

# WHAT ATHLETES NEED TO KNOW ABOUT CREATINE & ITS USE AS A SUPPLEMENT

## What is Creatine?

- \*It is a substance manufactured by the body (about 2 grams daily), and you can also get creatine from meat and fish in your diet.
- \*It is also sold as a supplement that falls under the category of products known as ergogenic aids (designed and claimed to improve athletic performance).
- \*Creatine is stored in your muscles and levels are relatively easily maintained. Excess creatine is removed by the kidneys, so the value of supplement to someone with a “naturally” adequate muscle creatine content is questionable.

## What is Creatine supposed to do?

- \*Some research indicates that creatine may help muscles make and circulate ATP, which is used for quick, explosive bursts of activity, such as in weightlifting or sprinting.
- \*Some research indicates that creatine may reduce energy waste products (such as lactic acid) that can cause muscle fatigue.

## What doesn't Creatine do?

- \*There is no evidence to date that creatine enhances performance in aerobic or endurance sports.

## What are the potential side effects of using Creatine supplements?

- \*It is difficult to say what potentially could occur to teens, since no studies on adolescents have ever been conducted. However, the American College of Sports Medicine discourages creatine use in people less than 18 years of age.
- \*Effects reported by individuals (no specific age) using creatine includes:
  - weight gain (with prolonged use, may be more a result of water retention that increases in muscle tissue).
  - diarrhea
  - abdominal pain/stomach cramps
  - dehydration
  - muscle cramping/strains
  - nausea & vomiting
  - seizures
- \*With high doses, it is felt there is potential for dysfunction or damage to the kidneys &/or liver.

## What's the bottom line?

- \*Psychological dependence is possible and creatine is typically considered a “gateway substance” to steroid use.
- \*Another primary concern with creatine is quality – these supplements are not regulated by the FDA and therefore it is impossible to judge the quality of any particular brand:
  - purity of the product cannot be guaranteed
  - quantity of creatine can vary product to product
  - some ingredients mixed with creatine in these supplements may cause significant side effects, such as allergic reactions

\*It is unknown what kind of effect taking creatine has on teens over the long term and therefore is discouraged.