

Roundup - December 2023

New this month in therapeutic carbohydrate restriction and metabolic health.

Metabolic (TCR intervention)

1. Clemens, Z. *et al.* (2023) 'The Paleolithic Ketogenic Diet (PKD) Is Associated with Low C-peptide Levels in Non-T1DM Patients and Healthy Subjects'. Preprints. Available at: <https://doi.org/10.20944/preprints202312.0817.v1>.
2. Cooper, I.D. *et al.* (2023) 'Thyroid markers and body composition predict LDL-cholesterol change in lean healthy women on a ketogenic diet: experimental support for the lipid energy model', *Frontiers in Endocrinology*, 14. Available at: <https://www.frontiersin.org/articles/10.3389/fendo.2023.1326768>.
3. Currenti, W. *et al.* (2024) 'Comparative Evaluation of a Low-Carbohydrate Diet and a Mediterranean Diet in Overweight/Obese Patients with Type 2 Diabetes Mellitus: A 16-Week Intervention Study', *Nutrients*, 16(1), p. 95. Available at: <https://doi.org/10.3390/nu16010095>.
4. De Almeida, R.J.R. *et al.* (2023) 'Effects of Ketogenic Diet Intervention on Metabolic Acidosis in Patients with Obesity and Chronic Kidney Disease', *Missouri Medicine*, 120(6), pp. 451–458. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10743335/>.
5. Ezaki, O. and Abe, S. (2023) 'Medium-chain triglycerides (8:0 and 10:0) increase muscle mass and function in frail older adults: a combined data analysis of clinical trials', *Frontiers in Nutrition*, 10, p. 1284497. Available at: <https://doi.org/10.3389/fnut.2023.1284497>.
6. García, F.J.N. *et al.* (2024) 'Effect of the Very Low Calorie Ketogenic Low-Fat Diet (VLCKLFD) Compared to a Low-Calorie Diet (LCD) on the Lipid Profile of Mexican Patients with Type I Obesity', *American Heart Journal*, 267, pp. 119–120. Available at: <https://doi.org/10.1016/j.ahj.2023.08.020>.
7. Hawkins, M.A., Zinn, C. and Delon, C. (2023) 'The application of carbohydrate-reduction in general practice: A medical audit', *Journal of Metabolic Health*, 6(1). Available at: <https://doi.org/10.4102/jmh.v6i1.86>.
8. McNelly, A. *et al.* (2023) 'A pilot study of alternative substrates in the critically ill subject using a ketogenic feed', *Nature Communications*, 14, p. 8345. Available at: <https://doi.org/10.1038/s41467-023-42659-8>.
9. Pinsawas, B. *et al.* (2023) 'Asian Low-Carbohydrate Diet with Increased Whole Egg Consumption Improves Metabolic Outcomes in Metabolic Syndrome: A 52-Week Intervention Stud'. Available at: <https://doi.org/10.21203/rs.3.rs-3646877/v1>.
10. Soto-Mota, A. *et al.* (2023) 'Physiological Adaptation to Macronutrient Change Distorts Findings from Short Dietary Trials: Reanalysis of a Metabolic Ward Study', *The Journal of Nutrition* [Preprint]. Available at: <https://doi.org/10.1016/j.tjnut.2023.12.017>.

Reviews - metabolism

1. Alabdali, Y., Abdulzahra, I.A. and Albyati, S. (2023) 'A review of ketogenic diets and their potential impact on COVID-19: Is there an interaction?', 4, pp. 295–301. Available at: <https://doi.org/10.47587/SA.2023.4409>.
2. Neudorf, H. and Little, J.P. (2023) 'Impact of fasting & ketogenic interventions on the NLRP3 inflammasome: A narrative review', *Biomedical Journal*, p. 100677. Available at: <https://doi.org/10.1016/j.bj.2023.100677>.

Type 1 Diabetes

1. Al-Shehaili, S.M. *et al.* (2023) 'The effect of poor glycemic control on cognitive function in children and adolescents with type 1 diabetes mellitus', *Saudi Medical Journal*, 44(10), pp. 1006–1012. Available at: <https://doi.org/10.15537/smj.2023.44.20230327>.
2. Isaksson, S.S. *et al.* (2023) 'The effect of carbohydrate intake on glycaemic control in individuals with type 1 diabetes: a randomised, open-label, crossover trial', *The Lancet Regional Health – Europe*, 0(0). Available at: <https://doi.org/10.1016/j.lanepe.2023.100799>.
3. Kristensen, K.B. *et al.* (2024) 'Effects of a Low-Carbohydrate-High-Protein Pre-Exercise Meal in Type 1 Diabetes—a Randomized Crossover Trial', *The Journal of Clinical Endocrinology & Metabolism*, 109(1), pp. 208–216. Available at: <https://doi.org/10.1210/clinem/dgad427>.
4. Smee, S. *et al.* (2023) 'A very-low-carbohydrate diet for minimising blood glucose excursions during ultra-endurance open-water swimming in type 1 diabetes: a case report', *Applied Physiology, Nutrition, and Metabolism* [Preprint]. Available at: <https://doi.org/10.1139/apnm-2023-0266>.

Neurology

1. Pasca, L. *et al.* (2024) 'Sleep effects of Ketogenic diet in pediatric patients with migraine: Preliminary data of a prospective study', *Sleep Medicine*, 113, pp. 238–241. Available at: <https://doi.org/10.1016/j.sleep.2023.11.1132>. ABSTRACT
2. Schweickart, A. *et al.* (2023) 'A Modified Mediterranean Ketogenic Diet mitigates modifiable risk factors of Alzheimer's Disease: a serum and CSF-based metabolic analysis', *medRxiv*, p. 2023.11.27.23298990. Available at: <https://doi.org/10.1101/2023.11.27.23298990>.

Case Studies

1. Kleissl-Muir, S. *et al.* (2023) 'A low-carbohydrate diet in place of SGLT2i therapy in a patient with diabetic cardiomyopathy', *Endocrinology, Diabetes & Metabolism Case Reports*, 2023(4). Available at: <https://doi.org/10.1530/EDM-23-0086>.

Special Communications: Contrasting perspectives - Athletic Performance (Abstract links)

1. Burke, L.M. and Whitfield, J. (2023) 'Ketogenic Diets Are Not Beneficial for Athletic Performance', *Medicine and Science in Sports and Exercise* [Preprint]. Available at: <https://doi.org/10.1249/MSS.0000000000003344>. ABSTRACT



2. Noakes, T.D. (2023a) 'Ketogenic Diets Are Beneficial for Athletic Performance', *Medicine and Science in Sports and Exercise* [Preprint]. Available at:
<https://doi.org/10.1249/MSS.0000000000003343>. ABSTRACT
3. Noakes, T.D. (2023b) 'Ketogenic Diets Are Beneficial for Athletic Performance: Response to Burke and Whitfield', *Medicine and Science in Sports and Exercise* [Preprint]. Available at:
<https://doi.org/10.1249/MSS.0000000000003345>. ABSTRACT