



# How to Safely Consume Protein with Type 1 Diabetes

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## Type 1 Diabetes and Protein

There is a common misconception that consuming protein has no impact on blood glucose levels for a person living with type 1 diabetes. While the impact may not be immediate, consuming large amounts of protein will most definitely affect a diabetic's blood sugar. Since the digestion of protein is slower, the effect will be delayed. It is important to learn how eating protein (especially large quantities of it) will affect how your body metabolizes insulin and food.

Protein can work in multiple ways when combining food; in addition to causing delayed blood glucose level spikes, it can be extremely helpful in preventing immediate spikes caused by eating large amounts of fast-acting carbohydrates.

To learn more about the connection between type 1 diabetes and protein, as well as learn some helpful tips, keep reading!

## The T1D and Protein Connection

When it comes down to it, protein does end up getting converted to glucose in the body. For a long time, it was believed that consuming protein does not affect blood glucose levels. While this may be true while consuming smaller portions of protein, it has since been proven that eating large amounts of protein with main meals can increase insulin needs by up to 50%.

## Real-life Tips for Managing Protein Spikes

As someone who lives with T1D, calculating and dosing extra for large quantities of protein is something I do regularly. It does take some trial and error to find out exactly when the peak of the protein spike will be, but usually it will occur anywhere from four to six hours post-meal. This means that administering an extended bolus (delayed-release dose of insulin made possible by insulin pumps) at the time of consumption or extra bolus (manual insulin shot) when the protein is spiking is required to maintain in-range blood glucose levels.

This type of dosing is only to take into consideration when eating bigger, balanced meals with more protein than usual! A safe rule to find out how much extra insulin to give is to start by dividing the grams of protein consumed by one-quarter, and bolus the equivalent you'd give for that amount of carbohydrate. This will most likely not be enough, but it's always safer to start by undershooting!

## How Protein Keeps Blood Glucose Stable

Even though protein can cause a delayed spike when consumed in large quantities, it is incredibly important to still incorporate an appropriate amount of protein into all major meals of the day and snacks if possible.

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Having adequate protein, in conjunction with carbohydrates and fat, will ensure blood glucose won't crash shortly after eating a meal. Consuming protein allows the body to metabolize the carbs slower, therefore, releasing over a longer period of time. This will lead to more stable glucose levels and also a higher satisfaction of appetite. Eating balanced meals is something everyone should aim for, not just people living with type 1 diabetes.

Eating pure protein as a snack can also be quite liberating when it comes to having mental freedom from T1D. Typically, if one is consuming small amounts of pure protein, such as tofu, fish or lean meat, it can be eaten without having to administer any insulin. In small, snack size portions, protein will have extremely minimal to no effect on glucose levels.

Diabetes can be extremely mentally taxing and having to think about calculations every single day can start to take its toll. Being able to grab a snack and not have to worry about giving an insulin shot is a small gift. Beware of over-consuming protein-dense snacks though, unfortunately as mentioned above, too much will cause a delayed spike in glucose levels.

### **How Much Protein to Consume**

I am not a certified nutritionist or a doctor, I am just a person living with type 1 diabetes. The best advice I can give in this department is to find what works for you and your body. Every human body requires different amounts of food to feel healthy and happy.

Keep in mind that it's important to have a nice balanced ratio of carbohydrates, fat and protein, but the exact breakdown will come down to personal physical needs. The most important thing is that however much you end up consuming, you keep it consistent, and the appropriate amount of insulin is administered to keep blood glucose in range.

Talk to your doctor or nutritionist about a meal plan that would fit nicely into your lifestyle, and experiment with a variety of foods to see how your body reacts to them. If you invest time and effort into taking care of your body, the rewards will be priceless.

When it comes down to it, protein and type 1 diabetes isn't as simple as many people expect. There are ways in which it works to support our health and also ways that can make managing diabetes slightly more complicated. Incorporating protein-rich foods that help keep the body feeling satiated and happy, while still managing healthy blood glucose levels is completely possible, it just takes some time and determination!