

Roundup - October 2022

New this month in therapeutic carbohydrate restriction and metabolic health.

Diabetes/Obesity/CVD/Other metabolic

1. Apekey, T.A., Maynard, M.J., Kittana, M., Kunutsor, S.K., 2022. Comparison of the Effectiveness of Low Carbohydrate Versus Low Fat Diets, in Type 2 Diabetes: Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Nutrients* 14, 4391. doi.org/10.3390/nu14204391
2. Vargas-Molina, S., Gómez-Urquiza, J.L., García-Romero, J., Benítez-Porres, J., 2022. Effects of the Ketogenic Diet on Muscle Hypertrophy in Resistance-Trained Men and Women: A Systematic Review and Meta-Analysis. *Int J Environ Res Public Health* 19, 12629. doi.org/10.3390/ijerph191912629
3. Zhao, H., Jin, H., Xian, J., Zhang, Z., Shi, J., Bai, X., 2022. Effect of Ketogenic Diets on Body Composition and Metabolic Parameters of Cancer Patients: A Systematic Review and Meta-Analysis. *Nutrients* 14, 4192. doi.org/10.3390/nu14194192
4. Klement, R.J., n.d. Was there a need for high carbohydrate content in Neanderthal diets? *American Journal of Biological Anthropology* n/a. doi.org/10.1002/ajpa.24643
5. Cummings, P.J., Noakes, T.D., Nichols, D.M., Berchou, K.D., Kreher, M.D., Washburn, P.J., 2022. Lifestyle Therapy Targeting Hyperinsulinemia Normalizes Hyperglycemia and Surrogate Markers of Insulin Resistance in a Large, Free-Living Population. *AJPM Focus* 1. doi.org/10.1016/j.focus.2022.100034
6. Di Rosa, C., Lattanzi, G., Spiezia, C., Imperia, E., Piccirilli, S., Beato, I., Gaspa, G., Micheli, V., De Joannon, F., Vallecorsa, N., Ciccozzi, M., Defeudis, G., Manfrini, S., Khazrai, Y.M., 2022. Mediterranean Diet versus Very Low-Calorie Ketogenic Diet: Effects of Reaching 5% Body Weight Loss on Body Composition in Subjects with Overweight and with Obesity—A Cohort Study. *IJERPH* 19, 13040. doi.org/10.3390/ijerph192013040
7. Brinkworth, G.D., Wycherley, T.P., Taylor, P.J., Thompson, C.H., 2022. A Health Care Professional Delivered Low Carbohydrate Diet Program Reduces Body Weight, Haemoglobin A1c, Diabetes Medication Use and Cardiovascular Risk Markers—A Single-Arm Intervention Analysis. *Nutrients* 14, 4406. doi.org/10.3390/nu14204406
8. Dorans, K.S., Bazzano, L.A., Qi, L., He, H., Chen, J., Appel, L.J., Chen, C.-S., Hsieh, M.-H., Hu, F.B., Mills, K.T., Nguyen, B.T., O'Brien, M.J., Samet, J.M., Uwaifo, G.I., He, J., 2022. Effects of a Low-Carbohydrate Dietary Intervention on Hemoglobin A_{1c}: A Randomized Clinical Trial. *JAMA Netw Open* 5, e2238645. doi.org/10.1001/jamanetworkopen.2022.38645
9. 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:

[10.3389/fnins.2022.971144](https://doi.org/10.3389/fnins.2022.971144)

10. Kord-Varkaneh, H., Salehi-Sahlabadi, A., Tinsley, G.M., Santos, H.O., Hekmatdoost, A., 2022. Effects of time-restricted feeding (16/8) combined with a low-sugar diet on the management of non-alcoholic fatty liver disease: A randomized controlled trial. *Nutrition* 105, 111847. doi:[org/10.1016/j.nut.2022.111847](https://doi.org/10.1016/j.nut.2022.111847)

Reproductive Health

1. Magagnini, M.C., Condorelli, R.A., Cimino, L., Cannarella, R., Aversa, A., Calogero, A.E., Vignera, S.L., 2022. Does the Ketogenic Diet Improve the Quality of Ovarian Function in Obese Women? *Nutrients* 14. doi:[org/10.3390/nu14194147](https://doi.org/10.3390/nu14194147)
2. Whittaker, J., 2022. High-protein diets and testosterone. *Nutr Health* 026010602211329. doi:[org/10.1177/02601060221132922](https://doi.org/10.1177/02601060221132922)
3. Kalam, F., Akasheh, R.T., Cienfuegos, S., Ankireddy, A., Gabel, K., Ezpeleta, M., Lin, S., Tamatam, C.M., Reddy, S.P., Spring, B., Khan, S.A., Varady, K.A., 2022. Effect of time-restricted eating on sex hormone levels in premenopausal and postmenopausal females. *Obesity (Silver Spring)*. doi:[org/10.1002/oby.23562](https://doi.org/10.1002/oby.23562)
4. Chen, T.-Y., Huang, W.-Y., Liu, K.-H., Kor, C.-T., Chao, Y.-C., Wu, H.-M., 2022. The relationship between hot flashes and fatty acid binding protein 2 in postmenopausal women. *PLoS ONE* 17, e0276391. doi:[org/10.1371/journal.pone.0276391](https://doi.org/10.1371/journal.pone.0276391)
5. Bermingham, K.M., Linenberg, I., Hall, W.L., Kadé, K., Franks, P.W., Davies, R., Wolf, J., Hadjigeorgiou, G., Asnicar, F., Segata, N., Manson, J.E., Newson, L.R., Delahanty, L.M., Ordovas, J.M., Chan, A.T., Spector, T.D., Valdes, A.M., Berry, S.E., 2022. Menopause is associated with postprandial metabolism, metabolic health and lifestyle: The ZOE PREDICT study. *eBioMedicine* 104303. doi:[org/10.1016/j.ebiom.2022.104303](https://doi.org/10.1016/j.ebiom.2022.104303)

Neurology

1. Huynh, P., Calabrese, P., 2022. Pathophysiological Abnormalities in Migraine Ameliorated by Ketosis: A Proof-of-Concept Review. *Journal of Integrative Neuroscience* 21, 167. doi:[org/10.31083/j.jin2106167](https://doi.org/10.31083/j.jin2106167)
2. Jayasinghe, M., Prathiraja, O., Kayani, A.M.A., Jena, R., Caldera, D., Silva, M.S., Singhal, M., Pierre, J., n.d. The Role of Diet and Gut Microbiome in Multiple Sclerosis. *Cureus* 14, e28975. doi:[org/10.7759/cureus.28975](https://doi.org/10.7759/cureus.28975)
3. Kaviyarasan, S., Chung Sia, E.L., Retinasamy, T., Arulsamy, A., Shaikh, M.F., 2022. Regulation of gut microbiome by ketogenic diet in neurodegenerative diseases: A

molecular crosstalk. *Front. Aging Neurosci.* 14, 1015837.

doi:doi.org/10.3389/fnagi.2022.1015837

4. Omori, N.E., Woo, G.H., Mansor, L.S., 2022. Exogenous Ketones and Lactate as a Potential Therapeutic Intervention for Brain Injury and Neurodegenerative Conditions. *Front. Hum. Neurosci.* 16, 846183. doi:doi.org/10.3389/fnhum.2022.846183

Inflammatory Bowel Disease

1. Alsharairi, N.A., 2022. The Therapeutic Role of Short-Chain Fatty Acids Mediated Very Low-Calorie Ketogenic Diet–Gut Microbiota Relationships in Paediatric Inflammatory Bowel Diseases. *Nutrients* 14, 4113. doi:doi.org/10.3390/nu14194113

Exercise/Muscle/Bone

1. Barrea, L., de Alteriis, G., Muscogiuri, G., Vetrani, C., Verde, L., Camajani, E., Aprano, S., Colao, A., Savastano, S., 2022. Impact of a Very Low-Calorie Ketogenic Diet (VLCKD) on Changes in Handgrip Strength in Women with Obesity. *Nutrients* 14, 4213. doi:doi.org/10.3390/nu14194213
2. Camajani, E., Feraco, A., Proietti, S., Basciani, S., Barrea, L., Armani, A., Lombardo, M., Gnessi, L., Caprio, M., 2022. Very low calorie ketogenic diet combined with physical interval training for preserving muscle mass during weight loss in sarcopenic obesity: A pilot study. *Frontiers in Nutrition* 9. doi:doi.org/10.3389/fnut.2022.955024
3. Evans, M., McClure, T.S., Koutnik, A.P., Egan, B., 2022. Exogenous Ketone Supplements in Athletic Contexts: Past, Present, and Future. *Sports Med.* doi:doi.org/10.1007/s40279-022-01756-2
4. Papageorgiou, M., Biver, E., Mareschal, J., Phillips, N.E., Hemmer, A., Biolley, E., Schwab, N., Manoogian, E.N.C., Gonzalez Rodriguez, E., Aeberli, D., Hans, D., Pot, C., Panda, S., Rodondi, N., Ferrari, S.L., Collet, T.-H., 2022. The effects of time-restricted eating and weight loss on bone metabolism and health: a 6-month randomized controlled trial. *Obesity (Silver Spring)*. doi:doi.org/10.1002/oby.23577

Parenteral/enteral nutrition

1. Haines, K.L., Ohnuma, T., Trujillo, C., Osamudiamen, O., Krishnamoorthy, V., Raghunathan, K., Wischmeyer, P.E., 2022. Hospital change to mixed lipid emulsion from soybean oil-based lipid emulsion for parenteral nutrition in hospitalized and critically ill adults improves outcomes: a pre–post-comparative study. *Crit Care* 26, 317. doi:doi.org/10.1186/s13054-022-04194-8

2. Nourmohammadi, M., Moradi moghdam, O., Lahiji, M.N., Shariatpanahi, Z.V., 2022. High-fat low-carbohydrate enteral feeding enriched with olive oil and acute respiratory failure: a double-blind, randomized, controlled trial. Clinical Nutrition ESPEN. doi.[org/10.1016/j.clnesp.2022.10.017](https://doi.org/10.1016/j.clnesp.2022.10.017)

Case Studies

1. Dugandzic, M.K., Pierre-Michel, E.-C., Kalayjian, T., 2022. Ketogenic Diet Initially Masks Symptoms of Hypercortisolism in Cushing's Disease. Metabolites 12, 1033. doi.[org/10.3390/metabo12111033](https://doi.org/10.3390/metabo12111033)
2. Yar, N., Mukona, L.T., Nguyen, K., Nalbandyan, L., Mukona, L., St. Fleur, G., Lamberty, N.L., Zullo, K., Le, A., Van, A., Allen, B., 2022. Consuming an All-Meat Ketogenic Diet for the Long-Term Management of Candida Vulvovaginitis and Vaginal Hidradenitis Suppurativa: A 47-Month Follow-Up Case Report. Cureus. doi.[org/10.7759/cureus.30510](https://doi.org/10.7759/cureus.30510)

Other

1. Neri, L. de C.L., Sampaio, L.P. de B., 2022. Validation of ketogenic diet adherence questionnaire: Keto-check. Arq Neuropsiquiatr 80, 794–801. doi.[org/10.1055/s-0042-1755343](https://doi.org/10.1055/s-0042-1755343)