Animal vs. Plant Protein – What's Better?

Starting a conversation about protein sources between a vegan and a meat eater is a lot like discussing politics or religion with a stranger. More often than not, it's not going to end peacefully. However, there are many myths and inaccurate claims made on both sides of the fence with regards to protein intake and the best sources, and it's time to clear it up.

Calorie Content

One of the first big debates with animal vs. plant protein is calorie content. Meat eaters will argue that you need to eat far more vegetables than you do meat in order to get a beneficial amount of protein. In fact, some will argue that you will basically starve trying to get enough protein while spending your entire day eating.

It's true that vegetables have a lower caloric density than meat. Yes, you would have to consume more volume to equal the same amount of protein. But this may be a moot point. Unless you are training moderately to heavily, the protein content you require could easily be met by a vegetarian diet. Furthermore, a lower calorie vegetarian diet is easier on the digestive system than a diet with animal protein (largely due to meat being cooked).

If you train intensely, it will be more difficult to meet your caloric needs on plant protein alone. This is where meat can help pick up the slack and provide you with the extra calories you may require. For example, a 3oz serving of steak provides 174 calories and delivers 26 grams of complete protein. A 3oz serving of cooked quinoa provides 34 calories and delivers 3.5 grams of complete protein.

If you feel you require more calories with protein, for whatever reason, animal meat is definitely an easy option. And it is the only way many people are going to get enough protein. Due to the lack of produce and other whole foods in our diet, most people's vegan protein comes from soy and other unhealthy ingredients in processed foods. Not only are these foods highly processed and toxic, the proteins are difficult for the body to assimilate and they cause a host of health issues.

Complete vs Incomplete

One of the most cited points in an animal vs. plant protein debate is the fact that animals provide a complete protein, whereas plants can't do the same. This is an erroneous assumption for two reasons:

- There are plant sources of protein that are complete (for example, chlorella, hemp seeds, bee pollen, chia seeds, and quinoa).
- You can combine different plant proteins to make a complete protein in any given meal, like lentils and brown rice. The reality is that plant-based diets contain such a wide variety of amino acid profiles that vegans are virtually guaranteed to get all of their amino acids with very little effort.

There are logical and understandable reasons why animal protein may be more desirable to people, besides taste and convenience. While vegans argue that meat causes cancer and other serious health problems, health minded omnivores will state, and correctly so, that improper cooking methods and poor quality meat (factory farmed), are the causes of poor health issues.

Assimilation

One of the least talked about subjects when it comes to the

animal vs. plant protein debate is assimilation. Very few people consider the fact that the amount of protein contained in the food source is rarely the amount of protein your body digests and properly assimilates.

For years, soy protein isolate has been used in protein powders and even baby formula to help increase protein intake. However, what many failed to consider is that conventional unfermented soy is a highly indigestible protein, and assimilation is a fraction of what is printed on the label. In addition, most soy is genetically modified, and unfermented soy enzymes inhibitors can cause serious hormone imbalances.

Generally speaking, good forms of plant protein will be more easily digested than good forms of animal protein. In fact, to better digest animal protein it should be paired with fresh non-starchy vegetables in order to provide the enzymes and probiotics required to break it down properly for optimal digestion.

Furthermore, typical cooking methods of animal protein ruin your ability to properly assimilate it. Today, we usually cook food quickly and at high heat by pan-frying, microwaving, deep-frying, and barbecuing. All of these methods form advanced glycated end products, which are difficult to metabolize, and the problem becomes considerably worse with added sugar (which is present in nearly all sauces that may be applied while cooking).

If you want to avoid these glycated end products to improve your assimilation and avoid negative immune system reactions, cook your food on low heat (up to 180F) with water whenever possible, and avoid adding sugar. Glycated end products, other free radicals, and broken damaged acids are all a result of cooking foods, and cooking faster and/or longer creates more of them. They are all toxic to the body.

Amount of Protein Required

Of course, a big factor in how much protein you actually need depends on your activity level. These numbers vary between “protein experts”. However, the following numbers can provide a guideline:

- Sedentary – .8 grams per kg of body weight (160lbs is 72kg which is 57.6 g of protein required daily)
- Endurance – 1.2 to 1.4 grams per kg of body weight (160 lbs is 72 kg, which is up to 100g of protein required daily)
- Body builders – 1.4 to 2.0 (some say as much as 2.5) grams per kg of body weight (160 lbs is 72kg, which is up to 130g of protein required daily)

With a fairly sedentary lifestyle (inactive to very light exercise like walking), you can very easily meet your protein requirements through a plant-based diet. An endurance athlete will need to know the higher and more efficient plant-based proteins to be able to do the same, and the body builder will have to consistently consume only the most nutrient and protein dense forms, many times a day, in order to meet the right quota.

In the case of body builders, it will likely be much easier to consume animal meat to get the amount of calories and protein they require, but they should be wary of proper combinations with non-starchy protein rich plant sources in order to actually absorb the high level of protein they take in.

However, there are vegan body builders winning competitions on plant-based protein alone, so those needs can be met. If you seriously doubt the ability to build muscle mass on a plant protein based diet, I would ask you to consider where cattle and pigs get their protein to build muscle mass (hint: plant-based sources, not other animals).

Eating Protein

If you do choose to eat animal meat as your primary source of protein, choose those that are raised humanely and not injected with antibiotics, hormones, or steroids and are pasture fed or fed organically. Grass fed beef is a great example of a good source of animal protein.

Also consider how the meat is cooked. Beef and fish do not need to be completely cooked and therefore are much easier on the digestive system. Chicken and pork on the other hand, should be cooked completely, which makes the meat more acidic and much more difficult to digest, which compromises your protein assimilation. (We don’t recommend eating pork.)

When looking at good vegetarian and vegan protein sources, consider chlorella/spirulina, hemp, bee pollen, chia, and quinoa, which are all above 25% protein (quinoa, chia, bee pollen,) all the way up to between 40% and 70% (hemp and chlorella).

When preparing a plant-based protein, cook it gently or not at all. A properly made smoothie can easily yield more than 30 grams of protein in a highly digestible format. Combine this with a quinoa and vegetable dish and you have a protein rich meal.

In the end, you can meet your protein needs with either

Our ancient ancestors, in most parts of the world, ate far more plants than animal protein and certainly did not eat animal protein nearly as often as we do in modern times. We could learn a lot from them and limit the animal protein in our diet as we add in more high quality plant protein to increase the absorption and assimilation of our various protein sources.

If you do choose to ingest animal flesh, please buy meat that you know was treated as humanely as possible. These animal products are better for us, better for the environment, and of course better for them.

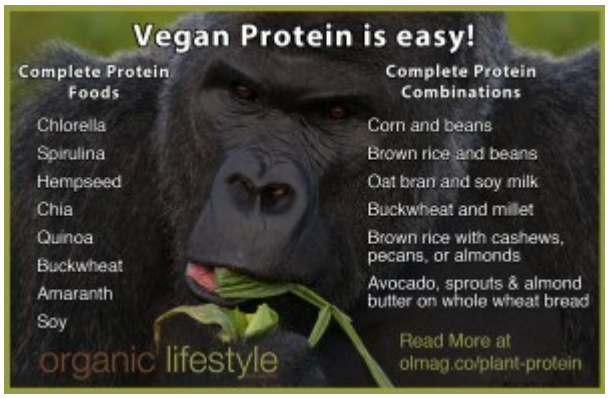
And if you decide you want to avoid animal sources altogether, you can certainly obtain the complete protein and calories you require through plant-based sources alone. If you have high protein requirements, it just may take a bit more planning and work in the beginning to ensure you meet your needs, depending on your activity levels.

Complete Vegan Sources of Protein

The following are plant-based foods that contain all of the essential amino acids that make up a complete source of protein.

- Chlorella – 58-75% protein
- Spirulina – 51-71% protein
- Hempseed – 47% protein
- Chia – 21% protein
- Quinoa – 14% protein
- Buckwheat – 13% protein
- Amaranth – 13% protein
- Soy – 81% protein (look for whole, organic and fermented soybean sources for proper digestion)

Bee pollen, while not vegan, is another plant-based complete protein that is 25% to 40% protein.



It’s nice to know what your complete sources of plant-based protein are, but with a little variety, it’s easy to get all the essential amino acids in your diet. Also, many traditional dishes offer all of the essential amino acids. For instance, brown rice and beans is a complete source of protein. Vegetables have such a wide variety of amino acids, it’s actually easy to just eat a few vegetables and get all of them. Further, you don’t need all of the essential amino acids in one meal, or even in one day, to build complete protein in your body.

Conclusion

If you’re considering reducing your animal consumption, or cutting it out completely (or you already have), know that there are plenty of choices out there. Being healthy is all about eating well, and eating well is all about whole foods. Almost everyone could use more fresh, whole, raw and/or home cooked foods in their diet.

Also, the amount of meat we consume is not sustainable. We as a society cannot continue to eat as much meat as we do unless we turn to lab created flesh or some other scientific answer, which will likely create a whole host of new health problems. But if we reduce our meat consumption drastically, grow some of our own food, start looking at how and where we can grow more food (such as rooftops and stacked gardens), and we buy from local and small scale farmers, not only can we feed

everyone well with plenty of land left over, we can also dramatically reduce our impact on our environment (there is nothing more impactful that we could do), radically improve our health, and we could remove a lot of needless suffering, too.

Did we miss any complete protein sources for vegans? Let us know! And if you have any other tips on healthy protein intake, please tell us about them.