Creatine In Sport Essay, Research Paper

One of the primary things an athlete will do is put supplements into their body.

These supplements range from protein shakes to illegal anabolic steroids. Some

sports supplements are incredibly safe and effective, yet others work for a

while and then fizzle out, while others still work well but do more damage than

good in the long run. In the past athletes had to turn to such things as

anabolic steroids or blood doping (the process of taking out blood and adding

oxygen to it and putting it back into your body in order to increase a persons

endurance). However, these procedures have many drawbacks. Mainly, they are

illegal. An athlete may be suspended from playing their perspective sport for

using them. They have many long terms and short term side effects. Many

supplements are as simple as packaged energy and others require a strict

exercise and eating regimen. I will explore sports supplements focusing on

creatine and it’s effect on the sport world. The first and most basic sports

supplements are protein weight gainers. This normally comes in the form of

powder and works best when mixed with milk. The main reason for taking extra

protein is to gain weight and muscle mass. In today’s athletics, whether it is

high school, college, or professional, the athletes are getting bigger and

stronger. Protein works the best when the athlete is on a strict work out

regimen. Many sports supplements are a combination of herbs and proteins. A

popular supplement of this sort is called "Heat." Heat has many

different ingredients in it that allow the athlete to experience more energy by

creating more heat. This allows the athletes’ body to work more efficiently and

therefore work faster, stronger, and longer. This is very important in the

sports world because it is becoming harder and harder to compete at an

unsupplemented level. Athletes want every advantage that he or she can receive.

Now there is a substance that can give an athlete the edge that they desire. One

of the most popular and effective sports supplements on the market today is Pure

creatine Monohydrate. Creatine was first introduced to the US in 1993 by a

supplement company called Experimental and Applied Sciences. Since that time it

has become one of the most demanded items on the market. The creatine that is

bought in stores duplicates the natural creatine that is produced by the kidney,

liver, and pancreas. Creatine Monohydrate has been proven to significantly

enhance athletic performance in the areas of power, strength, and muscle mass.

Most importantly though, it doesn’t seem to have any serious side effects. Also,

since Creatine is found naturally in the body and in foods, it is likely that it

will not be removed from sports. What is Creatine? Creatine is a nutrient that

is found in many foods. It is most highly concentrated in lean red meat. A

half-pound of red meat contains about two grams of Creatine. Every human body

also produces Creatine in very small amounts, though some people produce more

than others. Creatine is necessary for proper cell functions and cell

reproduction, it is also a primary storage for energy in muscles. How does

Creatine work? When somebody is exercising, his or her muscles demand energy.

The energy that the muscle gets is called adenosine triphosphate (ATP). As the

muscles keep contracting, the ATP is turned into adenosine diphosphate (ADP).

ADP causes your muscles to fatigue. Creatine Phosphate helps to convert ADP into

ATP when the ATP is gone. In doing this, the athlete has better endurance during

his of her workout or event. Creatine producers and users claim it to have many

advantages, such as increased endurance, increased overall work potential,

increased speed of muscular action, and the potential to further increase muscle

mass. Creatine also accelerates protein synthesis. If all this were true, it

would be easy to see why athletes are turning to Creatine for an edge on their

competition. But are these claims real? Is their scientific proof of what

Creatine does? Yes, since Creatine came onto the supplement market it has been

tested extensively. Research in human sports science indicates that if you

supplement a normal diet with Creatine it will increase the Creatine content in

the muscles. The Texas A&M football program, experimented by putting only a

few of their players on Creatine in 1994, and as a result by 1995 they put their

whole team on Creatine. The facts don’t lie Creatine has definite advantages.

Since studies on Creatine loading have only been going on for less than a

decade, it is still unknown what long-term effects will have. Several small

short- term side effects include dehydration, diarrhea, and muscle cramping.

Also, Creatine might not be able to help a person in their sport. For example,

Creatine does not always benefit an athlete who participates in an aerobic sport

such as swimming, and long distance running. From a long distance runner’s point

of view, Creatine would be bad to take. Creatine causes an athlete to retain

water, causing them to gain weight. The Athletes that will receive the most

benefit from creatine are athletes in power and performance sports such as

football and wrestling. Though even with wrestling creatine can be dangerous

because of the weight gaining factor, so more effective use my be during the

off-season. For such sports as football, Creatine can be very useful in gaining

strength and size, while maintaining or increasing speed and endurance.

Bodybuilders can also use Creatine as a legal and effective way to enhance

muscle growth. Creatine use can best summed up pretty easy, a person can take

all the Creatine they want, but if the proper biological, physiological, and

nutritional factors aren’t in place, it won’t be of even the slightest benefit.

Creatine is a true athletes supplement. It allows an athlete to work out harder

and more frequently. Plus, it helps an athlete to become bigger, faster and

stronger. In addition, Creatine delivers these benefits without causing any

serious harm, if any. "The only proven side effect has been weight

gain"(AFQ, pg. 44). What is the positive side of sports supplements such as

Creatine? With the rise of popularity in sports supplements, sports are becoming

more competitive. This creates new interest in sports and helps athletes get in

better shape. Creatine almost works like magic and gives the athlete an extra

boost when it is really needed, and the athlete is struggling. With sports

becoming more and more global, natural athletes are dominating the playing

field. Sports supplements are out there to help those with less natural talent

reach their full potential by helping them to become faster, stronger and to

have more endurance. "As long as athletes are encouraged to accept the

norms of the sport ethic without question or qualification, they will continue

to voluntarily try anything or take anything to remain in sports"(Coakley,

pg.175). Sports Supplements have taken sports to a new level of competition

helping more athletes succeed. Creatine though is not without its down sides.

Many people criticize and worry that extensive use of this somewhat new

supplement may be premature. The side effects are very minimal so far and are

restricted to cramping, nausea, and diarrhea. The cause of this, many scientists

believe, is because the user doesn’t drink enough water while working out, and

with creatine the athlete can dehydrate much quicker because water gets absorbed

into the muscles faster. As of right now, it is perceived that creatine does

more good than evil and is, therefore, worth the occasional stomach ache. Though

many reports say that Creatine may cause a person to dehydrate, some disagree

with this view. Steven Plisk, director of sports conditioning at Yale U., "Creatine

doesn’t have a dehydrating effect on individual muscle cells. If anything,

creatine adds water to the muscle-explaining some of the weight gain"(AfQ,

pg. 44). Many still argue the credibility of negative comments toward creatine,

but none argue its positive effects. Just shoving creatine into your body

without proper exercise will result only in creation of fat and waste. Creatine

is not going to make someone a better athlete, he or she has to go out and do it

themselves. If anything creatine requires one to increase their workouts and

effort, because the body’s tolerance to exhaustion is higher. Another problem

that people may see with creatine is the cost factor. A Creatine supply for a

month will average close to forty-five dollars. With the cost of this and other

supplements being so high, it seems that the higher class athletes would have an

advantage, which causes many critics of creatine(or supplements in general) to

deem it unfair. Their case is, athletes of one group should not be permitted to

have an advantage over another due to something such as money. In conclusion,

Creatine is and can be a very effective supplement for athletes, it doesn’t help

everyone. Depending on the person and the sport they are participating in

creatine’s effects can be either positive or negative. Though long term research

on the effects of creatine have not been confirmed, as of now the only side

effects are diarrhea, nausea, and weight gain. These are outweighed by the

increased success that one may have in their strength and performance in sports.

Creatine has a positive effect on sports as well as its negative effect,

therefore each person should weigh the positive and negative, then make the

decision for themselves.