

**HEALTH HUB**  
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# **CREATINE FOR BRAIN AND BODY**

MORE THAN A GYM SUPPLEMENT

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MORE THAN A GYM SUPPLEMENT

## The Dual-Action Power of Creatine

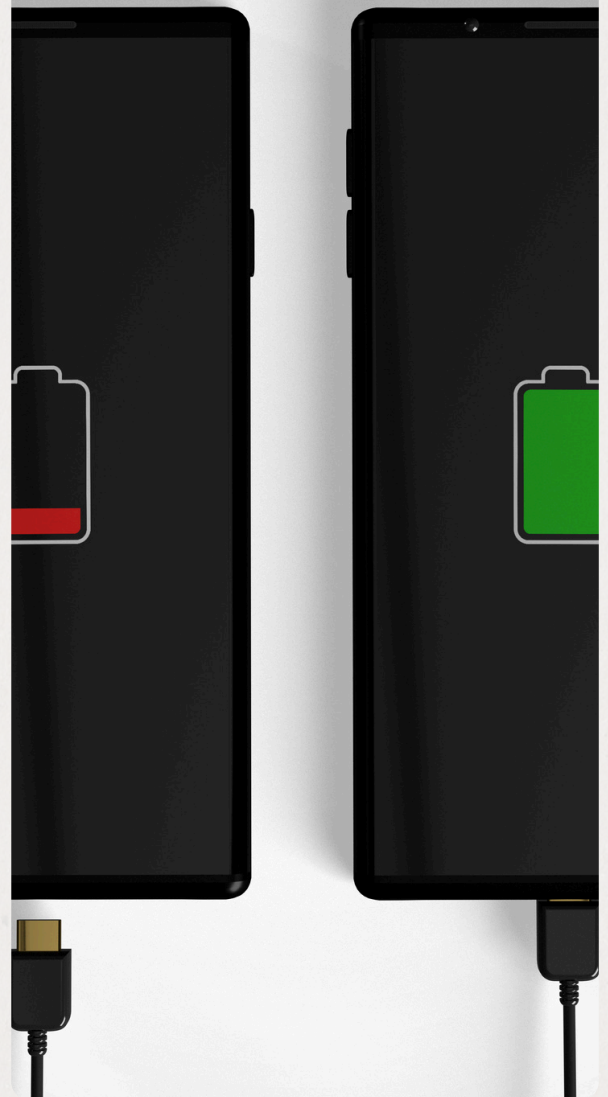
When you hear the word "creatine," you might picture heavy weightlifters or professional athletes. However, creatine is one of the most researched supplements in the world, and its benefits extend far beyond the gym. Emerging research also suggests potential brain health benefits. Whether you are looking to stay active, keep your mind sharp, or simply maintain your strength as you age, creatine might be worth a second look to add to your supplement lineup.

## What is Creatine?

Creatine is a naturally occurring compound found in foods like red meat and fish, and your body also produces it naturally. Creatine helps your body quickly create ATP (adenosine triphosphate), which is the primary "energy currency" your cells use to function. Creatine may support both physical and mental performance, including exercise capacity, healthy aging, recovery, focus, and reaction time.



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## Who Might Benefit Most?

While creatine has benefits for many people, it may be especially helpful for:

- Adults over 40 wanting to preserve muscle mass
- Vegetarians or vegans (who often consume less dietary creatine)
- People who strength train
- Individuals with physically demanding jobs
- Those experiencing periods of mental fatigue or poor sleep



## Creatine's Advantages for Physical Performance

Creatine supplementation may support muscle growth and exercise performance, particularly when paired with resistance training such as weightlifting or strength exercises. By increasing stored creatine levels, muscles can produce energy more efficiently and delay fatigue during short bursts of activity. Creatine's benefits for muscle mass are contingent upon consistent and sufficient training ([Wu et al., 2022](#)).

Creatine increases water content within muscle cells, which may support muscle function and performance. This process not only reduces fatigue but also creates an environment that supports gains in strength and muscle mass. It may improve work capacity during exercise (such as

performing extra repetitions), which leads to greater muscle growth and strength over time.

As a person ages, the body naturally begins to lose muscle mass (a process called sarcopenia). Creatine, when paired with even light resistance training, helps preserve and strengthen muscles. Maintaining muscle mass supports metabolism, strength, balance, and long-term physical independence now and through the aging process.

Creatine works at a cellular level to lower inflammation and muscle damage, helping you recover more quickly from physical stress. From heavy yard work to chasing kids all day, creatine may help support energy and recovery after physically demanding activities.

# Creatine's Brain Boosting Benefits

The brain is an energy-hungry organ. While it makes up only about 2% of the body's weight, it uses roughly 20% of the body's energy. Creatine helps your body produce ATP, the energy source your cells use to function efficiently, including brain cells. Emerging research suggests creatine may help support cognitive performance, particularly during periods of stress, mental fatigue, or sleep deprivation.

Some studies have found improvements in areas such as reaction time, attention, short-term memory, and reasoning, especially in older adults or individuals experiencing inadequate sleep ([Smith et al., 2025](#)). Research by [Gordji-Nejad et al. \(2024\)](#) also suggests creatine may help support the brain's increased energy demands during mentally demanding situations.

Many studies use daily doses around 3-5 grams of creatine monohydrate to support both muscle and potential cognitive benefits. While more research is still emerging, creatine shows promising potential as a supplement that may support both brain and body health.



## Is Creatine Safe?

As with any supplement, consider consulting your healthcare provider before starting creatine supplementation. For the vast majority of healthy adults, creatine monohydrate is considered very safe.

The most common side effect is mild water retention within the muscles. This water retention is inside the muscle, not under the

skin. Creatine monohydrate supplements are typically created in a lab from non-animal sources, making it a great choice for those who eat a plant-based diet.

As with any change to your routine, it is always a good idea to check with your healthcare provider if you have a history of kidney issues or other chronic conditions.

# How to Take Creatine Supplements

A daily dose of 3-5 grams of creatine monohydrate is typically recommended. Taking 3-5 grams daily typically increases muscle creatine stores within a few weeks. It is relatively inexpensive, mostly tasteless, and easy to mix into beverages, smoothies, oatmeal, or water.

Creatine is widely considered safe, effective, and one of the best-researched supplements on the market today. It does not need to be taken at a specific time (like right before a workout). Consistency, taking it every single day, is the most important factor. Look for "Monohydrate" as it is the most researched and cost-effective form. Also, check for third-party testing on labels like National Science Foundation (NSF) Certified for Sport or Informed Choice to ensure the product is pure and free of contaminants.



## Common Creatine Myths

- "Creatine is a steroid."
  - False. Creatine is not a steroid and works differently in the body.
- "Creatine causes dehydration."
  - Research does not support this in healthy adults when hydration is adequate.
- "You have to 'load' creatine."
  - Loading is optional. A consistent daily dose of 3-5 grams works well for most people.

# Key Creatine Takeaways

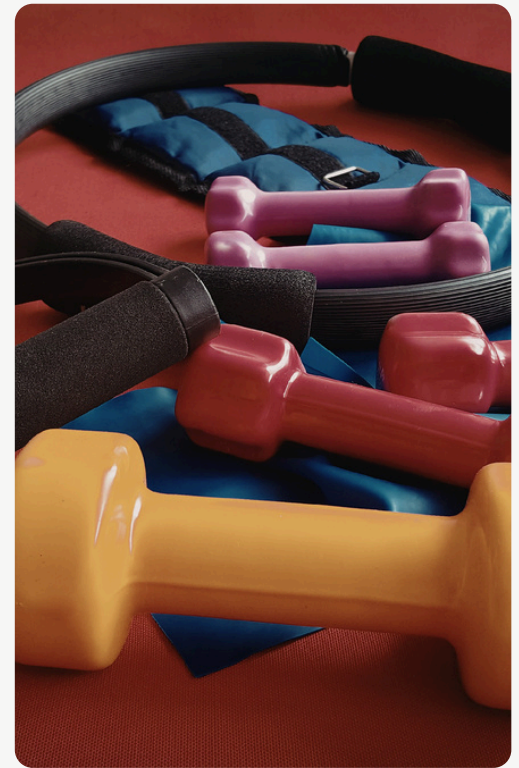
- Creatine supports both muscle and brain energy
- It may help with strength, recovery, and healthy aging
- Most research supports 3-5 grams daily of creatine monohydrate
- Consistency matters more than timing
- Creatine is generally safe for healthy adults



## Give Creatine a Chance

Ready to see if creatine could be a good supplement to add to your routine? Follow these three steps this week:

1. **Consult:** If you're curious about adding creatine to your regimen, send a quick note to your healthcare provider to ensure it aligns with your health history.
2. **Hydrate:** Creatine works best when you are well-hydrated. Staying adequately hydrated can help maximize creatine's benefits and support overall performance.
3. **Move:** To get the most out of your body's natural energy, practice some resistance training such as bodyweight exercises, free weights, resistance bands, and weight machines. Join us for our next [SLCo Employee Wellness 30-minute functional strength training class!](#)



## Learn More Podcast Resources

- [\*The Most Tested, Safe, & Effective Sports Supplement\*](#) by Huberman Lab
- [\*What Men & Women NEED to Know about Creatine\*](#) by The Diary of a CEO
- [\*Does Creatine have Cognitive Benefits?\*](#) by Peter Attia MD
- [\*Creatine: Dose, Benefits, & Safety\*](#) by Huberman Lab

## References

- Gordji-Nejad, A., Matusch, A., Kleedörfer, S., Patel, H. J., Drzezga, A., Elmenhorst, D., Binkofski, F., & Bauer, A. (2024). Single dose creatine improves cognitive performance and induces changes in cerebral high energy phosphates during sleep deprivation. *Scientific Reports*, 14(1), Article 4937.
- Smith, R. N., Agharkar, A. S., & Gonzales, E. B. (2025). Creatine monohydrate pilot in Alzheimer's: Feasibility, brain creatine, and cognition. *Alzheimer's & Dementia: Translational Research & Clinical Interventions*, 11(1), e70101. <https://doi.org/10.1002/trc2.12086>
- Wu, S. H., Chen, K. L., Hsu, C., Chen, H. C., Chen, J. Y., Yu, S. Y., & Shiu, Y. J. (2022). Creatine Supplementation for Muscle Growth: A Scoping Review of Randomized Clinical Trials from 2012 to 2021. *Nutrients*, 14(6), 1255. <https://doi.org/10.3390/nu14061255>