

### Protein article 3

This month I wanted to follow up the previous two articles on protein with some information on good protein sources and how to gauge how much you need to eat. As I stated in the last article (which can be reviewed on [www.selfhealclinic.co.nz](http://www.selfhealclinic.co.nz)) the optimal amount of protein will vary according to individual needs, but a good general guideline is 1.5 to 2gm per kilo of healthy body weight. Healthy bodyweight refers to the healthy weight range for your age and height, preferably with a healthy body fat level. As an example, a person weighing 54kg would need approximately 80-90gm of protein content in their diet unless they were athletic, in which case they are more likely to need in the region of 150-160gm daily.

There are no two ways about it, the best and most efficient sources of protein are of animal origin. However, there are vegetarian sources as well and I shall come back to these shortly. Animal proteins are foods like eggs, meat, fish, chicken, shellfish, dairy foods, other poultry, rabbit, squid and whey protein powder. When choosing animal proteins it is always best to choose the unprocessed, low fat options.

When assessing your diet for protein levels it is important to know how much of the food makes up its protein value. The vast proportion of most foods is water, and protein foods are no exception. This means that the protein value is very different from the overall weight of the food. Here are some of the protein values for some of the most common animal protein foods.

- 100gm chicken breast has approximately 20gm of protein value.
- 100gm of white fish has approximately 20-25gm of protein value.
- 100gm of fresh salmon has 25-27gm of protein value.
- 100gm of lean steak has 20-25gm of protein value.
- 100gm duck has approximately 16gm of protein value.
- 100ml of milk has 3-4gm of protein value.
- 100gm of cottage cheese has 19-20gm of protein value.
- 1 egg has 6-7gm of protein value.
- 1 egg white has 4gm of protein value.
- 100gm lamb leg roast has approximately 24gm of protein value.
- 1 tin of sardines has 19-20gm of protein value.
- 1 small tin of salmon has 18-20gm of protein value.

To work out the protein value of other foods, either check the food panel if it comes in packaging or Google the words “protein charts”. This will give you many websites which will show you the protein breakdown of any food and many have charts which can be printed off.

You might think it is hard to get in 80-90gm of protein in a day’s eating, so here is an example of what that might look like: 2 eggs for breakfast with 1 slice of brown toast; sardines and sliced tomato on 1 Ryevita cracker for morning tea; chicken (120gm) and kumara/green salad for lunch; a small handful of raw nuts and a piece of fruit for afternoon tea; beef (150gm) and vegetable stir fry for dinner. This would equate to approximately 85-95gm of protein for that day. This not only provides the optimal amount of protein for most people but also helps to control blood sugar levels, changes the type of appetite hormones produced and reduces insulin resistance and weight gain.

When it comes to vegetarian protein, things are not quite so simple. Dairy foods and eggs are the only “complete” protein sources (that is; have all of the essential amino acids present in the one food) eaten by most vegetarians, but are relatively low in their protein content. The plant-based protein sources tend to have an incomplete amino acid profile which means that certain foods need to be eaten in good quantity in the same day in order to provide all of the building blocks the body needs. Examples of food combining include putting legumes with grains such as rice with chickpeas; nuts with grains such as crackers with almond butter; and legumes with nuts and seeds. Here are some protein values for the most common vegetarian protein sources:

- Greek yoghurt has 10-12gm of protein value per cup.
- Feta cheese has 7gm of protein value per 50gm.
- Tofu has 10gm of protein value per 100gm.
- Chickpeas have 15gm of protein value per cup.
- Lentils have 18gm of protein value per cup cooked.
- Quinoa has 12gm of protein value per ½ cup uncooked.
- Brown rice has 3-5gm of protein value per 1 cup cooked.
- Wild rice has 7gm of protein value per cup cooked.
- Kidney beans have 15gm of protein value per cup cooked.
- Adzuki beans have 17gm of protein value per cup cooked.
- Soy beans have 29gm of protein value per cup cooked.
- Almonds have 7gm of protein value per ¼ cup.
- Oats have 7gm of protein value per 1 cup cooked.
- Triticale has 25gm of protein value per cup cooked.

- Peanut butter has 7gm of protein value per 2 table spoons.
- Tahini has 7gm of protein value per 2 table spoons.
- Soy milk has 7gm of protein value per cup.
- Oat milk has 5gm of protein value per cup.

Rice and pea protein powders are usually around 80-90% protein and have had the missing amino acids added. They can be an invaluable way for vegetarians to lift their protein intake. I have had numerous protein-depleted vegetarians through the clinic who have experienced a major turn around by using these powders to increase their protein levels. They can be added into soups, stews, fritters, hummus, smoothies or made into protein bars. We have some very good non-whey based protein powders available as well as recipes for how to use them.

A good guideline for ensuring the best chemistry as far a protein goes, is to include vegetables or fruit with it when you eat it. This ensures the acid/alkaline balance of the body is maintained. Examples of this include chicken and salad; a smoothie made with berries, banana and protein powder; salmon, tomato and avocado on rye bread; 1 piece of fruit and a handful of raw nuts.

**If you have any queries regarding this article, or would like to address health issues of your own please contact us at the clinic on 06 3048177 or call into the dispensary Tuesday, Thursday, Friday 9.30am to 4pm, or Saturday 10.30am to 4pm to make an appointment.**