

Research Roundup – November 2024

New this month in therapeutic carbohydrate restriction and metabolic health.

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Metabolic Studies

1. Almabruk, B.A. *et al.* (2024) 'The Role of Intermittent Fasting on Metabolic Syndrome: A Systematic Review and Meta-Analysis', *Cureus*, 16(10), p. e71623. Available at: <https://doi.org/10.7759/cureus.71623>.
2. Cull, M. (2024) 'Weight loss for obese patients as a treatment of hip and knee osteoarthritis: A scoping review', *Journal of Metabolic Health*, 7(1), p. 8. Available at: <https://doi.org/10.4102/jmh.v7i1.97>.
3. Ernesti, I., Watanabe, M. and Genco, A. (2024) 'A Very Low-Calorie Ketogenic Diet Approach for Post-Bariatric Weight Regain: A Pilot Study', *J*, 7(4), pp. 482–488. Available at: <https://doi.org/10.3390/j7040029>.
4. Kalayjian, T. *et al.* (2024) 'The SMHP™ position statement on therapeutic carbohydrate reduction for type 1 diabetes', *Journal of Metabolic Health*, 7(1), p. 9. Available at: <https://doi.org/10.4102/jmh.v7i1.100>.
5. Lundanes, J., Storliløkken, G.E., *et al.* (2024) 'Gastrointestinal hormones and subjective ratings of appetite after low-carbohydrate vs low-fat low-energy diets in females with lipedema - A randomized controlled trial', *Clinical nutrition ESPEN*, 65, pp. 16–24. Available at: <https://doi.org/10.1016/j.clnesp.2024.11.018>.
6. Lundanes, J., Gårseth, M., *et al.* (2024) 'The effect of a low-carbohydrate diet on subcutaneous adipose tissue in females with lipedema', *Frontiers in Nutrition*, 11. Available at: <https://doi.org/10.3389/fnut.2024.1484612>.
7. McNally, B. *et al.* (2024) 'THERAPEUTIC CARBOHYDRATE REDUCTION IN TYPE 1 DIABETES: A GUIDE FOR DIETITIANS & NUTRITIONISTS'. Available at: <https://www.therapeuticnutrition.org/tcr-type-1-diabetes-guide>.
8. Moseley, G. *et al.* (2024) 'Abstract 4139384: Retrospective Review of the Safety and Effectiveness of a Low Carbohydrate Ketogenic Diet in Overweight or Obese Patients with Heart Failure', *Circulation*, 150(Suppl_1). Available at: https://doi.org/10.1161/circ.150.suppl_1.4139384.
9. Muensterman, E.G. *et al.* (2024) 'Real-Life Data from a Ketogenic Metabolic Therapy Program for Autosomal-Dominant Polycystic Kidney Disease Suggests Significant Benefits to Participants: TH-PO440', *Journal of the*

American Society of Nephrology, 35(10S), p. 10.1681/ASN.2024kqy7mws6.
Available at: <https://doi.org/10.1681/ASN.2024kqy7mws6>.

10. Paul, J. et al. (2024) 'Low carbohydrate diets, glycaemic control, enablers, and barriers in the management of type 1 diabetes: a mixed methods systematic review', *Diabetology & Metabolic Syndrome*, 16, p. 261. Available at: <https://doi.org/10.1186/s13098-024-01496-5>.
11. Plaisance, E.P. et al. (2024) 'Low-Dose Ketone Monoester Administration in Adults with Cystic Fibrosis: A Pilot and Feasibility Study', *Nutrients*, 16(22), p. 3957. Available at: <https://doi.org/10.3390/nu16223957>.
12. Thomsen, M.N. et al. (2024) 'Replacing dietary carbohydrate with protein and fat improves lipoprotein subclass profile and liver fat in type 2 diabetes independent of body weight: evidence from two randomized controlled trials', *The American Journal of Clinical Nutrition* [Preprint]. Available at: <https://doi.org/10.1016/j.ajcnut.2024.11.030>.
13. Willis, H.J. et al. (2024) 'Impact of Continuous Glucose Monitoring Versus Blood Glucose Monitoring to Support a Carbohydrate-Restricted Nutrition Intervention in People with Type 2 Diabetes', *Diabetes Technology & Therapeutics* [Preprint]. Available at: <https://doi.org/10.1089/dia.2024.0406>.
14. Zweers, H.E.E. et al. (2024a) 'Ketogenic diet in adult patients with mitochondrial myopathy', *Molecular Genetics and Metabolism*, 143(4), p. 108610. Available at: <https://doi.org/10.1016/j.ymgme.2024.108610>.

General reviews

1. Fink, J., Tanaka, M. and Horie, S. (2024) 'Effects of Fasting on Metabolic Hormones and Functions: A Narrative Review', *Juntendo Medical Journal*, 70(5), p. 348. Available at: <https://doi.org/10.14789/jmj.JMJ24-0012-R>. PDF
2. Hirschberger, S. et al. (2024) 'The Impact of a Ketogenic Diet on Weight Loss, Metabolism, Body Composition and Quality of Life', *iScience*, p. 111291. Available at: <https://doi.org/10.1016/j.isci.2024.111291>.
3. Miao, Y. et al. (2024) 'Ketogenic diet in treating sepsis-related acquired weakness: is it friend or foe?', *Frontiers in Nutrition*, 11. Available at: <https://doi.org/10.3389/fnut.2024.1484856>.
4. Stefan, V.E. et al. (2024) 'Overcoming immunosuppression in cancer: how ketogenic diets boost immune checkpoint blockade', *Cancer Immunology, Immunotherapy: CII*, 74(1), p. 23. Available at: <https://doi.org/10.1007/s00262-024-03867-3>.
5. The benefits of preoperative low carbohydrate diets alongside lifestyle changes | Centre for Perioperative Care (11.2024). Available at:

<https://cpoc.org.uk/benefits-preoperative-low-carbohydrate-diets-alongside-lifestyle-changes> (Accessed: 6 November 2024).

Neurology

1. Abagnale, C. et al. (2024) 'A 1-month ketogenic diet in patients with migraine gives a clinical beneficial effect associated with increased latency of somatosensory thalamo-cortical activity', *Clinical Neurophysiology Practice* [Preprint]. Available at: <https://doi.org/10.1016/j.cnp.2024.11.002>.
2. Wang, M. et al. (2024) 'Ketogenic diets therapy in the management of epileptic spasms syndrome', *Frontiers in Pediatrics*, 12, p. 1472982. Available at: <https://doi.org/10.3389/fped.2024.1472982>.
3. Zemer, A. et al. (2024) 'Ketogenic diet in clinical populations—a narrative review', *Frontiers in Medicine*, 11, p. 1432717. Available at: <https://doi.org/10.3389/fmed.2024.1432717>.

Metabolic Psychiatry

1. Anderson, J. et al. (2024) 'The Ketogenic Diet as a Transdiagnostic Treatment for Neuropsychiatric Disorders: Mechanisms and Clinical Outcomes', *Current Treatment Options in Psychiatry*, 12(1), p. 1. Available at: <https://doi.org/10.1007/s40501-024-00339-4>.
2. Yousufzai, W. et al. (2024) 'Measuring the effects of ketogenic diet on neuropsychiatric disorder: A scoping review', *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, p. 111205. Available at: <https://doi.org/10.1016/j.pnpbp.2024.111205>.

Case studies

1. Basu, S., Manokaran, R.K. and Hemamalini, A.J. (2024) 'Ketogenic Diet as a Therapeutic Intervention for Doose Syndrome: A Case Report and Review of Current Evidence', *International Journal of Nutrition, Pharmacology, Neurological Diseases*, 14(4), p. 483. Available at: https://doi.org/10.4103/ijnpnd.ijnpnd_130_24.

