

# Creatine Monohydrate – Increases Muscle Mass Improves Strength and Power

## About Creatine Monohydrate

- Creatine is a naturally occurring compound made primarily from the amino acids arginine and glycine.
- It is stored within muscle cells as phosphocreatine, where it helps restore the body's energy in the form of adenosine triphosphate (ATP), particularly during short bursts of physical effort.
- As early as age 50, muscle mass and strength may begin to decline, partly because of a natural decrease in the body's ability to make and store creatine.<sup>1</sup>
- Supplemental forms of creatine can support adults who wish to maintain an active lifestyle by replenishing creatine stores and supporting power and performance in repetitive bouts of brief, highly intense physical activity.
- Creatine helps increase exercise capacity by enabling the muscles to do more work before depleting energy stores, building muscle mass and strength more efficiently.<sup>2</sup>
- In a double-blind, placebo-controlled study, 64 men and women aged 50 and older were randomly assigned to creatine or placebo before or after resistance training for 32 weeks. Compared to resistance training alone, creatine supplementation improved muscle mass, with the greater improvements observed when creatine was taken after resistance training.<sup>3</sup>

## How to Use Creatine Monohydrate

- Mix 1 scoop (5 g) with 250 mL of water, juice, or protein shake. Start with a loading phase of 15–20 g per day for 5–7 days and follow with a maintenance phase (5 g per day). **Loading phase:** 1 scoop 3–4 times per day or as directed by a health care practitioner. **Maintenance phase:** 1 scoop per day or as directed by a health care practitioner.
- Loading phase is not always needed, please check with your health care practitioner.

## Cautions and Contraindications

- Consult a health care practitioner prior to use if you are pregnant or breastfeeding or have a kidney disease/disorder. May result in weight gain. Keep out of reach of children.

## Drug Interactions

- There are no known drug interactions, but taking creatine with caffeine may decrease the effectiveness of creatine and increase the risk of adverse effects.<sup>4</sup>

## Quick Tips for Optimal Health

- Nutritional strategies may help support muscle mass throughout the lifespan. Including protein at each meal, at approximately 0.3 g/kg, helps maximize muscle protein synthesis after resistance exercise.<sup>5</sup> Nutrient-dense, wholefood sources of high-quality protein also support healthy muscle mass.<sup>5</sup>
- Make time for workouts! Studies suggest that, in addition to physical benefits, regular exercise helps improve the perception of everyday stress and contributes to a healthy mood.<sup>6</sup>
- Live an active lifestyle in addition to your normal workouts. Make time for physical activity – consider using the stairs instead of the elevator, park farther away to fit in exercise, or even count your steps. Studies show, without a doubt, that physical activity increases health span.<sup>7</sup>
- Take charge of stress. Stress management techniques such as breathing and stretching exercises can have a greater impact on psychological well-being than you might think.<sup>8,9</sup>
- Get at least 7–9 hours of sleep to be ready for the next day.<sup>10</sup> Sufficient sleep, including naps, can help support optimal physical performance.<sup>11</sup> Keeping the bedroom quiet, cool, and dark will also help with sleep.<sup>12</sup>
- Relax an hour before bedtime by dimming the lights and engaging in a relaxing wind-down – you know what will work best for you. Consider stretching and breathing exercises, reading a soothing book, or listening to relaxing music. One study found that people who spent five minutes at bedtime writing a to-do list for the next day fell asleep significantly faster than people who instead wrote an already-done list.<sup>13</sup>

PATIENT NAME: \_\_\_\_\_

**PRACTITIONER NOTES:**

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PRACTITIONER CONTACT INFORMATION:

## References

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1. von Haehling, S., Morley, J.E., & Anker, S.D. (2010). An overview of sarcopenia: Facts and numbers on prevalence and clinical impact. *J Cachexia Sarcopenia Muscle*, 1(2), 129-33.
2. Kreider, R.B., & Stout, J.R. (2021). Creatine in health and disease. *Nutrients*, 13(2), 447.
3. Candow, D.G., Vogt, E., Johannsmeyer, S., et al. (2015). Strategic creatine supplementation and resistance training in healthy older adults. *Appl Physiol Nutr Metab*, 40(7), 689-94.
4. NatMed Pro. (2025). Creatine [monograph]. <https://naturalmedicines.therapeuticresearch.com/>
5. Moore, D.R., & Philp, A. (2020). Nutritional strategies to promote muscle mass and function across the health span. *Front Nutr*, 7, 569270.
6. Stults-Kolehmainen, M.A., & Sinha, R. (2014). The effects of stress on physical activity and exercise. *Sports Med*, 44(1), 81-121.
7. Warburton, D.E.R., Nicol, C.W., & Bredin, S.S.D. (2006). Health benefits of physical activity: The evidence. *CMAJ*, 174(6), 801-9.
8. Worthen, M., & Cash, E. Stress Management. [Updated 2023 Aug 14]. In: StatPearls [Internet]. StatPearls Publishing; 2025 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK513300/>
9. Alborzkouh, P., Nabati, M., Zainali, M., et al. (2015). A review of the effectiveness of stress management skills training on academic vitality and psychological well-being of college students. *J Med Life*, 8(Spec Iss 4), 39-44.
10. Watson, N.F., Badr, M.S., Belenky, G., et al. (2015). Recommended amount of sleep for a healthy adult: A joint consensus statement of the American Academy of Sleep Medicine and Sleep Research Society. *Sleep*, 38(6), 843-44.
11. Charest, J., & Grandner, M.A. (2020). Sleep and athletic performance: Impacts on physical performance, mental performance, injury risk and recovery, and mental health. *Sleep Med Clin*, 15(1), 41-57.
12. Markwald, R.R., Iftikhar, I., & Youngstedt, S.D. (2018). Behavioral strategies, including exercise, for addressing insomnia. *ACSMs Health Fit J*, 22(2), 23-9.
13. Scullin, M.K., Krueger, M.L., Ballard, H.K., et al. (2018). The effects of bedtime writing on difficulty falling asleep: A polysomnographic study comparing to-do lists and completed activity lists. *J Exp Psychol Gen*, 147(1), 139-46.