

## CREATINA: OLTRE LO SPORT!

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### RIFERIMENTI BIBLIOGRAFICI

1. Béard E, Braissant O. Synthesis and transport of creatine in the CNS: importance for cerebral functions. *J Neurochem*. 2010 Oct;115(2):297-313. doi: 10.1111/j.1471-4159.2010.06935.x
2. Joncquel-Chevalier Curt M, Voicu PM, Fontaine M, Dessein AF, Porchet N, Mention-Mulliez K, Dobbelaere D, Soto-Ares G, Cheillan D, Vamecq J. Creatine biosynthesis and transport in health and disease. *Biochimie*. 2015 Dec;119:146-65. doi: 10.1016/j.biochi.2015.10.022
3. Kreider RB, Stout JR. Creatine in Health and Disease. *Nutrients*. 2021 Jan 29;13(2):447. doi: 10.3390/nu13020447
4. Bassi A, Boffi A, De Curtis I, Degano M, Di Liegro I, Ientile R, Vigetti D e Zocchi E *Biochimica 2021 Ediermes*
5. Jagim AR, Oliver JM, Sanchez A, Galvan E, Fluckey J, Riechman S, Greenwood M, Kelly K, Meininger C, Rasmussen C, Kreider RB. A buffered form of creatine does not promote greater changes in muscle creatine content, body composition, or training adaptations than creatine monohydrate. *J Int Soc Sports Nutr*. 2012 Sep 13;9(1):43. doi: 10.1186/1550-2783-9-43
6. Bonilla DA, Kreider RB, Stout JR, Forero DA, Kerksick CM, Roberts MD, Rawson ES. Metabolic Basis of Creatine in Health and Disease: A Bioinformatics-Assisted Review. *Nutrients*. 2021; 13(4):1238. <https://doi.org/10.3390/nu13041238>
7. Kreider RB, Jäger R, Purpura M. Bioavailability, Efficacy, Safety, and Regulatory Status of Creatine and Related Compounds: A Critical Review. *Nutrients*. 2022 Feb 28;14(5):1035. doi: 10.3390/nu14051035
8. Moret S, Prevarin A and Tubaro F Levels of creatine, organic contaminants and heavy metals in creatine dietary supplements *Food Chemistry Volume 126, Issue 3, 1 June 2011, Pages 1232-1238*
9. Agostoni et al Scientific Opinion on the substantiation of health claims related to creatine and increase in physical performance during short-term, high intensity, repeated exercise bouts (ID 739, 1520, 1521, 1522, 1523, 1525, 1526, 1531, 1532, 1533, 1534, 1922, 1923, 1924), increase in endurance capacity (ID 1527, 1535), and increase in endurance performance (ID 1521, 1963) pursuant to Article 13(1) of Regulation (EC) No 1924/2006 EFSA journal July 2011 <https://doi.org/10.2903/j.efsa.2011.2303>
10. Food and Drug Administration. (2020). GRAS Notice for Creatine Monohydrate. Available at: <https://www.fda.gov/media/143525/download> Assessed at April 14, 2021
11. de Souza E Silva A, Pertille A, Reis Barbosa CG, Aparecida de Oliveira Silva J, de Jesus DV, Ribeiro AGSV, Baganha RJ, de Oliveira JJ. Effects of Creatine Supplementation on Renal Function: A Systematic Review and Meta-Analysis. *J Ren Nutr*. 2019 Nov;29(6):480-489. doi: 10.1053/j.jrn.2019.05.004
12. Escribano-Ott I, Calleja-González J, Mielgo-Ayuso J. Ergo-Nutritional Intervention in Basketball: A Systematic Review. *Nutrients*. 2022 Feb 2;14(3):638. doi: 10.3390/nu14030638

13. Hall M, Manetta E, Tupper K. Creatine Supplementation: An Update. *Curr Sports Med Rep*. 2021 Jul 1;20(7):338-344. doi: 10.1249/JSR.0000000000000863
14. Cannataro R, Straface N and Cione E Nutritional supplements in combat sports: What we know and what we do *Human Nutrition & Metabolism* Volume 29, September 2022, 200155 <https://doi.org/10.1016/j.hnm.2022.200155>
15. Balestrino M. Role of Creatine in the Heart: Health and Disease. *Nutrients*. 2021 Apr 7;13(4):1215. doi: 10.3390/nu13041215
16. Roschel H, Gualano B, Ostojic SM, Rawson ES. Creatine Supplementation and Brain Health. *Nutrients*. 2021 Feb 10;13(2):586. doi: 10.3390/nu13020586
17. Stares A, Bains M. The Additive Effects of Creatine Supplementation and Exercise Training in an Aging Population: A Systematic Review of Randomized Controlled Trials. *J Geriatr Phys Ther*. 2020 Apr/Jun;43(2):99-112. doi: 10.1519/JPT.0000000000000222
18. Marshall RP, Droste JN, Giessing J, Kreider RB. Role of Creatine Supplementation in Conditions Involving Mitochondrial Dysfunction: A Narrative Review. *Nutrients*. 2022 Jan 26;14(3):529. doi: 10.3390/nu14030529
19. Cannataro R, Carbone L, Petro JL, Cione E, Vargas S, Angulo H, Forero DA, Odriozola-Martínez A, Kreider RB, Bonilla DA. Sarcopenia: Etiology, Nutritional Approaches, and miRNAs. *International Journal of Molecular Sciences*. 2021; 22(18):9724. <https://doi.org/10.3390/ijms22189724>
20. Muccini AM, Tran NT, de Guingand DL, Philip M, Della Gatta PA, Galinsky R, Sherman LS, Kelleher MA, Palmer KR, Berry MJ, Walker DW, Snow RJ, Ellery SJ. Creatine Metabolism in Female Reproduction, Pregnancy and Newborn Health. *Nutrients*. 2021 Feb 2;13(2):490. doi: 10.3390/nu13020490
21. van der Veen Y, Post A, Kremer D, Koops CA, Marsman E, Appeldoorn TYJ, Touw DJ, Westerhuis R, Heiner-Fokkema MR, Franssen CFM, Wallimann T, Bakker SJL. Chronic Dialysis Patients Are Depleted of Creatine: Review and Rationale for Intradialytic Creatine Supplementation. *Nutrients*. 2021 Aug 6;13(8):2709. doi: 10.3390/nu13082709
22. Jagim AR, Kerksick CM. Creatine Supplementation in Children and Adolescents. *Nutrients*. 2021 Feb 18;13(2):664. doi: 10.3390/nu13020664