so you include some brown rice later in the day in order to top up.

The key is variety. Some animal protein 'and' a range of different plant proteins. If you prefer one over the other, that is fine too. There are a lot of options available for sourcing wild game and well bred animal products.

If your goal is to build strength you will need to ensure you have the essential amino acids on board for that task.

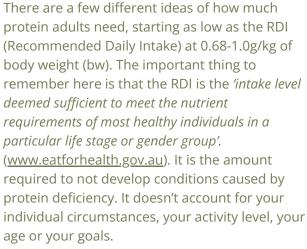
Building muscle requires a minimum amount of the essential amino acid Leucine to kick start the muscle synthesis process. When consuming a high quality complete protein you will need at least 30grams of protein in one meal to achieve this. If you are consuming plants only, you will need 35-45% more protein to reach the same threshold. Keep in mind the plant option will also include a lot more carbohydrates.

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# Portion Your Protein

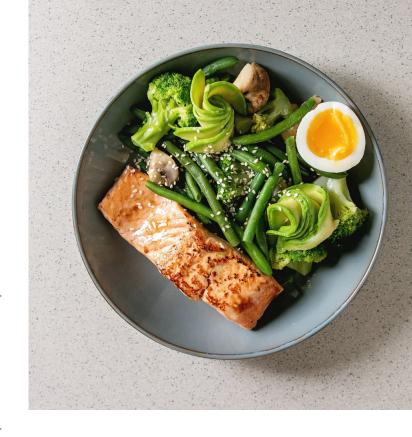
# How much protein do you need?



You may have heard people recommend 1.2g/kg bw. You could also go 1.6-1.8g/kg bw. Ranges of up to 2.0g/kg of body weight have been widely and safely studied.

Consider that you may need more than the RDI if you are pregnant or breastfeeding, trying to build muscle, recovering from surgery or injury or you are over the age of 65.





#### Here's how to calculate your needs.

To calculate your protein requirements use your realistic desired body weight, not necessarily your current body weight, multiplied by the protein target (eg. 1.5g).

Kg of Body weight X Protein target = Total daily protein

Eg. 
$$70 \text{kg} \times 1.5 \text{g} = 105 \text{g}$$

The example above is aiming for 105g of protein each day. Divide this by 3 meals (or however many meals you have) and you are aiming for 35g of protein 3 times a day.

In the case of protein, more is not better. Your body has particular requirements and if there is no use for that 350g Ribeye today, your body will convert the excess protein into fat and store it for later. Sadly, we do not store our excess protein as muscle. Any excess energy/calories consumed will be stashed away in our fat stores.

# How to Build Your Meal

# Start with your protein of choice.

The protein portion of your meal is the part that will tell your body you have had enough to eat. If you have a decent serving of protein on your plate you will not be tempted to over consume the other components of your meal.

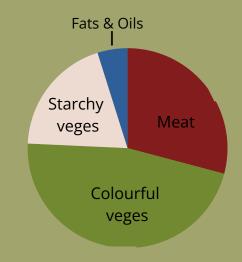
So you have some chicken in the fridge for dinner. What is your protein goal for this meal? On the previous page we looked at how to calculate your own personal protein needs. This is not an exact science and you may need to use a bit of trial and error. For this reason I will be working on 25% or 1/4 as the protein content of meat, raw or cooked, lean or fat. For example, 100g of chicken breast or eye fillet will contain approximately 25g of protein. This single figure is used to make the whole process simple, not perfect. We are all just humans trying to do our best.

So, work out your protein goal for this meal, multiply it by 4 and that is how much meat you need on your plate.

Now add lots of vegetables!

If you're planning your meal around plant protein there is just a little more maths as you will see when using the 'Protein Content' table.

Build your plate around your protein and make sure your first one to two mouthfuls are of protein. This sends the right signals to your body and brain dampening your blood glucose increase and slowing down stomach emptying.



Protein Source	Amount
1 cup boiled navy beans (white beans)	15 grams
1 cup cooked quinoa	8 grams
1 cup cooked, long grain, brown rice	5 grams
28g Mixed nuts – 1 handful	5 grams
1 cup cooked lentils	18 grams
1 cup whole milk	7 grams
1 cup boiled, chickpeas	14 grams
Tofu, 100g	6-12 grams



# Protein Rich Meal 7 deas

#### Breakfast, lunch, dinner or leftovers

#### Chicken Marbella

This is a classic chicken dish adapted many times from the the 1982 Silver Palate Cookbook. It is a great way to feed a crowd or to make sure you have delicious cold chicken leftovers. There are a lot of ingredients but it's worth the trouble.

2kg chicken pieces

1 head of garlic, peeled & separated

½ cup pitted prunes

½ cup pitted Spanish green olives, halved

¼ cup capers, and a little bit of brine/juice

¼ cup red wine vinegar

¼ cup extra virgin olive oil

2 bay leaves

2 tbsp dried oregano

Salt and pepper

½ cup white wine

½ cup brown sugar

Using a large bowl, combine all marinade ingredients except white wine and brown sugar.

Thoroughly coat the chicken pieces, cover the bowl and refrigerate overnight.

The next day, preheat oven to 200°c. Transfer chicken pieces and marinade to an ovenproof dish in a single layer.

Sprinkle chicken with brown sugar and add white wine to the dish.

Roast for 50 minutes, basting 2-3 times, until juices run clear.

#### Ham & Vege Fritatta

6 eggs

Dash of milk

300g leg ham, chopped

4 cups of leftover cooked veges

or

Vegetables of choice

1 small brown onion

Mushrooms

Capsicum

Carrots

Peas

Baby spinach

Whichever vegetables you choose make sure they are cooked before adding to the egg mixture. The eggs + ham provide about 140g of protein which equals about 4 serves.

Preheat oven to 180°c.

Saute onion, carrot, capsicum, mushrooms or veges of choice. Stir baby spinach through hot veges to wilt. Add chopped ham.

Whisk eggs in a separate bowl, add milk. In a well greased casserole dish, place vegetable and ham mix over the bottom of the dish. Top with egg mixture.

Bake in oven for 25-30mins. it should be golden on top and have just a very slight wobble in the centre when jiggled.



# More Protein Rich Meal 7deas



#### **Savoury Mince**

1 medium sized onion, chopped
Garlic, 2 or more cloves to taste, crushed
1 celery stick, finely chopped
½ leek, finely chopped
2 medium carrots, diced
500g grass fed beef mince
1 medium zucchini, coarsely grated
2 cups sliced cabbage
And any other veges you like, the more the merrier! (peas, corn, cauliflower/broccoli rice, mushrooms, capsicum, cherry tomatoes)
2 tbsp tomato paste, optional
1 tbsp Worcestershire sauce, optional
2 cups loosely packed fresh baby spinach.
Salt & pepper, to taste

add garlic. Add mince, brown off. Add sliced cabbage, stir.Add grated zucchini, and any other vegetables, stir and cook until veges are tender. Add tomato paste, stir & cook for 2 minutes. Add Worcestershire sauce and seasoning. Stir through spinach leaves before serving. Choose vegetables you like and add those that need more cooking time first.

This will make four serves based on the protein amount. If it doesn't like enough for a meal, just

#### Oven Roasted Chicken Breast

250g cherry tomatoes
150g Sliced prosciutto
1 tablespoons oregano leaves
Ground paprika
8 cloves garlic (or to taste)
1 tablespoon olive oil
4 Chicken breast fillets, trimmed
½ cup (80g) black olives (optional)
cracked black pepper
basil leaves, to serve

Preheat oven to 200°C (400°F).

Place the tomatoes, oregano, garlic and oil in a baking dish and toss to combine.

Bake for 10-15 minutes.

Time here to prep your veges.

Add the chicken, sprinkle with a little paprika and oregano and lay the prosciutto on top.

Bake for 25 minutes or until the chicken is tender and cooked through. This will depend or the size of the individual breasts. Test at 20 minutes if not sure.

Serve with pancetta & tomatoes, top with basil.

Cook extra chicken breast and veges for

(Ref- Donna Hay - Fast, Fresh, Simple)

tomorrows lunch.



# High Protein Snacks



#### Bliss Balls

Play around with some of these ingredients, roll them

into balls and enjoy!

LSA Oats
Dates Sultanans
Chia seeds Pepitas

Cacao powder Sunflower seeds
Dessicated coconut Protein powder

Nut butter of choice (for binding)



## Mixed Nuts

Protein, good quality fats, fibre and nutrients!

A handful will definitely keep you going until your next meal. The combination of macronutrients will keep you satisfied and ensure you don't spike your blood glucose. Keep an eye on quantity, they are energy dense and can easily blow your goals if you're not paying attention.

Take a handful, put the jar away and then enjoy your snack.



# Boiled Eggs

Eggs are an excellent source of protein and nutrients. They're super easy to prepare and come in their own ready to go packaging. At 6-7g of protein per egg they are miles ahead in the high protein snack world. I recommend firm or hard boiled if you are going to eat them on the run. For perfect cooking timing, sit the raw egg in warm while you're waiting for the pot to boil, then gently slip the egg into the boiling water and start timing straight away.



## Ferky

Made fat trimmed meat, cut into strips and dehydrated. Most often made from beef but you can also find chicken, turkey and salmon jerky. A serving size of 30grams will give you about 15g protein. Check the back of the pack and choose one with just a few vital ingredients. Watch out for added sugar.



# Clean Protein Shopping Guide

Choosing protein that is clean and lean can help reach your health goals.



#### **Chicken & Eggs**

Choose organic or free range chickens. In Australia, all commercially processed chickens are washed in chlorine, in organic chickens the exposure is much lower. You may find a small farm based abattoir that doesn't use chemicals.

#### **Red Meat**

Beef, lamb, pork: First, look for grass fed beef or pasture raised lamb and pork. Organic is also a great option but it doesn't always mean grass fed. Always choose lean mince, it will still contain some fat.

#### Seafood

Fish: Ideally, wild caught fish. 'SMASH' fish are highest in omega 3 fats (Salmon, Mackerel, Anchovies, Sardines, Herring)

#### Game

Game: This is animals that are wild caught or hunted. They have grown up roaming free, without human intervention. Look for ethically sourced venison, kangaroo, goat, boar or rabbit

#### Legumes

Cheaper to buy dried, cook properly Choosing legumes: Consume a variety and ensure they are well cooked. Buying dried legumes is more cost effective and a bit more time consuming.

#### **Grains**

Choose as unrefined as possible, look for 'wholegrains' like rolled oats, brown rice, guinoa.

#### **Nuts & Seeds**

Raw, unflavoured. Buy from a source that has high turnover to ensure freshness.

#### Dairy

Full fat, unhomogenised milk will have the beautiful, yellow clump of cream on top. Choose plain full fat yoghurt and add your own flavourings (ground cinnamon, vanilla extract, fresh or frozen fruit, a little maple syrup or honey).

#### **Protein Powder**

These can be great to 'top up' some days, here are a few things to consider. All protein powders are ultra processed food. They should only be used as supplements to your normal wholefood diet. Read the ingredients, many of them come with alot of additives. As mentioned earlier, the different sources bring different amino acids and bioavailability. Whey Protein Isolate (from dairy) is the best option for complete protein.



# Wholefood Carbohydrate Options

When you feel like you need a carb containing snack, and we all do sometime, make it count. Choose something that contains good quality nutrients, no nasty chemicals and doesn't spike you blood sugar levels.



## Vegetables

A diet containing a variety of colourful vegetables delivers vitamins, minerals, fibre, a little protein and lots of phytonutrients. Pair vegetable stick with a dip made from chickpeas, white beans or avocado.



#### Fruit

Don't drink your fruit.

Eat the whole fabulous package. Whole fruit contains a nutritious range of vitamins, mineral and phytonutrients packaged up with fibre to slow digestion and dampen the sugar hit.



# Wholegrains, Nuts & Seeds

Power packed nutrient bombs. Nuts, seeds and wholegrains are rich in fibre, healthy fats, vitamins and minerals. Soak them overnight to make them easier to digest. Combine them to make sure you are getting the full range of nutrition.



Wholegrain Bread

Not all bread is created equal. Always check the ingredients list and look for breads that contain 100% wholegrains, or sprouted grains. Sourdough is a great option but still look for wholegrains. Gluten free breads are usually made with a combination of different flours and starches, remember you are still looking for wholegrains and low sugar.



# Pimp Your Protein

# Healthy and tasty ideas to dress up your meal.

If you're tempted by the pre-dressed meat options, marinated roasts, crumbed fillets, etc take a moment and think about what you are really buying and paying for.

Often the crumbing is hiding a little more fat or a cheaper cut of meat. Also, consider the ingredients, additives, colours and preservatives that may have been used in the mixture. Read the label, do you know what the ingredients are? Marinades often contain a lot of added salt, sugar and undesirable vegetable oils. Read the label and compare that to what you might put in a marinade at home - olive oil, herbs & spices, mustard, etc.

If the plain, undressed, unflavoured meat at the butcher doesn't appeal to you, here are some super-simple things you can add to your meat to up the flavour.

Good ol' salt and pepper

Herbs

Spices

Mustard

Onions

Garlic

Home made relish



Recipe Ideas next page for:

All you need for a Lamb Roast Marinade

Easy home made tomato relish to replace bottled sauce forever.

Fresh herb dressing for a grilled steak

Caramelised Onions to take your steak or burger to the next level.

# Pimp Your Protein-Recipes

# Clean and Healthy Ways to Cook Up a Storm

## Simple Lamb Roast Marinade Ingredients

- 2 tablespoons extra virgin olive oil
- Garlic
- Mustard
- Grated zest of one lemon
- Salt and Pepper

#### **Instructions**

- Combine all ingredients in a small bowl.
- If you have time, refrigerate for 2 hours, keeping mind that lamb roasts ae best brought up to room temp before going into the oven.
- Roast as normal.
- The zested lemon can be halved and placed in the bottom of the roasting dish.

#### Caramelised Onion Jam

#### **Ingredients**

- 2 tablespoons extra virgin olive oil
- 4 medium brown or red onions, halved and sliced
- 1 tbsp brown sugar
- 1-2 tbsp balsamic vinegar

#### **Instructions**

- Heat the oil in a 12-inch pan over medium heat. Add the onions and sauté for 5-10 minutes, or until starting to soften.
- Turn the heat down to medium-low and continue to cook, stirring as necessary to prevent catching or burning for another 30 minutes, until the onions are very soft, golden brown.
- Add the brown sugar and balsamic vinegar
  to start the caramelisation. Reduce the heat
  a little and stir occasionally to prevent
  sticking or burning and to lift the caramel
  from the bottom of the pan. The timing will
  depend on the size of your onions and the
  heat of your stove.



## **Easy Homemade Tomato Relish** Ingredients

- 250 g red onions, sliced finely
- 500 g tinned tomatoes
- 1/2 tsp chilli flakes (optional)
- 1/2 tsp paprika
- 1/2 tsp salt
- 75 ml apple cider vinegar/ red wine vinegar
- 150 g brown sugar

#### Instructions

- Combine all ingredients in a saucepan, stir.
- Simmer for 30 minutes.
- Allow to stop steaming. Pour into sterilised jars and seal immediately.
- Refrigerate, as it won't last long anyway.

#### Fresh Herb Dressing for Grilled Steak

#### **Ingredients**

- 50g (1 cup) chopped fresh coriander including stems
- 60ml (1/4 cup) extra virgin olive oil
- 2 tbsp lime juice
- 1 tbsp fish sauce
- 1/2 tsp caster sugar
- Optional, 1 large, red chilli, seeded and finely chopped

#### **Instructions**

- Combine ingredients in a small bowl
- Serve on top of grilled steak



# More Information

If you found this information useful and you would like to dig a little deeper, visit our website and book a free Discovery Call. We can have a chat about your health goals and decide on the best way forward for you.



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