

Beyond the Myths: Understanding the Impact of Fats on Health Outcomes

References

- Ali O, Szabó A. Review of Eukaryote Cellular Membrane Lipid Composition, with Special Attention to the Fatty Acids. *International Journal of Molecular Sciences*. 2023; 24(21):15693. <https://doi.org/10.3390/ijms242115693>.
- Astrup A., Magkos F., Bier D., et al. Saturated Fats and Health: A Reassessment and Proposal for Food-Based Recommendations: JACC State-of-the-Art Review. *J Am Coll Cardiol*. 2020;76(7):844-857. <https://doi.org/10.1016/j.jacc.2020.05.077>.
- Bajželj B., Laguzzi F., Roos E. The role of fats in the transition to sustainable diets. *The Lancet Planetary Health*. 2021;5:e644 - e653. [https://www.thelancet.com/pdfs/journals/lanplh/PIIS2542-5196\(21\)00194-7.pdf](https://www.thelancet.com/pdfs/journals/lanplh/PIIS2542-5196(21)00194-7.pdf)
- Bonthuis M., Hughes M., Ibiebele T., et al. Dairy consumption and patterns of mortality of Australian adults. *Eur J Clin Nutr*. 2010;64(6):569-577. <https://doi.org/10.1038/ejcn.2010.45>.
- Coniglio S, Shumskaya M, Vassiliou E. Unsaturated Fatty Acids and Their Immunomodulatory Properties. *Biology*. 2023;12(2):279. <https://doi.org/10.3390/biology12020279>.
- Daoud E., et al. Effects of Dietary Macronutrients on Plasma Lipid Levels and the Consequence for Cardiovascular Disease. *Journal of Cardiovascular Development and Disease*. 2014,1: 201-213. <https://doi.org/10.3390/jcdd1030201>.
- Da Silva Lima R., Block JM. Coconut oil: what do we really know about it so far? *Food Quality and Safety*. 2019;3(2):61-72. <https://doi.org/10.1093/fqsafe/fyz004>.
- de Alza F., Guillaume C., Ravetti L. Evaluation of Chemical and Physical Changes in Different Commercial Oils during Heating. *Acta Scientific Nutritional Health*.2018;2(6):02-11.
- Dehghan M, et al. Associations of fats and carbohydrate intake with cardiovascular disease and mortality in 18 countries from five continents (PURE): a prospective cohort study. *The Lancet*. 2017;390(10107):2050-2062. <https://pubmed.ncbi.nlm.nih.gov/28864332/>.
- DiNicolantonio JJ, O'Keefe JH. Omega-6 vegetable oils as a driver of coronary heart disease: the oxidized linoleic acid hypothesis. *Open Heart*. 2018;5:e000898. <https://doi.org/10.1136/openhrt-2018-000898>
- 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;118(5):453-459. <https://pubmed.ncbi.nlm.nih.gov/33311785/>
- Dymond M. Mammalian phospholipid homeostasis: evidence that membrane curvature elastic stress drives homeoviscous adaptation in vivo. *J R Soc Interface*. 2016;13(121):20160228. <https://doi.org/10.1098/rsif.2016.0228>.

- Eyres L, Eyres MF, Chisholm A, Brown RC. Coconut oil consumption and cardiovascular risk factors in humans. *Nutrition Reviews*. 2016;74(4):267-80. <https://doi.org/10.1093/nutrit/nuw002>.
- 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>
- Grasgruber P., Sebera M., Hrazdira E., et al. Food consumption and the actual statistics of cardiovascular diseases: an epidemiological comparison of 42 European countries. *Food Nutr Res*. 2016;60:31694. <https://doi.org/10.3402/fnr.v60.31694>.
- Gray B., Steyn F., Davies P., et al. Omega-3 fatty acids: a review of the effects on adiponectin and leptin and potential implications for obesity management. *Eur J Clin Nutr*. 2013;67(12):1234–1242. <https://doi.org/10.1038/ejcn.2013.197>.
- Grebenteuch S., Kroh L., Drusch S., et al. Formation of Secondary and Tertiary Volatile Compounds Resulting from the Lipid Oxidation of Rapeseed Oil. *Foods*. 2021; 10(10):2417. <https://doi.org/10.3390/foods10102417>.
- Harris W., Tintle N., Imamura F., et al. Blood n-3 fatty acid levels and total and cause-specific mortality from 17 prospective studies. *Nat Commun* 12. 2021:2329. <https://doi.org/10.1038/s41467-021-22370-2>.
- Jicha G. & Markesbery W. Omega-3 fatty acids: potential role in the management of early Alzheimer's disease. *Clin Interv Aging*. 2010;5:45-61. <https://doi.org/10.2147/cia.s5231/>.
- McKenzie KM., Lee CM., Mijatovic J., et al. Medium-Chain Triglyceride Oil and Blood Lipids: A Systematic Review and Meta-Analysis of Randomized Trials. *J Nutr*. 2021;151(10):2949-2956. <https://doi.org/10.1093/jn/nxab220>.
- Neelakantan N., Seah J., van Dam R. The Effect of Coconut Oil Consumption on Cardiovascular Risk Factors: A Systematic Review and Meta-Analysis of Clinical Trials. *Circulation*. 2020;141(10):803-14. <https://doi.org/10.1161/CIRCULATIONAHA.119.043052>.
- Papotti B., Escolà-Gil J., Julve J., et al. Impact of Dietary Lipids on the Reverse Cholesterol Transport: What We Learned from Animal Studies. *Nutrients*. 2021;13(8):2643. <https://doi.org/10.3390/nu13082643>.
- Pischon T., Hankinson S., Hotamisligil G., et al. Habitual Dietary Intake of n-3 and n-6 Fatty Acids in Relation to Inflammatory Markers Among US Men and Women. *Circulation*. 2003;108(2):155-160. <https://doi.org/10.1161/01.CIR.0000079224.46084.C2>.
- Roopashree P., Shetty S., Kumari S. Effect of medium chain fatty acid in human health and disease. *Journal of Functional Foods*. 2021;87:104724. <https://doi.org/10.1016/j.jff.2021.104724>.

- Rosqvist F. & Niinistö S. Fats and oils - a scoping review for Nordic Nutrition Recommendations 2023. *Food Nutr Res.* 2024;9;68. <https://doi.org/10.29219/fnr.v68.10487>.
- Schwingshackl L., Schlesinger S. Coconut Oil and Cardiovascular Disease Risk. *Curr Atheroscler Rep.* 2023;25:231-236. <https://doi.org/10.1007/s11883-023-01098-y>.
- Spiazzi B., Duarte A., Zingano, C., et al. Coconut oil: an overview of cardiometabolic effects and the public health burden of misinformation. *Arch. Endocrinol. Metab.* 2023;67(6): e000641. <https://doi.org/10.20945/2359-3997000000641>.
- Suburu J., Lim K., Calviello G., et al. RE: Serum Phospholipid Fatty Acids and Prostate Cancer Risk in the SELECT Trial. *J Natl Cancer Inst.* 2014;106(4):dju023. <https://doi.org/10.1093/jnci/dju023>.
- Taha A. Linoleic acid—good or bad for the brain? *npj Sci Food* **4**, 1 (2020). <https://doi.org/10.1038/s41538-019-0061-9>.
- Ting H., Chen L., Chen J., et al. Double bonds of unsaturated fatty acids differentially regulate mitochondrial cardiolipin remodeling. *Lipids Health Dis* **18**, 53 (2019). <https://doi.org/10.1186/s12944-019-0990-y>.
- Varela-López A., Ochoa J., Llamas-Elvira J., et al. Loss of Bone Mineral Density Associated with Age in Male Rats Fed on Sunflower Oil Is Avoided by Virgin Olive Oil Intake or Coenzyme Q Supplementation. *Int J Mol Sci.* 2017;18(7):1397. <https://doi.org/10.3390/ijms18071397>.
- Zhang X., Xue C., Xu Q., et al. Caprylic acid suppresses inflammation via TLR4/NF-κB signaling and improves atherosclerosis in ApoE-deficient mice. *Nutr Metab (Lond)* **16**, 40 (2019). <https://doi.org/10.1186/s12986-019-0359-2>.