

Creatine Myths and Facts

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Introduction

I can't help but shake my head whenever I hear gym morons discuss creatine. It has become the ultimate "tall tail" in bodybuilding today. And the myths and stories concerning this supplement, become more and more preposterous as the years go by. The plain fact of the matter is that most people who take creatine, do not even know what it is, or exactly how our bodies use it. I find this puzzling, because I do not believe in ever taking supplements that I do not fully understand. After you finish reading this article, the myths and tall tales concerning creatine will be completely dissolved and like myself, you will shake your head when rookies in the gym, cluelessly discuss the effects of this supplement.

Questions and Answers: I receive at least a handful of letters a day concerning creatine. I will post the most frequently asked of those below.

Q: Is Creatine a Steroid?

A: I would like to dispel this myth by giving you the definition of what an anabolic steroid is. These are synthetic versions of the male hormone testosterone. Creatine, as you will see below is not. Basically anyone who says this should immediately be labeled a gymbeccile.

Q: What is Creatine?

A: First, let me emphasize that our bodies already produce creatine naturally. Did you ever watch the transformers when you were a kid? Well if not, there were groups of robots called "combiners." They would join together and form an even larger and more massive robot, crushing everything in their paths! Our liver does the same thing with the three amino acids, Arginine, Glycine and Methionine. It combines them to form creatine, much like the constructicons combined to form devastator! Ok so that was a lame example, but it explains the process quite nicely.

That being said, it is also important to understand that over 95 percent of this substance is found in our muscles. With the remainder being stored in our brain, heart and other parts of our bodies.

Q: The clerk at my local sporting goods store, explained to me, that when your body runs out of food at night, your muscles can take the creatine in them and use it to fuel their growth.

A: I don't believe I will even waste my time dispelling his explanation. How moronic can you get? My real question is, where do these people get their information

from? I actually have a theory on this very matter. I believe, that there is a moronic website that is the complete opposite of abcbodbuilding. I've tried to crack the code, but gymmorons.com just didn't work. Perhaps they are trying to hide their identity? But regardless of my theory, the guy is dead wrong!

Q: What exactly does creatine do?

A: I will break down the uses of this supplement into 4 sections.

1. Creatine works mainly to increase our Creatine Phosphate System

This is a very difficult concept to understand. And what I am going to do, here is place an excerpt from my article on energy systems in here. It will explain how our body's use energy, and how creatine fits into this!

The Three Energy Systems

What we will now discuss is how our muscles are fueled to contract in virtually every situation possible. You see, a different energy system is used for a heavy set of 4 repetitions then compared to a set of 12 repetitions. Each of these is linked with a particular muscle fiber type. If you can manipulate the energy system, then you can drastically increase muscle mass.

Firstly I need to emphasize that our muscle fibers store ATP. The problem is that we only have enough to fuel contractions for about 3 seconds, and even in the most well trained bodybuilder that supply can only last about 5-6 seconds. So what is the point of having such a low amount of stored energy? It's essentially designed to give you a quick burst. You name the sport(barring chess) and every athlete will tell you the benefits of being able to call on a quick burst of energy! What becomes painfully obvious at this point is that 3 seconds will not power 90-99 percent of traditional bodybuilding sets. Therefore our body must have a way of producing more energy to sustain contractions! This is where the 3 fueling systems come into play!

note: again, all three energy system's function is to produce ATP. These processes dominantly take place in the mitochondria(about 95 percent of the ATP in your muscle stores to be exact !) that lie inside of the sarcoplasm of the muscle fiber. For now I will explain the energy systems, further on I will explain how to increase their proficiency!

Phosphagen System

To replenish the ATP levels quickly after the initial energy boost is used up, muscle cells contain a high-energy phosphate compound called creatine phosphate(PC). To state the obvious, this compound contains a phosphate. Your muscle cell releases enzymes that break the phosphate off of the PC molecule, then this phosphate is transferred back to the ADP to reform the high energy molecule ATP.

To recap, when your body uses ATP, it breaks one phosphate off of it which produces energy. This burst fuels contractions. What is left after a phosphate is broken off of ATP is the molecule called ADP.

Our muscle fibers contain 5 times as much creatine phosphate than it does ATP. Your cell sends out enzymes that break off the phosphate from the creatine. The Energy released from this sever and the phosphate molecule are recombined with the ADP to again form ATP. The PC system provides an additional 10 to 20 seconds of energy to allow us, as bodybuilders to continue an intense set!

A process such as this can occur in the blink of an eye, which makes it very efficient! Again, for the conscious athlete(when I say conscious, I mean one who improves this system) this will provide a good 15-20 seconds more energy for contractions, and perhaps a bit more. You see creatine phosphate stores run out about this time. In total ATP stores and the creatine phosphate system provide about 25-30 seconds of maximum muscular contraction. This system is the powerhouse for extremely high intensity activities. If it is weak then you will have a difficult time lifting heavy weights for any extended period of time. This will be extremely detrimental if your goal is to hit the denser fast twitch IIb fibers.

One way to increase your creatine stores is obvious. You can easily saturate your muscle cells with creatine by actually supplementing with it. Your body already produces it, but supplementation assists in the saturation process. You can see why this is a proven product. It literally speaks for itself in functionality, and has proven to be one of the safest substances on the shelves today! Millions have used creatine for over a decade with absolutely no side effects whatsoever. And the amount of studies to back up its safety are second to none! This is a tried and true power house. You can learn more about it by reading my article, creatine myths and facts. My recommendation is to load it for 5 days at 15-25 grams broken up into 5 grams servings per meal. This will saturate your muscles with creatine. Following this period simple maintain saturation with 5-10 grams a day. Then start the process over in about 8 weeks. On a side note, steak is also beneficial to refilling your PC stores. It to is rich in this substance!

What System is Beneficial For - It allows you to contract your muscles up to a total of 30 seconds of intense exertion(with the ATP system)! The benefits are obvious. Anytime you lift heavy, you call on this system to back you up. If you play other explosive sports then it is also obvious. A play in football is relatively short and would rely heavily on the PC system. Hockey shifts are also relatively short, many elite teams only allow 30 seconds shifts of all out work per player. You name it: martial arts, soccer, rugby, all have the need for superior functionality of the PC system.

For more information in this regard, and further discussion on energy systems [click here](#)

2. Increases The Pump!

Creatine has been shown to super hydrate your muscles(cell volumization; it literally draws water into the muscle cells). This increases pumps dramatically! Even while on low carbs, creatine can help and maintain your pump in the weight room.

3. Increases The Reparation Process of Bodybuilding.

Muscle growth occurs, via a process known as the dehydration synthesis. What does this mean? The dehydration synthesis is the process in which larger molecules are

formed. In this case we are referring to muscle protein. And this is also referred to, as of course protein synthesis.

Consequently, many journals point, to creatine actually enhancing this.

Overview:

The main function of creatine is to provide our muscles with more energy. More energy means that our muscles can contract harder therefore our body must adapt to the greater amount of stress that we put our bodies through. It super hydrates our muscles and improves protein synthesis.

Q: How exactly does Creatine Apply to An Athlete?

A: Simple, it does so by enhancing your creatine phosphate energy system. This does a number of things:

1. Increases explosion - Most athletes notice more explosiveness after utilizing this supplement
2. Allows yourself to push yourself harder and longer.

Note: Interestingly enough, creatine in some studies has been shown to buffer lactic acid. If this be true, then one can see how it can enhance any sport that requires one to run.

Q: What are the side effects of Creatine, and in General how safe is it?

A: As stated above, creatine is not, and I repeat not a hormone. Therefore it does not have the side effects associated with any Prohormone or illegal steroid.

There have been hundreds of studies done on creatine that all show that it is a safe supplement.

To further prove its safety two an a half million kilograms of creatine were consumed in the United States alone in 1999! That statistic alone speaks volumes about the safety and efficiency of this supplement! Not only that, but creatine has been the number one supplement on the market for almost a decade and no one has reported any adverse side effects from it. (aside from the ones I listed above.)

Q: I don't workout, but do you think that creatine will build muscles and help me to lose fat?

A: No! If you don't workout I cannot imagine what supplement would help you. Creatine provides your muscles with more short term energy - but that is wasted if you do not exercise them. If you take creatine you should push yourself even harder in the gym. The idea is with more energy you should be able to workout harder. A harder workout leads to increased muscle mass.

Q: Since Creatine makes you gain weight should I not take it on a cut?

A: Yes, creatine causes your body to hold water, but that is a good thing! The fact that your muscles are super hydrated even on a cut is fantastic. I see absolutely no

correlation between taking creatine and our body storing fat. If anything, creatine will assist us in maintaining more lean mass while dieting. In my mind there is no point to discontinuing the use of creatine while trying to burn fat.

Q: Can I take Creatine and Protein at the same time?

A: Firstly, protein is a food product. If you couldn't take creatine and protein at the same time, then you would have to be a strict vegetarian and still you would end up consuming around 40 grams a day just from normal foods. To top this off, creatine is not much use without a significant protein intake. What is the point of pushing your muscles further than they are used to, if you are not going to provide the amino acids necessary for their repair?

Q: Which supplement is Better Creatine or Protein?

A: (I probably get asked this question at least once a day through email.) Amino acids are the building blocks of our muscles. If you do not get enough then there is no point to working out. Creatine is an outstanding supplement, but if you have to choose from getting at least 1 gram a day of protein or getting your creatine then opt for the protein. However I do want to stress that creatine is an excellent supplement. In fact for assistance in muscular gains I would rate it second only to whey.

Q: I just got myself some creatine. Now I only started with half the dosage, because creatine fires me up and I don't want too much of a buzz in the weight room! So how should I up the dosage?

(Yes I know what you are thinking (LOL). I get these kinds of questions everyday though. I answer them because I was a rookie at one time too.)

A: Ummm, there are two things that come to my mind.

1. Your creatine has been spiked with caffeine or ephedrine
2. Your creatine has gone rotten and is causing you to have hallucinations (LOL). Or a " Buzz " before your workout.

Creatine is not and I repeat not a stimulant! It should not make you have these feelings. Read my article next month on the subject and you will see why. Until then, if your container of creatine really gives you a buzz, then throw it away immediately!

Q: I am breaking out, is it because of the creatine?

A: (Again) Creatine does not effect hormone levels in any way. So the answer is no.

Q: I am a woman and I was thinking about taking creatine, but I don't want to become huge and veiny like a man.

A: If that is the case, then I would suggest that you do not eat like the " huge and veiny " men that you do not want to look like. Creatine will assist you in your workout, but only calories will make you grow. Yes, creatine is an excellent supplement for mass, but only if you are eating for mass.

Q: Do you feel that creatine is cheating? I want to earn my muscles the hard way and don't want to cheat to get them.

A: (I can't stand these types of questions!!!) Yes, you would be cheating. You would be cheating yourself out of great gains by not supplementing with it!

Q: Is there anything I can take to make creatine a more effective supplement?

A: Excellent Question!

a. The first thing I would like to emphasize is that creatine will not work if you are not properly hydrated! It relies heavily on this, so you must drink tons of water, if you want optimal results from it. Super hydrating your body will also improve your weight room pumps tremendously!

B. Creatine is good stacked with high glycemic carbs, as well as sodium--they both facilitate creatine transport into muscle cells. This is recommended *only* for your post workout meal.

Q: What is the best method, dose wise, of taking creatine?

A: For creatine to produce optimal results, muscle stores must be topped off or saturated with it. To accomplish this you need to load the creatine for 5 days at 20-25 grams, spread out throughout the day into 4-5 servings. This is the quickest and in my opinion the " best " way to saturate your muscles with creatine. Following this phase, all you need is to take 5-10 grams a day to maintain your saturation levels. After this, any creatine you take will be excreted as creatinine.

Q: Do I need to take my creatine with carbohydrates to make it effective?

A: Whenever we digest carbohydrates our pancreas secretes the hormone known as insulin. The simpler the carb, the higher a burst of insulin our pancreas releases to deal with them. The good thing about insulin is that it actually drives nutrients into our muscles to assist them in recovery. If you take creatine with fast burning carbs, it will increase the absorption rate in your muscles. However, insulin is also responsible for fat storage. Therefore my suggestion to you would be to only use a sugar spike like this with your post workout meal. This is because this is the least likely times that your body will store fat. Insulin control, is a massive subject and you might consider reading [13 weeks to burning fat](#), to become better acquainted with it .

Q: Do I need to Cycle Creatine?

A: My recommendation is to load for 5 days, followed by a 5-10 gram maintenance dosage for 4-6 weeks. Following this, there are two particular strategies:

1. You can take one to two weeks off and then start the cycle over. Many athletes attest to receiving a better results this way.
2. However, several athletes will never come off of it. They will load it for 5 days, maintain for a few weeks and then reload again. This is increasingly becoming the more popular method of usage.

Conclusion

Creatine, like a classic novel has stood the test of time; and yet, so many people have picked it up without reading it. My intent in this article was to fill this void and if I answered just one of your questions than it was worth writing. If there was something that I did not cover, than feel free to ask about it in our forums. Until then, indulge yourself in perhaps the most revolutionary, natural supplement to ever hit the athletic market!

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