

# CREATINE

It's your primary fuel for explosive, high-intensity exercise. It's found in meat and fish (and your body makes its own creatine), but supplementing can boost your supply by as much as a third.

**INSTANT  
EXPERT**



## 3 Athletes Who Benefit

### 1) ENDURANCE ATHLETES

Creatine won't help you power through mile 26, but it can help you recover. When athletes in a Taiwanese study took creatine, their carb stores were less depleted after an endurance workout.

### 2) WEIGHTLIFTERS

Creatine helps you do more work per set. That leads to more microtears in your muscles, which stimulates more growth.

### 3) SPRINTERS

Your muscles can store only enough fuel for a few seconds of hard exercise. Creatine helps refill your tank so you can go longer. This applies to interval training or agility sports, like soccer and basketball.

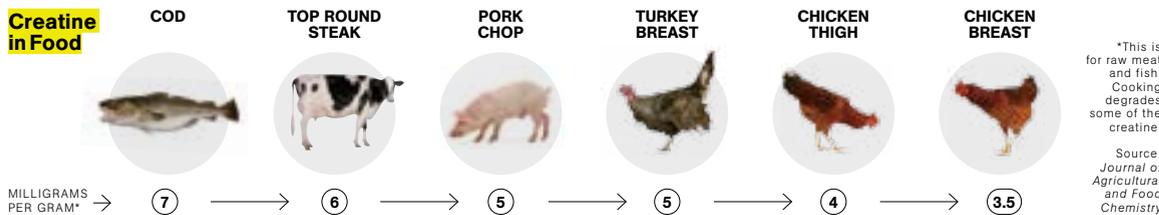


## What About Bloating?

If you "load" creatine (take high doses to saturate your cells quickly), you may retain some water since H<sub>2</sub>O is part of creatine's structure. Plus, the stuff boosts carb storage—every gram of sugar stored comes with 2 grams of water. If you want size, this is fine. But if you play sports with quick movements, skip the loading phase. Rapid weight gain can strain your joints, says Jeffrey Stout, Ph.D., an exercise scientist at the University of Central Florida.

## Will It Kill My Kidneys?

As long as you stick to the suggested dose, your waste-filtration system is safe. Kidney malfunction raises creatinine (a by-product of creatine), but high creatinine doesn't damage kidneys, says Gordon Purser, Ph.D., a chemist at the University of Tulsa. If you have kidney disease, talk to your doc before taking creatine.



## Your Creatine Buying Guide

**1** Stick with creatine monohydrate. "All other forms—Kre-Alkayn, creatine ethyl ester, creatine pyruvate—are marketing hype," says Stout. Creatine monohydrate is backed up by 600-plus human studies; it works.

**2** Check the country of origin. German creatine is used in most studies; look for the "Creapure" seal indicating that it came from Germany's only manufacturer. Creatine made in the United States is also a smart choice.

**3** Powder, tablets, and bars work equally well, says Richard Kreider, Ph.D., a kinesiologist at Texas A&M. Avoid liquid forms, which may not be stable or effective, and capsules, which may not break down well.

**Dose Up!**

FOLLOW THE SCIENCE-SUPPORTED PROTOCOL. LOAD FOR 5 DAYS FIRST: TAKE 20 GRAMS A DAY, IN 5-GRAM DOSES (A TEASPOON OF POWDER IN 8 OUNCES OF WATER) DOWNED AT REGULAR INTERVALS. THEN TO MAINTAIN MUSCLE STORES, TAKE 3 TO 5 GRAMS A DAY. SIPPING IT WITH A MEAL CAN ENHANCE ABSORPTION.