Creatine is a substance naturally found in meats and normally made in the human body. Creatine is necessary for the generation of energy within the cell. It has been used by athletes (e.g. Sammy Sosa) as a performance enhancer and studies indicate that it improves performance for very quick, bursts of high energy activity like sprinting or batting.

In muscle disease, there is some evidence suggesting that short term creatine supplementation increases strength, makes people feel better, and increases the number of things they can do. This is most dramatic in mitochondrial diseases, but there is some evidence that creatine may be helpful in other forms of muscle disease, including the muscular dystrophies.

**Side-effects**
Creatine has been associated with kidney damage if you become dehydrated

Long term use of creatine has not been studied. There is evidence that some of the body’s own production of proteins involved in transporting creatine into the cell may be “turned off” if there is long term exposure to high doses of creatine.

**Dose**
Creatine is not a drug. It is viewed as a dietary supplement. You don’t need a prescription, and the production of creatine is not monitored by the FDA. There is, therefore, no oversight of exactly how much actual creatine is found in any preparation you buy. Similarly, a “correct” dose has not been established.

One dose that has been used in clinical studies is:

- **Children:** 2.5 grams 2X per day (total=5 grams/day)
- **Adults** (more than 100 pounds): 5 grams 2X/day (total=10 grams/day)

**Recommendations**

1. Creatine appears to be a reasonably safe dietary supplement for trial in people with muscle disease.

2. If you choose to try creatine, you should plan to take it for 3 months at a time, then 1 month off, 3 months on, one month off, and so forth. If it does not appear to be helping, I recommend stopping it.

3. If you are taking creatine, be sure to maintain good hydration. If you have the flu, and are throwing up a lot, see your doctor to get hydrated. In the hot summer weather, be sure to drink enough.

4. Check with your doctor before starting creatine, and let all doctors involved in your care know once you are taking it.

From Dr. Mathews from University of Iowa