

***Balance.***

**SOURCES OF**

**PROTEIN**

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Protein sources to include in your diet (not an exhaustive list)

# MEAT AND SEAFOOD

Food	Serving size	Protein per serving	Protein per 100g
Chicken breast (grilled without skin)	100g	25 – 35	25 – 35
Turkey breast (grilled)	100g	30	30g
Steak (grilled)	100g	28	28
Pork chop (grilled)	80 – 100g	12 - 16	16
Lamp chop (grilled)	80 – 100g	23 - 28	28
Roast Beef	100g	24 - 32	24 - 32
Beef mince (5% fat)	100g (cooked)	20 - 23	20 – 23
Turkey mince (5% fat)	100g (cooked)	22 - 26	22 – 26
Ham slices	50g	8.5 – 13	17 - 26
Bacon (grilled)	Per rasher	9 - 11	20 – 24
Salmon fillet	Per fillet (100 – 120g)	20 - 25	20
Cod fillet	Per fillet (100 – 120g)	17.5 – 25	17.5 - 20
Tuna (in brine)	Per tin (120g)	28 - 30	23 – 25
Prawns	85g	15.5	15 - 18
Mackerel fillet	100g	20 – 22	20 - 22

# VEGAN SOURCES

Food	Serving size	Protein per serving	Protein per 100g
Spirulina	30 – 40	21 – 26	67
Chlorella	30 – 40	18 - 24	60
Nutritional Yeast	Depends on recipe	n/a	52
Moringa	Depends on goal	n/a	27
Cacao	Depends on recipe	n/a	26
Soy beans	100g (depending)	16 – 22	16 - 22
Lentils	200g (cooked)	14	7 (cooked)
Red kidney beans	120g	9	7.5 – 8
Black beans	100g	8	8
Adzuki beans	117.5g	8	7
Tahini	15g	4	19 – 25
Chickpeas	120g	9	7.5 – 8
Corn	50g	1.5 - 3	3 - 6
Peas	50g	3 – 4	7 - 8
Broccoli	100g	3	3

# GRAINS, NUTS AND SEEDS

Food	Serving size	Protein per serving	Protein per 100g
Oats	30 – 40g (dry)	4.8 – 6	16
Spelt	200g (cooked)	11	5 – 6 (cooked)
Wild Rice	165g (cooked)	6.5	3 – 4 (cooked)
Quinoa	185g (cooked)	8	3.5 – 5 (cooked)
Buckwheat	150g (cooked)	4.5 - 5	3 – 4
Brown rice	125g (cooked)	4	3

Food	Serving size	Protein per serving	Protein per 100g
Peanuts	25g	8 – 9.5	33 - 38
Almonds	25g	5 - 6	20 - 24
Cashews	25g	4.8 - 6	19 - 24
Walnuts	25g	4.3 - 5	17 - 20
Hazelnuts	25g	3.8 – 4.5	15 – 18
Brazil nuts	25g	3.5 – 4.3	14 - 17
Pine nuts	10g	1.4 – 1.6	14 - 16
Pumpkin seeds	10 – 20g	1.7 – 5	17 - 25
Sunflower seeds	10 – 20g	1.6 – 4.6	16 - 23
Flax seeds / linseed	10g	1.8 – 2	18 - 20
Sesame seeds	10g	1.6 - 2	16 - 20
Chia seeds	10 – 15g	1.5 – 2.7	15 - 18

# DAIRY AND EGGS

Food	Serving size	Protein per serving	Protein per 100g
Semi-skimmed milk	250ml	9	3.6
Skimmed milk	250ml	9	3.6
Whole milk	250ml	8.8	3.5
FAGE Total 0% Natural Fat Free Greek Yoghurt	100g	10.3	10.3
0% Fat Natural Yogurt	100g	5.5	5.5
Alpro Yogurt Alternative	100g	3.7	3.7
Arla Skyr Natural	100g	10.6	10.6
Arla Protein yoghurt	200g	20	10
Light & Free Skyr Yogurt	150g	14	9.2
Lindahls Kvarg Pot	150g	17	11.3
Fage Total 0% Greek Yogurt Split Pot	170g	14	8.3
Muller Light Greek Yogurt	120g	8	6.3
Muller Light Mixed Yogurt	160g	8	4.9
Lighter Cheddar Cheese	30g	8.5 - 9	28 - 30
Lighter Mature Cheese	30g	8.5 - 9	28 - 30
Whole egg	1 egg (large)	6	12
Egg white	1 egg (large)	4	11

# SNACKS

Food	Serving size	Protein per serving	Protein per 100g
Grenade Protein Bar	60g bar	20 – 23.5	33 - 39
PhD Smart Bars	64g bar	20 – 21	31 - 33
Sci-Mx Flapjack	80g flapjack	21	26
Sci-Mx Cookie	75g cookie	23	30
Pro2Go Protein Bar	60g bar	22 - 24	38 - 42
Maximuscle Protein Bar	55g bar	20	36.5
Barebells Protein Bar	55g bar	20	36.5
Quest Bar	60g bar	21 - 23	34 - 40
Fibre one Brownies	24g brownie	1	4
Fibre one Cake Bars	25g bar	1	4
Halo Top Ice Cream	100ml	4	4
Breyer's Ice Cream	100ml	4	4
Graham's Goodness Ice Cream	100ml	4.4 - 4.6	4.4 – 4.6
Graze Snack Box	35g	7 - 10	20 - 23
Eat Natural Protein Bar	45g	10g	22 - 23

# COELIAC FRIENDLY SNACKS

Food	Serving size	Protein per serving	Protein per 100g
Bulkpowders vegan protein bar	75g bar	21	28
Musclepharm combat crunch	63g bar	20	28 - 30
Bulkpowders protein bites	50g	15	30
Bulkpowders chocolate whey balls	50g	10	20
MyProtein Break Bars	21.5g	3.4	16
Billtong	50g	25 - 30	50 - 60
Beef Jerky	50g	17.5 - 25	35 - 50
Trek protein nut bar	40g	10 - 12	22 - 28
Trek protein flapjack	50g	9	18
Trek peanut power	55g	10	19

MyProtein and Bulkpowders have a range of gluten free snack options;

MyProtein -

<https://www.myprotein.com/dietary-needs/gluten-free.list?pageNumber=1>

Bulkpowders -

<https://www.bulkpowders.co.uk/search/go?w=gluten+free>

# COELIAC FRIENDLY PROTEIN POWDER

Food	Serving size	Protein per serving	Protein per 100g
GNC Pro Performance 100% Whey Protein	30g	19	63
Isopure Natural Flavor	30g	25	85
Quest Protein Powder	30g	23 - 24	82
Bulkpowders Gluten Free Whey Protein	30g	24	80
MyProtein Impact whey isolate	30g	26	90
Vega Plant Based Protein Powder	30g	21 – 22.5	70 - 73



# COFFEE-INFUSED OVERNIGHT PROATS

## *Ingredients (Serves 1)*

- 45g old fashioned oats
- 60ml coffee
- 60ml unsweetened almond milk
- 15g vanilla protein powder
- 1 tablespoon chia seeds

## *Directions*

- In a jar or small bowl, combine the oats, coffee, almond milk, protein powder and chia seeds.
- Put the lid on the jar and give it a shake; stir if using a bowl. Chill overnight.

## *Nutritional Info*

Calories - 293kcal

Fibre - 10g

Protein - 21g



# PASTA LENTIL BOLOGNESE

## Ingredients (Serves 4)

- 2 teaspoons (10 ml) olive oil
- 1 medium onion, diced small
- 1 medium carrot, peeled and diced small
- 2 small celery stalks, diced small
- 1 small fennel bulb, diced small
- 4 cloves garlic, minced
- 2 tablespoons (30 ml) white wine vinegar
- 480 ml low-sodium vegetable broth
- 240g green lentils
- 600 ml chopped or crushed tomatoes with juices
- 2 teaspoons (10 ml) dried oregano
- 2 teaspoons (10 ml) dried parsley
- 1 teaspoon (5 ml) dried basil
- 225 grams wide whole-wheat pasta noodles
- 120 ml low-fat milk
- 2 pinches of sea salt
- 2 pinches of ground black pepper

## Nutritional Info

Calories - 337kcal

Fibre - 15g

Protein - 13g

## Directions

- In a large Dutch oven or saucepan, heat oil on medium-high. Add onion, carrot, celery, fennel and garlic. Cook, stirring often, until released water evaporates and brown bits begin to form on the bottom of the pot, about 15 minutes.
- Add vinegar, scraping any brown bits from the bottom of the pot as the liquid evaporates.
- Stir in the broth, 1 cup water, lentils, tomatoes, oregano, parsley and basil.
- Reduce heat to medium and simmer, partially covered, for 45 minutes, stirring occasionally.
- Meanwhile, bring a large pot of water to a boil and prepare pasta according to package directions.
- Drain pasta and set aside.
- Add milk to Bolognese and continue to simmer for an additional 10 minutes. Season with salt and pepper.
- Divide pasta among 4 bowls and top each with an equal portion of the Bolognese.



# CHICKEN AND BLACK BEAN ENCHILADAS

## *Ingredients (Serves 4)*

- 1 teaspoon (5ml) olive oil
- 35g yellow or white onion, finely chopped
- 2 garlic cloves, minced
- 115g boneless, skinless chicken breasts, cut into strips
- 3/4 teaspoon ground cumin
- 1/4 teaspoon salt
- 240g low-sodium canned black beans, rinsed and drained
- 120g fresh or frozen and thawed yellow corn
- 60g plus 1 tablespoon 5g chopped cilantro, divided
- 180g prepared tomato salsa or salsa verde
- 8 corn tortillas
- 120g shredded low-fat cheddar cheese

## *Nutritional Info*

Calories - 309kcal

Fibre - 7g

Protein - 27g

## *Directions*

- Preheat oven to 180 degrees. Heat oil in over medium in a large nonstick skillet. Add the onion, garlic, chicken, cumin and salt. Cook, stirring often, for 3–5 minutes or until chicken is cooked through. Stir in the black beans and corn; cook for 1 minute. Remove from heat, and stir in 60g cilantro and 3 tablespoons of the salsa.
- Stack tortillas on a plate; cover with damp paper towel. Microwave on high for 15 to 30 seconds until hot and pliable.
- Lightly coat a 13-by-9-inch baking dish with cooking spray. Spoon an 8th of the chicken mixture in center of a tortilla. Roll up, and arrange in baking dish. Repeat with the remaining tortillas. Spoon the remaining salsa over the enchiladas.
- Sprinkle evenly with cheese, then bake for 30 minutes, or until hot and bubbly. Before serving, garnish with remaining 1 tablespoon of cilantro.



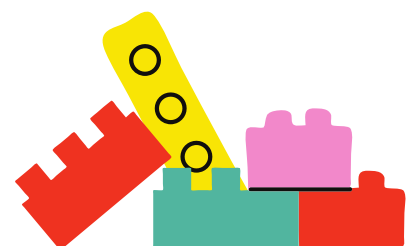
# WHAT IS PROTEIN?

A **protein is essentially a lego set. A lego set built from bricks called Amino acids.**

Our body **breaks down protein** (both dietary and existing structures) **"lego sets" into their amino acid "bricks"** so that it can **use these bricks to build new structures in the body or convert these bricks to use for energy.**

There are **two groups of amino acids - essential and non-essential.**

When we talk about "essential" and "non-essential" in relation to our diet it simply means things we can produce ourselves (non-essential) and things we must get from our diet (essential).



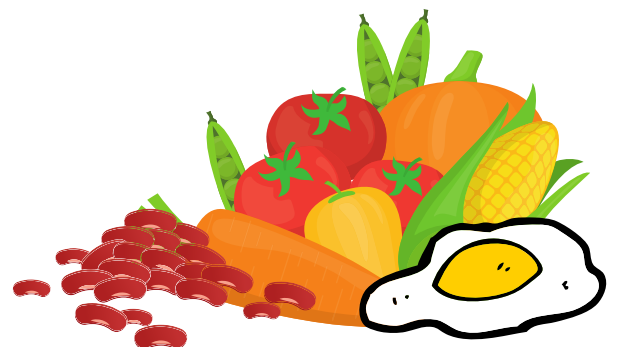
# WHAT IS PROTEIN?

**Protein sources containing all the essential amino acids are referred to as "complete" proteins and are more desirable.**

A protein source **missing one or more of the essential amino acids** are referred to as **"incomplete" proteins.**

Generally speaking, **animal sources are most often complete and plant sources are most often incomplete.**

Thus it is **important for vegetarians & vegans to have complimentary sources of protein in one meal**



# COELIAC DISEASE

Coeliac disease is an autoimmune condition that causes severe damage to the lining of the small intestine.

**Gluten** – a protein found in wheat, barley, and rye – **triggers its symptoms**. There's currently no cure for coeliac disease.

A strict gluten-free diet – also known as the coeliac disease diet – must be followed to allow your body to heal.

**If you have coeliac disease and consume even small amounts of gluten, damage to your intestines will continue, regardless of the absence of symptoms**

## ***Potential Benefits of a gluten free diet for coelilacs***

- Reduces the Symptoms of Coeliac Disease
- Prevents Small Intestinal Damage
- Improves Nutrient Absorption
- Improves Fertility
- May Reduce Cancer Risk
- Lowers the Risk of Osteoporosis



# COELIAC DISEASE

There are many naturally gluten-free foods to enjoy on the coeliac disease diet, including:

- **Animal proteins:** Beef, chicken, dairy products, eggs, game meat, lamb, pork, seafood, and turkey.
- **Fats and oils:** Avocado, coconut oil, olives, oils, solid fats, and butter.
- **Fruits and vegetables:** In any form, including fresh, frozen, dried, or canned.
- **Gluten-free cereals and pseudocereals:** Amaranth, buckwheat, corn, millet, quinoa, rice, sorghum, teff, and wild rice.
- **Herbs and spices:** All fresh and dried herbs and spices are naturally gluten-free and can be enjoyed liberally.
- **Legumes:** Beans, lentils, peanuts, peas, and soy.
- **Nuts and seeds:** Any type, including almonds, cashews, chia, flax, pecans, pepitas, pine nuts, and walnuts.

There's also a wide variety of specialty products, including gluten-free bread, cereals, flours, crackers, pastas, and baked goods.

**All animal proteins, fruits, vegetables, nuts, seeds, legumes, herbs, and spices are naturally gluten-free. There are many naturally gluten-free grains and specialty products, too.**





# SUMMARY

Protein plays an incredibly important role within the human system and can be an invaluable aid for a diverse range of health systems and outcomes.

**Protein requirements will vary greatly dependent on situation however a general rule of thumb would be to at least get 1.2g per kg** if not more per day (obviously not so much so that you're missing out on other nutrients).

Protein is also not simply the powder the local gym lug drags around behind them, but is found in an extremely diverse range of both animal and plant based sources.

Protein is our favourite macronutrient, and we hope it is soon yours too!

## ***Recommendations for daily protein intake;***

- **General health** - >1.2g of protein per kg of bodyweight
- **Endurance training** - >1.2g of protein per kg of bodyweight
- **Team sports** - >1.6g of protein per kg of bodyweight
- **Strength/Power sports** - >1.8g of protein per kg of bodyweight
- **Resistance Training** - >2.2g of protein per kg of bodyweight

