

Roundup - September 2022

New this month in therapeutic carbohydrate restriction and metabolic health.

Reviews/Mechanisms

1. A, A., M, K., M, M., Rj, K., D, L., A, K., 2022. Effect of Ketogenic Diets on Cardio-Metabolic Outcomes in **Cancer** Patients: A Systematic Review and Meta-Analysis of Controlled Clinical Trials. *Nutrition and cancer*. doi.[org/10.1080/01635581.2022.2117388](https://doi.org/10.1080/01635581.2022.2117388)
2. Dilliraj, L.N., Schiuma, G., Lara, D., Strazzabosco, G., Clement, J., Giovannini, P., Trapella, C., Narducci, M., Rizzo, R., 2022. The Evolution of Ketosis: Potential Impact on **Clinical Conditions**. *Nutrients* 14, 3613. doi.[org/10.3390/nu14173613](https://doi.org/10.3390/nu14173613)
3. King, A.N., Notaro, N.M., n.d. The Ketogenic Diet maintains insulin sensitivity and inhibits lipid accumulation in the **liver**. *The Journal of Physiology* n/a. doi.[org/10.1113/jp283784](https://doi.org/10.1113/jp283784)
4. Krakovski, M.A., Arora, N., Jain, S., Glover, J., Dombrowski, K., Hernandez, B., Yadav, H., Sarma, A.K., 2022. Diet-microbiome-gut-brain nexus in **acute and chronic brain injury**. *Front Neurosci* 16, 1002266. doi.[org/10.3389/fnins.2022.1002266](https://doi.org/10.3389/fnins.2022.1002266)
5. Papazafropoulou, A.K., Georgopoulos, M.M., Katsilambros, N.L., 2021. Ketone bodies and the **heart**. *Arch Med Sci Atheroscler Dis* 6, e209–e214. doi.[org/10.5114/amsad.2021.112475](https://doi.org/10.5114/amsad.2021.112475)
6. Shen, S., Iyengar, N.M., 2022. Insulin-Lowering Diets in **Metastatic Cancer**. *Nutrients* 14, 3542. doi.[org/10.3390/nu14173542](https://doi.org/10.3390/nu14173542)
7. Wang, Y., Chi, H., 2022. Fasting as key tone for **COVID** immunity. *Nat Metab* 1–3. doi.[org/10.1038/s42255-022-00646-1](https://doi.org/10.1038/s42255-022-00646-1)
8. Lim, J.-M., Letchumanan, V., Tan, L.T.-H., Hong, K.-W., Wong, S.-H., Ab Mutalib, N.-S., Lee, L.-H., Law, J.W.-F., 2022. Ketogenic Diet: A Dietary Intervention via **Gut Microbiome Modulation** for the Treatment of Neurological and Nutritional Disorders (a Narrative Review). *Nutrients* 14, 3566. doi.[org/10.3390/nu14173566](https://doi.org/10.3390/nu14173566)
9. Eller, O.C., Willits, A.B., Young, E.E., Baumbauer, K.M., 2022. Pharmacological and non-pharmacological therapeutic interventions for the treatment of **spinal cord injury-induced pain**. *Front Pain Res (Lausanne)* 3, 991736. doi.[org/10.3389/fpain.2022.991736](https://doi.org/10.3389/fpain.2022.991736)
10. Grech, O., Sassani, M., Terwindt, G., Lavery, G.G., Mollan, S.P., Sinclair, A.J., 2022. Alterations in metabolic flux in **migraine** and the translational relevance. *The Journal of Headache and Pain* 23. doi.[org/10.1186/s10194-022-01494-w](https://doi.org/10.1186/s10194-022-01494-w)
11. Mohammadifard, N., Haghghatdoost, F., Rahimlou, M., Rodrigues, A.P.S., Gaskarei, M.K., Okhovat, P., de Oliveira, C., Silveira, E.A., Sarrafzadegan, N., 2022. The Effect of Ketogenic Diet on Shared Risk Factors of **Cardiovascular Disease and Cancer**. *Nutrients* 14, 3499. doi.[org/10.3390/nu14173499](https://doi.org/10.3390/nu14173499)

12. Ojo, T.K., Joshua, O.O., Ogedegbe, O.J., Oluwole, O., Ademidun, A., Jesuyajolu, D., 2022. Role of Intermittent Fasting in the Management of **Prediabetes and Type 2 Diabetes** Mellitus. Cureus 14. doi.[org/10.7759/cureus.28800](https://doi.org/10.7759/cureus.28800)
13. Simpson, S.J., Raubenheimer, D., Black, K.I., Conigrave, A.D., n.d. Weight gain during the **menopause** transition: Evidence for a mechanism dependent on protein leverage. BJOG: An International Journal of Obstetrics & Gynaecology n/a. doi.[org/10.1111/1471-0528.17290](https://doi.org/10.1111/1471-0528.17290)

Trials/Studies

1. Li, X., Shi, Z., Byanyima, J., Morgan, P.T., et al, 2022. Brain glutamate and sleep efficiency associations following a ketogenic diet intervention in individuals with **Alcohol Use Disorder**. Drug and Alcohol Dependence Reports 100092. doi.[org/10.1016/j.dadr.2022.100092](https://doi.org/10.1016/j.dadr.2022.100092)
2. Omar, E.M., Omran, G.A., Mustafa, M.F., El-Khodary, N.M., 2022. Intermittent fasting during adjuvant chemotherapy may promote differential stress resistance in **breast cancer** patients. Journal of the Egyptian National Cancer Institute 34, 38. doi.[org/10.1186/s43046-022-00141-4](https://doi.org/10.1186/s43046-022-00141-4)
3. Thio, C.L.-P., Lai, A.C.-Y., Ting, Y.-T., Chi, P.-Y., Chang, Y.-J., 2022. The ketone body β-hydroxybutyrate mitigates ILC2-driven **airway inflammation** by regulating mast cell function. Cell Reports 40. doi.[org/10.1016/j.celrep.2022.111437](https://doi.org/10.1016/j.celrep.2022.111437)
4. Unwin, J., Delon, C., Giæver, H., Kennedy, C., Painschab, M., Sandin, F., Poulsen, C.S., Wiss, D.A., 2022. Low carbohydrate and psychoeducational programs show promise for the treatment of **ultra-processed food addiction**. Frontiers in Psychiatry 13. doi.[org/10.3389/fpsy.2022.1005523](https://doi.org/10.3389/fpsy.2022.1005523)
5. Valente, M., Garbo, R., Filippi, F., Antonutti, A., Ceccarini, V., Tereshko, Y., Di Lorenzo, C., Gigli, G.L., 2022. **Migraine** Prevention through Ketogenic Diet: More than Body Mass Composition Changes. J Clin Med 11, 4946. doi.[org/10.3390/jcm11174946](https://doi.org/10.3390/jcm11174946)
6. Kackley, M.L., Brownlow, M.L., Buga, A., Crabtree, C.D., Sapper, T.N., O'Connor, A., Volek, J.S., 2022. The effects of a 6-week controlled, hypocaloric ketogenic diet, with and without exogenous ketone salts, on cognitive performance and mood states in **overweight and obese** adults. Frontiers in Neuroscience 16. doi.[org/10.3389/fnins.2022.971144](https://doi.org/10.3389/fnins.2022.971144)

Case Studies

1. Alam, L., Fishberg, R., 2022. Ketogenic diets exacerbating **hyperlipidemia in APOE** variants. Atherosclerosis 355, 136. doi.[org/10.1016/j.atherosclerosis.2022.06.617](https://doi.org/10.1016/j.atherosclerosis.2022.06.617) (of note, CAC=0 in both cases)
2. Ünalp, A., Köse, M., Karaoğlu, P., Güzin, Y., Yılmaz, Ü., 2022. A rare case of **hypomyelinating leukodystrophy-14** benefiting from ketogenic diet therapy. Turk J Pediatr 64, 747–753. doi.[org/10.24953/turkped.2021.1662](https://doi.org/10.24953/turkped.2021.1662)
3. Tan, D., Zhao, J., Yang, W., Yuan, F., 2022. Significance of Calorie-Restricted Ketogenic Diet for Lung **Cancer** with Brain Metastases and Hepatoma with Pulmonary Metastases: Two Case Reports. Arch Clin Biomed Res 06. <https://doi.org/10.26502/acbr.50170293>