

Roundup - December 2022

New this month in therapeutic carbohydrate restriction and metabolic health.

Consensus Statements/Reviews

1. ElSayed, N.A., Aleppo, G., Aroda, V.R., et al., 2023. 5. Facilitating Positive Health Behaviors and Well-being to Improve Health Outcomes: *Standards of Care in Diabetes—2023*. *Diabetes Care* 46, S68–S96. <https://doi.org/10.2337/dc23-S005>
2. Hassapidou, M., Vlassopoulos, A., Kalliostra, M., et al, 2022. European Association for the Study of Obesity Position Statement on Medical Nutrition Therapy for the Management of Overweight and Obesity in Adults Developed in Collaboration with the European Federation of the Associations of Dietitians. OFA 1–18. <https://doi.org/10.1159/000528083>

Metabolic (Diabetes/Obesity/CVD and other)

1. Cai, W.-Y., Luo, X., Lv, H.-Y., et al, J., 2022. Insulin resistance in women with recurrent miscarriage: a systematic review and meta-analysis. *BMC Pregnancy Childbirth* 22, 916. <https://doi.org/10.1186/s12884-022-05256-z>
2. Cignarelli, A., Santi, D., Genchi, V.A., et al, 2022. Very low-calorie ketogenic diet rapidly augments testosterone levels in non-diabetic obese subjects. *Andrology*. <https://doi.org/10.1111/andr.13357>
3. Detopoulou, P., Papadopoulou, S.K., Voulgaridou, G., et al., 2022. Ketogenic Diet and Vitamin D Metabolism: A Review of Evidence. *Metabolites* 12, 1288. <https://doi.org/10.3390/metabo12121288>
4. Hansen, C.D., Gram-Kampmann, E.-M., Hansen, J.K., et al, 2022. Effect of Calorie-Unrestricted Low-Carbohydrate, High-Fat Diet Versus High-Carbohydrate, Low-Fat Diet on Type 2 Diabetes and Nonalcoholic Fatty Liver Disease : A Randomized Controlled Trial. *Ann Intern Med*. <https://doi.org/10.7326/M22-1787>
5. Kersten, S., 2023. The impact of fasting on adipose tissue metabolism. *Biochimica et Biophysica Acta (BBA) - Molecular and Cell Biology of Lipids* 1868, 159262. <https://doi.org/10.1016/j.bbaliip.2022.159262>
6. Luo, W., Zhang, J., Xu, D., Zhou, Y., et al, 2022. Low carbohydrate ketogenic diets reduce cardiovascular risk factor levels in obese or overweight patients with T2DM: A meta-analysis of randomized controlled trials. *Front Nutr* 9, 1092031. <https://doi.org/10.3389/fnut.2022.1092031>
7. Obermayer, A., Tripolt, N.J., Pferschy, P.N., et al, 2022. Efficacy and Safety of Intermittent Fasting in People With Insulin-Treated Type 2 Diabetes (INTERFAST-2)-A Randomized Controlled Trial. *Diabetes Care* dc221622. <https://doi.org/10.2337/dc22-1622>
8. Teke Kisa, P., Güzel, O., Arslan, N., Demir, K., 2022. Positive effects of ketogenic diet on weight control in children with obesity due to Prader-Willi syndrome. *Clin Endocrinol (Oxf)*. <https://doi.org/10.1111/cen.14864>
9. Srivastava, S., Pawar, V.A., Tyagi, A., Sharma, K.P., Kumar, V., Shukla, S.K., 2023. Immune Modulatory Effects of Ketogenic Diet in Different Disease Conditions. *Immuno* 3, 1–15. <https://doi.org/10.3390/immuno3010001>

10. Enders, J., Elliott, D., Wright, D., 2022. Emerging Nonpharmacologic Interventions to Treat Diabetic Peripheral Neuropathy. *Antioxid Redox Signal.* <https://doi.org/10.1089/ars.2022.0158> ABSTRACT

Community/Web based

1. Pujol-Busquets, G., Smith, J., Fàbregues, S., Bach-Faig, A., Larmuth, K., 2023. Community Assessment for a Low-Carbohydrate Nutrition Education Program in South Africa. *Nutrients* 15, 67. <https://doi.org/10.3390/nu15010067>
2. Valinskas, S., Aleknavicius, K., Nakrys, M., Jonusas, J., 2022. Fasting and weight loss: mobile application-based approach. *BMC Nutrition* 8, 144. <https://doi.org/10.1186/s40795-022-00645-1>

Neuropsychiatry

1. Yu, B.J., Oz, R.S., Sethi, S., 2023. Ketogenic diet as a metabolic therapy for bipolar disorder: Clinical developments. *Journal of Affective Disorders Reports* 11, 100457. <https://doi.org/10.1016/j.jadr.2022.100457>
2. Koning, E., McDonald, A., Bambokian, A., Gomes, F.A., Vorstman, J., et al, 2022. The concept of “metabolic jet lag” in the pathophysiology of bipolar disorder: implications for research and clinical care. *CNS Spectrums* 1–10. <https://doi.org/10.1017/S1092852922001195>
3. Kakani, G., Ata, F., 2022. The KDEP Trial: **Protocol** for a phase II, multicenter, open label, randomized controlled trial to evaluate the efficacy of ketogenic diet for symptomatic improvement of moderate to severe Major Depressive Disorder. *Principles and Practice of Clinical Research Journal* 8, 77–83. <https://doi.org/10.21801/ppcrj.2022.83.10> PDF
4. Buck, P., Joli, J., Zipfel, S., Stengel, A., 2022. Carbohydrate malabsorption in anorexia nervosa: a systematic review. *J Eat Disord* 10, 189. <https://doi.org/10.1186/s40337-022-00713-8> (possible role of TCR approach in addition to neurometabolic effects on mental health parameters)

Neurology

1. Dyńka, D., Kowalcze, K., Paziewska, A., 2022. The Role of Ketogenic Diet in the Treatment of Neurological Diseases. *Nutrients* 14, 5003. <https://doi.org/10.3390/nu14235003>
2. Imdad, K., Abualait, T., Kanwal, A., AlGhannam, Z.T., et al, 2022. The Metabolic Role of Ketogenic Diets in Treating Epilepsy. *Nutrients* 14, 5074. <https://doi.org/10.3390/nu14235074>
3. Lobo, F., Haase, J., Brandhorst, S., 2022. The Effects of Dietary Interventions on Brain Aging and Neurological Diseases. *Nutrients* 14, 5086. <https://doi.org/10.3390/nu14235086>
4. Shelkowitz, E., Saneto, R.P., Al-Hertani, W., Lubout, C.M.A., et al, 2022. Ketogenic diet as a glycine lowering therapy in nonketotic hyperglycinemia and impact on brain glycine levels. *Orphanet J Rare Dis* 17, 423. <https://doi.org/10.1186/s13023-022-02581-6>
5. Skrobas, U., Duda, P., Bryliński, Ł., Drożak, P., Pelczar, M., Rejdak, K., 2022. Ketogenic Diets in the Management of Lennox-Gastaut Syndrome—Review of Literature. *Nutrients* 14, 4977. <https://doi.org/10.3390/nu14234977>
6. Zhou, Y., Sun, L., Wang, H., 2022. Ketogenic Diet for Neonatal Hypoxic-Ischemic Encephalopathy. *ACS Chem Neurosci.* <https://doi.org/10.1021/acschemneuro.2c00609> ABSTRACT
7. Chen, M., Zhao, J., Ding, X., Qin, Y., Wu, X., Li, X., Wang, L., Jiang, G., 2023. Ketogenic diet and calorie-restricted diet attenuate ischemic brain injury via UBR4 and downstream Camk II /TAK1/JNK signaling. *Journal of Functional Foods* 100, 105368. <https://doi.org/10.1016/j.jff.2022.105368> (preclinical)