

Roundup - March 2024

New this month in therapeutic carbohydrate restriction and metabolic health.

Metabolic

1. Bagde, H. *et al.* (2024) 'The Effect of a Low-Carbohydrate Diet on Periodontal Health and Inflammation in Patients with Type 2 Diabetes', *Journal of Pharmacy and Bioallied Sciences*, 16, pp. S644–S646. Available at: https://doi.org/10.4103/jpbs.jpbs_911_23.
2. Berg-Hansen, K. *et al.* (2024) 'Cardiovascular Effects of Oral Ketone Ester Treatment in Patients With Heart Failure With Reduced Ejection Fraction: A Randomized, Controlled, Double-Blind Trial', *Circulation*, 0(0). Available at: <https://doi.org/10.1161/CIRCULATIONAHA.123.067971>. ABSTRACT
3. Chapela, S.P. *et al.* (2024) 'Obesity and Obesity-Related Thyroid Dysfunction: Any Potential Role for the Very Low-Calorie Ketogenic Diet (VLCKD)?', *Current Nutrition Reports* [Preprint]. Available at: <https://doi.org/10.1007/s13668-024-00528-w>.
4. Huang, X.-S. *et al.* (2024) 'MRI quantitative assessment of the effects of low-carbohydrate therapy on Hashimoto's thyroiditis', *Endocrine Connections*, 1(aop). Available at: <https://doi.org/10.1530/EC-23-0477>.
5. Kazeminasab, F. *et al.* (2024) 'Effects of low-carbohydrate diets, with and without caloric restriction, on inflammatory markers in adults: a systematic review and meta-analysis of randomized clinical trials', *European Journal of Clinical Nutrition* [Preprint]. Available at: <https://doi.org/10.1038/s41430-024-01431-x>. ABSTRACT
6. Kip, K.E. *et al.* (2024) 'Is LDL cholesterol associated with long-term mortality among primary prevention adults? A retrospective cohort study from a large healthcare system', *BMJ Open*, 14(3), p. e077949. Available at: <https://doi.org/10.1136/bmjopen-2023-077949>.
7. Monteyne, A.J. *et al.* (2024) 'A ketone monoester drink reduces postprandial blood glucose concentrations in adults with type 2 diabetes: a randomised controlled trial', *Diabetologia* [Preprint]. Available at: <https://doi.org/10.1007/s00125-024-06122-7>.
8. NAVEED, A. *et al.* (2024) 'EFFECTS OF A KETOGENIC DIET IN OVERWEIGHT WOMEN WITH POLYCYSTIC OVARY SYNDROME', *Biological and Clinical Sciences Research Journal*, 2024, p. 734. Available at: <https://doi.org/10.54112/bcsrj.v2024i1.734>.
9. Pietzner, M. *et al.* (2024) 'Systemic proteome adaptations to 7-day complete caloric restriction in humans', *Nature Metabolism*, pp. 1–14. Available at: <https://doi.org/10.1038/s42255-024-01008-9>. ABSTRACT
10. Ramírez-Martínez, L. *et al.* (2024) 'The Potential for Ketogenic Diets to Control Glucotoxicity, Hyperinsulinemia, and Insulin Resistance to Improve Fertility in Women with Polycystic Ovary Syndrome', *Clinical and Experimental Obstetrics & Gynecology*, 51(3), p. 57. Available at: <https://doi.org/10.31083/j.ceog5103057>.
11. Sila, A. *et al.* (2024) 'Higher-Level Steatosis Is Associated with a Greater Decrease in Metabolic Dysfunction-Associated Steatoic Liver Disease after Eight Weeks of a Very Low-Calorie Ketogenic Diet (VLCKD) in Subjects Affected by Overweight and Obesity', *Nutrients*, 16(6), p. 874. Available at: <https://doi.org/10.3390/nu16060874>.
12. Xing, N., Ren, F. and Yang, H. (2024) 'Effects of ketogenic diet on weight loss parameters among obese or overweight patients with polycystic ovary syndrome: a systematic review and

meta-analysis of randomized controlled trails', *Food & Nutrition Research* [Preprint]. Available at: <https://doi.org/10.29219/fnr.v68.9835>.

General Reviews

1. Aksoy, A.N. *et al.* (2024) 'Physiological and psychological determinants of long-term diet-induced type 2 diabetes (T2DM) remission: A narrative review', *Obesity Reviews*, n/a(n/a), p. e13733. Available at: <https://doi.org/10.1111/obr.13733>.
2. Baylie, T. *et al.* (2024) 'Effect of Ketogenic Diet on Obesity and Other Metabolic Disorders: Narrative Review', *Diabetes, Metabolic Syndrome and Obesity*, 17, pp. 1391–1401. Available at: <https://doi.org/10.2147/DMSO.S447659>. (a concise overview of the main features of interest)
3. Faria-Costa, G. *et al.* (2024) 'The Ketone Bridge Between the Heart and the Bladder: How Fast Should We Go?', *International Neurology Journal*, 28(Suppl 1), pp. S2-11. Available at: <https://doi.org/10.5213/inj.2346250.125>.
4. Fazio, S. *et al.* (2024) 'Insulin resistance/hyperinsulinemia: an important cardiovascular risk factor that has long been underestimated', *Frontiers in Cardiovascular Medicine*, 11, p. 1380506. Available at: <https://doi.org/10.3389/fcvm.2024.1380506>. (useful paper - TCR not mentioned though)
5. Jeevitha, M., Sundhram, R. and Kumar, R. (2024) 'Exploring the Neuroprotective Effects of Intermittent Fasting: A Comprehensive Review on its Impact on Neurological Diseases', *Journal of Drug Delivery and Therapeutics*, 14, pp. 174–178. Available at: <https://doi.org/10.22270/jddt.v14i3.6486>.
6. Neudorf, H. and Little, J.P. (2024) 'Impact of fasting & ketogenic interventions on the NLRP3 inflammasome: A narrative review', *Biomedical Journal*, 47(1), p. 100677. Available at: <https://doi.org/10.1016/j.bj.2023.100677>.
7. Stubbs, B.J., Ford, K.M. and Volek, J. (2024) 'Editorial: Emerging aspects of ketone metabolism in health & disease', *Frontiers in Physiology*, 15. Available at: <https://doi.org/10.3389/fphys.2024.1404454>. (This article is part of the Research Topic: [Emerging Aspects of Ketone Metabolism in Health & Disease](#))

Neurology

1. Buchholz, A. *et al.* (2024) 'A randomized feasibility trial of the modified Atkins diet in older adults with mild cognitive impairment due to Alzheimer's disease', *Frontiers in Endocrinology*, 15, p. 1182519. Available at: <https://doi.org/10.3389/fendo.2024.1182519>.
2. Choi, K.-E. *et al.* (1709650801) 'Fasting plasma glucose level and longitudinal motor and cognitive outcomes in Parkinson's disease', *Journal of Movement Disorders* [Preprint]. Available at: <https://doi.org/10.14802/jmd.23264>.
3. Edwards, M.G.P. *et al.* (2024) 'Diet-induced ketosis in adult patients with subacute acquired brain injury: a feasibility study', *Frontiers in Medicine*, 10. Available at: <https://doi.org/10.3389/fmed.2023.1305888>.
4. Wesół-Kucharska, D. *et al.* (2024) 'Efficacy and Safety of Ketogenic Diet Treatment in Pediatric Patients with Mitochondrial Disease', *Nutrients*, 16(6), p. 812. Available at: <https://doi.org/10.3390/nu16060812>.

Metabolic Psychiatry

1. Garner, S. *et al.* (2024b) 'Ketogenic Diet has a positive association with mental and emotional well-being in the general population', *Nutrition*, p. 112420. Available at: <https://doi.org/10.1016/j.nut.2024.112420>.
2. Maksyutynska, K. *et al.* (2024) 'Neurocognitive correlates of metabolic dysregulation in individuals with mood disorders: a systematic review and meta-analysis', *Psychological Medicine*, pp. 1–27. Available at: <https://doi.org/10.1017/S0033291724000345>.
3. Sethi, S. *et al.* (2024) 'Ketogenic Diet Intervention on Metabolic and Psychiatric Health in Bipolar and Schizophrenia: A Pilot Trial', *Psychiatry Research*, 335, p. 115866. Available at: <https://doi.org/10.1016/j.psychres.2024.115866>.

Case Studies

1. Amendolara, A. *et al.* (2024) 'Chronic Migraine May Be Associated With Postprandial Hypoglycemia in Adult Men: A Case Series', *Cureus*, 16(2), p. e54987. Available at: <https://doi.org/10.7759/cureus.54987>.
2. Pathare, A.V. and Chaudhary, A.B. (2024) '2.5-MONTH EFFECTS OF A HIGH-INTENSITY LOW-CARBOHYDRATE INTERVENTION ON GLYCEMIC AND LIPID PROFILE: A TYPE-2 DIABETES NEAR-TO-REMISSION CASE STUDY OF A 65-YEAR-OLD INDIAN WOMAN WITH RECENT BILATERAL KNEE REPLACEMENT SURGERY', *Journal of Population Therapeutics and Clinical Pharmacology*, 31(3). Available at: <https://doi.org/10.53555/jptcp.v31i3.5141>.
3. Phillips, M. *et al.* (2024) 'Ketogenic metabolic therapy in conjunction with standard treatment for glioblastoma: A case report', *Oncology Letters*, 27. Available at: <https://doi.org/10.3892/ol.2024.14363>.
4. Stephanie, B., Michael, C. and Sreenath, T.G. (2024) 'Safety and tolerance of the ketogenic diet in patients with Zellweger Syndrome', *Epilepsy & Behavior Reports*, 26, p. 100655. Available at: <https://doi.org/10.1016/j.ebr.2024.100655>.

Athletic Performance Discussion

1. Burke, L.M. and Whitfield, J. (2024) 'Ketogenic Diets Are Not Beneficial for Athletic Performance', *Medicine & Science in Sports & Exercise*, 56(4), p. 756. Available at: <https://doi.org/10.1249/MSS.0000000000003344>.
2. Noakes, T.D. (2024) 'Ketogenic Diets Are Beneficial for Athletic Performance: Response to Burke and Whitfield', *Medicine & Science in Sports & Exercise*, 56(4), p. 760. Available at: <https://doi.org/10.1249/MSS.0000000000003345>.