

Roundup - April 2022

New this month in therapeutic carbohydrate restriction and metabolic health.

Reviews/Mechanisms

1. Sabine Kleissl-Muir, Bodil Rasmussen, Alice Owen, Caryn Zinn and Andrea D. Np (2022) 'Low carbohydrate diets for diabetic **cardiomyopathy**: A hypothesis'. doi:[10.3389/fnut.2022.865489](https://doi.org/10.3389/fnut.2022.865489).
2. Field, R. *et al.* (2022) 'Low-carbohydrate and ketogenic diets: a scoping review of neurological and inflammatory outcomes in human studies and their relevance to chronic **pain**', *Nutrition Research Reviews*, pp. 1–71. doi:[10.1017/S0954422422000087](https://doi.org/10.1017/S0954422422000087).
3. Song, D.-K. and Kim, Y.-W. (2022) 'Beneficial effects of **intermittent fasting**: a narrative review', *Yeungnam University Journal of Medicine* [Preprint]. doi:[10.12701/jyms.2022.00010](https://doi.org/10.12701/jyms.2022.00010).
4. Silverii, G.A. *et al.* (2022) 'Effectiveness of Low Carbohydrate diets for long-term **weight loss** in obese individuals: a meta-analysis of randomized controlled trials', *Diabetes, Obesity & Metabolism* [Preprint]. doi:[10.1111/dom.14709](https://doi.org/10.1111/dom.14709).
5. Falkenhain, K. *et al.* (2022) 'Effects of Exogenous **Ketone Supplementation** on Blood Glucose: A Systematic Review and Meta-Analysis', *Advances in Nutrition (Bethesda, Md.)*, p. nmac036. doi:[10.1093/advances/nmac036](https://doi.org/10.1093/advances/nmac036).
6. Kundu, S. *et al.* (2022) 'Potentials of ketogenic diet against chronic **kidney diseases**: pharmacological insights and therapeutic prospects', *Molecular Biology Reports* [Preprint]. doi:[10.1007/s11033-022-07460-8](https://doi.org/10.1007/s11033-022-07460-8).

Trials/Studies

1. Lyman, K.S. *et al.* (2022) 'Continuous care intervention with carbohydrate restriction improves **physical function of the knees** among patients with type 2 diabetes: a non-randomized study', *BMC Musculoskeletal Disorders*, 23(1), p. 297. doi:[10.1186/s12891-022-05258-0](https://doi.org/10.1186/s12891-022-05258-0).
2. Chi, J.-T. *et al.* (2022) 'Serum metabolomic analysis of men on a low-carbohydrate diet for biochemically recurrent **prostate cancer** reveals the potential role of ketogenesis to slow tumor growth: a secondary analysis of the CAPS2 diet trial', *Prostate Cancer and Prostatic Diseases* [Preprint]. doi:[10.1038/s41391-022-00525-6](https://doi.org/10.1038/s41391-022-00525-6).
3. Yang, M. *et al.* (2022) 'Metabolic effects of a ketogenic diet in overweight/obese women with **polycystic ovary syndrome** with different uric acid levels: a prospective cohort study', *Reproductive BioMedicine Online* [Preprint]. doi:[10.1016/j.rbmo.2022.03.023](https://doi.org/10.1016/j.rbmo.2022.03.023).

4. Mei, S. *et al.* (2022) 'Mediterranean Diet Combined With a Low-Carbohydrate Dietary Pattern in the Treatment of Overweight **Polycystic Ovary Syndrome Patients**', *Frontiers in Nutrition*, 9, p. 876620. doi:[10.3389/fnut.2022.876620](https://doi.org/10.3389/fnut.2022.876620).
5. Cho, I.Y. *et al.* (2022) 'Fasting ketonuria is inversely associated with **coronary artery calcification** in non-diabetic individuals', *Atherosclerosis*, 348, pp. 1–7. doi:[10.1016/j.atherosclerosis.2022.03.018](https://doi.org/10.1016/j.atherosclerosis.2022.03.018).
6. Mutoh, T. *et al.* (2022) 'Impact of **medium-chain triglycerides** on gait performance and brain metabolic network in healthy older adults: a double-blind, randomized controlled study', *GeroScience* [Preprint]. doi:[10.1007/s11357-022-00553-z](https://doi.org/10.1007/s11357-022-00553-z).
7. Tzenios, N. *et al.* (2022) '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*, 20(2), pp. 94–103. doi:[10.1089/met.2021.0042](https://doi.org/10.1089/met.2021.0042).
8. Li, J. *et al.* (2022) 'Effects of a Low-carbohydrate/High-protein Diet on **Gut Microbiome** Composition in Insulin Resistant Individuals with Chronic Spinal Cord Injury: Preliminary Results from a Randomized Controlled Trial', *Archives of Physical Medicine and Rehabilitation*, pp. S0003-9993(22)00338–0. doi:[10.1016/j.apmr.2022.03.014](https://doi.org/10.1016/j.apmr.2022.03.014).
9. Bruen, D.M. *et al.* (2022) 'Ren.Nu, a Dietary Program for Individuals with **Autosomal-Dominant Polycystic Kidney Disease** Implementing a Sustainable, Plant-Focused, Kidney-Safe, Ketogenic Approach with Avoidance of Renal Stressors', *Kidney and Dialysis*, 2(2), pp. 183–203. doi:[10.3390/kidneydial2020020](https://doi.org/10.3390/kidneydial2020020).
10. Brenton, J.N. *et al.* (2022) 'Phase II study of ketogenic diets in relapsing **multiple sclerosis**: safety, tolerability and potential clinical benefits', *Journal of Neurology, Neurosurgery & Psychiatry* [Preprint]. doi:[10.1136/jnnp-2022-329074](https://doi.org/10.1136/jnnp-2022-329074).
11. Chiarello, N. *et al.* (2022) *Effect of a four-week isocaloric ketogenic diet on physical performance in very **high-altitude**: a pilot study*. preprint. In Review. doi:[10.21203/rs.3.rs-1451453/v1](https://doi.org/10.21203/rs.3.rs-1451453/v1).

Case Studies

1. Norwitz, N.G. *et al.* (2022) 'Case Report: Hypercholesterolemia "**Lean Mass Hyper-Responder**" Phenotype Presents in the Context of a Low Saturated Fat Carbohydrate-Restricted Diet', *Frontiers in Endocrinology*, 13, p. 830325. doi:[10.3389/fendo.2022.830325](https://doi.org/10.3389/fendo.2022.830325).
2. Cannataro, R. *et al.* (2022) 'Ketogenic Diet and Physical Exercise on Managing **Tarlov Cysts**: A Case Report', *Reports*, 5(2), p. 12. doi:[10.3390/reports5020012](https://doi.org/10.3390/reports5020012).