



GVXC

Nutrition Notes

Nutrition notes: The complete guide to protein

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Protein has been the nutrition hot topic du jour for a while now. I feel like there are two camps waging a protein war. On one hand you have the Paleo world (Atkins falls into this camp) where protein is KING. Looking for weight loss? More protein is your answer! Want to get bigger and stronger? More protein! Want to grow better skin, nails, hair? Protein, protein, protein... Then we have the vegan/vegetarian camps who focus on plants and plant protein sources and don't stress that you need to get your "complete protein" at every meal. The ketogenic folks are actually more in the camp of less protein believe it or not, because fat is king in that world.



What even is protein? Protein is a macronutrient defined as a nutrient found in food that is made up of many amino acids joined together. It is a necessary part of a healthy diet and is essential for normal cell structure and function. Your tissues, organs, muscles, hormones, enzymes and more are all made up of proteins. We need to consume protein foods every day to keep our metabolism running strong, to help us feel satiated and to keep our energy up and blood sugar stable.

So where does the truth lie? While I impress upon my clients that protein is an essential macronutrient, our obsession about "getting our protein" can lead us down the wrong path. In my eyes you can overdo the protein and this leads to four main issues:

1. Increased blood sugar (which then stores this former protein as fat)
2. 2.) Activation of the genetic pathway mTOR which increases cancer risk and may decrease longevity 3.) Stress on your kidneys
3. 4.) Low quality protein especially from conventional sources is pro inflammatory and often contains things like nitrates, antibiotics and potentially harmful organisms

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First, if you are consuming more protein than your body requires it will turn the protein into sugar which is ultimately stored as fat. Secondly, excess protein can activate a biochemical pathway called mTOR which has an important role in many cancers. When you reduce protein to what your body needs, mTOR remains inhibited, which helps minimize your chances of cancer growth and promotes longevity. Third, when you eat excess protein your body needs to remove the nitrogen waste from your blood which is seen as stress on your kidneys. Finally, most people are consuming lower quality animal proteins and you need to remember, you are whatever you eat, ate! If they are eating genetically modified grains or antibiotics then so are you. Quality is paramount when it comes to protein consumption.

So how much protein should we consume? For most between 40-70 grams is enough. People who need to be a little more careful are those who are pregnant, aggressively exercising and aging individuals who may need to consume a bit more. Most Americans actually consume way too much protein. The ideal equation is 1 g/kg of lean body weight, or another way to look at it is one half gram per pound of lean body weight. To estimate your protein requirements, first determine your lean body mass. Subtract your percent body fat from 100. For example, if you have 25 percent body fat, then you have 75 percent lean body mass. Just multiply that percentage (in this case, 0.75) by your current weight to get your lean body mass in pounds or kilos.

So, in the above example, if you weighed 150 pounds, 0.75 multiplied by 150 equals 112.5 pounds of lean body mass. Using the ½ gram of protein rule, you would need about 56 grams of protein per day.

If you aren't into all of that math, a good ballpark is a protein serving that is about the size of a deck of cards or a little less.



So where should I get my protein from?

The correct answer is from a wide variety of **QUALITY** plant and animal sources. Most people feel animal protein is best because it is what is called a “complete protein”, meaning it contains all of the essential amino acids. However, your body can easily form complete proteins when consuming a wide variety of protein containing foods. So don't stress if your vegan/vegetarian. You do not to be careful about a few things, but usually getting enough protein isn't a huge issue.

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So What would a 67g of protein day look like?

- Breakfast: 2 egg omelet with spinach and tomato~14 g
- Lunch: Large salad with 3 oz chicken and veggies~25 g
- Snack: 1/4 cup almonds~6 g
- Dinner: 3 z Salmon with side of sweet potatoes and asparagus~22 g

o **Total: 67**

Top Sources of Protein:

- Meat: Typically contains about 6-9 grams of protein per ounce, so 3 oz is a good serving size
- Eggs: Eggs contain about 6 g of protein per egg, so a two-egg omelet would give you 12 grams, not to mention what you may add into the omelet
- Beans: Contain approximately 8 g per half cup
- Nuts and seeds: about 4-8 g per half cup
- Cooked grains: 6 g per cup
- Vegetables: 1-2 g per ounce
- Other fantastic sources of vegetarian protein include spirulina (6 grams per 10 gram serving), hemp seeds (11 g in 3 Tbsp), and chia seeds (4 g per 3 Tbsp)

One final thing I always leave my clients with is to see protein as a condiment, not the main. Fill your plate with veggies first and some quality fats and protein make up the rest. You can throw in some healthy grains, but those should also be seen as more as condiment status. Protein is like Goldilocks, you want it to be “just right”.



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The low down on Protein Powders:

Now this could be an entire book all on its own! These days it's hard to walk into a store without seeing shelves of the stuff. I get it, it's an easy and convenient way to ensure you get your protein, even though most of us are getting enough without really trying. I'm not a huge meat eater so I do throw some sort of protein in my smoothie nearly every day. Here is a quick overview on the variety you may find. When it comes to protein powder I highly suggest you stick to high quality as many have been found to contain high levels of heavy metals and other more toxic ingredients. Don't worry I will keep this high level as cricket protein powder hasn't quite caught on yet, although it may!

Animal based Protein Powders:

Collagen Powder (the on-trend go-to protein powder)-Collagen is the most abundant protein in our bodies. Collagen makes up our body's skin, bones and connective tissues. Many are turning to collagen to reduce signs of aging and help with joint pain. The good news is that people usually do not have a problem with digesting collagen and it is well assimilated to the body.

My Recommended brand: Vital Proteins Collagen-18 g per serving

Gelatin -Gelatin comes from the connective tissue of animals and contains high amounts of amino acids which can help with inflammation reduction. It is also great for skin and muscle repair and helps to heal a bad gut.

Perfect for those with digestive issues.

My Recommended Brand: Great Lakes Gelatin-11 g per serving

Bone Broth Protein Powder-Bone broth is all the rage. Bone broth is an incredibly nourishing food, filled with collagen and gelatin so it kind of combines a lot of the benefits of the two above. You can get Bone Broth protein in a variety of flavors.

My Recommended Brand: Ancient Nutrition -20 g per serving

Whey Protein-Whey is one of the original sources for protein powder. Typically preferred by the muscle building crowd. It has been shown to increase lean body mass and boost muscle mass. The downside to whey is that it is derived from cow's milk and this makes it very difficult for people to digest and absorb properly. Cow's milk is highly allergenic and many people react with skin breakouts and digestive upset.

Whey protein is hard to recommend for this reason. However, if you do want to go this route I suggest a high- quality source from Grass fed cows.

My Recommended brand: Bio Chem 100% protein-20 g per serving

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Plant Based Proteins

For vegans and vegetarians, there are a number of plant-based proteins to choose from. Vegan proteins are often high in fiber and typically derived from beans, grains, nuts and seeds. So be mindful of whether these foods work for you. If you have “leaky gut” or suffer from autoimmune disease they may not be your best bet. Here are some of the best plant-based protein options:

Pea Protein-Pea protein is a great choice for weight control and is also great for blood sugar balancing. It's BCAAs (branch chain amino acids) help with muscle repair.

My Recommended brand: Plant Fusion-21 g per serving

Brown Rice Protein-Brown rice protein is great for boosting lean muscle mass and decreasing fat. Brown rice protein is typically less problematic and lower on the allergy index, it's also good for balancing blood sugar.

Product I Recommend: Sun Warrior Classic Rice - 15 g per serving

Fermented Protein-Fermented foods are fantastic for the digestive and immune system. Fermented proteins are easy to digest and our bodies can easily access the amino acids for healing and repair.

My Recommended brand: Genuine Health Fermented Vegan Protein -15 g per serving

Hemp Seed Protein-Hemp seeds are a complete source of protein and are easy to digest for most. Hemp seeds also contain anti-inflammatory omega-3 fatty acids. I often throw these into my soups and smoothies because the taste can be masked and they are clean source of protein.

My Recommended brand: Nutiva hemp protein -15 g per serving

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For more information on our GVXC Nutrition Note, or to submit material for future newsletters, please contact Rita Grendze: grendze@hotmail.com