



DIETARY SUPPLEMENT FACT SHEET

<http://chppm-www.apgea.army.mil/dhpw/Wellness.aspx>

Creatine

Also known as: N-(aminoiminomethyl)-N-methyl glycine, N-amidinosarcosine. Creatine, Creatine Monophosphate, Creatine Monohydrate

Historical Perspective: First identified in meat extracts. The word creatine is derived from the Greek work "kreas," for flesh, similar to the word creature. First studies began in 1910.

Common Uses: Increase weight and strength as well as endurance. Athletes who perform repeated bouts of brief, strenuous, high-intensity, maximal exercise. May enhance strength and power performance, i.e., increase repetitions and power output.

Potential Side Effects: Side effects appear to be dose related. Muscle cramping is reported most commonly. In addition, dehydration, heat illness, diarrhea, headache, muscle soreness, gastrointestinal distress, nausea, tears, and pulls, and seizure problems have been reported, but not described in scientific studies.

Food Drug-Supplement Interactions: There are no known food-medication interactions associated with the use of creatine.

Contraindications to Use: Caution is recommended when consuming nephrotoxic drugs. There is some concern that combining creatine with caffeine, and ephedra might increase the risk of serious adverse effects. There is concern that creatine might exacerbate renal dysfunction in individuals who have pre-existing renal disease or by people with diabetes mellitus.

Research Data on Safety and Efficacy: No evidence of long-term chronic benefit or optimal duration from supplementation has been determined. Research has produced mixed results. The majority of well-designed investigations have shown creatine to be effective in areas such as anaerobic endurance, anaerobic power, and body mass composition. May decrease performance in endurance exercise. Athletes with low muscle creatine may benefit, but excess is excreted in urine. Concern about possible high doses causing liver and kidney damage from chronic ingestion. Appears to be safe. Individuals are cautioned towards the use of any dietary supplement, and should consult their primary health care provider if they are considering consuming any dietary supplement.

Bottom Line: Those engaging in strenuous exercise and/or exercising in a hot environment should NOT consume creatine.

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References:

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