

Roundup - August 2023

New this month in therapeutic carbohydrate restriction and metabolic health.

Metabolic (TCR intervention)

1. Gram-Kampmann, E.M. *et al.* (2023) 'A six-month low-carbohydrate diet high in fat does not adversely affect endothelial function or markers of low-grade inflammation in patients with type 2 diabetes: an open-label randomized controlled trial', *Cardiovascular Diabetology*, 22(1), p. 212. Available at: <https://doi.org/10.1186/s12933-023-01956-8>.
2. Huangfu, G. *et al.* (2023) 'Triglyceride-to-HDL ratio: A Marker of Insulin Resistance Independently Predicts Cardiometabolic Risk in Familial Hypercholesterolaemia', *Heart, Lung and Circulation*, 32, p. S404. Available at: <https://doi.org/10.1016/j.hlc.2023.06.556>.
3. Kleissl-Muir, S. *et al.* (2023) 'Effects if a low carbohydrate diet on heart failure symptoms and quality of life in patients with diabetic cardiomyopathy: A randomised controlled trial pilot study', *Nutrition, Metabolism and Cardiovascular Diseases* [Preprint]. Available at: <https://doi.org/10.1016/j.numecd.2023.08.015>.
4. McKay, A.K.A. *et al.* (2023) 'The Impact of a Short-Term Ketogenic Low-Carbohydrate High-Fat Diet on Biomarkers of Intestinal Epithelial Integrity and Gastrointestinal Symptoms', *International Journal of Sport Nutrition and Exercise Metabolism*, 1(aop), pp. 1–11. Available at: <https://doi.org/10.1123/ijsnem.2023-0009>.
5. Salcedo, A.C. *et al.* (2023) 'Therapeutic Carbohydrate Restriction as a Metabolic Modality for the Prevention and Treatment of Abnormal Uterine Bleeding', *Nutrients*, 15(17), p. 3760. Available at: <https://doi.org/10.3390/nu15173760>.
6. Stamati, A. *et al.* (2023) 'Efficacy and safety of carbohydrate restriction in patients with type 1 diabetes: A systematic review and meta-analysis', *Diabetes, Obesity & Metabolism*, 25(9), pp. 2770–2773. Available at: <https://doi.org/10.1111/dom.15124>. ABSTRACT (Concludes - TCR increases time in range, decreases time below range and glycaemic variability in the short term. Limitations - available RCTs)
7. Tamai, H., Okamura, J. and Nanjo, K. (2023) 'Moderate-carbohydrate diet without caloric or lipid restriction for Japanese adult patients with nonalcoholic fatty liver disease: A prospective cohort study', *Hepatology Research: The Official Journal of the Japan Society of Hepatology* [Preprint]. Available at: <https://doi.org/10.1111/hepr.13954>. ABSTRACT
8. Wang, Q. *et al.* (2023) '[Potential implications of ketone body metabolism changes and ketogenic therapy in the treatment of heart failure]', *Zhonghua wei zhong bing ji jiu yi xue*, 35(7), pp. 769–772. Available at: <https://doi.org/10.3760/cma.j.cn121430-20221008-00891>. ABSTRACT

Reviews

1. Alberry, B. and Silveira, P.P. (2023) 'Brain insulin signaling as a potential mediator of early life adversity effects on physical and mental health', *Neuroscience & Biobehavioral Reviews*, 153, p. 105350. Available at: <https://doi.org/10.1016/j.neubiorev.2023.105350>.

2. Cecchi, N. *et al.* (2023) 'Current knowledges in pharmaconutrition: "Ketogenics" in pediatric gliomas', *Frontiers in Nutrition*, 10, p. 1222908. Available at: <https://doi.org/10.3389/fnut.2023.1222908>.
3. Dyńka, D. *et al.* (2023) 'The Ketogenic Diet and Cardiovascular Diseases', *Nutrients*, 15(15), p. 3368. Available at: <https://doi.org/10.3390/nu15153368>.
4. García-Velázquez, L. and Massieu, L. (2023) 'The proteomic effects of ketone bodies: implications for proteostasis and brain proteinopathies', *Frontiers in Molecular Neuroscience*, 16, p. 1214092. Available at: <https://doi.org/10.3389/fnmol.2023.1214092>.
5. Herz, D. *et al.* (2023) 'Efficacy of Fasting in Type 1 and Type 2 Diabetes Mellitus: A Narrative Review', *Nutrients*, 15(16), p. 3525. Available at: <https://doi.org/10.3390/nu15163525>.
6. Ortí, J.E. de la R. *et al.* (2023) 'Exploring the impact of ketogenic diet on multiple sclerosis: obesity, anxiety, depression, and the glutamate system', *Frontiers in Nutrition*, 10. Available at: <https://www.frontiersin.org/articles/10.3389/fnut.2023.1227431>.

Neurology

1. Bui, P.H. *et al.* (2023) 'Propofol for anesthesia in pediatric patients with epilepsy on the Ketogenic diet: A single center experience', *Pediatric Neurology* [Preprint]. Available at: <https://doi.org/10.1016/j.pediatrneurol.2023.08.031>.
2. Molteberg, E. *et al.* (no date) 'Stress biomarkers in adult patients with drug resistant epilepsy on a modified Atkins diet – a prospective study', *Epilepsia Open*, n/a(n/a). Available at: <https://doi.org/10.1002/epi4.12808>.

Case studies

1. Dyńka, D., Paziewska, A. and Kowalcze, K. (2023) 'Keto Menu–Effect of Ketogenic Menu and Intermittent Fasting on the Biochemical Markers and Body Composition in a Physically Active Man—A Controlled Case Study', *Foods*, 12(17), p. 3219. Available at: <https://doi.org/10.3390/foods12173219>.
2. Gardemann, C., Knowles, S. and Marquardt, T. (2023) 'Managing type 1 diabetes mellitus with a ketogenic diet', *Endocrinology, Diabetes & Metabolism Case Reports*, 2023(3). Available at: <https://doi.org/10.1530/EDM-23-0008>.
3. Hudec, J. *et al.* (2023) 'Challenging anesthesia of the patient on ketogenic diet therapy scheduled for scoliosis surgery under motor evoked potentials monitoring: a case report', *Journal of Anesthesia* [Preprint]. Available at: <https://doi.org/10.1007/s00540-023-03226-z>. ABSTRACT
4. Ikeda, A. *et al.* (2023) 'The efficacy of a medium-chain triglyceride ketogenic diet for drug-resistant epilepsy with PIGA germline variant', *Seizure: European Journal of Epilepsy*, 111, pp. 103–105. Available at: <https://doi.org/10.1016/j.seizure.2023.08.002>.