

# Protein



The human body contains 1000s of different proteins, each with a specific function. Proteins are made from amino acids and there are 20 amino acids the body needs to make the proteins it requires. Some can be made within the body, but nine of them are “essential”, i.e. they cannot be made in the body and must be obtained from our diet.

So why is protein so important? It has so many physiological functions that it would be impossible to list them all. Protein is a key structural building

block for the human body. A lot of our protein stores are found within muscle tissue – hence the need for athletes to ensure they have enough protein in their diet to allow for added muscle mass. Protein is also vital for general growth and repair, which is why it’s so important for growing children. Furthermore, protein is needed for hormone function, immune function and healthy brain chemistry. We can also burn protein to make energy.

Meat and dairy are known as “complete” proteins, as they contain all 20 amino acids. For this reason, advice on protein-rich food usually centres on them. However, it is perfectly possible to get all of the essential amino acids from a healthy vegetarian or vegan diet, so long as you eat a varied diet that includes a range of different vegetable proteins.

**The following list of foods cover all of the best sources of protein, for all diet types. Find the ones that work for you, whether you are vegan, vegetarian, pescatarian or on a dairy-free diet.**

**Meat** - go for organic, grass fed meat if possible. It is definitely on the expensive side, but you could try increasing your other sources of protein and having meat more sparingly.

**Fish** - go for oily fish whenever you can. They are not only a great source of protein, but are also high in omega 3 fatty acids, which have been shown to support the nervous system, cardiovascular function and healthy skin, amongst other things. Oily fish include sardines, mackerel, herring, anchovies and salmon.

**Dairy products** - always go organic with dairy. Avoid flavoured yogurts, as these are high in sugar and additives. Flavour yoghurt yourself with fresh fruit and a few nuts and seeds.

**Eggs** - these can be a good source of protein, particularly for vegetarians.

**Nuts and seeds** - fill a Tupperware with a variety of nuts and seeds. You can eat them on their own, or add them to salads, yoghurt, smoothies etc. Alternatively, use nut butters spread on toast or mixed into smoothies. Almond, cashew, pumpkin seed and hazelnut butters are now all available from whole food shops. Sprouted seeds, such as alfalfa and broccoli seeds, are also an excellent form of protein.

**Grains/cereals** - oats, wheat, buckwheat, millet, rye and quinoa. Quinoa is a pseudo-cereal, and is actually a “complete” protein. For this reason it is a vital addition to any vegetarian or vegan diet. You can have it hot or cold, sweet or savoury. Use it for porridge in the morning, adding cinnamon, a little honey, some stewed fruit, and top with yoghurt and nuts/seed mix.

**Milks** - almond and quinoa milk. You can find almond milk in most large supermarkets, but make sure you go for the unsweetened version.



**Legumes/pulses** - lentils, butterbeans, black-eyed beans, pinto, adzuki, chickpeas, cannelloni beans and edemame. These are great when added to stews and soups, but also work cold on salads. You can turn them into pâtés as well by simply adding garlic, mixed herbs, olive oil and a squeeze of lemon and placing in a blender.

**Soy products** - tofu, tempeh and miso. Plain tofu is pretty tasteless, so either marinate yourself, or go for the marinated varieties. These can be used in hot

foods, such as stir fries, or added to salads. You can even eat a few slices on its own. Tempeh is more of an acquired taste, but can work well in stir fries.

**Protein powders** – protein powders are rarely needed, but if you do buy one, go for a good brand, such as Pulsin, or other brands that do not add sweeteners and other chemicals. Opt for hemp, brown rice or sunflower protein, rather than whey or pea.

**Vegetables** - spinach, kale, French beans and peas. Yes, vegetables and fruit also contain protein, although in smaller amounts. But these vegetables are particularly high in protein.

### Quick Quinoa Greek Salad

*170g uncooked quinoa*

*2 tbsp extra virgin olive oil*

*1 tsp grated lemon rind*

*1 tsp balsamic vinegar*

*1 handful cherry tomatoes, quartered*

*1 chopped yellow bell pepper*

*100g crumbled feta cheese*

*250ml vegetable stock*

*1 tsp chopped fresh mint*

*2 tsp fresh lemon juice*

*½ tsp sea salt*

*1 tbsp chopped shallots*

*4 inches chopped cucumber*

*3 tbsp chopped olives*

**Method:** Bring stock to boil in large saucepan; stir in quinoa. Cover, reduce heat and simmer for 10-12 minutes, then turn off heat and leave a further 3-5 minutes or until liquid is absorbed. If it starts to dry out prior to this then simply add a little more boiling water. Uncover and fluff with a fork. Cool to room temperature. Combine the other ingredients in another bowl, add quinoa and stir lightly. If you are on a dairy-free diet then leave out the feta and add chicken or chickpeas. Serves 3-4.



**Sources and further information:** [www.bbc.co.uk/food/quinoa](http://www.bbc.co.uk/food/quinoa), [www.vegetarian.about.com](http://www.vegetarian.about.com)