



Nutrition for Weightlifters FAQ

Questions most frequently asked --answered here by Thomas Incledon,
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Do I really need supplements?

I am a firm believer that an appropriate diet and training regimen are needed before one can start improving performance significantly. You also want to make sure that your diet is working before adding supplements to it so that you do not inadvertently mask a problem with your diet.



What type of protein is best?

In food, recently beef and pork proteins were found to be superior to milk and fish proteins for adding lean body mass in older guys. In supplements, I would suggest that you consider a whey-casein combination. Some newer protein powders combine a variety of proteins. There is no clear research showing that protein mixtures are better or worse than isolated proteins (whey or casein), but anecdotal reports indicate that strength-trained athletes make better gains with the combined proteins

What about soy protein? I hear it will lower my testosterone.

While it's true that excess soy consumption can lower testosterone levels (although soy supporters will deny this), eating soybeans as part of one's normal diet is not a problem.

How much protein can I eat at one sitting? I've heard that the body can't digest more than 30 or 40 grams from one meal.

I do not know of any specific limitations on the amount of protein that one can consume in one sitting. In general there will be a limit to how many enzymes and how much hydrochloric acid one can secrete in the GI tract. You should calculate how much protein you need on a daily basis, while there are specific values that one can use, most guys will use 1 gram per pound of body weight for convenience. This is fine. Divide this total protein by the number of meals you eat each day. This is how much protein you should try to have each meal.

What should I eat before and after training?

A good preworkout meal (supplement, whole food or whatever) should break down slowly and supply your body with a steady supply of nutrients. An example

would be skim milk, banana, nuts. If you want to drink a shake, an example would be whey protein in skim milk, a tablespoon of olive oil, canola or flax seed oil (I would choose olive oil or canola oil most of the time), and some frozen berries. The timing of the preworkout meal depends on how large it is, the amount of fat and fiber, and whether it is solid or liquid. Ideally it would be 300-500 calories and liquid. You want the protein from this meal digested and in the blood when you workout so that as your muscles contract there are amino acids available. To achieve this about 1-2 hours before you are exercising, you should have this drink. A good post-workout meal should be fairly high glycemic and broken down rapidly. Whey protein and maltodextrin are ideal. A better tasting drink would use 1 cup of grape juice, 2 scoops of whey (plain or vanilla), a half cup of maltodextrin. This would be ingested immediately after training. In 90 minutes - 2 hours, you would eat a solid meal or another shake

Who should and shouldn't take creatine?

Creatine as a supplement should be considered by anyone interested in maximizing his fitness, health and performance. It's certainly not mandatory, but it does allow a guy to train harder and make more progress in the gym. The advantage of increasing the quality of one's training carries over to a lot of areas, hence the incredibly broad range up above. Other than people with kidney disorders, I don't know of any other contraindications to taking creatine. It's not wise to consume high amounts of nitrogen (protein, creatine, amino acids) while dehydrated. This can stress the kidneys out big time. Anecdotal though, I have to think that the body is incredibly resilient. Bodybuilders ingest large amounts of protein while severely dehydrated for competition, and very few reports have been made regarding complications.

When should I take creatine--before a workout? After? Both?

You want to take creatine when insulin levels are at their highest. The best time to do this is with a post-workout shake. We use carbohydrate: protein ratios ranging from about 2:1 to 4:1 after a workout. Just add 5 grams of creatine monohydrate to the shake. Make sure there is no extra fiber or fat in the shake, as that will blunt the insulin response.

Should I cycle my creatine intake?

There is no published research on creatine cycling in humans. Based upon one rat study, scientists have theorized that a two month on, two month off cycle is good. This should work fine even though we know the theory has some flaws in it.

What do you think of creatine serum?

It's junk. Creatine quickly turns to creatinine in a liquid. Cheap creatine monohydrate powder works very well.

Should I load creatine? I've heard that if I do I'll just urinate it away.

You load when there's a time element involved. If you aren't preparing for anything in the immediate future, or have a specific date, loading is unnecessary, as the excess creatine will indeed be urinated away. However, if you have a limited period of time to get into maximum shape, then you load. Consider an athlete coming into preseason camp and looking to win the starting position. When money is on the line, pissing away a little creatine is no big deal if you can get into top shape a little faster. The guy loading will have a 3-week training advantage over the guy not loading. This advantage will be lost with time, but when you can't afford to lose the position you use everything at your disposal.

How much creatine should I take, when loading or maintaining?

Unless there is a time element involved, loading is not necessary. The values listed in the literature are .3 g per kg of body mass for loading and .03 g per kg of body mass for maintenance. These numbers are from one study and they did not systematically compare different dosing schedules to see what was best. So we only have one set of numbers and for all we know they may not represent what active men really need. Still it is the best info we have at this point in time. There is no creatine-cycling data on humans that has been published. From my empirical experience (in the real world and not the laboratory) working with a number of Olympic athletes and guys that will get as close to the Olympics as their TV set will allow, the most important factors regarding creatine intake was consistency and taking it with carbohydrates. In terms of dosing we found no difference between guys taking 5g of creatin with about 90-100 grams of carbs after training 3-4 times per week compared to the same guys taking as high as 50 grams of creatine with about 90-100 grams of carbs after training. This was every day.

I have seen and heard all kinds of dosing and loading formulas, including the "Zig-zag Method" proposed by Rick Kreider in the *Journal of Strength and Conditioning*. 5 g appears to work as well as any of these methods and does not require a calculator to figure out.

What do you think about HMB and ribose?

HMB may have some use during very heavy training periods or when beginners are just starting out. Otherwise it is waste of money as well. Consider plain old

creatine monohydrate and ribose. I just read some recent data on ribose and it was very impressive. I first used it around May of this year. I pushed a 12,000 pound truck 70 feet in 17 seconds for 5 trials. I crushed my old records and made a believer out of me. (This was done before my injury, no the truck didn't fall on me, just a tire).

How do I make a protein shake?

Basic ingredients of a decent shake

- whey protein
- olive oil
- banana
- skim milk
- sugar-free instant pudding mix

Options Drop the pudding mix and use frozen berries

- Add some flax seed oil to it
- OJ and bananas work well
- Try other pudding flavors
- Add some colostrum (20-60 g)

Will combining andro, DHEA, and tribulus terrestris help boost my testosterone?

4-androstenedione and DHEA are not good agents to put in the same product. They compete for similar enzymes and you get less testosterone (T) elevation, not more. They are both very capable of elevating estrogen levels and several papers have shown this. Tribulus terrestris (TT) does not elevate luteinizing hormone (LH), like so many people mistakenly believe. Every study thus far has shown TT has no effect on LH or T levels. Studies on Andro-6, which contained these agents, clearly showed that it elevated estrogen levels.

The limitation of these studies is that they used oral tablets. Cyclodextrins, topicals, intranasal and/or liposome delivery methods may produce different hormonal effects than the tablets. Anecdotal reports vary considerably, so at this point we just do not know for sure. If you take any type of prohormone, make sure to get estrogen and androgen levels pre and post, so that you can see if they work.