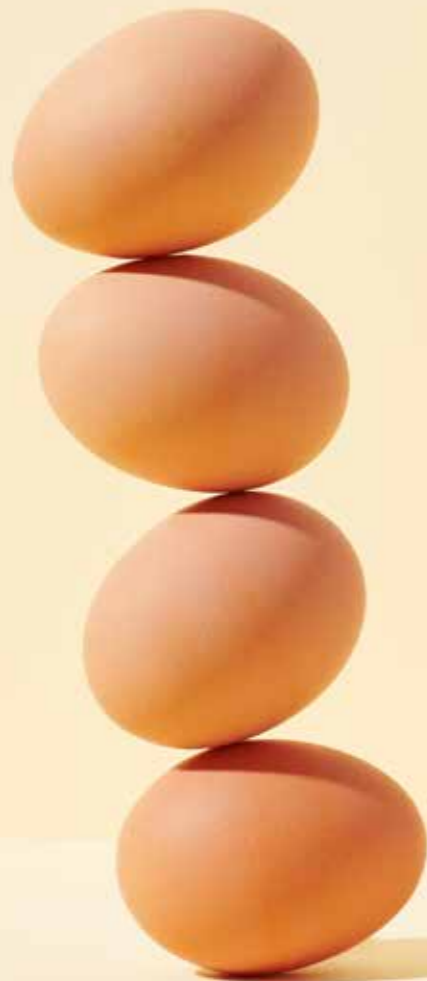


Protein power



PLANT-BASED IS WHERE
IT'S AT HEALTH-WISE,
BUT COULD IT BE MAKING
US DEFICIENT IN A KEY
NUTRITIONAL STAPLE?
ARIELLE STEELE INVESTIGATES

Like many aspects of nutrition, there are madly mixed messages about protein. On the one hand, many of us are being told to dial down on meat and ramp up plant-based foods, not just for ethical or environmental reasons but also for improved gut health and to help protect against heart disease and certain cancers. The flipside? Many of us may not be getting as much protein as we used to, given it's reliably found in animal sources such as meat and eggs.

Not only that, we're increasingly becoming aware that many of our favourite packaged snacks that come with 'high-protein' labels, such as our mid-morning snack bar and our grab-and-go fitness shake, are synonymous with much-feared ultra-processed foods (UPFs).

However, protein is considered to be the holy grail, particularly in midlife. 'There are so many benefits to a protein-forward diet,' says Dr Gabrielle Lyon, founder of Muscle-Centric Medicine and author of *Forever Strong* (Little, Brown). 'This includes more balanced blood sugar, increased energy, decreased body fat, improved recovery and reduced cravings. It's crucial for longevity, repairing your body's tissues and quality of life.'

So, how do we get the balance right and ensure we get enough protein without sacrificing our plant-plenty diets? The experts weigh in...

What is protein?

We often think about protein as a single macronutrient, says Dr Lyon, 'But actually it's a delivery system for 20 different amino acids.' All of these amino acids (AAs) are important, but nine of them are 'essential', meaning they aren't already synthesised in our bodies and we rely on our diets to get them, including histidine, tryptophan and lysine. They all serve two important functions, says Dr Lyon: 'supporting the body's physical structure, and supporting physiological functions such as neurotransmitter and antioxidant production, hunger regulation and calorie burning.'

But, according to Dr Lyon, different proteins contain different proportions of those all-important amino acids – meaning not all protein is created equal. 'The quality of protein matters just as much as the quantity,' she says.

The highest-quality proteins, as expected, come from animal sources – think chicken, turkey, beef, lamb, eggs, dairy and fish. 'In addition to having optimally balanced AA profiles, animal-based products are superior in calorie-for-calorie nutrient density,' she says.

But protein can be found in all corners of your diet, including vegetables and carbohydrates. And, of course, if meat and/or dairy aren't options for you, you can still get enough protein, but it requires a bit more effort to meet the same levels. One of the most important things you need to know? Variety is king.

'For example, legumes contain lysine, threonine and tryptophan, but they contain low quantities of methionine,' says Dr Lyon. 'Grains, meanwhile, contain methionine but provide limited lysine and often limited threonine and tryptophan. Combined, they supply a mixture of AAs of higher quality than either one alone.' Other protein-packed veggie foods include hummus, baked beans, soya, tofu, lentils, seeds and peanut butter.

Why does it matter?

At any age, we need the amino acids in protein to build and repair muscles and bones. But this becomes especially important when we hit midlife.

'Muscle's ability to sense nutrients diminishes with age,' says Dr Lyon. 'When muscle becomes less responsive to protein – particularly low doses of amino acids – the tissue changes. When these

SELF

changes occur, the metabolic abilities of the muscle tissue significantly decline, increasing our risks of disease, fatigue and obesity.'

And this can be even more pronounced for women in the perimenopause or menopause years, when our oestrogen levels start to decline. 'Chronic low levels of oestrogen result in a loss of muscle mass and decrease in bone density,' says registered dietitian Laura Clark (themenopausediitian.co.uk). 'This can result in increased frailty and risks of osteoporosis and fractures.'

The good news? Protein, combined with weight-bearing exercise (which encourages protein to be used more effectively in the body), can safeguard against these changes. What's more, it can help you maintain your weight. 'Protecting muscle mass maintains a higher metabolic rate, so your body is more efficient at using calories,' adds Clark.

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How much should we have?

As it stands, the official recommended daily intake for women is 0.75g per kilo of body weight (which equates to about 45g per day for the average woman) – which most of us are easily meeting. But, says Dr Lyon, recommended daily intakes are based on 'deficiency models',

meaning they spell out the minimum requirements to keep you alive. 'These guidelines don't account for active lifestyles or the goals of protecting muscle and longevity as we age,' she explains.

In the long-running Women's Health Initiative study, a higher protein intake (1.2g/kg body weight) was associated with a 32% lower risk of frailty and better physical function. Although it's still difficult to prove cause and effect here, Clark recommends increasing your intake to roughly 1-1.2g/kg body weight when you go through menopause, to help protect against the muscle mass you lose. For the average woman, this would roughly translate to 90g per day – which means eating around 20-30g of protein in each meal (breakfast, lunch and dinner).

Give your diet a protein overhaul

Knowing your numbers is all well and good, but how does that translate into your daily eating habits? Here are the seven steps every protein-curious woman needs to know...

PHOTOGRAPHY: STOCKSY, GETTY

1 Know your quantities

First up, it helps to know where you can get the best-quality proteins into your diet – in real terms.

Laura Clark shares handy measures of the best sources...

ANIMAL PROTEINS

Each serving contains roughly 20g of protein:

- Beef, lamb, pork – 2 medium slices
- Turkey, chicken – 1 small breast
- Grilled fish – 1 small fillet
- Salmon, tuna, mackerel – 1 small tin/fillet
- Shrimps, prawns – 2 serving spoons
- Eggs – 3 medium
- Cottage cheese – 4tbsp
- Greek yogurt – 4tbsp
- Milk (skimmed/semi-skimmed) – 1 pint

VEGETABLE PROTEINS

Each serving contains roughly 10g of protein:

- Nuts (e.g. peanuts, cashews) – 4tbsp
- Seeds (e.g. sunflower, sesame) – 4tbsp
- Baked beans – half a large tin
- Kidney beans/split peas – 5tbsp, cooked
- Lentils – 5tbsp, cooked
- Tofu (soya bean curd) – half a packet
- Soya milk – approx $\frac{2}{3}$ pint
- Hummus – 3tbsp (approx $\frac{1}{2}$ a tub)
- Peanut butter – 2 heaped tbsp (thickly spread on 2 slices of bread)
- Grains – $\frac{1}{4}$ to $\frac{1}{3}$ of a plate

2 Work out your baseline

Clark says there's not much point in boosting your protein intake without an understanding of how much protein you're already getting – as you may already be having plenty. 'Going through the perimenopause is the perfect opportunity for a protein MOT,' she says.

In the UK, many of us eat protein-heavy dinners (thanks to the meat-and-two-veg mentality) but sacrifice protein at breakfast and lunch in favour of sugary yogurts or rainbow salads. Work out which meals already contain enough protein, and which ones could benefit from a boost. Dr Gabrielle Lyon also recommends tracking your intake using an app such as Cronometer or MyFitnessPal.

3 Spread throughout the day

'Breakfast is particularly important because your body's level of muscle breakdown is higher after an overnight fast,' says Holland & Barrett's nutrition development lead, Alex Glover. 'Spacing out your protein intake throughout the day is important,' he adds, because your body is constantly breaking down and building muscle. And it isn't just important for the days you're exercising – 'Protein is there to support your recovery, but that recovery never stops,' he explains.

4 Don't make sacrifices

'When women think they need to eat lots more protein, it can lead to displacing other food groups instead – especially carbohydrates,' says Clark. 'It's important to remember that carbohydrates also contain some protein, particularly if they're wholegrain.' You shouldn't have to sacrifice any food groups – it's more about making mindful swaps for good-quality sources of protein wherever possible.

5 Get supplement-smart

Protein shakes used to be associated with gym bros, but in more recent times they've had a marketing overhaul, with brands now gearing their powders towards midlife women, with extra female-centric vitamins and minerals to boot. But do you actually need them? It really depends, says Clark. 'Protein powders can be helpful for people on plant-based diets; for example, oat and almond milk have much lower protein content than regular milk, so a protein powder could supercharge a plant-milk smoothie,' she says. 'They're also a convenient way to get more protein on the go. Whey, which is a constituent of milk, is the best quality, but if you're plant-based, look for a pea-rice blend in order to obtain the full amino acid profile.' Protein powders are also considered an ultra-processed food. 'Ideally, search for a product with the fewest ingredients possible, without additives or fillers,' recommends Dr Lyon. And if you put yours into a smoothie, as opposed to water, you'll be getting a load of other essential vitamins and minerals – so you can stack the benefits.

6 Watch out for sugar saturation

Like powders, protein snack bars are big business – but, says Glover, 'They often contain lots of sugar alcohols and sweeteners, and the protein sources tend to be variable, often containing lower-quality proteins.' Still, he says, they're not necessarily the enemy just because they're ultra-processed. A more natural protein bar with fewer ingredients would still be more nutritionally beneficial than, say, a chocolate bar. Everything in moderation.

7 Check your meat alternatives

Some meat alternatives (such as Quorn) contain protein, but be aware that many of them do not replicate meat's amino acid profile. 'For example, some may be chosen for their texture, which resembles meat, such as jackfruit, but they're nutritionally quite different,' says Clark. 'Salt content is generally higher in processed vegan products than their non-vegan counterparts, with some even containing twice as much.' As with bars and powders, always check the nutritional info and don't assume it's healthier just because it's plant-based or has the words 'high protein' on the label.

LAZY MEALS

Varying your protein doesn't have to be a faff. Here are Laura Clark's favourite dishes that the whole family will eat:

- Scrambled egg, spinach and smoked salmon served with wholegrain toast
- Bean burritos
- Tofu and edamame bean stir-fry with brown rice
- Wholewheat spaghetti with tomatoes, rocket, chickpeas and feta
- Soya mince and lentil Bolognese

