

Roundup - December 2021

New this month in therapeutic carbohydrate restriction and metabolic health.

Reviews/Mechanisms

1. Li, S., Ding, L. and Xiao, X. (2021) 'Comparing the Efficacy and Safety of Low-Carbohydrate Diets with Low-Fat Diets for **Type 2 Diabetes** Mellitus Patients: A Systematic Review and Meta-Analysis of Randomized Clinical Trials', *International Journal of Endocrinology*, 2021, p. e8521756. doi:[10.1155/2021/8521756](https://doi.org/10.1155/2021/8521756).
2. Abboud, M. *et al.* (2021) 'Effect of Ketogenic Diet on Quality of Life in Adults with **Chronic Disease**: A Systematic Review of Randomized Controlled Trials', *Nutrients*, 13(12), p. 4463. doi:[10.3390/nu13124463](https://doi.org/10.3390/nu13124463).
3. Patikorn, C. *et al.* (2021) '**Intermittent Fasting** and Obesity-Related Health Outcomes: An Umbrella Review of Meta-analyses of Randomized Clinical Trials', *JAMA Network Open*, 4(12), p. e2139558. doi:[10.1001/jamanetworkopen.2021.39558](https://doi.org/10.1001/jamanetworkopen.2021.39558).
4. Souza, A.P. da S. *et al.* (2021) 'Effect of Metabolic Syndrome on **Parkinson's Disease**: A Systematic Review', *Clinics*, 76. doi:[10.6061/clinics/2021/e3379](https://doi.org/10.6061/clinics/2021/e3379).
5. Kolb, H. *et al.* (2021) '**Ketone bodies**: from enemy to friend and guardian angel', *BMC Medicine*, 19(1), p. 313. doi:[10.1186/s12916-021-02185-0](https://doi.org/10.1186/s12916-021-02185-0).
6. Wang, J.-H. *et al.* (2022) 'The potential pharmacological mechanisms of β -hydroxybutyrate for improving **cognitive functions**', *Current Opinion in Pharmacology*, 62, pp. 15–22. doi:[10.1016/j.coph.2021.10.005](https://doi.org/10.1016/j.coph.2021.10.005).
7. Gough, S.M. *et al.* (2021) '**Neuroprotection** by the Ketogenic Diet: Evidence and Controversies', *Frontiers in Nutrition*, 8. doi:[10.3389/fnut.2021.782657](https://doi.org/10.3389/fnut.2021.782657).
8. Jemal, M., Molla, T.S. and Dejenie, T.A. (2021) '<p>Ketogenic Diets and their Therapeutic Potential on **Breast Cancer**: A Systemic Review</p>', *Cancer Management and Research*, 13, pp. 9147–9155. doi:[10.2147/CMAR.S339970](https://doi.org/10.2147/CMAR.S339970).
9. Shalabi, H. *et al.* (2021) '**Ketogenic Diets**: Side Effects, Attitude, and Quality of Life', *Cureus*, 13(12). doi:[10.7759/cureus.20390](https://doi.org/10.7759/cureus.20390).
10. Gangitano, E. *et al.* (2021) 'Ketogenic Diet for Obese COVID-19 Patients: Is Respiratory Disease a Contraindication? A Narrative Review of the Literature on Ketogenic Diet and **Respiratory Function**', *Frontiers in Nutrition*, 8. doi:[10.3389/fnut.2021.771047](https://doi.org/10.3389/fnut.2021.771047).
11. Kayla-Anne Lenferna De La Motte, BSR, Grant Schofield, PhD, Helen Kilding, MSc, Caryn Zinn, PhD, RD (2021) 'An Alternate Approach to **Military Rations** for Optimal Health and Performance'. *Military Medicine*, usab498. doi: [10.1093/milmed/usab498](https://doi.org/10.1093/milmed/usab498)

12. Mahajan, V.R. *et al.* (2021) 'Nutritional Ketosis as a Potential Treatment for Alcohol Use Disorder', *Frontiers in Psychiatry*, 12. doi:[10.3389/fpsy.2021.781668](https://doi.org/10.3389/fpsy.2021.781668).
13. Tabaie, E.A. *et al.* (2022) 'A narrative review on the effects of a ketogenic diet on patients with **Alzheimer's disease**', *AIMS Public Health*, 9(1), pp. 185–193. doi:[10.3934/publichealth.2022014](https://doi.org/10.3934/publichealth.2022014).

Trials/Studies

1. Sørlie, V. *et al.* (2021) 'Effect of a ketogenic diet on pain and quality of life in patients with **lipedema**: The LIPODIET pilot study', *Obesity Science & Practice*, n/a(n/a). doi:[10.1002/osp4.580](https://doi.org/10.1002/osp4.580).
2. Zainordin, N.A. *et al.* (2021) 'THE EFFECTS VERY LOW CARBOHYDRATE DIET (VLCBD) ON RENAL OUTCOMES IN **DIABETIC KIDNEY DISEASE PATIENTS**:', *Journal of the ASEAN Federation of Endocrine Societies*, 36, pp. 62–62. Available at: <https://asean-endocrinejournal.org/index.php/JAFES/article/view/1553> (Accessed: 16 December 2021).
3. Roy, M. *et al.* (2021) 'A ketogenic supplement improves white matter energy supply and processing speed in **mild cognitive impairment**', *Alzheimer's & Dementia : Translational Research & Clinical Interventions*, 7(1). doi:[10.1002/trc2.12217](https://doi.org/10.1002/trc2.12217).
4. Dou, X. *et al.* (2021) 'Evaluation of the seizure control and the tolerability of ketogenic diet in Chinese children with structural **drug-resistant epilepsy**', *Seizure*, 94, pp. 43–51. doi:[10.1016/j.seizure.2021.11.008](https://doi.org/10.1016/j.seizure.2021.11.008).
5. Zihua Li 1, Yudian Zhang 2, Meng Han 3, Haiteng Deng 2, Fuqing Wu 2, Gang Liu 1, Guo-Qiang Chen (no date) 'Lysine β -Hydroxybutyrylation Improves Stability of COVID-19 Antibody'. doi:[10.1021/acs.biomac.1c01435](https://doi.org/10.1021/acs.biomac.1c01435).
6. Zainordin, N.A. *et al.* (2021) 'THE VERY **LOW CARBOHYDRATE DIET** (VLCBD)';, *Journal of the ASEAN Federation of Endocrine Societies*, 36, pp. 7–7.
7. Parker, E.K. *et al.* (2021) 'A standard enteral formula versus an iso-caloric lower carbohydrate/high fat enteral formula in the hospital management of adolescent and young adults admitted with **anorexia nervosa**: a randomised controlled trial', *Journal of Eating Disorders*, 9(1), p. 160. doi:[10.1186/s40337-021-00513-6](https://doi.org/10.1186/s40337-021-00513-6).
8. Jiang, Y. *et al.* (2021) 'S485 The Effects of Intermittent Fasting on **Gastroesophageal Reflux Disease**', *Official journal of the American College of Gastroenterology | ACG*, 116, p. S214. doi:[10.14309/01.ajg.0000774412.06006.67](https://doi.org/10.14309/01.ajg.0000774412.06006.67).
9. Cohen, C.C. *et al.* (2021) 'Dietary sugar restriction reduces hepatic de novo lipogenesis in adolescent boys with **fatty liver disease**', *The Journal of Clinical Investigation*, 131(24), p. e150996. doi:[10.1172/JCI150996](https://doi.org/10.1172/JCI150996).

10. Harvie, M. *et al.* (2021) 'Randomised controlled trial of intermittent vs continuous energy restriction during chemotherapy for early **breast cancer**', *British Journal of Cancer*, pp. 1–11. doi:[10.1038/s41416-021-01650-0](https://doi.org/10.1038/s41416-021-01650-0).
11. Tzenios, N. *et al.* (2021) 'Examining the Efficacy of a Very-Low-Carbohydrate Ketogenic Diet on Cardiovascular Health in Adults with Mildly Elevated **Low-Density Lipoprotein** Cholesterol in an Open-Label Pilot Study', *Metabolic Syndrome and Related Disorders* [Preprint]. doi:[10.1089/met.2021.0042](https://doi.org/10.1089/met.2021.0042).
12. Conference, A. *et al.* (2021) 'Effect of body weight training plus low carbohydrate diet versus running plus low carbohydrate diet on body fat percentage changes in **overweight and obese** young man', *Journal of Engineering Research* [Preprint]. doi:[10.36909/jer.ASSEEE.16061](https://doi.org/10.36909/jer.ASSEEE.16061).
13. Sánchez, E. *et al.* (2022) 'Randomized Clinical Trial to Evaluate the Morphological Changes in the Adventitial Vasa Vasorum Density and Biological Markers of Endothelial Dysfunction in Subjects with Moderate **Obesity** Undergoing a Very Low-Calorie Ketogenic Diet', *Nutrients*, 14(1), p. 33. doi:[10.3390/nu14010033](https://doi.org/10.3390/nu14010033).

Case Studies and Surveys

1. Norwitz, N.G. *et al.* (2021) 'Elevated LDL-Cholesterol with a Carbohydrate-Restricted Diet: Evidence for a "**Lean Mass Hyper-Responder**" Phenotype', *Current Developments in Nutrition* [Preprint]. doi:[10.1093/cdn/nzab144](https://doi.org/10.1093/cdn/nzab144).
2. Cannataro, R. *et al.* (2021) 'Management of **Lipedema** with Ketogenic Diet: 22-Month Follow-Up', *Life*, 11(12), p. 1402. doi:[10.3390/life11121402](https://doi.org/10.3390/life11121402).
3. Melikishvili, G. *et al.* (2021) 'Novel UBE3A pathogenic variant in a large Georgian family produces non-convulsive **status epilepticus** responsive to ketogenic diet', *Seizure*, 94, pp. 70–73. doi:[10.1016/j.seizure.2021.11.012](https://doi.org/10.1016/j.seizure.2021.11.012).
4. Inui, T. *et al.* (2021) 'Intravenous ketogenic diet therapy for **neonatal-onset pyruvate dehydrogenase complex deficiency**', *Brain & Development*, pp. S0387-7604(21)00210–2. doi:[10.1016/j.braindev.2021.11.005](https://doi.org/10.1016/j.braindev.2021.11.005).
5. AlQassmi, A., AlOtiabi, M. and AlRabeeh, F. (2021) 'A Case Report: An Approach to Recognize a Role in Ketogenic Diet Response in **Autism** with Positive CHD8', *Recent Developments in Medicine and Medical Research Vol. 9*, pp. 17–22. doi:[10.9734/bpi/rdmmr/v9/4654F](https://doi.org/10.9734/bpi/rdmmr/v9/4654F).
6. Jiahong, L. *et al.* (2021) 'Ketogenic parenteral nutrition in a case of developmental and **epileptic encephalopathy** caused by GABRB2 gene variation', *Chinese Journal of Pediatrics*, 59(12), pp. 1092–1094. doi:[10.3760/cma.j.cn112140-20210606-00487](https://doi.org/10.3760/cma.j.cn112140-20210606-00487).