

Roundup - September 2023

New this month in therapeutic carbohydrate restriction and metabolic health.

Metabolic (TCR intervention)

1. Celano, G. *et al.* (2023) 'Effects of a Very-Low-Calorie Ketogenic Diet on the Fecal and Urinary Volatilome in an Obese Patient Cohort: A Preliminary Investigation', *Nutrients*, 15(17), p. 3752. Available at: <https://doi.org/10.3390/nu15173752>.
2. Georgiev, A. *et al.* (2023) 'Obesity control and liver health in breast cancer: Normalized hepatic elasticity after ketogenic diet', *Heliyon*, 9(10), p. e20449. Available at: <https://doi.org/10.1016/j.heliyon.2023.e20449>.
3. Haines, K.L. *et al.* (2023) 'Change to Mixed-Lipid Emulsion From Soybean Oil-Based Lipid Emulsion in Pediatric Patients', *JAMA Network Open*, 6(9), p. e2332389. Available at: <https://doi.org/10.1001/jamanetworkopen.2023.32389>.
4. Khalid, K. *et al.* (2023) 'Effects of Ketogenic Diet on Reproductive Hormones in Women With Polycystic Ovary Syndrome', *Journal of the Endocrine Society*, 7(10), p. bvad112. Available at: <https://doi.org/10.1210/jendso/bvad112>.
5. Løkken, N. *et al.* (2023) 'Can a modified ketogenic diet be a nutritional strategy for patients with McArdle disease? Results from a randomized, single-blind, placebo-controlled, cross-over study', *Clinical Nutrition*, 42(11), pp. 2124–2137. Available at: <https://doi.org/10.1016/j.clnu.2023.09.006>.
6. Ozoran, H. *et al.* (2023) 'Type 1 diabetes and low carbohydrate diets—Defining the degree of nutritional ketosis', *Diabetic Medicine*, 40(10), p. e15178. Available at: <https://doi.org/10.1111/dme.15178>.
7. Wan, Y. *et al.* (2023) 'Association between changes in carbohydrate intake and long term weight changes: prospective cohort study', *BMJ*, 382, p. e073939. Available at: <https://doi.org/10.1136/bmj-2022-073939>.

Reviews

1. Andersen, O.E. *et al.* (2023) 'Regulation of adult stem cell function by ketone bodies', *Frontiers in Cell and Developmental Biology*, 11, p. 1246998. Available at: <https://doi.org/10.3389/fcell.2023.1246998>.
2. Arima, Y. (2023) 'The Impact of Ketone Body Metabolism on Mitochondrial Function and Cardiovascular Diseases', *Journal of Atherosclerosis and Thrombosis*, advpub, p. RV22011. Available at: <https://doi.org/10.5551/jat.RV22011>.
3. Chelikam, N. *et al.* (2023) 'Role of Ketogenic Diets and Intermittent Fasting in Neurologic Diseases, Cancers and Obesity- A Comprehensive Review of Human Studies'. Preprints. Available at: <https://doi.org/10.20944/preprints202309.1017.v1>.
4. Cooper, I.D. *et al.* (2023) 'Bio-Hacking Better Health—Leveraging Metabolic Biochemistry to Maximise Healthspan', *Antioxidants*, 12(9), p. 1749. Available at: <https://doi.org/10.3390/antiox12091749>.

5. Hajjar, J. *et al.* (2023) 'The role of low-carbohydrate diets in the intensive care unit', *Nutrition and Health*, 29(3), pp. 377–381. Available at: <https://doi.org/10.1177/02601060221149088>.
ABSTRACT
6. Ludwig, D.S. (2023) 'Carbohydrate-insulin model: does the conventional view of obesity reverse cause and effect?', *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 378(1888), p. 20220211. Available at: <https://doi.org/10.1098/rstb.2022.0211>.
7. Ryan, T. *et al.* (2023) 'A Potential Role Exists for Nutritional Interventions in the Chronic Phase of Mild Traumatic Brain Injury, Concussion and Sports-Related Concussion: A Systematic Review', *Nutrients*, 15(17), p. 3726. Available at: <https://doi.org/10.3390/nu15173726>.
8. Santangelo, A. *et al.* (2023) 'The Influence of Ketogenic Diet on Gut Microbiota: Potential Benefits, Risks and Indications', *Nutrients*, 15(17), p. 3680. Available at: <https://doi.org/10.3390/nu15173680>.
9. Surma, S. *et al.* (2023) 'Low carbohydrate/ketogenic diet in the optimization of lipoprotein(a) levels: do we have sufficient evidence for any recommendation?', *European Heart Journal*, p. ehad635. Available at: <https://doi.org/10.1093/eurheartj/ehad635>.
10. Talukdar, J.R. *et al.* (2023) 'Saturated fat, the estimated absolute risk and certainty of risk for mortality and major cancer and cardiometabolic outcomes: an overview of systematic reviews', *Systematic Reviews*, 12(1), p. 179. Available at: <https://doi.org/10.1186/s13643-023-02312-3>.

Neurology

1. Armeno, M. *et al.* (2023) 'Use of ketogenic dietary therapy for drug-resistant epilepsy in early infancy', *Epilepsia Open*, n/a(n/a). Available at: <https://doi.org/10.1002/epi4.12836>.
2. Bramen, J.E. *et al.* (2023) 'Impact of Eating a Carbohydrate-Restricted Diet on Cortical Atrophy in a Cross-Section of Amyloid Positive Patients with Alzheimer's Disease: A Small Sample Study', *Journal of Alzheimer's Disease*, Preprint(Preprint), pp. 1–14. Available at: <https://doi.org/10.3233/JAD-230458>.
3. Brockhoff, J.D., Bereswill, S. and Heimesaat, M.M. (2023) 'The impact of ketogenic diet on the onset and progression of multiple sclerosis', *European Journal of Microbiology and Immunology*, 1(aop). Available at: <https://doi.org/10.1556/1886.2023.00020>.
4. Mengoli, M. *et al.* (2023) 'Microbiota-gut-brain axis and ketogenic diet: how close are we to tackling epilepsy?', *Microbiome Research Reports*, 2(4). Available at: <https://doi.org/10.20517/mrr.2023.24>.

Case studies

1. Zegarra, W.A. *et al.* (2023) 'Safe use of the ketogenic diet in an infant with microcephaly, epilepsy, and diabetes syndrome: a case report', *BMC Pediatrics*, 23, p. 453. Available at: <https://doi.org/10.1186/s12887-023-04272-y>.