Does Creatine Work?--The Latest

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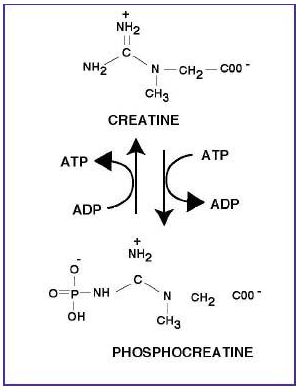
Creatine occurs naturally in the body--95% is found in skeletal muscle. In the diet, it's found in foods containing muscle or nerves, such as fish, meat, shellfish and eggs. We only eat 1 to 3 grams of creatine each day through these foods, which is a lot less than the experimental amounts used in creatine studies. Unfortunately cooking tends to destroy creatine. If you are a vegetarian, don't worry--even though you get less creatine in food, your body still makes it.

Does It Work?

Research done on creatine over the last 15+ years shows that creatine supplementation can improve high intensity work output, probably because it helps nature restock creatine phosphate stores in the muscle. So for the serious amateur or professional athlete whose sport involves intense muscle contraction like power lifting or sprint work, creatine may offer an advantage.

Though creatine has not been banned yet by any sporting body and appears to have no harmful effects when taken in the recommended dosage, it is not recommended for athletes under 18 years of age--since no one knows how creatine affects growth and development, nor is anyone sure about the possible long-term effects.

For the recreational athlete, there would be little benefit from using this costly supplement.



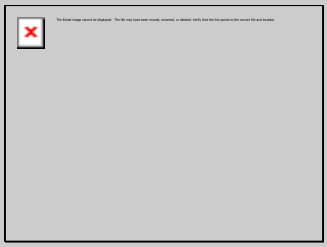
What Does It Do?

During intense exercise ATP (adenosine tri-phosphate) provides the energy for muscle contraction, but it only lasts for one to two seconds. The role of creatine is to produce ATP as fast as it is broken down. There is enough creatine phosphate in muscle to allow ATP regeneration for the first six seconds or so of sprint exercise. In other words, it helps create enough ATP for the first 50 or 60 meters of a 100-meter sprint. After this, glucose is broken down to produce ATP for fuel during exercise.

Creatine also acts to help delay fatigue by reducing the build-up of lactic acid; this means more work can be done in a shorter amount of time. Creatine content increases during exercise, so fit people generally have more creatine in their muscle.

Creatine seems to work best when there is a short recovery period between exercises, but is of little value in single sprints such as 100 meter swimming. However, it might be useful in training where multiple sprints are required.

There is no evidence that creatine increases muscle strength or improves performance in endurance events or low-intensity exercise.

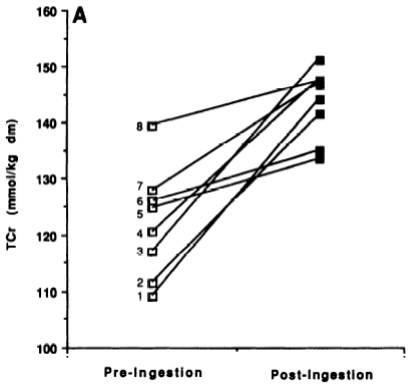


Weight Gain

Creatine may cause an initial weight gain of 2 to 6.5 pounds in the first 7-10 days of usage, but this gain is usually due to water retention, not in increased muscle size as some athletes would like to believe. In fact, the extra weight gain may be a disadvantage for athletes having to transport the extra weight around, as in 100 meter or 200 meter sprints in track.

After the initial weight gain, gains over the next couple of months of up to 5

kilograms or more, is most likely to be muscle gain due to the extra *weight training* that was done while being creatine-loaded, not just because a *creatine supplement* was used.



Creatine Loading

The quickest way to get maximum levels of creatine in your muscles is to creatine-load; take 5 grams four to six times a day for a week with a meal or snack (carbohydrates enhance its absorption). This increases muscle creatine by about 25 percent, but will vary greatly from person to person. When loaded, the muscle creatine content will remain elevated for four to six weeks. In order to maintain the maximum creatine level, take a maintenance dose of 2 or 3 grams a day.

Recommend Creatine?

All athletes will not benefit from using creatine. Some athletes already have high levels in their muscles. Those with low levels can benefit most from supplementation. You can only find out your creatine level by having a muscle biopsy done.

Another problem is, will the athlete take only the recommended dosage? Most will not, thinking more is better!

In stores, I've seen creatine added to all kinds of things with no research to back up claims being made. Liquid creatine, though advertised as being more effective than creatine monohydrate, is not!

I predict creatine will ultimately be banned because some manufacturer will add a banned substance to it and not indicate it on the label (for obvious reasons),

claiming increased benefits. An unsuspecting athlete will lose eligibility or be banned from competition as a result.

I hear of kids as young as 10 years of age taking creatine. It is not recommended for those younger than 18 years because there is no knowledge about its possible negative effects on growth and development. We don't know creatine's long-term effects!

Is creatine use worth the risk? I don't think so! You already have creatine in every muscle. Why not train what you already have and not take the risk! Unfortunately athletes, coaches, and sometimes parents, are looking for an edge and are willing to risk it.

NO thanks!

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