

## REFERENCES FOR KETOGENIC STRATEGIES FOR ALZHEIMER'S, MCI, AND PARKINSON'S

Prepared by Mary T. Newport, M.D.

Updated December 2025

### COCONUT OIL & MCT OIL: Studies & Reviews

- Abe S, E Osamu, M Suzuki. "Medium-chain triglycerides in combination with leucine and vitamin D benefit cognition in frail elderly adults: A randomized controlled trial." *J Nutr Sci Vitaminol* Vol. 63 (2017): 133-140.
- Abe S, O Ezaki, M Suzuki. "Medium-chain triglycerides in combination with leucine and vitamin D increase muscle strength and function in frail elderly adults in a randomized controlled trial." *J Nutr* Vol. 146 No. 5 (2016): 1017-26.
- Abe S, Ezaki O, Suzuki M. Medium-chain triglycerides (8:0 and 10:0) are promising nutrients for sarcopenia: a randomized controlled trial. *Am J Clin Nutr*. 2019 Sep 1;110(3):652-665.
- Abe S, Ezaki O, Suzuki M. Medium-Chain Triglycerides (8:0 and 10:0) Increase Mini-Mental State Examination (MMSE) Score in Frail Elderly Adults in a Randomized Controlled Trial. *J Nutr*. 2020 Sep 1;150(9):2383-2390.
- Bonnechère B, Stephens EB, Boileau AC, Ducker M, Stubbs BJ. The Effect of Exogenous Ketone Bodies on Cognition in Patients with Mild Cognitive Impairment, Alzheimer's Disease and in Healthy Adults: A Systematic Review and Meta-Analysis. *medRxiv* [Preprint]. 2025 Sep 18:2025.09.17.25335999.
- Castellano C-A, S Nugent, N Paquet, et al. "Lower brain <sup>18</sup>F-fluorodeoxyglucose uptake but normal <sup>11</sup>C-acetoacetate metabolism in mild Alzheimer's disease dementia." *J Alzheim Dis* Vol. 43 (2015): 1343-1353.
- Chatterjee P, et al. "Potential of coconut oil and medium chain triglycerides in the prevention and treatment of Alzheimer's disease." *Mechanisms of Ageing and Development* V. 186 (2020):111209.
- Costantini LC, Barr LJ, Vogel JL, Henderson ST. Hypometabolism as a therapeutic target in Alzheimer's disease. *BMC Neurosci*. 2008 Dec 3;9 Suppl 2(Suppl 2):S16.
- Constantini, et al. "Study of the ketogenic agent AC-1202 in mild to Moderate Alzheimer's disease: a randomized, double-blind, placebo-controlled, multicenter trial," *Nutr and Metab* Vol. 6 No. 31 (2009): 1-25.
- Courchesne-Loyer A, M Fortier, J Tremblay-Mercier, et al. "Stimulation of mild, sustained ketonemia by medium-chain triacylglycerols in healthy humans: Estimated potential contribution to brain energy metabolism." *Nutrition*. (2013): 1-6.
- Courchesne-Loyer A, E Croteau, C-A Castellano, et al. "Inverse relationship between brain glucose and ketone metabolism in adults during short-term moderate dietary ketosis: A dual tracer quantitative positron emission tomography study." *JCBFM*. Open Access (2016): E1-9.
- Croteau E, C-A Castellano, MA Richard, et al. "Ketogenic medium chain triglycerides increase brain energy metabolism in Alzheimer's disease." *J Alzheim Dis* In press May 2018.
- Cunnane S, et al. "Brain energy rescue: an emerging therapeutic concept for neurodegenerative disorders of aging." *Nature Reviews Drug Discovery* V. 19 No. 9 (2020):609-633.
- Cunnane SC, A Courchesne-Loyer, V St-Pierre, et al. "Can ketones compensate for deteriorating brain glucose uptake during ageing? Implications for the risk and treatment of Alzheimer's disease." *Ann NY Acad Sci* (2016): 1-9.
- De la Rubia Ortí JE, et al. "Improvement of main cognitive functions in patients with Alzheimer's disease after treatment with coconut oil enriched Mediterranean diet: A pilot study." *J Alzheimers Dis* V. 65 No. 2 (2018):577-587.

Farah BA. "Effects of caprylic triglyceride on cognitive performance and cerebral glucose metabolism in mild Alzheimer's disease: a single-case observation." *Frontiers in Ageing Neuroscience* Vol. 6 No. 133 (2014): 1-5.

Fernando WM, et al. "The role of dietary coconut for the prevention and treatment of Alzheimer's disease." *Br J Nutr* Vol. 114 No. 1 (2015): 1-14.

Fernando MG, Silva R, Fernando WMADB, de Silva HA, Wickremasinghe AR, Dissanayake AS, Sohrabi HR, Martins RN, Williams SS. Effect of Virgin Coconut Oil Supplementation on Cognition of Individuals with Mild-to-Moderate Alzheimer's Disease in Sri Lanka (VCO-AD Study): A Randomized Placebo-Controlled Trial. *J Alzheimers Dis*. 2023;96(3):1195-1206.

Fortier M, et al. "A ketogenic drink improves cognition in mild cognitive impairment: Results of a 6-month RCT." *Alzheimers Dement* V. 17 No. 3 (2021):543–52.

Fortier, et al. "A ketogenic drink improves brain energy and some measures of cognition in MCI." *Alzheim and Dement* (2019): e1-10.

Henderson ST, et al. "Study of the ketogenic agent AC-1202 in mild to moderate Alzheimer's disease: a randomized, double-blind, placebo-controlled, multicenter trial," *Nutrition and Metabolism* 2009 6(31): 1-25.

Juby AG, et al. "Use of medium chain triglyceride (MCT) oil in subjects with Alzheimer's disease: A randomized, double-blind, placebo-controlled, crossover study, with an open-label extension." *Alzheimers Dement* V. 8 No. 1 (2022):e12259.

Maynard SD and J Gelblum. Retrospective cohort study of the efficacy of caprylic triglyceride in patients with mild-to-moderate Alzheimer's disease. *Neuropsychiatric Disease and Treatment* Vol. 9 (2013):1619–1627.

Maynard SD and J Gelblum. Retrospective case studies of the efficacy of caprylic triglyceride in mild-to-moderate Alzheimer's disease. *Neuropsychiatric Disease and Treatment* Vol. 9 (2013):1629–1635.

Nafar F and KM Mearow. "Coconut oil attenuates the effects of amyloid-beta on cortical neurons in vitro." *J Alzheim Dis* 39 (2014): 233–23.

Neth BJ, A Mintz, Whitlow, et al. "Modified ketogenic diet is associated with improved cerebrospinal fluid biomarker profile, cerebral perfusion, and cerebral ketone body uptake in older adults at risk for Alzheimer's disease..." *Neurobio Aging* In press 2019:00:1-10.

Newport MT, TB VanItallie, Y Kashiwaya, et al. "A new way to produce hyperketonemia: use of a ketone ester in a case of Alzheimer's." *Alzheim and Dement* Vol. 11 No. 1 (2015):99-103.

Newport, Mary T. Ketogenic strategies for Alzheimer's disease and other memory impairments: History, rationale, and 288 caregiver case reports. *Medical Research Archives*, 202412 (4).

Newport MT, Dayrit FM. Analysis of 26 Studies of the Impact of Coconut Oil on Lipid Parameters: Beyond Total and LDL Cholesterol. *Nutrients*. 2025 Jan 30;17(3):514.

Ota M, J Matsuo, I Ishida, et al. "Effect of a ketogenic meal on cognitive function in elderly adults: potential for cognitive enhancement." *Psychopharmacology* Vol. 233 No. 21-22 (2016): 3797-3802.

Ota M, Matsuo J, Ishida I, et al. "Effects of a medium-chain triglyceride-based ketogenic formula on cognitive function in patients with mild-to-moderate Alzheimer's disease." *Neurosci Lett* V. 690 (2019):232-236.

Page KA, A Williamson, N Yu, et al. "Medium-chain fatty acids improve cognitive function in intensively treated type 1 diabetic patients and support *in vitro* synaptic transmission during acute hypoglycemia." *Diabetes* Vol. 58 No. 5 (May 2009): 1237–1244.

Phillips MCL, et al. "Low-fat versus ketogenic diet in Parkinson's disease: A pilot randomized controlled trial." *Mov Disord* V. 33 No. 8 (2018):1306-1314. (Coconut oil in nearly all keto diet program recipes)

Phillips MCL, et al. "Randomized crossover trial of a modified ketogenic diet in Alzheimer's disease." *Alzheimers Res Ther* V. 13 No. 1 (2021):51. (Coconut oil in nearly all keto diet program recipes)

Rahima NS, SM Li, et al. "Enhanced memory in Wistar rats by virgin coconut oil is associated with increased antioxidative, cholinergic activities and reduced oxidative stress." *Pharmac Biol* V. 55 NO. 1 (2017): 825–832.

Rebello CJ, JN Kellera , AG Liua , et al. Pilot feasibility and safety study examining the effect of medium chain triglyceride supplementation in subjects with mild cognitive impairment: A randomized controlled trial. *BBA Clinical* Vol. 3 (2015): 123–125.

Reger MA, ST Henderson, et. al. "Effects of b-Hydroxybutyrate on cognition in memory-impaired adults," *Neurobiology of Ageing* Vol. 25 (2004):311-314.

Roy M, Rheault F, Croteau E, et al. "Fascicle- and glucose-specific deterioration in white matter energy supply in Alzheimer's Disease." *J Alzheimers Dis* V. 76 No. 3 (2020):863-881.

Roy M, Fortier M, Rheault F, et al. "A ketogenic supplement improves white matter energy supply and processing speed in mild cognitive impairment." *Alzheimers Dement* V. 7 No. 1 (2021):e12217.

Roy M, Edde M, Fortier M, et al. "A ketogenic intervention improves dorsal attention network functional and structural connectivity in mild cognitive impairment." *Neurobiol Aging* V. 115 (2022):77-87.

Taylor M K, D K Sullivan, J D Mahnken, et al. "Feasibility and efficacy data from a ketogenic diet intervention in Alzheimer's disease." *Alzheim and Dement* (2017): 1-9.

Vandenbergh C, et al. "Tricaprylin alone increases plasma ketone response more than coconut oil or other medium-chain triglycerides: an acute crossover study in healthy adults." *Curr Dev Nutr* V. 1 No. 4 (2017):e000257.

Vandenbergh C, et al. "A short-term intervention combining aerobic exercise with medium-chain triglycerides (MCT) is more ketogenic than either MCT or aerobic exercise alone: a comparison of normoglycemic and prediabetic older women." *Appl Physiol Nutr Metab* V. 44 No. 1 (2019):66–73.

Vandenbergh C...SC Cunnane et al. A reduced carbohydrate diet improves glycemic regulation in hyperglycemic older people in a retirement home: the SAGE study. *Applied Physiology, Nutrition, and Metabolism*. 2025 V. 50: 1-10.

Watanabe S and Tsujino S. "Applications of medium-chain triglycerides in foods." *Frontiers in Nutrition* V. 9 (2022):802805.

Xu Q, Y Zhang, X Zhang, et al. "Medium-chain triglycerides improved cognition and lipid metabolomics in mild to moderate Alzheimer's disease patients with APOE4/-". *Clinical Nutrition* IN PRESS (2020).

Yang IH, et al. "Aceite de coco: tratamiento alternativo no farmacológico frente a la enfermedad de Alzheimer." *Nutr Hosp* V. 32 (2015): 2822-2827.

## **KETONES, KETOGENIC DIET, AND OTHER KETOGENIC STRATEGIES IN ALZHEIMER'S, MCI, PARKINSON'S, AGING: Animal, *in vitro* studies, Human Trials & Reviews**

Andersen JV, et al. "β-hydroxybutyrate and medium-chain fatty acids are metabolized by different cell types in mouse cerebral cortex slices." *Neurochem Res* V. 48 No. 1 (2022):54-61.

Augustin K, A Khabbush, S Williams, et al. "Mechanisms of action for the medium-chain triglyceride ketogenic diet in neurological and metabolic disorders." *Lancet Neurol* Vol. 17 (2018): 84–89.

Avgerinos KI, et al. Ketone ester effects on biomarkers of brain metabolism and cognitive performance in cognitively intact adults > 55 years old. A study protocol for a double-blinded randomized controlled clinical trial. *J Prev Alz Dis* 2022;1(9):54-66.

Baumeister A, et al. "Short-term influence of caffeine and medium-chain triglycerides on ketogenesis: A controlled double-blind intervention study." *J Nutr Metab* (2021):1861567.

Bergen SS, SA Hashim, TB VanItallie. Hyperketonemia induced in man by medium-chain triglyceride. *Diabetes* V. 15 No. 10 (1966):723-725.

Brandt J, Buchholz A, Henry-Barron B, et al. "Preliminary Report on the Feasibility and Efficacy of the Modified Atkins Diet for Treatment of Mild Cognitive Impairment and Early Alzheimer's Disease." *J Alzheimers Dis* V. 68 No. 3 (2019):969-981.

Cahill GF Jr., et al. "Alternate fuel utilization by brain." *Cerebral Metabolism and Neural Function* Williams & Wilkins, Baltimore, MD (1980):234-42.

Cahill GF Jr., et al. "Ketoacids? Good medicine?" *Trans Amer Clin Climatol Association* V. 114 (2003):149-63.

Cahill GF, Jr. "Fuel metabolism in starvation." *Annu Rev Nutr* V. 26 (2006):1-22.

Cahill GF, Jr. "Ketosis." *Kidney Int* V. 20 (1981): 416-425.

Castellano CA, et al. "A 3-Month Aerobic Training Program Improves Brain Energy Metabolism in Mild Alzheimer's Disease: Preliminary Results from a Neuroimaging Study." *J Alzheimers Dis* V. 56 No. 4 (2017):1459-68.

Clarke K, et al. "Kinetics, safety and tolerability of (R)-3-hydroxybutyl (R)-3- hydroxybutyrate in healthy adult subjects." *Regul Toxicol Pharmacol* V. 63 (2012): 401-8.

Cuenoud B, M Hartweg, JP Godin, et al. "Metabolism of Exogenous D-Beta-Hydroxybutyrate, an Energy Substrate Avidly Consumed by the Heart and Kidney." *Front Nutr* V. 7 (2020):13.

Cunnane S C, C R Menard, S S Likhodil, et al. "Carbon recycling into de novo lipogenesis is a major pathway in neonatal metabolism of linoleate and  $\alpha$ -linolenate." *Prost Leukotr and Essential Fatty Acids*. Vol. 60 No. 5 & 6. (1999): 387-92.

Curtis WM, et al. "NADPH and mitochondrial quality control as targets for a circadian-based fasting and exercise therapy for the treatment of Parkinson's disease." *Cells* V. 11 (2022): 2416

De la Monte SM, JR Wands. "Review of insulin and insulin-like growth factor expression, signaling, and malfunction in the central nervous system: Relevance to Alzheimer's disease." *Journal of Alzheimer's Disease* Vol. 7 (2005): 45-61.

De la Monte SM, JR Wands. "Alzheimer's disease is type 3 diabetes – evidence reviewed." *Journal of Diabetes Science and Technology*, Vol. 2 No. 6 (November 2008): 1101-1113.

Dehghan M, A Mente, X Zhang, et al. "Associations of fats and carbohydrate intake with cardiovascular disease and mortality in 18 countries from five continents (PURE): a prospective cohort study." *Lancet* Vol. 390 No. 10107 (2017):2050-2062.

Feinman R D, W K Pogozelski, A Astrup, et al. "Dietary Carbohydrate restriction as the first approach in diabetes management: Critical review and evidence base." *Nutrition* Vol. 31 (2015): 1-13.

Fery F, et al. "Ketone body turnover during and after exercise in overnight-fasted and starved humans." *Am J Physiol Endocrinol Metab* V. 245 (1983): 318-25.

Fischer T, et al. "Long-term ketone body therapy of severe multiple acyl-CoA dehydrogenase deficiency: a case report." *Nutrition* V. 60 (2019):122-8.

Giannos P, et al. "Medium-chain triglycerides may improve memory in non-demented older adults: a systematic review of randomized controlled trials." *BMC Geriatr* V. 22 No. 1 (2022):817.

Goldberg E L, J L Asher, R D Molony, et al.  $\beta$ -hydroxybutyrate deactivates neutrophil NLRP3 inflammasome to relieve gout flares. *Cell Rep*. Vol. 18 No. 9 (2017): 2077-87.

Han YM, et al. "Beta-hydroxybutyrate and its metabolic effects on age-associated pathology." *Exp Mol Med* V. 52 No. 4 (2020):548–55.

Hasselbalch SG, et al. "Changes in cerebral blood flow and carbohydrate metabolism during acute hyperketonemia." *Amer J Physiol* V. 270 (1996): E746–751.

Henderson ST (Inventor). "Combinations of medium-chain triglycerides and therapeutic agents for the treatment and prevention of Alzheimer's disease and other diseases resulting from reduced neuronal metabolism." [www.freepatentsonline.com](http://www.freepatentsonline.com). United States Patent 20080009467.

Henderson ST, et al. "Study of the ketogenic agent AC-1202 in mild to moderate Alzheimer's disease: a randomized, double-blind, placebo-controlled, multicenter trial." *Nutri Metab* V. 6, No. 31 (2009):1–25.

Henderson ST. "High carbohydrate diets and Alzheimer's disease." *Med Hypotheses* V. 62 (2004):689–700.

Henderson ST. "Ketone bodies as a therapeutic for Alzheimer's disease." *J Amer Soc for Experimental Neurotherapeutics* V. 5 (2008):470–80.

Hillebrandt HL, et al. "Cognition may improve with medium-chain triglyceride supplementation: A pilot study." AAIC (2021): Poster and audio presentation.

Kabara JJ, et al. "Fatty acids and derivatives as antimicrobial agents." *Antimicrobial Agents and Chemotherapy* (1972): 23-28.

Kashiwaya Y, K Sato, N Tsuchiya, et al. "Control of glucose utilization in working perfused rat heart." *The Journal of Biological Chemistry* Vol 269, No 41 (1994): 25502–25514.

Kashiwaya Y, T King, RL Veech. "Substrate signaling by insulin: A ketone bodies ratio mimics insulin action in heart." *American Journal of Cardiology* Vol 80, No 3A (1997): 50A–64A.

Kashiwaya Y, T Takeshima, N Mori, et al. "D-b-hydroxybutyrate protects neurons in models of Alzheimer's and Parkinson's disease." *PNAS* V. 97, No 10 (May 2000): 5440–5444.

Kashiwaya Y, C Bergman, J-H Lee, et al. "A ketone ester diet exhibits anxiolytic and cognition-sparing properties and lessens amyloid and tau pathologies in a mouse model of Alzheimer's." *Neurobiology of Ageing* Vol. 34 No. 6 (2013): 1530-9.

Kim ER, Kim SR, Cho W, et al. "Short Term Isocaloric Ketogenic Diet Modulates NLRP3 Inflammasome Via B-hydroxybutyrate and Fibroblast Growth Factor 21." *Front Immunol* V. 13 (2022):843520.

Kovács Z, B Brunner, C Ari. "Beneficial effects of exogenous ketogenic supplements on aging process and age-related neurodegenerative diseases." *Nutrients* V. 13, no. 7 (2021): 2197.

Krikorian R, Shidler MD, Summer SS, et al. "Nutritional ketosis for mild cognitive impairment in Parkinson's disease: A controlled pilot trial." *Clin Park Relat Disord* V. 1 (2019):41-47.

Maalouf M, et al. "The neuroprotective properties of calorie restriction, the ketogenic diet, and ketone bodies." *Brain Res Rev* V. 59 (2009): 293–315.

Madhavan SS, Roa Diaz S, Peralta S, Nomura M, King CD, Ceyhan KE, Lin A, Bhaumik D, Foulger AC, Shah S, Blade T, Gray W, Chamoli M, Eap B, Panda O, Diaz D, Garcia TY, Stubbs BJ, Ulrich SM, Lithgow GJ, Schilling B, Verdin E,

Chaudhuri AR, Newman JC.  $\beta$ -hydroxybutyrate is a metabolic regulator of proteostasis in the aged and Alzheimer disease brain. *Cell Chem Biol*. 2025 Jan 16;32(1):174-191.e8.

Mattson MP, et al. "Intermittent metabolic switching, neuroplasticity and brain health." *Nat Rev Neurosci* V. 19 No. 2 (2018):63–80.

Morrill SJ, KJ Gibas. "Ketogenic diet rescues cognition in ApoE4 patient with mild Alzheimer's disease: A case study." *Diabetes & Metabolic Syndrome: Clinical Research & Reviews* Vol. 13 (2019): 1187-1191.

Mujica-Parodi LR, Amgalan A, Sultan SF, Antal B, Sun X, Skiena S, Lithen A, Adra N, Ratai EM, Weistuch C, Govindarajan ST, Strey HH, Dill KA, Stufflebeam SM, Veech RL, Clarke K. Diet modulates brain network stability, a biomarker for brain aging, in young adults. *Proc Natl Acad Sci USA*. V. 117 No. 11 (2020):6170-6177.

Newman JC, Verdin E.  $\beta$ -Hydroxybutyrate: A Signaling Metabolite. *Annu Rev Nutr*. 2017 Aug 21;37:51-76.

Nonaka Y, T Tagaki, M Inai, et al. Lauric acid stimulates ketone body production in the KT-5 Astrocyte Cell Line. *J Oleo Science* Vol. 65 No. 8 (2016): 693-699.

Norgren J, Sindi S, Sandebring-Matton A, et al. "Ketosis after intake of coconut oil and caprylic acid-with and without glucose: A cross-over study in healthy older Adults." *Front Nutr* V. 7 (2020):40.

Norwitz, Mota, Norwitz, Clarke. "Multi-Loop Model of Alzheimer Disease: An Integrated Perspective on the Wnt/GSK3 $\beta$ ,  $\alpha$ -Synuclein, and Type 3 Diabetes Hypotheses." *Frontiers in Aging Neuroscience* July 31, 2019.

Norwitz NG, Jaramillo JG, Clarke K, Soto A. Ketotherapeutics for neurodegenerative diseases. *Int Rev Neurobiol*. 2020;155:141-168.

Nugent S, C-A Castellano, P Goffaux, et al. Glucose hypometabolism is highly localized, but lower cortical thickness and brain atrophy are widespread in cognitively normal older adults. *Am J Physiol Endocrinol Metab*. Vol. 306 (2014): e1315-21.

Nugent S, S Tremblay, K W Chen, et al. Brain glucose and acetoacetate metabolism: a comparison of young and older adults. *Neurobiol Ageing*. Vol. 35 No. 6 (2014): 1386-95.

Owen OE, AP Morgan, HG Kemp, et al. "Brain Metabolism during Fasting." *J Clin Invest* Vol. 46, No. 10 (1967): 1589-95.

Owen OE. "Ketone bodies as a fuel for the brain during starvation." *Biochem Mol Biol Educ* V. 33 No. 4 (2005): 246–51.

Page KA, et al. "Medium-chain fatty acids improve cognitive function in intensively treated type 1 diabetic patients and support in vitro synaptic transmission during acute hypoglycemia." *Diabetes* V. 58, No 5 (May 2009): 1237–44.

Pawlosky RJ, et al. "Effects of a dietary ketone ester on hippocampal glycolytic and tricarboxylic acid cycle intermediates and amino acids in a 3xTgAD mouse model of Alzheimer's disease." *J Neurochem*. V. 141 No. 2 (2017):195–207.

Peters R. "Ageing and the Brain." *Postgrad Med J* Vol. 82 (2006):84–88.

Phillips MCL, et al. "Low-fat versus ketogenic diet in Parkinson's disease: A pilot randomized controlled trial." *Mov Disord* V. 33 No. 8 (2018):1306-1314.

Phillips MCL, et al. "Randomized crossover trial of a modified ketogenic diet in Alzheimer's disease." *Alzheimers Res Ther* V. 13 No. 1 (2021):51.

Pietrzak D, et al. "The therapeutic role of ketogenic diet in neurological disorders." *Nutrients* V. 14 No. 9 (2022):1952.

Pi-Sunyer FX, et al. "Insulin and ketone responses to ingestion of medium and long-chain triglycerides in man." *Diabetes* V. 18 No. 2 (1969): 96–100.

Prins M. "Ketogenic diet and treatments: diet, ketones, and neurotrauma." *Epilepsia* V. 49 Suppl. 8 (2008):111–3.

Prins ML. "Cerebral metabolic adaptation and ketone metabolism after brain injury." *J Cereb Blood Flow Metab* V. 28 (2008): 1–16.

Sato K, Y Kashiwaya, RL Veech, et al. "Insulin, ketone bodies, and mitochondrial energy transduction." *FASEB Journal* Vol. 9 (1995): 651–658.

Senior JR, editor. *Medium-Chain Triglycerides*. University of Pennsylvania Press Anniversary Collection (reprint 2016 ed.), 1968.

Shippy DC, et al. "Beta-Hydroxybutyrate inhibits inflammasome activation to attenuate Alzheimer's disease pathology." *J Neuroinflammation* V. 17 No. 1 (2020):280

Soto-Mota A, et al. "Safety and tolerability of sustained exogenous ketosis using ketone monoester drinks for 28 days in healthy adults." *Regul Toxicol Pharmacol* V. 109 (2019):104506.

Stephens EB, Senadheera C, Roa-Diaz S, Peralta S, Alexander L, Silverman-Martin W, Yukawa M, Morris J, Johnson JB, Newman JC, Stubbs BJ. A Randomized Open-Label, Observational Study of the Novel Ketone Ester, Bis Octanoyl (R)-1,3-Butanediol, and Its Acute Effect on  $\beta$ -Hydroxybutyrate and Glucose Concentrations in Healthy Older Adults. *J Nutr Gerontol Geriatr*. 2025 Apr-Jun;44(2):103-122.

Stoykovich S, K Gibas. "APOE4, the door to insulin-resistant dyslipidemia and brain fog? A case study." *Alzheim Dement* Vol.11 (2019):264-269.

Stubbs BJ, et al. "On the metabolism of exogenous ketones in humans." *Front in Phys* V. 8 No. 848 (2017): 1–13.

Stubbs BJ, Stephens EB, Senadheera C, Peralta S, Roa-Diaz S, Alexander L, Silverman-Martin W, Garcia TY, Yukawa M, Morris J, Blonquist TM, Johnson JB, Newman JC. Daily consumption of ketone ester, bis-octanoyl (R)-1,3-butanediol, is safe and tolerable in healthy older adults in a randomized, parallel arm, double-blind, placebo-controlled, pilot study. *J Nutr Health Aging*. 2024 Sep;28(9):100329.

Suzuki Y, et al. "Beta-hydroxybutyrate alters GABA-transaminase activity in cultured astrocytes." *Brain Res*. V. 1268 (2009): 17–23.

Swerdlow RH, de Leon MJ, Marcus DL. "Betahydroxybutyrate consumption in autopsy brain Tissue from Alzheimer's disease subjects." *J Alzheimers Dis Rep* V. 5 No. 1 (2021):135-141.

Taha AY, et al. "Dietary enrichment with medium-chain triglycerides (AC-1203) elevates polyunsaturated fatty acids in the parietal cortex of aged dogs: Implication for treating age-related cognitive decline." *Neurochem Res* V. 34 No. 9 (2009): 1619–25.

Taylor MK, et al. "An Experimental Ketogenic Diet for Alzheimer Disease Was Nutritionally Dense and Rich in Vegetables and Avocado." *Curr Dev Nutr* V. 3 No. 4 (2019):nzz003.

Taylor MK, Swerdlow RH, Sullivan DK. "Dietary Neuroketotherapeutics for Alzheimer's Disease: An Evidence Update and the Potential Role for Diet Quality." *Nutrients* V. 11 No. 8 (2019):1910.

Taylor MK, et al. "Potential for Ketotherapies as Amyloid-Regulating Treatment in Individuals at Risk for Alzheimer's Disease." *Front Neurosci* V. 16 (2022):899612.

Thaweboon S, et al. "Effect of oil pulling on oral microorganisms in biofilm models." *Asia J Public Health* V. 2 (2011):62–6.

Thormar H, et al. "Inactivation of enveloped viruses and killing of cells by fatty acids and monoglycerides." *Antimicrob Agents Chemother* Vol. 31 No. 1(1987): 27-31.

Thevenet J, et al. "Medium-chain fatty acids inhibit mitochondrial metabolism in astrocytes promoting astrocyte-neuron lactate and ketone body shuttle systems." *FASEB J*. V. 30 No. 5 (2016):1913–26.

Turner N, et al. "Enhancement of muscle mitochondrial oxidative capacity and alterations in insulin action are lipid species dependent: potent tissue-specific effects of medium-chain fatty acids." *Diabetes* V. 48 (2009): 2547–54.

Vandenberghe C, et al. "Caffeine intake increases plasma ketones: an acute metabolic study in humans." *Can J Physiol Pharmacol* V. 95 No. 4 (2017):455–8.

Van der Auwera I, et al. "A ketogenic diet reduces amyloid beta 40 and 42 in a mouse model of Alzheimer's disease." *Nutr Metab* V. 2, No 28 (2005): 1–8.

Van Hove JLK, et al. "D, L-3-hydroxybutyrate treatment of multiple acyl-CoA dehydrogenase deficiency (MADD)." *Lancet* V. 361 (2003):1433–5.

VanItallie TB, et al. "Treatment of Parkinson disease with diet- induced hyperketonemia: a feasibility study." *Neurology* V. 64 (2005): 728–30.

VanItallie TB, et al. "Ketogenesis and hyperketonemia." *Amer J Med*. V. 31 (1961): 909. VanItallie TB, et al. "Ketones: metabolism's ugly duckling." *Nutr Rev* V. 61, No 10 (2003): 327–41.

Varesio C, et al. "Ketogenic dietary therapies in patients with autism spectrum disorder: facts or fads? A scoping review and a proposal for a shared protocol." *Nutrients* V. 13 No. 6 (2021):2057.

Veech RL, et al. "Hypothesis paper: ketone bodies, potential therapeutic uses." *IUBMB Life* V. 51 (2001): 241–7.

Veech RL. "The therapeutic implications of ketone bodies: the effects of ketone bodies in pathological conditions: ketosis, ketogenic diet, redox states, insulin resistance, and mitochondrial metabolism." *Prostaglandins, Leukot Essent Fatty Acids* Vol. 70 (2004): 309–319.

Veech RL. "The determination of the redox states and phosphorylation potential in living tissues and their relationship to metabolic control of disease phenotypes." *Biochem Mol Biol Educ* V. 32 No. 3 (2006):168–79.

Veech, RL. "Mini Series: Paths to Discovery" in *Biochemistry and Molecular Biology Education* V. 34 No. 3 (2006):168–79.

Veech, RL, et al. "Ketone bodies mimic the life span extending properties of caloric restriction." *IUBMB Life*. V. 69 (2017):305–14.

Veech, RL, et al. "The 'Great' Controlling Nucleotide Coenzymes." *IUBMB Life*. Vol. 71 (2019): 565–79.

Veech, RL, et al. "Relationship between inorganic ion distribution, resting membrane potential, and the  $\Delta G'$  of ATP hydrolysis: a new paradigm." *FASEB J* V. 33 (2019): 13126–30.

Wu Y, Y Gong, Y Luan, et al. "BHBA treatment improves cognitive function by targeting pleiotropic mechanisms in transgenic model of Alzheimer's disease." *FASEB* V. 34 No 1. 2019:1412-1429.

Xu Q, et al. "Medium-chain triglycerides improved cognition and lipid metabolomics in mild to moderate Alzheimer's disease patients with APOE4-/-." *Clinical Nutrition* V. 39 No. 7 (2020):2092–105.

Yin JX, et al. "Ketones block amyloid entry and improve cognition in an Alzheimer's model." *Neurobiol Aging* Vol. 39 (2016):25–37.

Youm YH, et al. "The ketone metabolite  $\beta$ -hydroxybutyrate blocks NLRP3 inflammasome-mediated inflammatory disease." *Nat Med* V. 21 No. 3 (2015):263–9.



Zhao Z, et al. "A ketogenic diet as a potential novel therapeutic intervention in amyotrophic lateral sclerosis." *BMC Neurosci* V. 7 (2006): 29