

Research Roundup – October 2024

New this month in therapeutic carbohydrate restriction and metabolic health.

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Metabolic Studies

1. Amato, A.C.M., Amato, J.L.S. and Benitti, D.A. (2024) 'The Efficacy of Ketogenic Diets (Low Carbohydrate; High Fat) as a Potential Nutritional Intervention for Lipedema: A Systematic Review and Meta-Analysis', *Nutrients*, 16(19), p. 3276. Available at: <https://doi.org/10.3390/nu16193276>.
2. Cicolani, G. *et al.* (2024) 'Poster: Impact of ketogenic diet on semen quality in obese patients: Cytological and molecular aspects, a pilot study', in. Available at: <https://doi.org/10.1111/andr.13714>. POSTER
3. De La Motte, K.L., Campbell, J.L. and Zinn, C. (2024) 'Exploring Consumption of Ultra-Processed Foods and Diet Quality in the Context of Popular Low Carbohydrate and Plant-Based Dietary Approaches', *Food Science & Nutrition*, p. fsn3.4496. Available at: <https://doi.org/10.1002/fsn3.4496>.
4. Gower, B.A. *et al.* (2024) 'Effects of a Carbohydrate-Restricted Diet on β -Cell Response in Adults With Type 2 Diabetes', *The Journal of Clinical Endocrinology & Metabolism*, p. dgae670. Available at: <https://doi.org/10.1210/clinem/dgae670>. ABSTRACT
5. Hironaka, J. *et al.* (2024) 'Low-carbohydrate diets in East Asians with type 2 diabetes: A systematic review and meta-analysis of randomized controlled trials', *Journal of Diabetes Investigation*, p. jdi.14326. Available at: <https://doi.org/10.1111/jdi.14326>.
6. Levrán, N. *et al.* (2024) 'Low-carbohydrate diet proved effective and safe for youths with type 1 diabetes: A randomised trial', *Acta Paediatrica (Oslo, Norway: 1992)* [Preprint]. Available at: <https://doi.org/10.1111/apa.17455>.
7. Li, L. *et al.* (2024) 'Effects of healthy low-carbohydrate diet and time-restricted eating on weight and gut microbiome in adults with overweight or obesity: Feeding RCT', *Cell Reports Medicine*, p. 101801. Available at: <https://doi.org/10.1016/j.xcrm.2024.101801>.
8. Liao, T. *et al.* (2024) 'The impact of 3 different dietary interventions on overweight or obese adults: A network meta-analysis', *Medicine*, 103(42), p. e39749. Available at: <https://doi.org/10.1097/MD.00000000000039749>.

9. V, H. and Ck, V. (2024) 'Investigation of the impact of a short-term low-carbohydrate paleolithic diet on cardiovascular risk markers', *INDIAN JOURNAL OF PHYSIOLOGY AND ALLIED SCIENCES*, 76(03). Available at: <https://www.ijpas.org/index.php/ijpas/article/view/308> (PDF).
10. Vandenberghe, C. *et al.* (2024) 'A reduced carbohydrate diet improves glycemic regulation in hyperglycemic older people in a retirement home: The SAGE study', *Applied Physiology, Nutrition, and Metabolism*, p. apnm-2024-0277. Available at: <https://doi.org/10.1139/apnm-2024-0277>.
ABSTRACT

Under resourced communities

1. Hoosen, F. *et al.* (2024) 'Development and feasibility testing of a time-restricted eating intervention for women living with overweight/obesity and HIV in a resource-limited setting of South Africa', *BMC Public Health*, 24, p. 2768. Available at: <https://doi.org/10.1186/s12889-024-20228-y>.
2. Pujol-Busquets, G. *et al.* (2024) 'Mixed methods evaluation of a low-carbohydrate high-fat nutrition education program for women from underserved communities in South Africa', *Appetite*, p. 107725. Available at: <https://doi.org/10.1016/j.appet.2024.107725>.

General reviews

1. Kwon, S., Jeyaratnam, R. and Kim, K.-H. (2024) 'Targeting ketone body metabolism to treat fatty liver disease', *Journal of Pharmacy & Pharmaceutical Sciences*, 27, p. 13375. Available at: <https://doi.org/10.3389/jpps.2024.13375>.
2. Malinowska, D. and Żendzian-Piotrowska, M. (2024) 'Ketogenic Diet: A Review of Composition Diversity, Mechanism of Action and Clinical Application', *Journal of Nutrition and Metabolism*, 2024, p. 6666171. Available at: <https://doi.org/10.1155/2024/6666171>.
3. Messing, M. *et al.* (2024) 'Trigger Warning: How Modern Diet, Lifestyle, and Environment Pull the Trigger on Autosomal Dominant Polycystic Kidney Disease Progression', *Nutrients*, 16(19), p. 3281. Available at: <https://doi.org/10.3390/nu16193281>.
4. Zemer, A. *et al.* (2024) 'Ketogenic diet in clinical populations—a narrative review', *Frontiers in Medicine*, 11. Available at: <https://doi.org/10.3389/fmed.2024.1432717>.

Neurology

1. Borowicz-Reutt, K., Krawczyk, M. and Czernia, J. (2024) 'Ketogenic Diet in the Treatment of Epilepsy', *Nutrients*, 16(9), p. 1258. Available at: <https://doi.org/10.3390/nu16091258>.
2. Liu, G., Su, S. and Zhang, H. (2024) 'Effectiveness and safety analysis of ketogenic diet therapy for drug-resistant epilepsy caused by structural pathology', *Frontiers in Neurology*, 15. Available at: <https://doi.org/10.3389/fneur.2024.1497969>.
3. Tereshko, Y. et al. (2024) 'Ketogenic Diet Improves Sleep Quality and Daytime Sleepiness in Chronic Migraine: A Pilot Study', *Neurology International*, 16(6), pp. 1203–1213. Available at: <https://doi.org/10.3390/neurolint16060091>.

Metabolic Psychiatry

1. Edwards, M.G.P. et al. (2024) 'Exploring diet-induced ketosis with exogenous ketone supplementation as a potential intervention in post-traumatic stress disorder: a feasibility study', *Frontiers in Nutrition*, 11. Available at: <https://doi.org/10.3389/fnut.2024.1406366>.

Cancer

1. Muscogiuri, G., Barrea, L., et al. (2024) 'European Society for the Study of Obesity (EASO) Position Statement on medical nutrition therapy for the management of individuals with overweight or obesity and cancer', *Obesity Facts*, pp. 1–37. Available at: <https://doi.org/10.1159/000542155>. (PDF)
2. Rajakumar, G. et al. (2024) 'Effect of ketogenic diets on insulin-like growth factor (IGF)-1 in humans: A systematic review and meta-analysis', *Ageing Research Reviews*, p. 102531. Available at: <https://doi.org/10.1016/j.arr.2024.102531>.

Case studies

1. Karačić, A. et al. (2024) 'The gut microbiome without any plant food? A case study on the gut microbiome of a healthy carnivore', *Microbiota and Host*, 1(aop). Available at: <https://doi.org/10.1530/MAH-24-0006>.
2. Winje, E., Lake, I. and Dankel, S.N. (2024) 'Case report: Ketogenic diet alleviated anxiety and depression associated with insulin-dependent diabetes management', *Frontiers in Nutrition*, 11. Available at: <https://doi.org/10.3389/fnut.2024.1404842>.