Literaturverzeichnis Genial ernährt!

Abdullah, M. *et al.* (2019) 'The effectiveness of omega-3 supplementation in reducing ADHD associated symptoms in children as measured by the Conners' rating scales: A systematic review of randomized controlled trials', *Journal of Psychiatric Research*, 110, pp. 64–73. Available at: https://doi.org/10.1016/j.jpsychires.2018.12.002.

Abo, S.M.C. and Layton, A.T. (2024) 'Modeling sex-specific whole-body metabolic responses to feeding and fasting', *Computers in Biology and Medicine*, 181, p. 109024. Available at: https://doi.org/10.1016/j.compbiomed.2024.109024.

Adamsen, E., Shimotsuura, S. and Koikeda, T. (2005) 'Potential interference of d-Tagatose with the medical treatment of diabetic Japanese patients', *Intern Stud Report. Study*, 5.

Adlunger, K. *et al.* (2022) 'Nicht relevant? Abbauprodukte von Pflanzenschutzmitteln als risiko für das Grundwasser', *Umwelt + Mensch Informationsdienst*, 1, pp. 5–16. Available at: https://www.umweltbundesamt.de/sites/default/files/medien/4031/publikationen/umid_01-2022-pflanzenschutzmittel.pdf.

Adolph, M. *et al.* (2018) *Ernährungsmedizin: Nach dem Curriculum Ernährungsmedizin der Bundesärztekammer*. 5., vollständig überarbeitete und erweiterte Auflage. Edited by H.-K. Biesalski et al. Stuttgart: Georg Thieme Verlag. Available at: https://doi.org/10.1055/b-004-132260.

Ahmad, M.F. *et al.* (2024) 'Are we eating plastic? Science mapping of microplastic pollution in the aquatic food chain', *Integrated Environmental Assessment and Management*, 20(6), pp. 1800–1811. Available at: https://doi.org/10.1002/ieam.4930.

Ahmad, S.Y., Friel, J. and Mackay, D. (2020) 'The Effects of Non-Nutritive Artificial Sweeteners, Aspartame and Sucralose, on the Gut Microbiome in Healthy Adults: Secondary Outcomes of a Randomized Double-Blinded Crossover Clinical Trial', *Nutrients*, 12(11), p. 3408. Available at: https://doi.org/10.3390/nu12113408.

Al Hadeethi, S. *et al.* (2023) 'Mannose Inhibits the Pentose Phosphate Pathway in Colorectal Cancer and Enhances Sensitivity to 5-Fluorouracil Therapy', *Cancers*, 15(8), p. 2268. Available at: https://doi.org/10.3390/cancers15082268.

Ali, N. *et al.* (2024) 'The potential impacts of micro-and-nano plastics on various organ systems in humans', *eBioMedicine*, 99, p. 104901. Available at: https://doi.org/10.1016/j.ebiom.2023.104901.

Ames, B.N. (2018) 'Prolonging healthy aging: Longevity vitamins and proteins', *Proceedings of the National Academy of Sciences*, 115(43), pp. 10836–10844. Available at: https://doi.org/10.1073/pnas.1809045115.

Andrzejewski, D. *et al.* (2004) 'Analysis of Coffee for the Presence of Acrylamide by LC-MS/MS', *Journal of Agricultural and Food Chemistry*, 52(7), pp. 1996–2002. Available at: https://doi.org/10.1021/jf0349634.

Askarpour, M. *et al.* (2020) 'Beneficial effects of l-carnitine supplementation for weight management in overweight and obese adults: An updated systematic review and dose-response meta-analysis of randomized controlled trials', *Pharmacological Research*, 151, p. 104554. Available at: https://doi.org/10.1016/j.phrs.2019.104554.

Banning, H. and Osterwald, A. (2022) *Nicht relevante Metaboliten von Pflanzenschutzmitteln*. Dessau-Roßlau, Deutschland: Umweltbundesamt (UBA). Available at: https://www.umweltbundesamt.de/sites/default/files/medien/362/dokumente/uba_factsheet_nrm.pdf.

Bautista, D.A., Pegg, R.B. and Shand, P.J. (2000) 'Effect of l-Glucose and d-Tagatose on Bacterial Growth in Media and a Cooked Cured Ham Product', *Journal of Food Protection*, 63(1), pp. 71–77. Available at: https://doi.org/10.4315/0362-028X-63.1.71.

Beielstein, A.C. *et al.* (2024) 'Macrophages are activated toward phagocytic lymphoma cell clearance by pentose phosphate pathway inhibition', *Cell Reports Medicine*, 5(12), p. 101830. Available at: https://doi.org/10.1016/j.xcrm.2024.101830.

Bertelsen, H., Jensen, B.B. and Buemann, B. (1999) 'D-Tagatose - A Novel Low-Calorie Bulk Sweetener with Prebiotic Properties', in A. Corti (ed.) *World Review of Nutrition and Dietetics*. Basel: KARGER, pp. 98–109. Available at: https://doi.org/10.1159/000059685.

Binder, Sybille, Integrative TEN Ernährung. Available at: https://www.medimops.de/sybille-binder-integrative-ten-ernaehrung-gebundene-ausgabe-M0399114011X.html.

Bock, M., Michalsen, A. and Paul, F. (2015) 'Ketogenic diet and prolonged fasting improve health-related quality of life and blood lipid profile in multiple sclerosis – a randomized controlled trial', *Multiple Sclerosis (Houndmills, Basingstoke, England)*, 23(11), pp. 794–795. Available at: https://doi.org/10.1177/1352458515604791.

Bodeker, K.L. *et al.* (2024) 'A randomized trial of pharmacological ascorbate, gemcitabine, and nab-paclitaxel for metastatic pancreatic cancer', *Redox Biology*, 77, p. 103375. Available at: https://doi.org/10.1016/j.redox.2024.103375.

Boesch, C. *et al.* (2001) 'Effect of Oral D-Tagatose on Liver Volume and Hepatic Glycogen Accumulation in Healthy Male Volunteers', *Regulatory Toxicology and Pharmacology*, 33(2), pp. 257–267. Available at: https://doi.org/10.1006/rtph.2001.1470.

Bonnard, C. *et al.* (2008) 'Mitochondrial dysfunction results from oxidative stress in the skeletal muscle of diet-induced insulin-resistant mice', *Journal of Clinical Investigation*, 118(2), pp. 789–800. Available at: https://doi.org/10.1172/JCI32601.

Borenstein, S. (2024) *Scientists find about a quarter million invisible microplastic particles in a liter of bottled water*, *PBS News*. Available at: https://www.pbs.org/newshour/science/scientists-find-about-a-quarter-million-invisible-microplastic-particles-in-a-liter-of-bottled-water (Accessed: 23 February 2025).

Boucher, J. and Billard, G. (2020) *The Mediterranean: Mare plasticum*. Gland, Switzerland: International Union for Conservation of Nature (IUCN), p. x+62 pp. Available at: https://portals.iucn.org/library/sites/library/files/documents/2020-030-en.pdf.

Brandhorst, S. and Longo, V.D. (2019) 'Protein Quantity and Source, Fasting-Mimicking Diets, and Longevity', *Advances in Nutrition*, 10, pp. S340–S350. Available at: https://doi.org/10.1093/advances/nmz079.

Braun, H. *et al.* (2019) 'Differing Water Intake and Hydration Status in Three European Countries—A Day-to-Day Analysis', *Nutrients*, 11(4), p. 773. Available at: https://doi.org/10.3390/nu11040773.

Budak, N.H. *et al.* (2011) 'Effects of Apple Cider Vinegars Produced with Different Techniques on Blood Lipids in High-Cholesterol-Fed Rats', *Journal of Agricultural and Food Chemistry*, 59(12), pp. 6638–6644. Available at: https://doi.org/10.1021/jf104912h.

Buemann, Benjamin *et al.* (2000) 'D-Tagatose, a stereoisomer of D-fructose, increases blood uric acid concentration', *Metabolism*, 49(8), pp. 969–976. Available at: https://doi.org/10.1053/meta.2000.7724.

Buemann, B. *et al.* (2000) 'The acute effect of D-tagatose on food intake in human subjects', *The British Journal of Nutrition*, 84(2), pp. 227–231.

Buemann, B., Toubro, S. and Astrup, A. (1998) 'D-Tagatose, a Stereoisomer of D-Fructose, Increases Hydrogen Production in Humans without Affecting 24-Hour Energy Expenditure or Respiratory Exchange Ratio', *The Journal of Nutrition*, 128(9), pp. 1481–1486. Available at: https://doi.org/10.1093/jn/128.9.1481.

Burtscher-Schaden, H. *et al.* (2024) *TFA: Die ewige Chemikalie im Wasser, das wir trinken*. Report. Umweltbundesamt (UBA), PAN Europe. Available at: https://www.global2000.at/sites/global/files/TFAinTrinkwasser_Report_Final_DE.pdf.

Carretta, L., Masin, R. and Zanin, G. (2022) 'Review of studies analysing glyphosate and aminomethylphosphonic acid (AMPA) occurrence in groundwater', *Environmental Reviews*, 30(1), pp. 88–109. Available at: https://doi.org/10.1139/er-2020-0106.

Carrillo-Norte, J.A. *et al.* (2024) 'Anti-Aging Effects of Low-Molecular-Weight Collagen Peptide Supplementation on Facial Wrinkles and Skin Hydration: Outcomes from a Six-Week Randomized, Double-

Blind, Placebo-Controlled Trial', *Cosmetics*, 11(4), p. 137. Available at: https://doi.org/10.3390/cosmetics11040137.

de Castilhos Ghisi, N. *et al.* (2020) 'Glyphosate and its toxicology: A scientometric review', *The Science of the Total Environment*, 733, p. 139359. Available at: https://doi.org/10.1016/j.scitotenv.2020.139359.

Chartres, N. *et al.* (2024) 'Effects of Microplastic Exposure on Human Digestive, Reproductive, and Respiratory Health: A Rapid Systematic Review', *Environmental Science & Technology*, 58(52), pp. 22843–22864. Available at: https://doi.org/10.1021/acs.est.3c09524.

Chen, L. *et al.* (2023) 'The effect of oral supplements containing collagen peptides rich in X-Hyp or X-Hyp-Gly compared with normal collagen hydrolysates on skin elasticity and collagen holes: a randomised double-blind clinical study', *Food & Function*, 14(23), pp. 10628–10638. Available at: https://doi.org/10.1039/D3FO02873A.

Chen, L., Li, M. and Li, H. (2019) 'Milk and yogurt intake and breast cancer risk: A meta-analysis', *Medicine*, 98(12), p. e14900. Available at: https://doi.org/10.1097/MD.0000000000014900.

Chi, L. *et al.* (2018) 'Effects of the Artificial Sweetener Neotame on the Gut Microbiome and Fecal Metabolites in Mice', *Molecules*, 23(2), p. 367. Available at: https://doi.org/10.3390/molecules23020367.

Cho, N.H. *et al.* (2018) 'IDF Diabetes Atlas: Global estimates of diabetes prevalence for 2017 and projections for 2045', *Diabetes Research and Clinical Practice*, 138, pp. 271–281. Available at: https://doi.org/10.1016/j.diabres.2018.02.023.

Chong, F. *et al.* (2022) 'High Concentrations of floating life in the North Pacific Garbage Patch'. Ecology. Available at: https://doi.org/10.1101/2022.04.26.489631.

Churuangsuk, C. *et al.* (2018) 'Low-carbohydrate diets for overweight and obesity: a systematic review of the systematic reviews', *Obesity Reviews*, 19(12), pp. 1700–1718. Available at: https://doi.org/10.1111/obr.12744.

Ciudad, C.J. *et al.* (1988) 'Glycogen synthase activation by sugars in isolated hepatocytes', *Archives of Biochemistry and Biophysics*, 264(1), pp. 30–39. Available at: https://doi.org/10.1016/0003-9861(88)90566-8.

Cole, M. *et al.* (2011) 'Microplastics as contaminants in the marine environment: A review', *Marine Pollution Bulletin*, 62(12), pp. 2588–2597. Available at: https://doi.org/10.1016/j.marpolbul.2011.09.025.

Collins, J. *et al.* (2018) 'Dietary trehalose enhances virulence of epidemic Clostridium difficile', *Nature*, 553(7688), pp. 291–294. Available at: https://doi.org/10.1038/nature25178.

Collotta, D. *et al.* (2018) 'Reduced Susceptibility to Sugar-Induced Metabolic Derangements and Impairments of Myocardial Redox Signaling in Mice Chronically Fed with D-Tagatose when Compared to Fructose', *Oxidative Medicine and Cellular Longevity*. Edited by S. Zacchigna, 2018(1), p. 5042428. Available at: https://doi.org/10.1155/2018/5042428.

Comas-Basté, O. *et al.* (2020) 'Histamine Intolerance: The Current State of the Art', *Biomolecules*, 10(8), p. 1181. Available at: https://doi.org/10.3390/biom10081181.

Corrêa, T.R. *et al.* (2023) 'The Impact of Microplastics on Global Food Production: A Brief Overview of This Complex Sector', *Microplastics*, 2(4), pp. 371–388. Available at: https://doi.org/10.3390/microplastics2040028.

Cosmetics Europe comments on the Microplastics Restriction (no date) *Cosmetics Europe - The Personal Care Association*. Available at: https://cosmeticseurope.eu/cosmetics-europe-comments-microplastics-restriction (Accessed: 22 February 2025).

Cousins, I.T. *et al.* (2022) 'Outside the Safe Operating Space of a New Planetary Boundary for Per- and Polyfluoroalkyl Substances (PFAS)', *Environmental Science & Technology*, 56(16), pp. 11172–11179. Available at: https://doi.org/10.1021/acs.est.2c02765.

Coy, J.F. (2019) *Fit mit Zucker: mit den richtigen Zuckern die Zellalterung stoppen, das Gehirn fit halten, die Gefäße schützen und die Fettverbrennung anschalten*. 1. München: GRÄFE UND UNZER Verlag GmbH.

Damaj, S. *et al.* (2024) 'Bridging the Gaps between Microplastics and Human Health', *Microplastics*, 3(1), pp. 46–66. Available at: https://doi.org/10.3390/microplastics3010004.

Debras, C. *et al.* (2022) 'Artificial sweeteners and cancer risk: Results from the NutriNet-Santé population-based cohort study', *PLOS Medicine*. Edited by W. Zheng, 19(3), p. e1003950. Available at: https://doi.org/10.1371/journal.pmed.1003950.

Deji-Oloruntoba, O., Agidigbi, T.S. and Jang, M. (2024) 'Microplastics and Nano-plastics Contamination in Foods: Current Understanding of the Health Impact on Human and Potential Solutions', *European Journal of Nutrition & Food Safety*, 16(5), pp. 11–31. Available at: https://doi.org/10.9734/ejnfs/2024/v16i51419.

Del Pozo, S. *et al.* (2022) 'Potential Effects of Sucralose and Saccharin on Gut Microbiota: A Review', *Nutrients*, 14(8), p. 1682. Available at: https://doi.org/10.3390/nu14081682.

Department of Health and Human ServicesFood and Drug Administration (2003) *Food Labeling: Health Claims; D-Tagatose and Dental Caries*, *21 CFR 101*. Available at: https://www.federalregister.gov/documents/2003/07/03/03-16949/food-labeling-health-claims-d-tagatose-and-dental-caries.

Der DGE-Ernährungskreis - Gut essen und trinken (no date) *Deutsche Gesellschaft für Ernährung e.V.* Available at: http://www.dge.de/gesunde-ernaehrung/gut-essen-und-trinken/dge-ernaehrungskreis/ (Accessed: 22 February 2025).

Dhillon, G. *et al.* (2024) 'Hydrogen Water: Extra Healthy or a Hoax?—A Systematic Review', *International Journal of Molecular Sciences*, 25(2), p. 973. Available at: https://doi.org/10.3390/ijms25020973.

Dineley, K.T., Jahrling, J.B. and Denner, L. (2014) 'Insulin resistance in Alzheimer's disease', *Neurobiology of Disease*, 72, pp. 92–103. Available at: https://doi.org/10.1016/j.nbd.2014.09.001.

Domenech, J. *et al.* (2023) 'Insights into the potential carcinogenicity of micro- and nano-plastics', *Mutation Research - Reviews in Mutation Research*, 791, p. 108453. Available at: https://doi.org/10.1016/j.mrrev.2023.108453.

Domenech, J. and Marcos, R. (2021) 'Pathways of human exposure to microplastics, and estimation of the total burden', *Current Opinion in Food Science*, 39, pp. 144–151. Available at: https://doi.org/10.1016/j.cofs.2021.01.004.

Dong, J.-Y. *et al.* (2011) 'Dairy consumption and risk of breast cancer: a meta-analysis of prospective cohort studies', *Breast Cancer Research and Treatment*, 127(1), pp. 23–31. Available at: https://doi.org/10.1007/s10549-011-1467-5.

Dong, L. *et al.* (2022) 'Mannose ameliorates experimental colitis by protecting intestinal barrier integrity', *Nature Communications*, 13(1), p. 4804. Available at: https://doi.org/10.1038/s41467-022-32505-8.

Donner, T.W., Magder, L.S. and Zarbalian, K. (2010) 'Dietary supplementation with d-tagatose in subjects with type 2 diabetes leads to weight loss and raises high-density lipoprotein cholesterol', *Nutrition Research*, 30(12), pp. 801–806. Available at: https://doi.org/10.1016/j.nutres.2010.09.007.

Donner, T.W., Wilber, J.F. and Ostrowski, D. (1999) 'D-tagatose, a novel hexose: acute effects on carbohydrate tolerance in subjects with and without type 2 diabetes', *Diabetes, Obesity and Metabolism*, 1(5), pp. 285–291. Available at: https://doi.org/10.1046/j.1463-1326.1999.00039.x.

Edwin Thanarajah, S. *et al.* (2023) 'Habitual daily intake of a sweet and fatty snack modulates reward processing in humans', *Cell Metabolism*, 35(4), pp. 571-584.e6. Available at: https://doi.org/10.1016/j.cmet.2023.02.015.

EFSA Panel on Food Additives and Flavourings (FAF) *et al.* (2024) 'Re-evaluation of saccharin and its sodium, potassium and calcium salts (E 954) as food additives', *EFSA Journal*, 22(11). Available at: https://doi.org/10.2903/j.efsa.2024.9044.

Eichhorn, J., Mariani, M. and Wenzel, L. (2024) *Sprudelwasser-Test: Kritische Stoffe in 14 Mineralwässern gefunden*, *ÖKOTEST*. Available at: https://www.oekotest.de/essen-trinken/Sprudelwasser-Test-Kritische-Stoffe-in-14-Mineralwaessern-gefunden_14615_1.html (Accessed: 23 February 2025).

Energiezufuhr - Ausgewählte Fragen und Antworten zur Energiezufuhr (2015) *Deutsche Gesellschaft für Ernährung e.V.* Available at: http://www.dge.de/gesunde-ernaehrung/faq/energiezufuhr/ (Accessed: 22 February 2025).

Ensor, M. *et al.* (2014) 'Effects of Three Low-Doses of D-Tagatose on Glycemic Control Over Six Months in Subjects with Mild Type 2 Diabetes Mellitus Under Control with Diet and Exercise', *Journal of Endocrinology, Diabetes & Obesity*, 2(4), p. 1057.

Ensor, M. *et al.* (2015) 'Safety and Efficacy of D-Tagatose in Glycemic Control in Subjects with Type 2 Diabetes', *Journal of Endocrinology, Diabetes & Obesity*, 3(1), p. 1065.

Ensor, M. *et al.* (2016) 'Effect Of BSN272 On Hyperlipidemia And Atherosclerosis In LDLr-/-Mice', *WebmedCentral PHARMACEUTICAL SCIENCES*, 7(11). Available at: http://www.webmedcentral.com/article_view/5227.

European Commission (2012) *Commission Regulation (EU) No 432/2012 of 16 May 2012 establishing a list of permitted health claims made on foods, other than those referring to the reduction of disease risk and to children's development and health*. Available at: https://doi.org/10.3000/19770677.L_2012.136.eng.

Evans, M., Cogan, K.E. and Egan, B. (2017) 'Metabolism of ketone bodies during exercise and training: physiological basis for exogenous supplementation', *The Journal of Physiology*, 595(9), pp. 2857–2871. Available at: https://doi.org/10.1113/JP273185.

Eyres, L. *et al.* (2016) 'Coconut oil consumption and cardiovascular risk factors in humans', *Nutrition Reviews*, 74(4), pp. 267–280. Available at: https://doi.org/10.1093/nutrit/nuw002.

Fabiano N, Luu B, Puder D. Human microplastic removal: what does the evidence tell us?. Brain Medicine. Published online March 04, 2025. doi: 10.61373/bm025c.0020

Faquih, T.O. *et al.* (2024) 'Per- and Polyfluoroalkyl Substances Concentrations are Associated with an Unfavorable Cardio-Metabolic Risk Profile: Findings from Two Population-Based Cohort Studies', *Exposure and Health*, 16(5), pp. 1251–1262. Available at: https://doi.org/10.1007/s12403-023-00622-4.

Fialová, J., Roberts, S.C. and Havlíček, J. (2016) 'Consumption of garlic positively affects hedonic perception of axillary body odour', *Appetite*, 97, pp. 8–15. Available at: https://doi.org/10.1016/j.appet.2015.11.001.

Fielding, R. *et al.* (2018) 'l-Carnitine Supplementation in Recovery after Exercise', *Nutrients*, 10(3), p. 349. Available at: https://doi.org/10.3390/nu10030349.

Forero-Rodríguez, L.J. *et al.* (2021) 'Parkinson's Disease and the Metal–Microbiome–Gut–Brain Axis: A Systems Toxicology Approach', *Antioxidants*, 11(1), p. 71. Available at: https://doi.org/10.3390/antiox11010071.

Fragen und Antworten zu endokrinen Disruptoren (2022) *BfR - Bundesinstitut für Risikobewertung*. Available at: https://www.bfr.bund.de/de/fragen_und_antworten_zu_endokrinen_disruptoren-50513.html (Accessed: 22 February 2025).

Fraser, G.E. *et al.* (2020) 'Dairy, soy, and risk of breast cancer: those confounded milks', *International Journal of Epidemiology*, 49(5), pp. 1526–1537. Available at: https://doi.org/10.1093/ije/dyaa007.

Gambino, I. *et al.* (2022) 'Occurrence of Microplastics in Tap and Bottled Water: Current Knowledge', *International Journal of Environmental Research and Public Health*, 19(9), p. 5283. Available at: https://doi.org/10.3390/ijerph19095283.

Gao, S. *et al.* (2024) 'A review on microplastics in major European rivers', *WIREs Water*, 11(3), p. e1713. Available at: https://doi.org/10.1002/wat2.1713.

García-Coronado, J.M. *et al.* (2019) 'Effect of collagen supplementation on osteoarthritis symptoms: a meta-analysis of randomized placebo-controlled trials', *International Orthopaedics*, 43(3), pp. 531–538. Available at: https://doi.org/10.1007/s00264-018-4211-5.

Gardener, H. *et al.* (2012) ‘Diet Soft Drink Consumption is Associated with an Increased Risk of Vascular Events in the Northern Manhattan Study’, *Journal of General Internal Medicine*, 27(9), pp. 1120–1126. Available at: https://doi.org/10.1007/s11606-011-1968-2.

Germerott, I. (2022) *Pazifischer Müllstrudel: Je mehr Abfall, desto mehr Leben?*, *National Geographic*. Available at: https://www.nationalgeographic.de/umwelt/2022/05/pazifischer-muellstrudel-je-mehr-abfall-desto-mehr-leben (Accessed: 22 February 2025).

Gibbons, C. *et al.* (2024) ‘Acute and two-week effects of neotame, stevia rebaudioside M and sucrose-sweetened biscuits on postprandial appetite and endocrine response in adults with overweight/obesity—a randomised crossover trial from the SWEET consortium’, *eBioMedicine*, 102, p. 105005. Available at: https://doi.org/10.1016/j.ebiom.2024.105005.

Gilbert, L. and Lu, Y. (2003) ‘D-Tagatose as an Anti-Biofilm Agent’. Available at: https://patentimages.storage.googleapis.com/99/9a/fe/9190afb464612e/CA2464805A1.pdf.

Gomez-Cabrera, M.-C. *et al.* (2008) ‘Oral administration of vitamin C decreases muscle mitochondrial biogenesis and hampers training-induced adaptations in endurance performance’, *The American Journal of Clinical Nutrition*, 87(1), pp. 142–149. Available at: https://doi.org/10.1093/ajcn/87.1.142.

Gonzalez, P.S. *et al.* (2018) ‘Mannose impairs tumour growth and enhances chemotherapy’, *Nature*, 563(7733), pp. 719–723. Available at: https://doi.org/10.1038/s41586-018-0729-3.

Graumnitz, S. and Jungmann, D. (2021) *The Database ‘Pharmaceuticals in the Environment’ – Update for the Period 2017-2020*. FB000627/ENG. Dessau-Roßlau, Germany: German Environment Agency (Umweltbundesamt, UBA). Available at: https://www.umweltbundesamt.de/en/database-pharmaceuticals-in-the-environment-0#undefined.

Gröber, U. (2011) *Mikronährstoffe: Metabolic Tuning, Prävention, Therapie*. 3., völlig überarb. und erw. Aufl. Stuttgart: Wissenschaftliche Verlagsgesellschaft (Für die Kitteltasche).

Guertler, A. *et al.* (2024) ‘Exploring the potential of omega-3 fatty acids in acne patients: A prospective intervention study’, *Journal of Cosmetic Dermatology*, 23(10), pp. 3295–3304. Available at: https://doi.org/10.1111/jocd.16434.

Gut essen und trinken – die DGE-Empfehlungen (no date) *Deutsche Gesellschaft für Ernährung e.V.* Available at: http://www.dge.de/gesunde-ernaehrung/gut-essen-und-trinken/dge-empfehlungen/ (Accessed: 22 February 2025).

Hadi, A. *et al.* (2021) ‘The effect of apple cider vinegar on lipid profiles and glycemic parameters: a systematic review and meta-analysis of randomized clinical trials’, *BMC Complementary Medicine and Therapies*, 21(1), p. 179. Available at: https://doi.org/10.1186/s12906-021-03351-w.

Haghighatdoost, F. *et al.* (2023) ‘Differences in all-cause mortality risk associated with animal and plant dietary protein sources consumption’, *Scientific Reports*, 13(1), p. 3396. Available at: https://doi.org/10.1038/s41598-023-30455-9.

Hahn, A., Ströhle, A. and Wolters, M. (2023) *Ernährung: physiologische Grundlagen, Prävention, Therapie: mit 339 Abbildungen und 406 Tabellen*. 4., völlig neu bearbeitete und erweiterte Auflage. Stuttgart: Wissenschaftliche Verlagsgesellschaft.

Hakamata, Y. *et al.* (2018) ‘Characterization of Mitochondrial Content and Respiratory Capacities of Broiler Chicken Skeletal Muscles with Different Muscle Fiber Compositions’, *The Journal of Poultry Science*, 55(3), pp. 210–216. Available at: https://doi.org/10.2141/jpsa.0170141.

Hamstra, S.I. *et al.* (2023) ‘Beyond its Psychiatric Use: The Benefits of Low-dose Lithium Supplementation’, *Current Neuropharmacology*, 21(4), pp. 891–910. Available at: https://doi.org/10.2174/1570159X20666220302151224.

Hans Bertelsen, Hans Andersen, Mich (2001) ‘Fermentation of D-Tagatose by Human Intestinal Bacteria and Dairy Lactic Acid Bacteria’, *Microbial Ecology in Health and Disease*, 13(2), pp. 87–95. Available at: https://doi.org/10.1080/08910600119905.

Harada, Y. *et al.* (2023) 'Metabolic clogging of mannose triggers dNTP loss and genomic instability in human cancer cells', *eLife*, 12, p. e83870. Available at: https://doi.org/10.7554/eLife.83870.

Harrison, S. *et al.* (2017) 'Does milk intake promote prostate cancer initiation or progression via effects on insulin-like growth factors (IGFs)? A systematic review and meta-analysis', *Cancer Causes & Control*, 28(6), pp. 497–528. Available at: https://doi.org/10.1007/s10552-017-0883-1.

Hartmann, M. *et al.* (2015) 'Distinct soil microbial diversity under long-term organic and conventional farming', *The ISME Journal*, 9(5), pp. 1177–1194. Available at: https://doi.org/10.1038/ismej.2014.210.

Hasibul, K. *et al.* (2018) 'D-Tagatose inhibits the growth and biofilm formation of Streptococcus mutans', *Molecular Medicine Reports*, 17(1), pp. 843–851. Available at: https://doi.org/10.3892/mmr.2017.8017.

Hayer, K., Stratford, M. and Archer, D.B. (2013) 'Structural features of sugars that trigger or support conidial germination in the filamentous fungus Aspergillus niger', *Applied and Environmental Microbiology*, 79(22), pp. 6924–6931. Available at: https://doi.org/10.1128/AEM.02061-13.

He, Y. *et al.* (2021) 'The relationship between dairy products intake and breast cancer incidence: a meta-analysis of observational studies', *BMC Cancer*, 21(1), p. 1109. Available at: https://doi.org/10.1186/s12885-021-08854-w.

Heinitz, S. *et al.* (2020) 'Early adaptive thermogenesis is a determinant of weight loss after six weeks of caloric restriction in overweight subjects', *Metabolism*, 110, p. 154303. Available at: https://doi.org/10.1016/j.metabol.2020.154303.

Henderson, T.T. *et al.* (2022) 'Enhanced availability of serotonin limits muscle activation during high-intensity, but not low-intensity, fatiguing contractions', *Journal of Neurophysiology*, 128(4), pp. 751–762. Available at: https://doi.org/10.1152/jn.00182.2022.

Hernandez, L. M., Xu, E. G., Larsson, H. C. E., Tahara, R., Maisuria, V. B., & Tufenkji, N. (2019). Plastic teabags release billions of microparticles and nanoparticles into tea. Environmental Science & Technology, 53(21), 12300–12310. https://doi.org/10.1021/acs.est.9b02540

Hernandez, L.M. *et al.* (2019) 'Plastic Teabags Release Billions of Microparticles and Nanoparticles into Tea', *Environmental Science & Technology*, 53(21), pp. 12300–12310. Available at: https://doi.org/10.1021/acs.est.9b02540.

Herrmann, M. and Sur, R. (2021) 'Natural attenuation along subsurface flow paths based on modeling and monitoring of a pesticide metabolite from three case studies', *Environmental Sciences Europe*, 33(1), p. 59. Available at: https://doi.org/10.1186/s12302-021-00490-2.

Hinte, L.C. *et al.* (2024) 'Adipose tissue retains an epigenetic memory of obesity after weight loss', *Nature*, 636(8042), pp. 457–465. Available at: https://doi.org/10.1038/s41586-024-08165-7.

Hollstein, T. (2018) *Zuckerersatz und Insulinresistenz: Süßstoffe als Stoffwechselrisiko*, *Deutsches Ärzteblatt*. Available at: https://www.aerzteblatt.de/archiv/zuckerersatz-und-insulinresistenz-suessstoffe-als-stoffwechselrisiko-f99efb25-4d3e-4030-963d-ebb2c8bf1858 (Accessed: 22 February 2025).

Hondl, K. (2023) *Aspartam 'möglicherweise krebserregend'*, *tagesschau*. Available at: https://www.tagesschau.de/wissen/gesundheit/aspartam-krebs-who-100.html (Accessed: 23 February 2025).

Hootman, K.C. *et al.* (2017) 'Erythritol is a pentose-phosphate pathway metabolite and associated with adiposity gain in young adults', *Proceedings of the National Academy of Sciences*, 114(21), pp. E4233–E4240. Available at: https://doi.org/10.1073/pnas.1620079114.

Hu, R. *et al.* (2019) 'Fermented carrot juice attenuates type 2 diabetes by mediating gut microbiota in rats', *Food & Function*, 10(5), pp. 2935–2946. Available at: https://doi.org/10.1039/C9FO00475K.

Huang, Yanmei & Thonusin, Chanisa & Tokuda, Masaaki & Chattipakorn, Nipon & Chattipakorn, Siriporn. (2025). The beneficial effects of D-allose and D-allulose on the brain under ischemic stroke and obese-insulin resistant conditions: evidence from in vitro to clinical studies. Metabolic Brain Disease. 40. 10.1007/s11011-025-01580-3.

Hummel, T. (2021) *Trinkwasser: EU-Agrarbeschlüsse erzürnen Wasserversorger*, *Süddeutsche Zeitung*. Available at: https://www.sueddeutsche.de/politik/trinkwasser-eu-agrarpolitik-wasserversorger-1.5336848 (Accessed: 23 February 2025).

Iliopoulos, F., Sil, B.C. and Evans, C.L. (2022) 'The role of excipients in promoting topical and transdermal delivery: Current limitations and future perspectives', *Frontiers in Drug Delivery*, 2. Available at: https://doi.org/10.3389/fddev.2022.1049848.

Imamura, F. *et al.* (2015) 'Consumption of sugar sweetened beverages, artificially sweetened beverages, and fruit juice and incidence of type 2 diabetes: systematic review, meta-analysis, and estimation of population attributable fraction', *BMJ*, p. h3576. Available at: https://doi.org/10.1136/bmj.h3576.

Jafarirad, S. *et al.* (2023) 'The improvement effect of apple cider vinegar as a functional food on anthropometric indices, blood glucose and lipid profile in diabetic patients: a randomized controlled clinical trial', *Frontiers in Clinical Diabetes and Healthcare*, 4, p. 1288786. Available at: https://doi.org/10.3389/fcdhc.2023.1288786.

Jakositz, S. *et al.* (2020) 'Protection through participation: Crowdsourced tap water quality monitoring for enhanced public health', *Water Research*, 169, p. 115209. Available at: https://doi.org/10.1016/j.watres.2019.115209.

Jensen, B.B. and Buemann, B. (1998) *D-Tagatose. The influence of D-tagatose on bacterial composition and fermentation capacity of faecal samples from human volunteers*. Internal report. Research Centre Foulum, Danish Institute of Agricultural Science, for MD Foods amba.

Jeschke, A. (2020) *Leitungswasser trinken? Besser als Mineralwasser aus Flaschen! Das sind die Gründe*, *ÖKOTEST*. Available at: https://www.oekotest.de/essen-trinken/Leitungswasser-trinken-Besser-als-Mineralwasser-aus-Flaschen-Das-sind-die-Gruende_11316_1.html (Accessed: 23 February 2025).

Jin, S. and Je, Y. (2022) 'Dairy Consumption and Total Cancer and Cancer-Specific Mortality: A Meta-Analysis of Prospective Cohort Studies', *Advances in Nutrition*, 13(4), pp. 1063–1082. Available at: https://doi.org/10.1093/advances/nmab135.

Johnston, C.S., Kim, C.M. and Buller, A.J. (2004) 'Vinegar Improves Insulin Sensitivity to a High-Carbohydrate Meal in Subjects With Insulin Resistance or Type 2 Diabetes', *Diabetes Care*, 27(1), pp. 281–282. Available at: https://doi.org/10.2337/diacare.27.1.281.

Juan Antonio Carrillo-Norte, Baldomero García-Mir, Lluis Quintana, Bruno Buracchio and Rafael Guerrero-Bonmatty "Anti-Aging Effects of Low-Molecular-Weight Collagen Peptide Supplementation on Facial Wrinkles and Skin Hydration: Outcomes from a Six-Week Randomized, Double-Blind, Placebo-Controlled Trial", Cosmetics 2024, 11(4), 137; https://doi.org/10.3390/cosmetics11040137

Kang, K.-M., Park, C.-S. and Lee, S.-H. (2013) 'Effects of D-Tagatose on the Growth of Intestinal Microflora and the Fermentation of Yogurt', *Journal of the Korean Society of Food Science and Nutrition*, 42(3), pp. 348–354. Available at: https://doi.org/10.3746/jkfn.2013.42.3.348.

Kasper, H. (2021) *Ernährungsmedizin und Diätetik*. 13., überarbeitete Auflage. München: Elsevier.

Kenji Sato, Tomoko T. Asai, Shiro Jimi Collagen-Derived Di-Peptide, Prolylhydroxyproline (Pro-Hyp): A New Low Molecular Weight Growth-Initiating Factor for Specific Fibroblasts Associated With Wound Healing, https://www.frontiersin.org/journals/cell-and-developmental-biology/articles/10.3389/fcell.2020.548975/full

Khezri, S.S. *et al.* (2018) 'Beneficial effects of Apple Cider Vinegar on weight management, Visceral Adiposity Index and lipid profile in overweight or obese subjects receiving restricted calorie diet: A randomized clinical trial', *Journal of Functional Foods*, 43, pp. 95–102. Available at: https://doi.org/10.1016/j.jff.2018.02.003.

Khodabakhshi, A. *et al.* (2020) 'Feasibility, Safety, and Beneficial Effects of MCT-Based Ketogenic Diet for Breast Cancer Treatment: A Randomized Controlled Trial Study', *Nutrition and Cancer*, 72(4), pp. 627–634. Available at: https://doi.org/10.1080/01635581.2019.1650942.

Kim, D.-U. *et al.* (2018) 'Oral Intake of Low-Molecular-Weight Collagen Peptide Improves Hydration, Elasticity, and Wrinkling in Human Skin: A Randomized, Double-Blind, Placebo-Controlled Study', *Nutrients*, 10(7), p. 826. Available at: https://doi.org/10.3390/nu10070826.

Kim, Jemin *et al.* (2022) 'Oral Supplementation of Low-Molecular-Weight Collagen Peptides Reduces Skin Wrinkles and Improves Biophysical Properties of Skin: A Randomized, Double-Blinded, Placebo-Controlled Study', *Journal of Medicinal Food*, 25(12), pp. 1146–1154. Available at: https://doi.org/10.1089/jmf.2022.K.0097.

Koh, J.H. *et al.* (2013) 'Synbiotic impact of tagatose on viability of Lactobacillus rhamnosus strain GG mediated by the phosphotransferase system (PTS)', *Food Microbiology*, 36(1), pp. 7–13. Available at: https://doi.org/10.1016/j.fm.2013.03.003.

Kopatz, V. *et al.* (2023) 'Micro- and Nanoplastics Breach the Blood–Brain Barrier (BBB): Biomolecular Corona's Role Revealed', *Nanomaterials*, 13(8), p. 1404. Available at: https://doi.org/10.3390/nano13081404.

Kosterlitz, H. and Wedler, H.W. (1933) 'Untersuchungen über die Verwertung der Galaktose in physiologischen und pathologischen Zuständen', *Zeitschrift für Die Gesamte Experimentelle Medizin*, 87(1), pp. 397–404. Available at: https://doi.org/10.1007/BF02610497.

Krajick, K. (2024) 'Bottled Water Can Contain Hundreds of Thousands of Previously Uncounted Tiny Plastic Bits, Study Finds – State of the Planet', *COLUMBIA CLIMATE SCHOOL Climate, Earth, and Society*, 8 January. Available at: https://news.climate.columbia.edu/2024/01/08/bottled-water-can-contain-hundreds-of-thousands-of-previously-uncounted-tiny-plastic-bits-study-finds/ (Accessed: 22 February 2025).

Krank durch Lektine in Pflanzenkost? (2024) *BfR - Bundesinstitut für Risikobewertung*. Available at: https://www.bfr.bund.de/de/presseinformation/2024/02/krank_durch_lektine_in_pflanzenkost_-314318.html (Accessed: 22 February 2025).

Kreider, R.B. and Stout, J.R. (2021) 'Creatine in Health and Disease', *Nutrients*, 13(2), p. 447. Available at: https://doi.org/10.3390/nu13020447.

Kruger, C.L. *et al.* (1999) '90-Day Oral Toxicity Study ofd-Tagatose in Rats', *Regulatory Toxicology and Pharmacology*, 29(2), pp. S1–S10. Available at: https://doi.org/10.1006/rtph.1998.1262.

Küchenarmaturen im Test: Welche gutes Trinkwasser liefern (2021) *Stiftung Warentest*. Stiftung Warentest. Available at: https://www.test.de/Kuechenarmaturen-im-Test-Welche-gutes-Trinkwasser-liefern-5771194-0/ (Accessed: 23 February 2025).

Kullmann, S., Wagner, L., Hauffe, R. et al. A short-term, high-caloric diet has prolonged effects on brain insulin action in men. Nat Metab (2025). https://doi.org/10.1038/s42255-025-01226-9

Kwak, J.H. *et al.* (2013) 'Beneficial effect of tagatose consumption on postprandial hyperglycemia in Koreans: a double-blind crossover designed study', *Food & Function*, 4(8), p. 1223. Available at: https://doi.org/10.1039/c3fo00006k.

Lærke, H.N. and Jensen, B.B. (1999) 'D-Tagatose Has Low Small Intestinal Digestibility but High Large Intestinal Fermentability in Pigs', *The Journal of Nutrition*, 129(5), pp. 1002–1009. Available at: https://doi.org/10.1093/jn/129.5.1002.

Lærke, H.N., Jensen, B.B. and Højsgaard, S. (2000) 'In Vitro Fermentation Pattern of D-Tagatose Is Affected by Adaptation of the Microbiota from the Gastrointestinal Tract of Pigs', *The Journal of Nutrition*, 130(7), pp. 1772–1779. Available at: https://doi.org/10.1093/jn/130.7.1772.

Laffel, L. (1999) 'Ketone bodies: a review of physiology, pathophysiology and application of monitoring to diabetes', *Diabetes/Metabolism Research and Reviews*, 15(6), pp. 412–426. Available at: https://doi.org/10.1002/(SICI)1520-7560(199911/12)15:6<412::AID-DMRR72>3.0.CO;2-8.

Lamas, G.A. *et al.* (2023) 'Contaminant Metals as Cardiovascular Risk Factors: A Scientific Statement From the American Heart Association', *Journal of the American Heart Association*, 12(13), p. e029852. Available at: https://doi.org/10.1161/JAHA.123.029852.

Landeta, G. *et al.* (2007) 'Screening of biogenic amine production by coagulase-negative staphylococci isolated during industrial Spanish dry-cured ham processes', *Meat Science*, 77(4), pp. 556–561. Available at: https://doi.org/10.1016/j.meatsci.2007.05.004.

Lee, M. *et al.* (2023) 'Oral intake of collagen peptide NS improves hydration, elasticity, desquamation, and wrinkling in human skin: a randomized, double-blinded, placebo-controlled study', *Food & Function*, 14(7), pp. 3196–3207. Available at: https://doi.org/10.1039/D2FO02958H.

Lembke, A. and Pause, B. (1989) 'Anticaries effectiveness of D(+)-galactose', *Zeitschrift Fur Stomatologie (1984)*, 86(4), pp. 179–189.

Levin, G.V. (2001) 'Increased Fertility and Improved Fetal Development Drug'. Available at: https://patentimages.storage.googleapis.com/93/de/f8/09fa27a66c4c17/US6225452B1.pdf.

Li, H. *et al.* (2008) 'Ethnic Related Selection for an ADH Class I Variant within East Asia', *PLoS ONE*. Edited by H. Harpending, 3(4), p. e1881. Available at: https://doi.org/10.1371/journal.pone.0001881.

Li, M. *et al.* (2022) 'Transketolase promotes colorectal cancer metastasis through regulating AKT phosphorylation', *Cell Death & Disease*, 13(2), p. 99. Available at: https://doi.org/10.1038/s41419-022-04575-5.

Li, Y. *et al.* (2019) 'APC/CCDH1 synchronizes ribose-5-phosphate levels and DNA synthesis to cell cycle progression', *Nature Communications*, 10(1), p. 2502. Available at: https://doi.org/10.1038/s41467-019-10375-x.

Li, Z. *et al.* (2010) 'Antioxidant-rich spice added to hamburger meat during cooking results in reduced meat, plasma, and urine malondialdehyde concentrations', *The American Journal of Clinical Nutrition*, 91(5), pp. 1180–1184. Available at: https://doi.org/10.3945/ajcn.2009.28526.

Liang, Y.-X. *et al.* (2019) 'The Constipation-Relieving Property of d-Tagatose by Modulating the Composition of Gut Microbiota', *International Journal of Molecular Sciences*, 20(22), p. 5721. Available at: https://doi.org/10.3390/ijms20225721.

Lieu, E.L. *et al.* (2021) 'Fructose and Mannose in Inborn Errors of Metabolism and Cancer', *Metabolites*, 11(8), p. 479. Available at: https://doi.org/10.3390/metabo11080479.

Lin, J. and Curhan, G.C. (2011) 'Associations of Sugar and Artificially Sweetened Soda with Albuminuria and Kidney Function Decline in Women', *Clinical Journal of the American Society of Nephrology*, 6(1), pp. 160–166. Available at: https://doi.org/10.2215/CJN.03260410.

Lin, Q. *et al.* (2022) 'Potential risk of microplastics in processed foods: Preliminary risk assessment concerning polymer types, abundance, and human exposure of microplastics', *Ecotoxicology and Environmental Safety*, 247, p. 114260. Available at: https://doi.org/10.1016/j.ecoenv.2022.114260.

Liu, Q. *et al.* (2022) 'Mannose Attenuates Colitis-Associated Colorectal Tumorigenesis by Targeting Tumor-Associated Macrophages', *Journal of Cancer Prevention*, 27(1), pp. 31–41. Available at: https://doi.org/10.15430/JCP.2022.27.1.31.

Liu, Z. *et al.* (2023) 'Hyperglycaemia induces metabolic reprogramming into a glycolytic phenotype and promotes epithelial-mesenchymal transitions via YAP/TAZ-Hedgehog signalling axis in pancreatic cancer', *British Journal of Cancer*, 128(5), pp. 844–856. Available at: https://doi.org/10.1038/s41416-022-02106-9.

Lu, Y. and Levin, G.V. (2002) 'Removal and prevention of dental plaque with d-tagatose', *International Journal of Cosmetic Science*, 24(4), pp. 225–234. Available at: https://doi.org/10.1046/j.1467-2494.2002.00141.x.

Luo, H. *et al.* (2022) 'Mannose enhances the radio-sensitivity of esophageal squamous cell carcinoma with low MPI expression by suppressing glycolysis', *Discover Oncology*, 13(1), p. 1. Available at: https://doi.org/10.1007/s12672-021-00447-0.

Ma, L., Wang, J. and Li, Y. (2015) 'Insulin resistance and cognitive dysfunction', *Clinica Chimica Acta*, 444, pp. 18–23. Available at: https://doi.org/10.1016/j.cca.2015.01.027.

Madenokoji, N. (2003) ‘Blunting effect of D-tagatose on blood glucose when administered orally with glucose in volunteer donors of boundary glycemic level’, *Jap Soc Clin Nutr*, 25, pp. 21–28. Available at: https://cir.nii.ac.jp/crid/1571698600630595584.

Makris, N. (1999) *Tagatose University of Maryland Clinical Study, Phase 2 Study, Statistical Analyses*. Beltsville, MD: Biospherics, Inc.

Malik, V.S. *et al.* (2019) ‘Long-Term Consumption of Sugar-Sweetened and Artificially Sweetened Beverages and Risk of Mortality in US Adults’, *Circulation*, 139(18), pp. 2113–2125. Available at: https://doi.org/10.1161/CIRCULATIONAHA.118.037401.

Manghi, P., Bhosle, A., Wang, K. et al. Coffee consumption is associated with intestinal Lawsonibacter asaccharolyticus abundance and prevalence across multiple cohorts. Nat Microbiol9,

3120–3134 (2024). https://doi.org/10.1038/s41564-024-01858-9

Marques Dos Santos, M. and Snyder, S.A. (2023) ‘Occurrence of Polymer Additives 1,3-Diphenylguanidine (DPG), N-(1,3-Dimethylbutyl)- N′-phenyl-1,4-benzenediamine (6PPD), and Chlorinated Byproducts in Drinking Water: Contribution from Plumbing Polymer Materials’, *Environmental Science & Technology Letters*, 10(10), pp. 885–890. Available at: https://doi.org/10.1021/acs.estlett.3c00446.

Mason, S.A., Welch, V.G. and Neratko, J. (2018) ‘Synthetic Polymer Contamination in Bottled Water’, *Frontiers in Chemistry*, 6, p. 407. Available at: https://doi.org/10.3389/fchem.2018.00407.

Mathur, K. *et al.* (2020) ‘Effect of artificial sweeteners on insulin resistance among type-2 diabetes mellitus patients’, *Journal of Family Medicine and Primary Care*, 9(1), pp. 69–71. Available at: https://doi.org/10.4103/jfmpc.jfmpc_329_19.

McDonald, D. *et al.* (2018) ‘American Gut: an Open Platform for Citizen Science Microbiome Research’, *mSystems*. Edited by C.S. Greene, 3(3), pp. e00031-18. Available at: https://doi.org/10.1128/mSystems.00031-18.

Mehat, K., Chen, Y. and Corpe, C.P. (2022) ‘The Combined Effects of Aspartame and Acesulfame-K Blends on Appetite: A Systematic Review and Meta-Analysis of Randomized Clinical Trials’, *Advances in Nutrition*, 13(6), pp. 2329–2340. Available at: https://doi.org/10.1093/advances/nmac072.

Melnik, B.C. (2017) ‘Milk disrupts p53 and DNMT1, the guardians of the genome: implications for acne vulgaris and prostate cancer’, *Nutrition & Metabolism*, 14(1). Available at: https://doi.org/10.1186/s12986-017-0212-4.

Melnik, B.C. (2021) *Macht Milch krank?*, *Deutsche Apotheker Zeitung*. Available at: https://www.deutsche-apotheker-zeitung.de/daz-az/2021/daz-32-2021/macht-milch-krank (Accessed: 22 February 2025).

Menéndez-Pedriza, A., Jaumot, J. and Bedia, C. (2022) ‘Lipidomic analysis of single and combined effects of polyethylene microplastics and polychlorinated biphenyls on human hepatoma cells’, *Journal of Hazardous Materials*, 421, p. 126777. Available at: https://doi.org/10.1016/j.jhazmat.2021.126777.

Meroño, T. *et al.* (2022) ‘Animal Protein Intake Is Inversely Associated With Mortality in Older Adults: The InCHIANTI Study’, *The Journals of Gerontology: Series A*. Edited by L.A. Lipsitz, 77(9), pp. 1866–1872. Available at: https://doi.org/10.1093/gerona/glab334.

Metts, B. (2013) ‘DDDAS Design of Drug Interventions for the Treatment of Dyslipidemia in ApoE-/- Mice’, *Journal of Developing Drugs*, 02(02). Available at: https://doi.org/10.4172/2329-6631.1000107.

Metzger, S., Schmalzbauer, B. and Benzing, K. (no date) ‘Use of a Monosaccharide for Sub- and/or Supragingival Tooth Cleaning’. Lorsch. Available at: https://patentimages.storage.googleapis.com/9c/57/8c/acc14518272c1b/US20190099345A1.pdf.

Mezue, K. *et al.* (2023) ‘Reduced Stress-Related Neural Network Activity Mediates the Effect of Alcohol on Cardiovascular Risk’, *Journal of the American College of Cardiology*, 81(24), pp. 2315–2325. Available at: https://doi.org/10.1016/j.jacc.2023.04.015.

Michel, A. *et al.* (2022) ‘Proposal for a tiered approach to evaluate the risk of transformation products formed from pesticide residues during drinking water treatment’, *Environmental Sciences Europe*, 34(1), p. 110. Available at: https://doi.org/10.1186/s12302-022-00688-y.

Mikroplastik in Kosmetik (2018) *Fraunhofer-Institut für Umwelt-, Sicherheits- und Energietechnik UMSICHT*. Available at: https://www.umsicht.fraunhofer.de/de/presse-medien/pressemitteilungen/2018/mikroplastik-in-kosmetik.html (Accessed: 22 February 2025).

Mizuno, K. *et al.* (2017) 'Hydrogen-rich water for improvements of mood, anxiety, and autonomic nerve function in daily life', *Medical Gas Research*, 7(4), pp. 247–255. Available at: https://doi.org/10.4103/2045-9912.222448.

Mohammad, M.A. *et al.* (2011) 'Galactose promotes fat mobilization in obese lactating and nonlactating women', *The American Journal of Clinical Nutrition*, 93(2), pp. 374–381. Available at: https://doi.org/10.3945/ajcn.110.005785.

Moon, J. and Koh, G. (2020a) 'Clinical Evidence and Mechanisms of High-Protein Diet-Induced Weight Loss', *Journal of Obesity & Metabolic Syndrome*, 29(3), pp. 166–173. Available at: https://doi.org/10.7570/jomes20028.

Moon, J. and Koh, G. (2020b) 'Clinical Evidence and Mechanisms of High-Protein Diet-Induced Weight Loss', *Journal of Obesity & Metabolic Syndrome*, 29(3), pp. 166–173. Available at: https://doi.org/10.7570/jomes20028.

Mooradian, A.D. *et al.* (2020) 'Naturally occurring rare sugars are free radical scavengers and can ameliorate endoplasmic reticulum stress', *International Journal for Vitamin and Nutrition Research*, 90(3–4), pp. 210–220. Available at: https://doi.org/10.1024/0300-9831/a000517.

Mossavar-Rahmani, Y. *et al.* (2019) 'Artificially Sweetened Beverages and Stroke, Coronary Heart Disease, and All-Cause Mortality in the Women's Health Initiative', *Stroke*, 50(3), pp. 555–562. Available at: https://doi.org/10.1161/STROKEAHA.118.023100.

Mullee, A. *et al.* (2019) 'Association Between Soft Drink Consumption and Mortality in 10 European Countries', *JAMA Internal Medicine*, 179(11), pp. 1479–1490. Available at: https://doi.org/10.1001/jamainternmed.2019.2478.

Naghshi, S. *et al.* (2020) 'Dietary intake of total, animal, and plant proteins and risk of all cause, cardiovascular, and cancer mortality: systematic review and dose-response meta-analysis of prospective cohort studies', *BMJ*, p. m2412. Available at: https://doi.org/10.1136/bmj.m2412.

Nan, F. *et al.* (2022) 'Mannose: A Sweet Option in the Treatment of Cancer and Inflammation', *Frontiers in Pharmacology*, 13, p. 877543. Available at: https://doi.org/10.3389/fphar.2022.877543.

Narain, A., Kwok, C.S. and Mamas, M.A. (2016) 'Soft drinks and sweetened beverages and the risk of cardiovascular disease and mortality: a systematic review and meta-analysis', *International Journal of Clinical Practice*, 70(10), pp. 791–805. Available at: https://doi.org/10.1111/ijcp.12841.

Navarro, I. *et al.* (2024) 'Assessing pesticide residues occurrence and risks in water systems: A Pan-European and Argentina perspective', *Water Research*, 254, p. 121419. Available at: https://doi.org/10.1016/j.watres.2024.121419.

Normén, L. *et al.* (2001) 'Small-bowel absorption of d-tagatose and related effects on carbohydrate digestibility: an ileostomy study', *The American Journal of Clinical Nutrition*, 73(1), pp. 105–110. Available at: https://doi.org/10.1093/ajcn/73.1.105.

Oliveri Conti, G. *et al.* (2020) 'Micro- and nano-plastics in edible fruit and vegetables. The first diet risks assessment for the general population', *Environmental Research*, 187, p. 109677. Available at: https://doi.org/10.1016/j.envres.2020.109677.

Ort, C., Scheringer, M. and Hungerbühler, K. (2014) 'Release of Additives from Synthetic Elastomeric Materials Used in Drinking Water Distribution Systems: Field Study and Modeling', *Environmental Science & Technology Letters*, 1(8), pp. 361–365.

Ortiz, S.R. and Field, M.S. (2020) 'Mammalian metabolism of erythritol: a predictive biomarker of metabolic dysfunction', *Current Opinion in Clinical Nutrition & Metabolic Care*, 23(5), pp. 296–301. Available at: https://doi.org/10.1097/MCO.0000000000000665.

Ortiz, S.R. and Field, M.S. (2023) 'Sucrose Intake Elevates Erythritol in Plasma and Urine in Male Mice', *The Journal of Nutrition*, 153(7), pp. 1889–1902. Available at: https://doi.org/10.1016/j.tjnut.2023.05.022.

Pacheco, L.S. *et al.* (2022) 'Avocado Consumption and Risk of Cardiovascular Disease in US Adults', *Journal of the American Heart Association*, 11(7), p. e024014. Available at: https://doi.org/10.1161/JAHA.121.024014.

Panneerselvam, K. and Freeze, H.H. (1996) 'Mannose Enters Mammalian Cells Using a Specific Transporter That Is Insensitive to Glucose', *Journal of Biological Chemistry*, 271(16), pp. 9417–9421. Available at: https://doi.org/10.1074/jbc.271.16.9417.

Parajuli, K.P. *et al.* (2014) 'The Microbial Invasion of Gastro Intestianal Tract and Habit of Drinking Water Immediately after Meals', *Journal of Nobel Medical College*, 3(1), pp. 58–61. Available at: https://doi.org/10.3126/jonmc.v3i1.10056.

Paterna, J.C. *et al.* (1998) 'Antioxidant and Cytoprotective Properties ofd-Tagatose in Cultured Murine Hepatocytes', *Toxicology and Applied Pharmacology*, 148(1), pp. 117–125. Available at: https://doi.org/10.1006/taap.1997.8315.

Patwa, J. and Flora, S.J.S. (2020) 'Heavy Metal-Induced Cerebral Small Vessel Disease: Insights into Molecular Mechanisms and Possible Reversal Strategies', *International Journal of Molecular Sciences*, 21(11), p. 3862. Available at: https://doi.org/10.3390/ijms21113862.

Peng, R. *et al.* (2023) 'Am I Ugly or Sick? The Influence of social media on Body Dysmorphic Disorder: China and the West', *Lecture Notes in Education Psychology and Public Media*, 3(1), pp. 1010–1021. Available at: https://doi.org/10.54254/2753-7048/3/2022561.

Pepino, M.Y. *et al.* (2013) 'Sucralose Affects Glycemic and Hormonal Responses to an Oral Glucose Load', *Diabetes Care*, 36(9), pp. 2530–2535. Available at: https://doi.org/10.2337/dc12-2221.

Perez-Cornago, A. (2020) 'Commentary: Dairy milk intake and breast cancer risk: does an association exist, and what might be the culprit?', *International Journal of Epidemiology*, 49(5), pp. 1537–1539. Available at: https://doi.org/10.1093/ije/dyaa199.

Pestizide abwaschen: Kaltes Wasser reicht (2006) *Stiftung Warentest*. Stiftung Warentest. Available at: https://www.test.de/Pestizide-abwaschen-Kaltes-Wasser-reicht-1371480-0/ (Accessed: 23 February 2025).

Pestizidzulassungen gefährden unser Grund- und Trinkwasser (2022) *Umweltbundesamt*. Umweltbundesamt. Available at: https://www.umweltbundesamt.de/themen/pestizidzulassungen-gefaehrden-unser-grund (Accessed: 23 February 2025).

PFAS-kontaminiertes Wasser wird wieder sauber – erfolgversprechendes und umweltschonendes Verfahren entwickelt (2023) *Fraunhofer-Institut für Grenzflächen- und Bioverfahrenstechnik IGB*. Available at: https://www.igb.fraunhofer.de/de/presse-medien/presseinformationen/2023/pfas-kontaminiertes-wasser-wird-wieder-sauber-erfolgversprechendes-und-umweltschonendes-verfahren-entwickelt.html (Accessed: 23 February 2025).

Pittroff, M. *et al.* (2021) 'Microplastic analysis in drinking water based on fractionated filtration sampling and Raman microspectroscopy', *Environmental Science and Pollution Research*, 28(42), pp. 59439–59451. Available at: https://doi.org/10.1007/s11356-021-12467-y.

Police, S.B. *et al.* (2009) 'Effect of Diets Containing Sucrose vs. D-tagatose in Hypercholesterolemic Mice', *Obesity*, 17(2), pp. 269–275. Available at: https://doi.org/10.1038/oby.2008.508.

Qian, N. *et al.* (2024) 'Rapid single-particle chemical imaging of nanoplastics by SRS microscopy', *Proceedings of the National Academy of Sciences*, 121(3), p. e2300582121. Available at: https://doi.org/10.1073/pnas.2300582121.

Reinhard, R. (2021) *Pestizid-Belastung: Sorge um das Trinkwasser*, *tagesschau*. Available at: https://www.tagesschau.de/wirtschaft/verbraucher/trinkwasser-schutz-landwirtschaft-101.html (Accessed: 23 February 2025).

Rigby, J. and Naidu, R. (2023) 'Exclusive: WHO's cancer research agency to say aspartame sweetener a possible carcinogen', *Reuters*, 13 July. Available at: https://www.reuters.com/business/healthcare-

pharmaceuticals/whos-cancer-research-agency-say-aspartame-sweetener-possible-carcinogen-sources-2023-06-29/ (Accessed: 22 February 2025).

Romo-Romo, A. *et al.* (2018) 'Sucralose decreases insulin sensitivity in healthy subjects: a randomized controlled trial', *The American Journal of Clinical Nutrition*, 108(3), pp. 485–491. Available at: https://doi.org/10.1093/ajcn/nqy152.

Roser, M. *et al.* (2009) 'Metabolism of galactose in the brain and liver of rats and its conversion into glutamate and other amino acids', *Journal of Neural Transmission*, 116(2), pp. 131–139. Available at: https://doi.org/10.1007/s00702-008-0166-9.

Rouhi, M. *et al.* (2015) 'Combined effects of replacement of sucrose with d-tagatose and addition of different probiotic strains on quality characteristics of chocolate milk', *Dairy Science & Technology*, 95(2), pp. 115–133. Available at: https://doi.org/10.1007/s13594-014-0189-y.

Ruanpeng, D. *et al.* (2017) 'Sugar and artificially sweetened beverages linked to obesity: a systematic review and meta-analysis', *QJM: An International Journal of Medicine*, 110(8), pp. 513–520. Available at: https://doi.org/10.1093/qjmed/hcx068.

Sadeghi, A. *et al.* (2024) 'Efficacy of Probiotics in Overweight and Obesity Control: An Umbrella Review and Subgroup Meta-Analysis', *Probiotics and Antimicrobial Proteins*, 16(6), pp. 2316–2328. Available at: https://doi.org/10.1007/s12602-024-10363-8.

Sánchez-Pérez, S. *et al.* (2022) 'Intestinal Dysbiosis in Patients with Histamine Intolerance', *Nutrients*, 14(9), p. 1774. Available at: https://doi.org/10.3390/nu14091774.

Saunders, J.P. *et al.* (1999) 'Effects of Acute and Repeated Oral Doses ofd-Tagatose on Plasma Uric Acid in Normal and Diabetic Humans', *Regulatory Toxicology and Pharmacology*, 29(2), pp. S57–S65. Available at: https://doi.org/10.1006/rtph.1998.1264.

Saunders, J.P., Zehner, L.R. and Levin, G.V. (1999) 'Disposition ofd-[U-14C]Tagatose in the Rat', *Regulatory Toxicology and Pharmacology*, 29(2), pp. S46–S56. Available at: https://doi.org/10.1006/rtph.1998.1251.

Sawada, D. *et al.* (2015) 'Potent inhibitory effects of D-tagatose on the acid production and water-insoluble glucan synthesis of Streptococcus mutans GS5 in the presence of sucrose', *Acta Medica Okayama*, 69(2), pp. 105–111. Available at: https://doi.org/10.18926/AMO/53339.

Schiffman, S.S. *et al.* (2023) 'Toxicological and pharmacokinetic properties of sucralose-6-acetate and its parent sucralose: in vitro screening assays', *Journal of Toxicology and Environmental Health, Part B*, 26(6), pp. 307–341. Available at: https://doi.org/10.1080/10937404.2023.2213903.

Schleicher, E. *et al.* (no date) 'Definition, Klassifikation und Diagnostik des Diabetes mellitus: Update 2021', *Diabetologie und Stoffwechsel*, 16(Suppl 2), pp. S1–S9. Available at: https://doi.org/10.1055/a-1193-3185.

Schuetz, P. *et al.* (2019) 'Individualised nutritional support in medical inpatients at nutritional risk: a randomised clinical trial', *The Lancet*, 393(10188), pp. 2312–2321. Available at: https://doi.org/10.1016/S0140-6736(18)32776-4.

Seidel, U. *et al.* (2019) 'Lithium-Rich Mineral Water is a Highly Bioavailable Lithium Source for Human Consumption', *Molecular Nutrition & Food Research*, 63(13), p. 1900039. Available at: https://doi.org/10.1002/mnfr.201900039.

Seri, K. *et al.* (1995) 'Prophylactic and Remedial Preparation for Diseases Attendant on Hyperglycemia, and Wholesome Food'. Tokyo. Available at: https://patentimages.storage.googleapis.com/9e/cf/5c/07319aae97fe32/US5468734.pdf.

Sharma, V. *et al.* (2018) 'Mannose Alters Gut Microbiome, Prevents Diet-Induced Obesity, and Improves Host Metabolism', *Cell Reports*, 24(12), pp. 3087–3098. Available at: https://doi.org/10.1016/j.celrep.2018.08.064.

Sherratt, S.C.R. *et al.* (2024) 'Do patients benefit from omega-3 fatty acids?', *Cardiovascular Research*, 119(18), pp. 2884–2901. Available at: https://doi.org/10.1093/cvr/cvad188.

Shi, X. *et al.* (2019) 'Garlic Consumption and All-Cause Mortality among Chinese Oldest-Old Individuals: A Population-Based Cohort Study', *Nutrients*, 11(7), p. 1504. Available at: https://doi.org/10.3390/nu11071504.

Shil, A. *et al.* (2020) 'Artificial Sweeteners Disrupt Tight Junctions and Barrier Function in the Intestinal Epithelium through Activation of the Sweet Taste Receptor, T1R3', *Nutrients*, 12(6), p. 1862. Available at: https://doi.org/10.3390/nu12061862.

Shil, A. and Chichger, H. (2021) 'Artificial Sweeteners Negatively Regulate Pathogenic Characteristics of Two Model Gut Bacteria, E. coli and E. faecalis', *International Journal of Molecular Sciences*, 22(10), p. 5228. Available at: https://doi.org/10.3390/ijms22105228.

Simon, B.R. *et al.* (2013) 'Artificial Sweeteners Stimulate Adipogenesis and Suppress Lipolysis Independently of Sweet Taste Receptors', *Journal of Biological Chemistry*, 288(45), pp. 32475–32489. Available at: https://doi.org/10.1074/jbc.M113.514034.

Simon, G. (2023) *Glyphosate is polluting our waters all across Europe*, *Pesticide Action Network Europe*. Available at: https://www.pan-europe.info/resources/reports/2023/09/glyphosate-polluting-our-waters-all-across-europe (Accessed: 14 February 2025).

Sind Pestizide und Medikamente im Leitungswasser? (2025) *Verbraucherzentrale*. Available at: https://www.verbraucherzentrale.de/wissen/umwelt-haushalt/wasser/sind-pestizide-und-medikamente-im-leitungswasser-34837 (Accessed: 23 February 2025).

Singh, P. *et al.* (2023) 'Taurine deficiency as a driver of aging', *Science*, 380(6649), p. eabn9257. Available at: https://doi.org/10.1126/science.abn9257.

Singh, S. *et al.* (2023) 'The contentious relationship between artificial sweeteners and cardiovascular health', *The Egyptian Journal of Internal Medicine*, 35(1), p. 43. Available at: https://doi.org/10.1186/s43162-023-00232-1.

Sjerps, R.M.A. *et al.* (2019) 'Occurrence of pesticides in Dutch drinking water sources', *Chemosphere*, 235, pp. 510–518. Available at: https://doi.org/10.1016/j.chemosphere.2019.06.207.

Smith, K. *et al.* (2024) 'Meeting the global protein supply requirements of a growing and ageing population', *European Journal of Nutrition*, 63(5), pp. 1425–1433. Available at: https://doi.org/10.1007/s00394-024-03358-2.

Smith, M. *et al.* (2018) 'Microplastics in Seafood and the Implications for Human Health', *Current Environmental Health Reports*, 5(3), pp. 375–386. Available at: https://doi.org/10.1007/s40572-018-0206-z.

Smith-Ryan, A.E. *et al.* (2021) 'Creatine Supplementation in Women's Health: A Lifespan Perspective', *Nutrients*, 13(3), p. 877. Available at: https://doi.org/10.3390/nu13030877.

Soares, D. *et al.* (2021) 'Glyphosate Use, Toxicity and Occurrence in Food', *Foods*, 10(11), p. 2785. Available at: https://doi.org/10.3390/foods10112785.

Soerensen, S.J.C. *et al.* (2025) 'Pesticides and prostate cancer incidence and mortality: An environment-wide association study', *Cancer*, 131(1), p. e35572. Available at: https://doi.org/10.1002/cncr.35572.

Sofield, C.E., Anderton, R.S. and Gorecki, A.M. (2024) 'Mind over Microplastics: Exploring Microplastic-Induced Gut Disruption and Gut-Brain-Axis Consequences', *Current Issues in Molecular Biology*, 46(5), pp. 4186–4202. Available at: https://doi.org/10.3390/cimb46050256.

Song, M. *et al.* (2016) 'Association of Animal and Plant Protein Intake With All-Cause and Cause-Specific Mortality', *JAMA Internal Medicine*, 176(10), pp. 1453–1463. Available at: https://doi.org/10.1001/jamainternmed.2016.4182.

Song, M. *et al.* (2018) 'Fiber Intake and Survival After Colorectal Cancer Diagnosis', *JAMA Oncology*, 4(1), pp. 71–79. Available at: https://doi.org/10.1001/jamaoncol.2017.3684.

Song, M., Wu, K., Meyerhardt, J., Ogino, S., Wang, M., Fuchs, C., Giovannucci, E., & Chan, A. (2018). Ballaststoffaufnahme und Überleben nach der Diagnose von Darmkrebs. JAMA Oncology , 4, 71–79. https://doi.org/10.1001/jamaoncol.2017.3684.

Soria, A.C., Sanz, M.L. and Villamiel, M. (2009) 'Determination of minor carbohydrates in carrot (Daucus carota L.) by GC–MS', *Food Chemistry*, 114(2), pp. 758–762. Available at: https://doi.org/10.1016/j.foodchem.2008.10.060.

Springmann, M. (2024) 'A multicriteria analysis of meat and milk alternatives from nutritional, health, environmental, and cost perspectives', *Proceedings of the National Academy of Sciences*, 121(50), p. e2319010121. Available at: https://doi.org/10.1073/pnas.2319010121.

Steensels, S., Vancleef, L. and Depoortere, I. (2016) 'The Sweetener-Sensing Mechanisms of the Ghrelin Cell', *Nutrients*, 8(12), p. 795. Available at: https://doi.org/10.3390/nu8120795.

Stemmer, K. and Müller, T.D. (2023) 'GLP-1-Mimetika — wegweisend zur Behandlung von Diabetes und Adipositas', *BIOspektrum*, 29(2), pp. 137–139. Available at: https://doi.org/10.1007/s12268-023-1919-6.

Stoll, J. (2024) *Die UBA Datenbank – „Arzneimittel in der Umwelt"*, *Umweltbundesamt*. Umweltbundesamt. Available at: https://www.umweltbundesamt.de/themen/chemikalien/arzneimittel/die-uba-datenbank-arzneimittel-in-der-umwelt (Accessed: 22 February 2025).

Straube, R. *et al.* (2019) 'Metabolic and Non-Metabolic Peripheral Neuropathy: Is there a Place for Therapeutic Apheresis?', *Hormone and Metabolic Research*, 51(12), pp. 779–784. Available at: https://doi.org/10.1055/a-1039-1471.

Sturman, J.A. *et al.* (1988) 'Tissue taurine content and conjugated bile acid composition of rhesus monkey infants fed a human infant soy-protein formula with or without taurine supplementation for 3 months', *Neurochemical Research*, 13(4), pp. 311–316. Available at: https://doi.org/10.1007/BF00972479.

Suez, J. *et al.* (2014) 'Artificial sweeteners induce glucose intolerance by altering the gut microbiota', *Nature*, 514(7521), pp. 181–186. Available at: https://doi.org/10.1038/nature13793.

Suez, J. *et al.* (2022) 'Personalized microbiome-driven effects of non-nutritive sweeteners on human glucose tolerance', *Cell*, 185(18), pp. 3307-3328.e19. Available at: https://doi.org/10.1016/j.cell.2022.07.016.

Suriano, F., Van Hul, M. and Cani, P.D. (2020) 'Gut microbiota and regulation of myokine-adipokine function', *Current Opinion in Pharmacology*, 52, pp. 9–17. Available at: https://doi.org/10.1016/j.coph.2020.03.006.

Syafrudin, M. *et al.* (2021) 'Pesticides in Drinking Water—A Review', *International Journal of Environmental Research and Public Health*, 18(2), p. 468. Available at: https://doi.org/10.3390/ijerph18020468.

Tang, K.H.D. *et al.* (2024) 'Health risk of human exposure to microplastics: a review', *Environmental Chemistry Letters*, 22(3), pp. 1155–1183. Available at: https://doi.org/10.1007/s10311-024-01727-1.

Tey, S.L. *et al.* (2017) 'Effects of aspartame-, monk fruit-, stevia- and sucrose-sweetened beverages on postprandial glucose, insulin and energy intake', *International Journal of Obesity*, 41(3), pp. 450–457. Available at: https://doi.org/10.1038/ijo.2016.225.

Thompson, R.C. *et al.* (2004) 'Lost at Sea: Where Is All the Plastic?', *Science*, 304(5672), p. 838. Available at: https://doi.org/10.1126/science.1094559.

Thomsen, H.H. *et al.* (2018) 'Effects of 3-hydroxybutyrate and free fatty acids on muscle protein kinetics and signaling during LPS-induced inflammation in humans: anticatabolic impact of ketone bodies', *The American Journal of Clinical Nutrition*, 108(4), pp. 857–867. Available at: https://doi.org/10.1093/ajcn/nqy170.

Thongprakaisang, S. *et al.* (2013) 'Glyphosate induces human breast cancer cells growth via estrogen receptors', *Food and Chemical Toxicology*, 59, pp. 129–136. Available at: https://doi.org/10.1016/j.fct.2013.05.057.

Tian, J. *et al.* (2021) 'Green tea catechins EGCG and ECG enhance the fitness and lifespan of Caenorhabditis elegans by complex I inhibition', *Aging*, 13(19), pp. 22629–22648. Available at: https://doi.org/10.18632/aging.203597.

Toews, I. *et al.* (2019) ‘Association between intake of non-sugar sweeteners and health outcomes: systematic review and meta-analyses of randomised and non-randomised controlled trials and observational studies’, *BMJ*, p. k4718. Available at: https://doi.org/10.1136/bmj.k4718.

Tremblay, F. *et al.* (2007) ‘Role of Dietary Proteins and Amino Acids in the Pathogenesis of Insulin Resistance’, *Annual Review of Nutrition*, 27(Volume 27, 2007, Volume 27), pp. 293–310. Available at: https://doi.org/10.1146/annurev.nutr.25.050304.092545.

Trinkwassercheck Deutschland – Jede sechste Probe überschreitet Grenzwert (2015) *Fraunhofer-Institut für Grenzflächen- und Bioverfahrenstechnik IGB*. Available at: https://www.igb.fraunhofer.de/de/presse-medien/presseinformationen/2015/wassercheck.html (Accessed: 23 February 2025).

Tutaroğlu, S., Uslu, L. and Gündoğdu, S. (2023) ‘Microplastic contamination of packaged spirulina products’, *Environmental Science and Pollution Research*, 31(1), pp. 1114–1126. Available at: https://doi.org/10.1007/s11356-023-31130-2.

Tyl, M.D., Merengwa, V.U. and Cristea, I.M. (2025) ‘Infection-induced lysine lactylation enables herpesvirus immune evasion’, *Science Advances*, 11(2), p. eads6215. Available at: https://doi.org/10.1126/sciadv.ads6215.

Urrutia-Pereira, M. *et al.* (2023) ‘Microplastics exposure and immunologic response’, *Allergologia et Immunopathologia*, 51(5), pp. 57–65. Available at: https://doi.org/10.15586/aei.v51i5.834.

Valencak, T. (2013) ‘Wildbret: Premiumprodukt dank „guter“ Fettsäuren’, *Weidwerk*, 8, pp. 14–15. Available at: https://www.vetmeduni.ac.at/fileadmin/v/fiwi/Publikationen/Populaerwissenschaftliche/Valencak_2013_Wildbret_Fettsaeuren.pdf.

Valeri, F. *et al.* (1997) ‘Fructose and Tagatose Protect Against Oxidative Cell Injury by Iron Chelation’, *Free Radical Biology and Medicine*, 22(1–2), pp. 257–268. Available at: https://doi.org/10.1016/S0891-5849(96)00331-0.

Venema, K., Vermunt, S.H.F. and Brink, E.J. (2005) ‘D-Tagatose increases butyrate production by the colonic microbiota in healthy men and women’, *Microbial Ecology in Health and Disease*, 17(1), pp. 47–57. Available at: https://doi.org/10.1080/08910600510035093.

Venturella, G. *et al.* (2021) ‘Medicinal Mushrooms: Bioactive Compounds, Use, and Clinical Trials’, *International Journal of Molecular Sciences*, 22(2), p. 634. Available at: https://doi.org/10.3390/ijms22020634.

Verrastro, V. *et al.* (2020) ‘Fear the Instagram: beauty stereotypes, body image and Instagram use in a sample of male and female adolescents’, *Qwerty. Open and Interdisciplinary Journal of Technology, Culture and Education*, 15(1). Available at: https://doi.org/10.30557/QW000021.

Verwendung und Wirkung von Lebensmittelzusatzstoffen (no date) *Bundesamt für Verbraucherschutz und Lebensmittelsicherheit*. Available at: https://www.bvl.bund.de/DE/Arbeitsbereiche/01_Lebensmittel/03_Verbraucher/05_Zusatzstoffe/lm_zusatzst_node.html (Accessed: 22 February 2025).

Voutchkova, D.D. *et al.* (2021) ‘Estimating pesticides in public drinking water at the household level in Denmark’, *GEUS Bulletin*, 47, p. e6090. Available at: https://doi.org/10.34194/geusb.v47.6090.

Vyas, A. *et al.* (2015) ‘Diet Drink Consumption and the Risk of Cardiovascular Events: A Report from the Women’s Health Initiative’, *Journal of General Internal Medicine*, 30(4), pp. 462–468. Available at: https://doi.org/10.1007/s11606-014-3098-0.

Wu W, Sui W, Chen S, Guo Z, Jing X, Wang X, Wang Q, Yu X, Xiong W, Ji J, Yang L, Zhang Y, Jiang W, Yu G, Liu S, Tao W, Zhao C, Zhang Y, Chen Y, Zhang C, Cao Y. Sweetener aspartame aggravates atherosclerosis through insulin-triggered inflammation. Cell Metab. 2025 Feb 19:S1550-4131(25)00006-3. doi: 10.1016/j.cmet.2025.01.006. Epub ahead of print. PMID: 39978336.

Wang, Z. *et al.* (2020) ‘Taurine Improves Lipid Metabolism and Increases Resistance to Oxidative Stress’, *Journal of Nutritional Science and Vitaminology*, 66(4), pp. 347–356. Available at: https://doi.org/10.3177/jnsv.66.347.

Watanabe, F. (2007) 'Vitamin B_{12} Sources and Bioavailability', *Experimental Biology and Medicine*, 232(10), pp. 1266–1274. Available at: https://doi.org/10.3181/0703-MR-67.

Watson, P. *et al.* (2015) 'Mild hypohydration increases the frequency of driver errors during a prolonged, monotonous driving task', *Physiology & Behavior*, 147, pp. 313–318. Available at: https://doi.org/10.1016/j.physbeh.2015.04.028.

Weber, F. *et al.* (2021) 'Investigation of microplastics contamination in drinking water of a German city', *Science of The Total Environment*, 755, p. 143421. Available at: https://doi.org/10.1016/j.scitotenv.2020.143421.

Wei, S.-J. *et al.* (2024) 'Ketogenic diet induces p53-dependent cellular senescence in multiple organs', *Science Advances*, 10(20). Available at: https://doi.org/10.1126/sciadv.ado1463.

Wei, Z. *et al.* (2020) 'Mannose: Good player and assister in pharmacotherapy', *Biomedicine & Pharmacotherapy*, 129, p. 110420. Available at: https://doi.org/10.1016/j.biopha.2020.110420.

Weißenborn, A. *et al.* (2018) 'Höchstmengen für Vitamine und Mineralstoffe in Nahrungsergänzungsmitteln', *Journal of Consumer Protection and Food Safety*, 13(1), pp. 25–39. Available at: https://doi.org/10.1007/s00003-017-1140-y.

WHO advises not to use non-sugar sweeteners for weight control in newly released guideline (2023) *World Health Organization*. Available at: https://www.who.int/news/item/15-05-2023-who-advises-not-to-use-non-sugar-sweeteners-for-weight-control-in-newly-released-guideline (Accessed: 22 February 2025).

Wie kann ich meinen Kalziumbedarf decken? (2021) *gesundheitsinformation.de*. Available at: https://www.gesundheitsinformation.de/wie-kann-ich-meinen-kalziumbedarf-decken.html (Accessed: 22 February 2025).

Wille, J. (2023) *Wo gespritzt wird, leiden die Bäche*, *Klimareporter*. Available at: https://www.klimareporter.de/landwirtschaft/wo-gespritzt-wird-leiden-die-baeche (Accessed: 23 February 2025).

Williams, J. *et al.* (2015) 'BSN723T Prevents Atherosclerosis and Weight Gain in ApoE Knockout Mice Fed a Western Diet', *WebmedCentral*, 6(12), p. WMC005034.

Willis, J.R. and Gabaldón, T. (2020) 'The Human Oral Microbiome in Health and Disease: From Sequences to Ecosystems', *Microorganisms*, 8(2), p. 308. Available at: https://doi.org/10.3390/microorganisms8020308.

Wintermantel, B. (2022) *Wasser filtern: Wie sinnvoll sind Wasserfilter wie Brita & Co.?*, *ÖKOTEST*. Available at: https://www.oekotest.de/essen-trinken/Wasser-filtern-Wie-sinnvoll-sind-Wasserfilter-wie-Brita-Co-_600943_1.html (Accessed: 23 February 2025).

Wise, J. (2016) 'Eating more plant protein is associated with lower risk of death', *BMJ*, 354. Available at: https://doi.org/10.1136/bmj.i4243.

Wissenschaftliche Dienste des Deutschen Bundestages (2023) *Gesundheitliche Auswirkungen von Süßungsmitteln*. Dokumentation WD 9-3000-006/23. Berlin, Deutschland: Deutscher Bundestag. Available at: https://www.bundestag.de/resource/blob/942568/bf2d135ccd96d2d7390c43bdae277809/WD-9-006-23-pdf-data.pdf.

Witkowski, M. *et al.* (2023) 'The artificial sweetener erythritol and cardiovascular event risk', *Nature Medicine*, 29(3), pp. 710–718. Available at: https://doi.org/10.1038/s41591-023-02223-9.

Witkowski, M. *et al.* (2024) 'Xylitol is prothrombotic and associated with cardiovascular risk', *European Heart Journal*, 45(27), pp. 2439–2452. Available at: https://doi.org/10.1093/eurheartj/ehae244.

Wolf, J. (no date) 'ZOE Science & Nutrition Podcast'. Available at: https://zoe.com/learn/category/podcasts.

Woodley, K. *et al.* (2023) 'Mannose metabolism inhibition sensitizes acute myeloid leukaemia cells to therapy by driving ferroptotic cell death', *Nature Communications*, 14(1), p. 2132. Available at: https://doi.org/10.1038/s41467-023-37652-0.

World Cancer Research Fund/American Institute for Cancer Research (2018) *Diet, nutrition, physical activity and breast cancer*. World Cancer Research Fund (WCRF) & American Institute for Cancer Research (AICR). Available at: http://dietandcancerreport.org.

World Health Organization (2023) *Use of non-sugar sweeteners: WHO guideline*. Geneva, Switzerland: World Health Organization.

Wu, G. *et al.* (2023) 'Methionine-Restricted Diet: A Feasible Strategy Against Chronic or Aging-Related Diseases', *Journal of Agricultural and Food Chemistry*, 71(1), pp. 5–19. Available at: https://doi.org/10.1021/acs.jafc.2c05829.

Wu, T. *et al.* (2012) 'Effects of different sweet preloads on incretin hormone secretion, gastric emptying, and postprandial glycemia in healthy humans', *The American Journal of Clinical Nutrition*, 95(1), pp. 78–83. Available at: https://doi.org/10.3945/ajcn.111.021543.

Xia, X. *et al.* (2011) 'Berberine Improves Glucose Metabolism in Diabetic Rats by Inhibition of Hepatic Gluconeogenesis', *PLoS ONE*. Edited by A. Xu, 6(2), p. e16556. Available at: https://doi.org/10.1371/journal.pone.0016556.

Yadav, D. *et al.* (2018) 'The Ability of Different Ketohexoses to Alter Apo-A-I Structure and Function In Vitro and to Induce Hepatosteatosis, Oxidative Stress, and Impaired Plasma Lipid Profile in Hyperlipidemic Zebrafish', *Oxidative Medicine and Cellular Longevity*. Edited by R. Valenzuela, 2018(1), p. 3124364. Available at: https://doi.org/10.1155/2018/3124364.

Yamazaki, Y. *et al.* (2011) 'Maximum Permissive Dosage for Transitory Diarrhea, Estimation of Available Energy, and Fate of D-tagatose in Healthy Female Subjects', *Nippon Eiyo Shokuryo Gakkaishi*, 64(6), pp. 403–413. Available at: https://doi.org/10.4327/jsnfs.64.403.

Younossi, Z.M. *et al.* (2016) 'Global epidemiology of nonalcoholic fatty liver disease—Meta-analytic assessment of prevalence, incidence, and outcomes', *Hepatology*, 64(1), pp. 73–84. Available at: https://doi.org/10.1002/hep.28431.

Yu, Z., Henderson, I.R. and Guo, J. (2023) 'Non-caloric artificial sweeteners modulate conjugative transfer of multi-drug resistance plasmid in the gut microbiota', *Gut Microbes*, 15(1), p. e2157698. Available at: https://doi.org/10.1080/19490976.2022.2157698.

Zahra, M. *et al.* (2024) 'Curcumin (Turmeric): A Carcinogenic, Miscarriage and Cirrhosis Causing Agent', *Journal of Health and Rehabilitation Research*, 4(2), pp. 1738–1743. Available at: https://doi.org/10.61919/jhrr.v4i2.1159.

Zeid, I.M. *et al.* (1997) 'Cytoprotection by Fructose and Other Ketohexoses During Bile Salt–Induced Apoptosis of Hepatocytes', *Hepatology*, 25(1), pp. 81–86. Available at: https://doi.org/10.1002/hep.510250115.

Zeng, Y. *et al.* (2018) 'Preventive and Therapeutic Role of Functional Ingredients of Barley Grass for Chronic Diseases in Human Beings', *Oxidative Medicine and Cellular Longevity*. Edited by R. Valenzuela, 2018(1), p. 3232080. Available at: https://doi.org/10.1155/2018/3232080.

Zhang, H. *et al.* (2024) 'D-Mannose promotes recovery from experimental colitis by inducing AMPK phosphorylation to stimulate epithelial repair', *Food & Function*, 15(2), pp. 625–646. Available at: https://doi.org/10.1039/D3FO03146B.

Zhang, J. *et al.* (2023) 'Identification of Poly(ethylene terephthalate) Nanoplastics in Commercially Bottled Drinking Water Using Surface-Enhanced Raman Spectroscopy', *Environmental Science & Technology*, 57(22), pp. 8365–8372. Available at: https://doi.org/10.1021/acs.est.3c00842.

Zhang, R. *et al.* (2022) 'D-mannose facilitates immunotherapy and radiotherapy of triple-negative breast cancer via degradation of PD-L1', *Proceedings of the National Academy of Sciences*, 119(8), p. e2114851119. Available at: https://doi.org/10.1073/pnas.2114851119.

Zhang, S. *et al.* (2021) 'Association between consumption frequency of honey and non-alcoholic fatty liver disease: results from a cross-sectional analysis based on the Tianjin Chronic Low-grade Systemic Inflammation and Health (TCLSIH) Cohort Study', *British Journal of Nutrition*, 125(6), pp. 712–720. Available at: https://doi.org/10.1017/S0007114520003190.

Zhao, D. *et al.* (2021) ‘Beneficial impacts of fermented celery (Apium graveolens L.) juice on obesity prevention and gut microbiota modulation in high-fat diet fed mice’, *Food & Function*, 12(19), pp. 9151–9164. Available at: https://doi.org/10.1039/D1FO00560J.

Ziani, K. *et al.* (2023) ‘Microplastics: A Real Global Threat for Environment and Food Safety: A State of the Art Review’, *Nutrients*, 15(3), p. 617. Available at: https://doi.org/10.3390/nu15030617.

Zuri, G., Karanasiou, A. and Lacorte, S. (2023) ‘Human biomonitoring of microplastics and health implications: A review’, *Environmental Research*, 237, p. 116966. Available at: https://doi.org/10.1016/j.envres.2023.116966.

Zylka-Menhorn, V. (2018) ‘Arzneimittelrückstände im Wasser: Vermeidung und Elimination’, *Deutsches Ärzteblatt*, 115(22), p. 8946. Available at: https://www.aerzteblatt.de/archiv/pdf/4e3c53e5-df77-4da8-8404-96be085ee7f7.

Auburn R. Berry, Samuel T. Ruzzene, Emily I. Ostrander, Kendra N. Wegerson, Nathalie C. Orozco-Fersiva, Madeleine F. Stone, Whitney B. Valenti, Joao E. Izaias, Joshua P. Holzer, Jared J. Greiner, Vinicius P. Garcia, Christopher A. DeSouza: The non-nutritive sweetener erythritol adversely affects brain microvascular endothelial cell function.
https://journals.physiology.org/doi/full/10.1152/japplphysiol.00276.2025 and https://www.n-tv.de/wissen/Bestimmter-Suessstoff-koennte-Schutzbarriere-im-Hirn-angreifen-article25916921.html