

## **Revitalize Your Energy: Unlocking Mitochondrial Health Through Nutrition References**

Bhat L., Vedantham S., Krishnan U., et al. Methylglyoxal- An emerging biomarker for diabetes mellitus diagnosis and its detection methods. *Biosens Bioelectron.* 2019;133:107-124. <https://doi.org/10.1016/j.bios.2019.03.010>

Boland M., Oldham S., Boland B., et al. Nonalcoholic steatohepatitis severity is defined by a failure in compensatory antioxidant capacity in the setting of mitochondrial dysfunction. *World J Gastroenterol.* 2018;24(16):1748-1765. <https://doi.org/10.3748/wjg.v24.i16.1748>

Bremer A., Mietus-Snyder M., & Lustig RH. Toward a unifying hypothesis of metabolic syndrome. *Pediatrics.* 2012 Mar;129(3):557-70. <https://doi.org/10.1542/peds.2011-2912>

Chen T., Tan J., Wan Z., et al. Effects of Commonly Used Pesticides in China on the Mitochondria and Ubiquitin-Proteasome System in Parkinson's Disease. *Int J Mol Sci.* 2017;18(12):2507. <https://doi.org/10.3390/ijms18122507>

Cioffi F., Senese R., Lasala P., et al. Fructose-Rich Diet Affects Mitochondrial DNA Damage and Repair in Rats. *Nutrients.* 2017;9(4):323. <https://doi.org/10.3390/nu9040323>

Coen P., Music R., Hinkley J., et al. Mitochondria as a Target for Mitigating Sarcopenia. *Front Physiol.* 2019;9:1883. <https://doi.org/10.3389/fphys.2018.01883>

DiNicolantonio J. & O'Keefe J. The Importance of Maintaining a Low Omega-6/Omega-3 Ratio for Reducing the Risk of Autoimmune Diseases, Asthma, and Allergies. *Mo Med.* 2021 Sep-Oct;118(5):453-459. <https://pubmed.ncbi.nlm.nih.gov/33311785/>

Garcia-Berumen C., Ortiz-Avila, O., Vargas-Vargas M., et al. The severity of rat liver injury by fructose and high fat depends on the degree of respiratory dysfunction and oxidative stress induced in mitochondria. *Lipids Health Dis.* 2019;18(1):78. <https://doi.org/10.1186/s12944-019-1024-5>

Ghosh S., Kewalramani G., Yuen G., et al. Induction of mitochondrial nitrative damage and cardiac dysfunction by chronic provision of dietary omega-6 polyunsaturated fatty acids. *Free Radic Biol Med.* 2006;41(9):1413-1424. <https://doi.org/10.1016/j.freeradbiomed.2006.07.021>

Gugliucci A. Formation of Fructose-Mediated Advanced Glycation End Products and Their Roles in Metabolic and Inflammatory Diseases. *Adv Nutr.* 2017;8(1):54-62. <https://doi.org/10.3945/an.116.013912>

Georgieva E., Ivanova D., Zhelev Z., et al. Mitochondrial Dysfunction and Redox Imbalance as a Diagnostic Marker of "Free Radical Diseases. *Anticancer Res.* 2017 Oct;37(10):5373-5381. <https://doi.org/10.21873/anticanres.11963>

Henkel J., Alfine E., Sain J., et al. Soybean Oil-Derived Poly-Unsaturated Fatty Acids Enhance Liver Damage in NAFLD Induced by Dietary Cholesterol. *Nutrients.* 2018;10(9):1326. <https://doi.org/10.3390/nu10091326>

Jomova K., Raptova R., Alomar S., et al. Reactive oxygen species, toxicity, oxidative stress, and antioxidants: chronic diseases and aging. *Arch Toxicol.* 2023 Oct;97(10):2499-2574. <https://doi.org/10.1007/s00204-023-03562-9>

Marzetti E., Calvani R., Cesari M., et al. Mitochondrial dysfunction and sarcopenia of aging: from signaling pathways to clinical trials. *Int J Biochem Cell Biol.* 2013 Oct;45(10):2288-301. <https://doi.org/10.1016/j.biocel.2013.06.024>

Morris G. & Berk M. The many roads to mitochondrial dysfunction in neuroimmune and neuropsychiatric disorders. *BMC Med* 13; 2015;68. <https://doi.org/10.1186/s12916-015-0310-y>

Nicholson G. & Ash M. Lipid Replacement Therapy: A natural medicine approach to replacing damaged lipids in cellular membranes and organelles and restoring function. *Biochim Biophys Acta*. 2014;1838(6):1657-1679.  
<https://doi.org/10.1016/j.bbamem.2013.11.010>

Nigro C., Leone A., Fiory F., et al. Dicarbonyl Stress at the Crossroads of Healthy and Unhealthy Aging. *Cells*. 2019;8(7):749. <https://doi.org/10.3390/cells8070749>

Pepe S., Tsuchiya N., Lakatta E., et al. PUFA and aging modulate cardiac mitochondrial membrane lipid composition and CA2+ activation of PDH. *Am J Physiol*. 1999;276(1):H149-58.  
<https://doi.org/10.1152/ajpheart.1999.276.1.H149>

Picca A., Mankowski R., Burman J., et al. Mitochondrial quality control mechanisms as molecular targets in cardiac ageing. *Nat Rev Cardiol*. 2018;15:543-554. <https://doi.org/10.1038/s41569-018-0059-z>

Picca A., Faitg J., Auwerx J., et al. Mitophagy in human health, ageing and disease. *Nat Metab*. 2023 Dec;5(12):2047-2061. <https://doi.org/10.1038/s42255-023-00930-8>

Priolo C. & Henske E. Metabolic reprogramming in polycystic kidney disease. *Nature Medicine*. 2013;19:407-409. <https://doi.org/10.1038/nm.3140>

Rauh V., Perera F., Horton M., et al. Brain anomalies in children exposed prenatally to a common organophosphate pesticide. *Proc Natl Acad Sci USA*. 2012;109(20):7871-7876. <https://doi.org/10.1073/pnas.1203396109>

Schalkwijk C. & Stehouwer C. Methylglyoxal, a Highly Reactive Dicarbonyl Compound, in Diabetes, Its Vascular Complications, and Other Age-Related Diseases. *Physiol Rev*. 2020;100(1):407-461.  
<https://doi.org/10.1152/physrev.00001.2019>

Schuster S., Johnson C., Hennebelle M., et al. Oxidized linoleic acid metabolites induce liver mitochondrial dysfunction, apoptosis, and NLRP3 activation in mice. *J Lipid Res*. 2018;59(9):1597-1609.  
<https://doi.org/10.1194/jlr.M083741>

Seyfried T. & Shelton L. Cancer as a metabolic disease. *Nutr Metab (Lond)* 7, 7 (2010).  
<https://doi.org/10.1186/1743-7075-7-7>

Shrestha N., Cuffe J., Holland O., et al. Linoleic Acid Increases Prostaglandin E2 Release and Reduces Mitochondrial Respiration and Cell Viability in Human Trophoblast-Like Cells. *Cell Physiol Biochem*. 2019;52(1):94-108.  
<https://doi.org/10.33594/000000007>

Softic S., Meyer J., Wang G., et al. Dietary Sugars Alter Hepatic Fatty Acid Oxidation via Transcriptional and Post-translational Modifications of Mitochondrial Proteins. *Cell Metab*. 2019;30(4):735-753.  
<https://doi.org/10.1016/j.cmet.2019.09.003>

Taha AY. Linoleic acid—good or bad for the brain? *npj Sci Food* 4, 1(2020).  
<https://www.nature.com/articles/s41538-019-0061-9>

Valera-Alberni M. & Canto C. Mitochondrial stress management: a dynamic journey. *Cell Stress*. 2018;2(10):253-274. <https://doi.org/10.15698/cst2018.10.158>

White S., Emma C., Andrew R., et al. The effects of apples and apple juice on acute plasma uric acid concentration: a randomized controlled trial. *Am J Clin Nutr*. 2018;107(2):165-172. <https://doi.org/10.1093/ajcn/nqx059>