REFERENCE LIST

Chapter 1. The Problem Isn't You

1. Global Burden of Disease 2023: Findings from the GBD 2023 Study (2023). Available at:

2. Pottenger's Cats. Renaissance Health Newsletter (8 April 2015). Available at:

3. Vilcins D, Cortes-Ramirez J, Currie D, Preston P (2021) Early environmental exposures and life-long risk of chronic non-respiratory disease. Paediatric Respiratory Reviews 40:33–38.

4. Elcombe CS, Evans NP, Bellingham M (2022) Critical review and analysis of literature on low dose exposure to chemical mixtures in mammalian in vivo systems. Critical Reviews in Toxicology 52(3):221–238.

5. Buñay J, Larriba E, Moreno RD, Del Mazo J (2017) Chronic low-dose exposure to a mixture of environmental endocrine disruptors induces microRNAs/isomiRs deregulation in mouse concomitant with intratesticular estradiol reduction. Scientific Reports 7(1):3373.

6. Gidlow CJ, Randall J, Gillman J, Smith GR, Jones MV (2016) Natural environments and chronic stress measured by hair cortisol. Landscape and Urban Planning 148:61–67. <https://doi.org/10.1016/j.landurbplan.2015.12.009>

7. Our Epidemic of Loneliness and Isolation: The U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community (2023).

8. Vogel SA (2009) The politics of plastics: the making and unmaking of bisphenol A "safety". American Journal of Public Health 99(Suppl. 3)--S566. <https://doi.org/10.2105/AJPH.2008.159228>

9. Goodbye E171: The EU bans titanium dioxide as a food additive. European Commission Newsroom (18 January 2022).

10. Electromagnetic fields (EMF) and health issues. Better Health Channel, Victoria State Government. Available at: <https://www.betterhealth.vic.gov.au/health/healthyliving/electromagnetic-fields-emf-and-health-issues>

11. United Kingdom Energy Drinks Market Size & Share Analysis – Growth Trends and Forecast (2026–2031). Available at: <https://www.mordorintelligence.com/industry-reports/united-kingdom-energy-drink-market>

12. Guo L, Tu B, Li D, Zhi L, Zhang Y, Xiao H, Li W, Xu X (2024) Association between United States environmental contaminants and the prevalence of psoriasis derived from the National Health and Nutrition Examination Survey. Toxics 12(7):522. <https://doi.org/10.3390/toxics12070522>

13. Pahwa R, Goyal A, Jialal I (2023) Chronic inflammation. In: StatPearls. Treasure Island, FL: StatPearls Publishing.

14. National Report on Human Exposure to Environmental Chemicals. CDC (23 May 2025). Available at: <https://www.cdc.gov/environmental-exposure-report/>

15. Chen H (2025) When tracking becomes toxic: The potential dark side of fitness technology. Newcastle University (18 December 2025).

16. Genuis SJ, Sears ME, Schwalfenberg G, Hope J, Bernhoft R (2013) Clinical detoxification: elimination of persistent toxicants from the human body. The Scientific World Journal 2013:238347. <https://doi.org/10.1155/2013/238347>

17. An E, Delgadillo DR, Yang J, Agarwal R, Labus JS, Pawar S, Lietman M, Kilpatrick LA, Bhatt RR, Vora P, Vaughan A, Dong TS, Gupta A (2024) Stress-resilience impacts psychological wellbeing: evidence from brain-gut microbiome interactions. Nature Mental Health 2(8):935–950. <https://doi.org/10.1038/s44220-024-00266-6>

18. Campbell-McBride N (2004) Gut and Psychology Syndrome.

19. Zhang C, Li L, Jin B, Xu X, Zuo X, Li Y, Li Z (2021) The effects of delivery mode on the gut microbiota and health: state of the art. Frontiers in Microbiology 12:724449. <https://doi.org/10.3389/fmicb.2021.724449>

Chapter 2. The Four Body Burdens

20. US Environmental Protection Agency (2025) TSCA Chemical Substance Inventory. Available at: <https://www.epa.gov/tsca-inventory/how-access-tsca-inventory#download> (July 2025).

21. Pletz M (2022) Ingested microplastics: do humans eat one credit card per week? Journal of Hazardous Materials Letters 3:100071. <https://doi.org/10.1016/j.hazl.2022.100071>

22. Jurikova M, Dvorakova D, Bechynska K, Pulkrabova J (2024) Bisphenols in daily clothes from conventional and recycled material: evaluation of dermal exposure to potentially toxic substances. Environmental Science and Pollution Research 31(43):55663–55675. <https://doi.org/10.1007/s11356-024-34904-4>

23. Rochester JR, Bolden AL (2015) Bisphenol S and F: a systematic review and comparison of the hormonal activity of bisphenol A substitutes. Environmental Health Perspectives 123(7):643–650. <https://doi.org/10.1289/ehp.1408989>

24. Wang Y, Aimuzi R, Nian M, Zhang Y, Luo K, Zhang J (2021) Bisphenol A substitutes and sex hormones in children and adolescents. Chemosphere 278:130396. <https://doi.org/10.1016/j.chemosphere.2021.130396>

25. Noonan GO, Ackerman LK, Begley TH (2011) Concentration of bisphenol A in highly consumed canned foods on the U.S. market. Journal of Agricultural and Food Chemistry 59(13):7178-7185. https://pubmed.ncbi.nlm.nih.gov/21598963/

26. Palacios-Arreola MI, Morales-Montor J, Cazares-Martinez CJ, Gomez-Arroyo S, Nava-Castro KE (2021) Environmental pollutants: an immunoendocrine perspective on phthalates. Frontiers in Bioscience 26(3):401–430. <https://doi.org/10.2741/4899>

27. Martínez-Pinna J, Sempere-Navarro R, Medina-Gali RM, Fuentes E, Quesada I, Sargis RM, Trasande L, Nadal A (2023) Endocrine disruptors in plastics alter β-cell physiology and increase the risk of diabetes mellitus. American Journal of Physiology -- Endocrinology and Metabolism 324(6)--E505. <https://doi.org/10.1152/ajpendo.00068.2023>

28. FIDRA. Environment and health: how PFAS enter the environment. Available at: <https://pfasfree.org.uk/about-pfas-old/environment-and-health>

29. DeWitt JC, Goldenman G, Lohmann R, Ng CA, Wang Z (2025) Emerging toxicological awareness of per- and polyfluoroalkyl substances: the rising concern over 'forever chemicals'. Disease Models & Mechanisms 18(11). <https://doi.org/10.1242/dmm.052647>

30. Cheng B, Alapaty K, Zartarian V, Poulakos A, Strynar M, Buckley T (2021) Per- and polyfluoroalkyl substances exposure science: current knowledge, information needs, future directions. International Journal of Environmental Science and Technology 1–16. <https://doi.org/10.1007/s13762-021-03710-7>

31. Liang J, Liu QS, Ren Z, Min K, Yang X, Hao F, Zhang Q, Liu Q, Zhou Q, Jiang G (2023) Studying paraben-induced estrogen receptor- and steroid hormone-related endocrine disruption effects via multi-level approaches. Science of the Total Environment 869:161793. <https://doi.org/10.1016/j.scitotenv.2023.161793>

32. Hager E, Chen J, Zhao L (2022) Minireview: parabens exposure and breast cancer. International Journal of Environmental Research and Public Health 19(3):1873. <https://doi.org/10.3390/ijerph19031873>

33. Foucault A, Ravalet N, Besombes J, Picou F, Gallay N, Babin L, Bourgeais J, Hamard S, Domenech J, Loyer P, et al. (2021) Low-dose pesticides alter primary human bone marrow mesenchymal stem/stromal cells through ALDH2 inhibition. Cancers 13:5699. <https://doi.org/10.3390/cancers13225699>

34. Hasenböhler A, Javaux G, Payen de la Garanderie M, de Edelenyi FS, Yvroud-Hoyos P, Agaësse C, et al. (2026) Intake of food additive preservatives and incidence of cancer: results from the NutriNet-Santé prospective cohort. BMJ 392. <https://doi.org/10.1136/bmj-2025-084917>

35. Steinemann A (2016) Fragranced consumer products: exposures and effects from emissions. Air Quality, Atmosphere & Health 9(8):861–866. <https://doi.org/10.1007/s11869-016-0442-z>

36. Campaign for Safe Cosmetics (2022) Fragrance. Available at: <https://www.safecosmetics.org/chemicals/fragrance/>

37. Velasco M (2024) Flame retardants decrease immune response in children with autism. Environmental Factor, National Institute of Environmental Health

Sciences (February 2024). Available at: <https://www.niehs.nih.gov/news/factor/2024/2/papers/dert#a1>

38. Zhou X, Zhou X, Wang C, Zhou H (2023) Environmental and human health impacts of volatile organic compounds: a perspective review. Chemosphere 313:137489. <https://doi.org/10.1016/j.chemosphere.2022.137489>

39. Wilkinson JL, Boxall ABA, Kolpin DW, Leung KMY, Lai RWS, Galán-Malagón C, Adell AD, Mondon J, Metian M, Marchant RA, Bouzas-Monroy A, Cuni-Sanchez A, Coors A, Carriquiriborde P, Rojo M, Gordon C, Cara M, Moermond M, Luarte T, Teta C (2022) Pharmaceutical pollution of the world's rivers. Proceedings of the National Academy of Sciences of the United States of America 119(8). <https://doi.org/10.1073/pnas.2113947119>

40. Svarczkopf L (2022) The River Thames has a drug problem. Emerald Review (1 October 2022). Available at: <https://emeraldreview.com/2022/10/the-river-thames-has-a-drug-problem/>

41. Thompson RC, Moore CJ, vom Saal FS, Swan SH (2009) Plastics, the environment and human health: current consensus and future trends. Philosophical Transactions of the Royal Society B: Biological Sciences 364(1526):2153–2166. <https://doi.org/10.1098/rstb.2009.0053>

42. University of Birmingham / PIRG (2025) New study finds that we're drinking microplastics. https://pirg.org/updates/new-study-finds-that-were-drinking-microplastics/

43. Prevalence of microplastics in commercially sold soft drinks. ScienceDirect. https://www.sciencedirect.com/science/article/abs/pii/S030147972300508X

44. Healthline Editorial Team (2025) The GAPS diet: an evidence-based review. Healthline (updated 21 August 2025). Available at: <https://www.healthline.com/nutrition/gaps-diet>

45. Puigbò P, Leino LI, Rainio MJ, Saikkonen K, Saloniemi I, Helander M (2022) Does glyphosate affect the human microbiota? Life 12(5):707. <https://doi.org/10.3390/life12050707>

46. Palleja A, Mikkelsen KH, Forslund SK, Kashani A, Allin KH, Nielsen T, Hansen TH, Liang S, Feng Q, Zhang C, Pyl PT, Coelho LP, Yang H, Wang J, Typas A, Nielsen MF, Nielsen HB, Bork P, Wang J, Vilsbøll T, Hansen T, Knop

FK, Arumugam M, Pedersen O (2018) Recovery of gut microbiota of healthy adults following antibiotic exposure. Nature Microbiology 3(11):1255–1265. <https://doi.org/10.1038/s41564-018-0257-9>

47. Seto T, Grondin JA, Khan WI (2025) Food additives: emerging detrimental roles on gut health. The FASEB Journal 39(13). <https://doi.org/10.1096/fj.202500737R>

48. Shanle EK, Xu W (2011) Endocrine disrupting chemicals targeting estrogen receptor signaling: identification and mechanisms of action. Chemical Research in Toxicology 24(1):6–19. <https://doi.org/10.1021/tx100231n>

49. Hutz RJ, Carvan MJ III, Larson JK, Liu Q, Stelzer RV, King-Heiden TC, Baldridge MG, Shahnoor N, Julien K (2014) Familiar and novel reproductive endocrine disruptors: xenoestrogens, dioxins and nanoparticles. Current Trends in Endocrinology 7:111–122.

50. Singleton DW, Khan SA (2003) Xenoestrogen exposure and mechanisms of endocrine disruption. Frontiers in Bioscience 8--S118. <https://doi.org/10.2741/1010>

51. Li Z, Deng L, Zhang Y (2026) Environmental pollutants as emerging disruptors of thyroid function: mechanisms and early-life risks. Ecotoxicology and Environmental Safety 309:119581. <https://doi.org/10.1016/j.ecoenv.2025.119581>

52. Zoeller RT (2021) Endocrine disrupting chemicals and thyroid hormone action. Advances in Pharmacology 92:401–417. <https://doi.org/10.1016/bs.apha.2021.05.002>

53. Imperial College London (2011) Obesity has doubled since 1980, major global analysis of risk factors reveals (4 February 2011).

54. Mohajer N, Du CY, Checkcinco C, Blumberg B (2021) Obesogens: how they are identified and molecular mechanisms underlying their action. Frontiers in Endocrinology 12:780888. <https://doi.org/10.3389/fendo.2021.780888>

55. Heindel JJ, Alvarez JA, Atlas E, Cave MC, Chatzi VL, Collier D, Corkey B, Fischer D, Goran MI, Howard S, Kahan S, Kayhoe M, Koliwad S, Kotz CM, La Merrill M, Lobstein T, Lumeng C, Ludwig DS, Lustig RH, Myers P, Nadal A, Trasande L, Redman LM, Rodeheffer MS, Sargis RM, Stephens JM, Ziegler

TR, Blumberg B (2023) Obesogens and obesity: state-of-the-science and future directions summary from a Healthy Environment and Endocrine Disruptors Strategies Workshop. American Journal of Clinical Nutrition 118(1):329–337. <https://doi.org/10.1016/j.ajcnut.2023.05.024>

56. Midya V, Yao M, Colicino E, et al. (2025) Exposure to per- and poly-fluoroalkyl substances in association with later occurrence of type 2 diabetes and metabolic pathway dysregulation in a multiethnic US population. eBioMedicine 118. <https://doi.org/10.1016/j.ebiom.2025.105838>

57. Angrand RC, Collins G, Landrigan PJ, Thomas VM (2022) Relation of blood lead levels and lead in gasoline: an updated systematic review. Environmental Health 21(1):138. <https://doi.org/10.1186/s12940-022-00936-x>

58. United Nations Environment Programme (2021) Era of leaded petrol over, eliminating a major threat to human and planetary health (30 August 2021).

59. Witkowska D, Słowik J, Chilicka K (2021) Heavy metals and human health: possible exposure pathways and the competition for protein binding sites. Molecules 26(19):6060. <https://doi.org/10.3390/molecules26196060>

60. Casanova A, Wevers A, Navarro-Ledesma S, Pruimboom L (2023) Mitochondria: it is all about energy. Frontiers in Physiology 14:1114231. <https://doi.org/10.3389/fphys.2023.1114231>

61. Cheng H, Yang B, Ke T, Li S, Yang X, Aschner M, Chen P (2021) Mechanisms of metal-induced mitochondrial dysfunction in neurological disorders. Toxics 9(6):142. <https://doi.org/10.3390/toxics9060142>

62. Kowalczyk P, Sulejczak D, Kleczkowska P, Bukowska-Ośko I, Kucia M, Popiel M, Wietrak E, Kramkowski K, Wrzosek K, Kaczyńska K (2021) Mitochondrial oxidative stress: a causative factor and therapeutic target in many diseases. International Journal of Molecular Sciences 22(24):13384. <https://doi.org/10.3390/ijms222413384>

63. Cheng YF, Zhao YJ, Chen C, Zhang F (2025) Heavy metals toxicity: mechanism, health effects, and therapeutic interventions. MedComm 6(9). <https://doi.org/10.1002/mco2.70241>

64. Maqbool F, Niaz K, Hassan F, Khan F, Abdollahi M (2017) Immunotoxicity of mercury: pathological and toxicological effects. Journal of Environmental Sci-

ence and Health, Part C 35(1):29–46. <https://doi.org/10.1080/10590501.2016.1278299> .

65. Pukanha K, Yimthiang S, Kwanhian W (2020) The immunotoxicity of chronic exposure to high levels of lead: an ex vivo investigation. Toxics 8(3):56. <https://doi.org/10.3390/toxics8030056>

66. Zhang H, Wang J, Zhang K, Shi J, Gao Y, Zheng J, He J, Zhang J, Song Y, Zhang R, Shi X, Jin L, Li H (2024) Association between heavy metals exposure and persistent infections: the mediating role of immune function. Frontiers in Public Health 12:1367644. <https://doi.org/10.3389/fpubh.2024.1367644>

67. Larsen B, Sánchez-Triana E (2023) Global health burden and cost of lead exposure in children and adults: a health impact and economic modelling analysis. The Lancet Planetary Health 7(10)--e840. <https://doi.org/10.1016/S2542-5196(23)00166-3>

68. The Lancet Planetary Health: Cardiovascular disease deaths and IQ loss caused by lead exposure far higher than previous estimates, global study indicates (11 September 2023).

69. Olufemi AC, Mji A, Mukhola MS (2022) Potential health risks of lead exposure from early life through later life: implications for public health education. International Journal of Environmental Research and Public Health 19(23):16006. <https://doi.org/10.3390/ijerph192316006>

70. Cheng H, Yang B, Ke T, Li S, Yang X, Aschner M, Chen P (2021) Mechanisms of metal-induced mitochondrial dysfunction in neurological disorders. Toxics 9(6):142. <https://doi.org/10.3390/toxics9060142>

71. Anderson T (2024) Native vs. non-native EMF: not all EMFs are the same! High Tech Health (10 September 2024). Available at: <https://www.hightechhealth.com/native-vs-non-native-emf/>

72. Eskandani R, Zibaii MI (2024) Unveiling the biological effects of radio-frequency and extremely-low frequency electromagnetic fields on the central nervous system performance. BioImpacts 14(4):30064. <https://doi.org/10.34172/bi.2023.30064>

73. Pineault N (2022) The dangers of your cell phones, WiFi and smart meters on your health. Your Ideal Day Podcast (3 May 2022). Available

at: <https://podcasts.apple.com/gb/podcast/nick-pineault-the-dangers-of-your-cell-phones-wifi/id1457973622?i=1000559433900>

74. Belpomme D, Hardell L, Belyaev I, Burgio E, Carpenter DO (2018) Thermal and non-thermal health effects of low intensity non-ionizing radiation: an international perspective. Environmental Pollution 242(Pt A):643–658. <https://doi.org/10.1016/j.envpol.2018.07.019>

75. Azab AE, Ebrahim SA (2017) Exposure to electromagnetic fields induces oxidative stress and pathophysiological changes in the cardiovascular system. Journal of Applied Biotechnology and Bioengineering 4(2):540–545. <https://doi.org/10.15406/jabb.2017.04.00096>

76. Shepherd S, Lima MAP, Oliveira EE, Sharkh SM, Jackson CW, Newland PL (2018) Extremely low frequency electromagnetic fields impair the cognitive and motor abilities of honey bees. Scientific Reports 8(1):7932. <https://doi.org/10.1038/s41598-018-26185-y>

77. Ma T, Ding Q, Liu C, Wu H (2023) Electromagnetic fields regulate calcium-mediated cell fate of stem cells: osteogenesis, chondrogenesis and apoptosis. Stem Cell Research & Therapy 14(1):133. <https://doi.org/10.1186/s13287-023-03303-w>

78. Scientific Committee on Emerging and Newly Identified Health Risks (2015) Opinion on Potential Health Effects of Exposure to Electromagnetic Fields (EMF) (20 January 2015). Available at: <https://ec.europa.eu/health/scientific_committees/emerging/docs/scenihr_o_041.pdf>

79. Jammoul M, Lawand N (2022) Melatonin: a potential shield against electromagnetic waves. Current Neuropharmacology 20(3):648–660. <https://doi.org/10.2174/1570159X19666210609163946>

80. Rafique N, Al-Asoom LI, Alsunni AA, Saudagar FN, Almulhim L, Alkaltham G (2020) Effects of mobile use on subjective sleep quality. Nature and Science of Sleep 12:357–364. <https://doi.org/10.2147/NSS.S253375>

81. Classic Environmental Testing (2026) What is dirty electricity and how does it affect you. Classic Environmental Testing (2 March 2026). Available at: <https://classicet.com/what-is-dirty-electricity/>

82. Reddy S, Reddy V, Sharma S (2023) Circadian rhythm. In: StatPearls. Trea-

sure Island, FL: StatPearls Publishing. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK519507/>

83. Campbell SS, Murphy PJ (1998) Extraocular circadian phototransduction in humans. Science 279(5349):396–399. <https://doi.org/10.1126/science.279.5349.396>

84. Diffey BL (2011) An overview analysis of the time people spend outdoors. British Journal of Dermatology 164(4):848–854. <https://doi.org/10.1111/j.1365-2133.2010.10165.x>

85. Souissi MA, Gouasmia C, Dergaa I, Faleh J, Trabelsi O, Weiss K, Rosemann T, Dhahbi W, Souissi N, Knechtle B (2025) Impact of evening blue light exposure timing on sleep, motor, and cognitive performance in young athletes with intermediate chronotype. Biology of Sport 42(3):61–68. <https://doi.org/10.5114/biolsport.2025.146787>

86. Zhong C, Masters M, Donzella SM, Diver WR, Patel AV (2025) Electronic screen use and sleep duration and timing in adults. JAMA Network Open 8(3). <https://doi.org/10.1001/jamanetworkopen.2025.2493>

87. Terán E, Yee-Rendon CM, Sosa-Arámbula HJ, De La Herrán-Arita AK, Woods RL (2026) Home lighting, blue-light filtering, and their effects on melatonin suppression. Scientific Reports 16(1):2850. <https://doi.org/10.1038/s41598-025-29882-7>

88. Prosperi S, Chiarelli F (2023) Early and precocious puberty during the COVID-19 pandemic. Frontiers in Endocrinology 13:1107911. <https://doi.org/10.3389/fendo.2022.1107911>

89. Rahman SA, Wright KP Jr, Lockley SW, Czeisler CA, Gronfier C (2019) Characterizing the temporal dynamics of melatonin and cortisol changes in response to nocturnal light exposure. Scientific Reports 9(1):19720. <https://doi.org/10.1038/s41598-019-54806-7>

90. Cajochen C, Frey S, Anders D, Späti J, Bues M, Pross A, Mager R, Wirz-Justice A, Stefani O (2011) Evening exposure to a light-emitting diode (LED)-backlit computer screen affects circadian physiology and cognitive performance. Journal of Applied Physiology 110(5):1432–1438. <https://doi.org/10.1152/japplphysiol.00165.2011>

91. Joseph DN, Whirledge S (2017) Stress and the HPA axis: balancing homeostasis and fertility. International Journal of Molecular Sciences 18(10):2224. <https://doi.org/10.3390/ijms18102224>

92. Okoli A, Hanlon EC, Brady MJ (2021) The relationship between sleep, obesity, and metabolic health in adolescents: a review. Current Opinion in Endocrine and Metabolic Research 17:15–19. <https://doi.org/10.1016/j.coemr.2020.10.007>

93. Taheri S, Lin L, Austin D, Young T, Mignot E (2004) Short sleep duration is associated with reduced leptin, elevated ghrelin, and increased body mass index. PLoS Medicine 1(3). <https://doi.org/10.1371/journal.pmed.0010062>

94. Garaulet M, Gómez-Abellán P (2014) Timing of food intake and obesity: a novel association. Physiology & Behavior 134:44–50. <https://doi.org/10.1016/j.physbeh.2014.01.001>

95. McHill AW, Melanson EL, Higgins J, Connick E, Moehlman TM, Stothard ER, Wright KP (2014) Impact of circadian misalignment on energy metabolism during simulated night-shift work. Proceedings of the National Academy of Sciences of the United States of America 111(48):17302–17307. <https://doi.org/10.1073/pnas.1412021111>

96. Salomon I, Sam S, Rehman YU, Hope IM (2025) Artificial light exposure at night: a hidden risk factor for type 2 diabetes. Sleep Medicine X 10:100146. <https://doi.org/10.1016/j.sleepx.2025.100146>

97. Chaput JP, McHill AW, Cox RC, et al. (2023) The role of insufficient sleep and circadian misalignment in obesity. Nature Reviews Endocrinology 19:82–97. <https://doi.org/10.1038/s41574-022-00747-7>

98. Mason IC, Grimaldi D, Reid KJ, Warlick CD, Malkani RG, Abbott SM, Zee PC (2022) Light exposure during sleep impairs cardiometabolic function. Proceedings of the National Academy of Sciences of the United States of America 119(12). <https://doi.org/10.1073/pnas.2113290119>

99. Scott T (2025) Light flicker: why your screen turning on and off 500 times a second is not good for your brain (23 April 2025). Available at: <https://daylightcomputer.com/blog/screen-flicker-101>

100. Sharifah-Aimi SI, Saliman NH, Buari NH (2024) Comparative analysis

of blink rates during printed and on-screen reading across varying screen sizes. Journal of Health Science and Medical Research 42(6).

Chapter 3. Pillar One: Review, Remove and Replace

101. National Toxicology Program (2024) NTP monograph on the state of the science concerning fluoride exposure and neurodevelopment and cognition: a systematic review. NTP Monographs (8). <https://doi.org/10.22427/NTP-MGRAPH-8>

102. Singh NK, Sanghvi G, Yadav M, Padhiyar H, Christian J, Singh V (2023) Fate of pesticides in agricultural runoff treatment systems: occurrence, impacts and technological progress. Environmental Research 237(Pt 2):117100. <https://doi.org/10.1016/j.envres.2023.117100>

103. Imperial College London (2025) Flea meds, antibiotics & drugs found in UK freshwater in citizen science study (4 November 2025).

104. National Institutes of Health (2024) Plastic particles in bottled water. Available at: <https://www.nih.gov/news-events/nih-research-matters/plastic-particles-bottled-water>.

105. Ranjan VP, Joseph A, Goel S (2021) Microplastics and other harmful substances released from disposable paper cups into hot water. Journal of Hazardous Materials 404(Pt B):124118. <https://doi.org/10.1016/j.jhazmat.2020.124118>

106. Rudel RA, Gray JM, Engel CL, Rawsthorne TW, Dodson RE, Ackerman JM, Rizzo J, Nudelman JL, Brody JG (2011) Food packaging and bisphenol A and bis(2-ethylhexyl) phthalate exposure: findings from a dietary intervention. Environmental Health Perspectives 119(7):914–920. <https://doi.org/10.1289/ehp.1003170>

107. Soudavari A, Barari F, Ehsani E, Bonyadi Z, Davoudi M (2025) Occurrence and health risk assessment of microplastics in beverages and ice packs. Scientific Reports 15(1):23584. <https://doi.org/10.1038/s41598-025-08821-6>

108. National Institutes of Health (2004) Plastic particles in bottled water. Available at: <https://www.nih.gov/news-events/nih-research-matters/plastic-particles-bottled-water>.

109. Lam HWL, Chow ASY, Fok L (2024) Human exposure to microplastics via

the consumption of nonalcoholic beverages in various packaging materials: the case of Hong Kong. Journal of Hazardous Materials 472:134575. <https://doi.org/10.1016/j.jhazmat.2024.134575>

110. Witkowska D, Słowik J, Chilicka K (2021) Heavy metals and human health: possible exposure pathways and the competition for protein binding sites. Molecules 26(19):6060. <https://doi.org/10.3390/molecules26196060>

111. Wong DL, Merrifield-MacRae ME, Stillman MJ (2017) Lead(II) binding in metallothioneins. In: Metallomics and the Cell. <https://doi.org/10.1515/9783110434330-009>

112. World Health Organization (2024) Lead poisoning. Available at: <https://www.who.int/news-room/fact-sheets/detail/lead-poisoning>.

113. Day FA, Funk AE, Brady FO (1984) In vivo and ex vivo displacement of zinc from metallothionein by cadmium and mercury. Chemico-Biological Interactions 50(2):159–174. <https://doi.org/10.1016/0009-2797(84)90093-0>

114. Agency for Toxic Substances and Disease Registry (2012) Toxicological profile for cadmium. US Department of Health and Human Services. Available at: <https://www.atsdr.cdc.gov/toxprofiles/tp5.pdf>.

115. Davis DR, Epp MD, Riordan HD (2004) Changes in USDA food composition data for 43 garden crops, 1950 to 1999. Journal of the American College of Nutrition 23(6):669–682. <https://doi.org/10.1080/07315724.2004.10719409>

116. Scientific American (2011) Dirt poor: have fruits and vegetables become less nutritious? (27 April 2011).

117. Growing Life (2020) 70 years of nutritional decline: today's fruits and vegetables are lacking in vitamins and minerals (14 September 2020).

118. Ernstmeyer K, Christman E (eds.) (2021) Nursing Fundamentals. Open RN, Chippewa Valley Technical College. Chapter 15: Fluids and electrolytes. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK591820/>

119. Marriott BM (ed.) (1994) Fluid Replacement and Heat Stress. National Academies Press. Chapter 2: Use of electrolytes in fluid replacement solutions.

120. Buccigrossi V, Lo Vecchio A, Bruzzese E, et al. (2020) Potency of oral rehydration solution in inducing fluid absorption is related to glucose concentration. Scientific Reports 10:7803. <https://doi.org/10.1038/s41598-020-64818-3>

121. Martini D, Godos J, Bonaccio M, Vitaglione P, Grosso G (2021) Ultra-processed foods and nutritional dietary profile: a meta-analysis of nationally representative samples. Nutrients 13(10):3390. <https://doi.org/10.3390/nu13103390>

122. Vaquero MP, García-Maldonado E, Gallego-Narbón A, Zapatera B, Alcorta A, Martínez-Suárez M (2024) Iron deficiency is associated with elevated parathormone levels, low vitamin D status, and risk of bone loss in omnivores and plant-based diet consumers. International Journal of Molecular Sciences 25(19):10290. <https://doi.org/10.3390/ijms251910290>

123. Tsaih SW, Korrick S, Schwartz J, et al. (2001) Influence of bone resorption on the mobilization of lead from bone among middle-aged and elderly men: the Normative Aging Study. Environmental Health Perspectives 109(10):995–999. <https://doi.org/10.1289/ehp.01109995>

124. Manassas A, Apostolidis C, Iakovidis S, Babas D, Samaras T (2023) A study of the long-term changes in the electromagnetic environment using data from continuous monitoring sensors in Greece. Scientific Reports 13(1):13784. <https://doi.org/10.1038/s41598-023-41034-3>

125. Beláčková L, Veludo AF, Aminzadeh R, Van Bladel H, Griffon V, Cardis E, Dongus S, Eeftens M, Guxens M, Joseph W, de Llobet P, Mazet P, Van Torre P, Thielens A, Vermeulen R, Wiart J, Röösli M, Huss A (2025) Temporal change of outdoor RF-EMF levels in four European countries: a microenvironmental measurement study. Environmental Research 285(Pt 1):122315. <https://doi.org/10.1016/j.envres.2025.122315>

126. Deprez K, Stroobandt B, Veludo AF, Vecsei Z, Necz PP, Politański P, Verloock L, Polanska K, Thuróczy G, Röösli M, Plets D, Joseph W (2025) 5G RF EMF spectral exposure assessment in four European countries. Bioelectromagnetics 46(6). <https://doi.org/10.1002/bem.70019>

127. Teimori F, Khaki AA, Rajabzadeh A, Roshangar L (2016) The effects of 30 mT electromagnetic fields on hippocampus cells of rats. Surgical Neurology International 7:70. <https://doi.org/10.4103/2152-7806.185006>

128. Taiwo T, Alausa S, Aliu A, Oluwafisoye P, Bayode O (2023) Measurement of electromagnetic fields (EMF) from mobile phone base stations and health effects in Abeokuta, Ogun State, South-Western Nigeria. Zenodo. doi:10.5281/zenodo.8037217.

129. Wall S, Wang ZM, Kendig T, Dobraca D, Lipsett M (2019) Real-world cell phone radiofrequency electromagnetic field exposures. Environmental Research 171:581–592. <https://doi.org/10.1016/j.envres.2018.09.015>

130. International Agency for Research on Cancer (2013) Non-ionizing radiation, Part 2: Radiofrequency electromagnetic fields. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans No. 102. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK304634/>

131. Kelly G (2020) iPhone alert: beware shock report about radiation from iPhones. Forbes (14 February 2020). Available at: <https://www.forbes.com/sites/gordonkelly/2020/02/14/pple-iphone-11-pro-radiation-warning-new-iphone-upgrade/>

132. Zradziński P, Karpowicz J, Gryz K, Morzyński L, Młyński R, Swidziński A, Godziszewski K, Ramos V (2020) Modelling the influence of electromagnetic field on the user of a wearable IoT device used in a WSN for monitoring and reducing hazards in the work environment. Sensors 20(24):7131. <https://doi.org/10.3390/s20247131>

133. Sharif Y, Kim S (2020) Mitigation of human RF exposure in wearable communications. arXiv preprint arXiv:2005.12487.

134. Barman L, Dumur A, Pyrgelis A, Hubaux JP (2021) Every byte matters: traffic analysis of Bluetooth wearable devices. arXiv preprint arXiv:2105.11172.<https://doi.org/10.1145/3463512>

135. U.S. Food and Drug Administration (2025) FDA authority over cosmetics: how cosmetics are not FDA-approved, but are FDA-regulated. 18 November 2025.

136. Besson T, Durand F, Zerhouni O (2025) The organic halo effect: perceived caloric disparities in high- and low-calorie foods and the role of nutrition label reading frequency. Journal of Human Nutrition and Dietetics 38(2). <https://doi.org/10.1111/jhn.70052>

137. European Food Safety Authority (2017) Guidance on dermal absorption. EFSA Journal 15(6). <https://doi.org/10.2903/j.efsa.2017.4873>

138. Hughes MF, Shrivastava SP, Sumler MR, et al. (1992) Dermal absorption of chemicals: effect of application of chemicals as a solid, aqueous paste, suspension, or in volatile vehicle. Journal of Toxicology and Environmental Health 37(1):57–71. <https://doi.org/10.1080/15287399209531657>

139. Harvard Medical School (2024) The connections between smell, memory, and health. Harvard Medicine, April 2024.

140. Skene DJ, Arendt J (2006) Human circadian rhythms: physiological and therapeutic relevance of light and melatonin. Annals of Clinical Biochemistry 43(5):344–353. <https://doi.org/10.1258/000456306778520142>

141. Blume C, Garbazza C, Spitschan M (2019) Effects of light on human circadian rhythms, sleep and mood. Somnologie 23(3):147–156. <https://doi.org/10.1007/s11818-019-00215-x>

142. Kayaba M, Iwayama K, Ogata H, et al. (2014) The effect of nocturnal blue light exposure from light-emitting diodes on wakefulness and energy metabolism the following morning. Environmental Health and Preventive Medicine 19(5):354–361. <https://doi.org/10.1007/s12199-014-0402-x>

143. Tähkämö L, Partonen T, Pesonen AK (2019) Systematic review of light exposure impact on human circadian rhythm. Chronobiology International 36(2):151–170. <https://doi.org/10.1080/07420528.2018.1527773>

144. Gooley JJ, Chamberlain K, Smith KA, et al. (2011) Exposure to room light before bedtime suppresses melatonin onset and shortens melatonin duration in humans. Journal of Clinical Endocrinology & Metabolism 96(3)--E472. <https://doi.org/10.1210/jc.2010-2098>

145. Te Kulve M, Schlangen LJM, van Marken Lichtenbelt WD (2019) Early evening light mitigates sleep compromising physiological and alerting responses to subsequent late evening light. Scientific Reports 9:16064. <https://doi.org/10.1038/s41598-019-52352-w>

146. de Menezes-Júnior LAA, Sabião TDS, Carraro JCC, et al. (2025) The role of sunlight in sleep regulation: analysis of morning, evening and late exposure. BMC Public Health 25:3362. <https://doi.org/10.1186/s12889-025-24618-8>

147. Rajput P, Kumar D, Krishnamurthy S (2023) Chronic exposure to dim artificial light disrupts the daily rhythm in mitochondrial respiration in mouse suprachiasmatic nucleus. Chronobiology International 40(7):938–951. <https://doi.org/10.1080/07420528.2023.2236708>

148. Onodera Y, Kubota N, Miyagi N, et al. (2025) Blue light-blocking glasses attenuate light-induced melatonin suppression in healthy Japanese adults. Tohoku Journal of Experimental Medicine. <https://doi.org/10.1620/tjem.2025.J086>

149. Liset R, Grønli J, Henriksen RE, et al. (2021) A randomized controlled trial on the effect of blue-blocking glasses compared to partial blue-blockers on melatonin profile among nulliparous women in third trimester of pregnancy. Neurobiology of Sleep and Circadian Rhythms 12:100074. <https://doi.org/10.1016/j.nbscr.2021.100074>

150. Gupta RK, Pipliya S, Karunanithi S, Eswaran UG, Kumar S, Mandliya S, Srivastav PP, Suthar T, Shaikh AM, Harsányi E, Kovács B (2024) Migration of chemical compounds from packaging materials into packaged foods: interaction, mechanism, assessment, and regulations. Foods 13(19):3125. <https://doi.org/10.3390/foods13193125>

151. National Geographic (2024) 'Forever chemicals' are hiding in your kitchen: here's where---and what you can do. By Joel Mathis. Updated 1 March 2024.

152. Skinner JP, Raderstorf A, Rittmann BE, Delgado AG (2025) Biotransforming the "forever chemicals": trends and insights from microbiological studies on PFAS. Environmental Science & Technology 59(11):5417–5430. <https://doi.org/10.1021/acs.est.4c04557>

153. Z2 (2023) Forever chemicals: the past, present & future of PFAS. By Michelle Adams. 18 August 2023. Available at: <https://www.z2data.com/insights/forever-chemicals-the-past-present-future-of-pfas>.

154. Sapozhnikova Y, Nuñez A, Johnston J (2021) Screening of chemicals migrating from plastic food contact materials for oven and microwave applications by liquid and gas chromatography--Orbitrap mass spectrometry. Journal of Chromatography A 1651:462261. <https://doi.org/10.1016/j.chroma.2021.462261>

155. Moreira MA, André LC, Cardeal ZL (2014) Analysis of phthalate migration to food simulants in plastic containers during microwave operations. International Journal of Environmental Research and Public Health 11(1):507–526.

<https://doi.org/10.3390/ijerph110100507>

156. Castle L, Jickells SM, Gilbert J, Harrison N (1990) Migration testing of plastics and microwave-active materials for high-temperature food-use applications. Food Additives & Contaminants 7(6):779–796. <https://doi.org/10.1080/02652039009373940>

157. Klepeis NE, Nelson WC, Ott WR, Robinson JP, Tsang AM, Switzer P, Behar JV, Hern SC, Engelmann WH (2001) The National Human Activity Pattern Survey (NHAPS): a resource for assessing exposure to environmental pollutants. Journal of Exposure Analysis and Environmental Epidemiology 11(3):231–252. <https://doi.org/10.1038/sj.jea.7500165>

158. World Health Organization (2010) WHO guidelines for indoor air quality: selected pollutants. Available at: <https://www.who.int/publications/i/item/9789289002134>.

159. U.S. Environmental Protection Agency (n.d.) Introduction to indoor air quality. Available at: <https://www.epa.gov/indoor-air-quality-iaq/introduction-indoor-air-quality>.

160. Ninyà N, Vallecillos L, Marcé RM, Borrull F (2022) Evaluation of air quality in indoor and outdoor environments: impact of anti-COVID-19 measures. Science of the Total Environment 836:155611. <https://doi.org/10.1016/j.scitotenv.2022.155611>

161. Caillaud D, Leynaert B, Keirsbulck M, Nadif R (2018) Indoor mould exposure, asthma and rhinitis: findings from systematic reviews and recent longitudinal studies. European Respiratory Review 27(148):170137. <https://doi.org/10.1183/16000617.0137-2017>

162. Mendell MJ, Mirer AG, Cheung K, Tong M, Douwes J (2011) Respiratory and allergic health effects of dampness, mold, and dampness-related agents: a review of the epidemiologic evidence. Environmental Health Perspectives 119(6):748–756. <https://doi.org/10.1289/ehp.1002410>

163. Reiner JL, Wong CM, Arcaro KF, Kannan K (2007) Synthetic musk fragrances in human milk from the United States. Environmental Science & Technology 41(11):3815–3820. <https://doi.org/10.1021/es063088a>

164. Dalton P, Wysocki CJ (1996) The nature and duration of adaptation following long-term odor exposure. Perception & Psychophysics 58(5):781–792. <https://doi.org/10.3758/BF03213109>

165. Ulker OC, Ulker O, Hiziroglu S (2021) Volatile organic compounds (VOCs) emitted from coated furniture units. Coatings 11(7):806. <https://doi.org/10.3390/coatings11070806>

166. Wang Y, Wang H, Tan Y, et al. (2021) Measurement of the key parameters of VOC emissions from wooden furniture, and the impact of temperature. Atmospheric Environment 259:118510. <https://doi.org/10.1016/j.atmosenv.2021.118510>

167. Tanaka-Kagawa T, Jinno H, Furukawa Y, Nishimura T (2010) Volatile organic compounds (VOCs) emitted from furniture and electrical appliances. Kokuritsu Iyakuhin Shokuhin Eisei Kenkyusho Hokoku (128):71–77.

168. Zhao X, Dong D, Li Y, Zhao C (2017) Detection of domestic detergent residues on porcelain tableware using laser induced breakdown spectroscopy. RSC Advances. <https://doi.org/10.1039/C7RA04304J>

169. Lin WT, Chen WL, Cheng WC, Chang HC, Tsai SW (2017) Determining the residual characteristics of alkylphenols, arsenic, and lead as well as assessing exposures of 1,4-dioxane from household food detergents. Journal of AOAC International 100(4):1086–1093. <https://doi.org/10.5740/jaoacint.16-0380>

170. Vassilenko E, Watkins M, Chastain S, Mertens J, Posacka AM, Patankar S, Ross PS (2021) Domestic laundry and microfiber pollution: exploring fiber shedding from consumer apparel textiles. PLoS ONE 16(7). <https://doi.org/10.1371/journal.pone.0250346>

171. Pinto VCD, Peleg Mizrachi M (2025) The health impact of fast fashion: exploring toxic chemicals in clothing and textiles. Encyclopedia 5(2):84. <https://doi.org/10.3390/encyclopedia5020084>

172. Vassilenko E, Watkins M, Chastain S, Mertens J, Posacka AM, Patankar S, Ross PS (2021) Domestic laundry and microfiber pollution: exploring fiber shedding from consumer apparel textiles. PLoS ONE 16(7). <https://doi.org/10.1371/journal.pone.0250346>

173. Carney Almroth BM, Åström L, Roslund S, Petersson H, Johansson M, Persson NK (2018) Quantifying shedding of synthetic fibers from textiles; a source of microplastics released into the environment. Environmental Science and Pollution Research 25(2):1191–1199. <https://doi.org/10.1007/s11356-017-0528-7>

174. Eberhard T, Casillas G, Zarus GM, et al. (2024) Systematic review of microplastics and nanoplastics in indoor and outdoor air: identifying a framework and data needs for quantifying human inhalation exposures. Journal of Exposure Science & Environmental Epidemiology 34:185–196. <https://doi.org/10.1038/s41370-023-00634-x>

175. Eberhard T, Casillas G, Zarus GM, et al. (2024) Systematic review of microplastics and nanoplastics in indoor and outdoor air: identifying a framework and data needs for quantifying human inhalation exposures. Journal of Exposure Science & Environmental Epidemiology 34:185–196. <https://doi.org/10.1038/s41370-023-00634-x>

176. Ravish P (2025) Airborne microplastics and human health in urban environments. Discover Public Health. <https://doi.org/10.1186/s12982-025-01098-0>

177. Environmental Health News (2015) New study highlights overlooked sources of at-home BPA exposure. 20 August 2015. Available at: <https://www.ehn.org/bpa-at-home-exposure>.

178. Semerjian L, Alawadhi N, Nazer K (2023) Detection of bisphenol A in thermal paper receipts and assessment of human exposure: a case study from Sharjah, United Arab Emirates. PLoS ONE 18(3). <https://doi.org/10.1371/journal.pone.0283675>

Chapter 4. Pillar Two: Eat to Detox

179. Smyth MC (2017) Intestinal permeability and autoimmune diseases. Bioscience Horizons: The International Journal of Student Research 10:hzx015. <https://doi.org/10.1093/biohorizons/hzx015>

180. De Pessemier B, Grine L, Debaere M, Maes A, Paetzold B, Callewaert C (2021) Gut-skin axis: current knowledge of the interrelationship between microbial dysbiosis and skin conditions. Microorganisms 9(2):353. <https://doi.org/10.3390/microorganisms9020353>

181. Ataei P, Kalantari H, Bodnar TS, Turner RJ (2026) The gut--brain connection: microbes' influence on mental health and psychological disorders. Frontiers in Microbiomes 4:1701608. <https://doi.org/10.3389/frmbi.2025.1701608>

182. Mohammad S, Thiemermann C (2021) Role of metabolic endotoxemia in systemic inflammation and potential interventions. Frontiers in Immunology 11:594150. <https://doi.org/10.3389/fimmu.2020.594150>

183. Fasano A (2011) Zonulin and its regulation of intestinal barrier function: the biological door to inflammation, autoimmunity, and cancer. Physiological Reviews 91(1):151–175.<https://doi.org/10.1152/physrev.00003.2008>

184. Coulson M (2025) Most of the foods we eat are ultra-processed. Are they all unhealthy? Johns Hopkins Bloomberg School. Available at: <https://www.jhsph.edu>.

185. Louzada ML, Martins AP, Canella DS, Baraldi LG, Levy RB, Claro RM, Moubarac JC, Cannon G, Monteiro CA (2015) Impact of ultra-processed foods on micronutrient content in the Brazilian diet. Revista de Saúde Pública 49:45. <https://doi.org/10.1590/S0034-8910.2015049006211>

186. Food and Agriculture Organization of the United Nations (FAO) (n.d.) Global Symposium on Soil Erosion. Available at: <https://www.fao.org/about/meetings/soil-erosion-symposium/key-messages/en>.

187. UNESCO (2024) UNESCO raises global alarm on the rapid degradation of soils. Available at: <https://www.unesco.org/en/articles/unesco-raises-global-alarm-rapid-degradation-soils>.

188. Dzombak B (2021) The nation's Corn Belt has lost a third of its topsoil. Smithsonian Magazine. Available at: <https://www.smithsonianmag.com/science-nature/scientists-say-nations-corn-belt-has-lost-third-its-topsoil-180977485/>.

189. Dzombak B (2021) The nation's Corn Belt has lost a third of its topsoil. Smithsonian Magazine. Available at: <https://www.smithsonianmag.com/science-nature/scientists-say-nations-corn-belt-has-lost-third-its-topsoil-180977485/>.

190. Benbrook CM (2016) Trends in glyphosate herbicide use in the United States and globally. Environmental Sciences Europe 28:3. <https://doi.org/10.1

186/s12302-016-0070-0>

191. Gillezeau C, van Gerwen M, Shaffer RM, Rana I, Zhang L, Sheppard L, Taioli E (2019) The evidence of human exposure to glyphosate: a review. Environmental Health 18:2. <https://doi.org/10.1186/s12940-018-0435-5>

192. Van Bruggen AHC, He MM, Shin K, Mai V, Jeong KC, Finckh MR, Morris JG Jr (2018) Environmental and health effects of the herbicide glyphosate. Science of the Total Environment 616–617:255–268. <https://doi.org/10.1016/j.scitotenv.2017.10.309>

193. Galli FS, Mollari M, Tassinari V, Alimonti C, Ubaldi A, Cuva C, Marcoccia D (2024) Overview of human health effects related to glyphosate exposure. Frontiers in Toxicology 6:1474792. <https://doi.org/10.3389/ftox.2024.1474792>

194. Galli FS, Mollari M, Tassinari V, Alimonti C, Ubaldi A, Cuva C, Marcoccia D (2024) Overview of human health effects related to glyphosate exposure. Frontiers in Toxicology 6:1474792. <https://doi.org/10.3389/ftox.2024.1474792>

195. Aoun PG, Khairallah W, Rejeb A, Haddarah A (2025) Glyphosate use in crop systems: risks to health and sustainable alternatives. Toxics 13(11):971. <https://doi.org/10.3390/toxics13110971>

196. Camilleri M (2019) Leaky gut: mechanisms, measurement and clinical implications in humans. Gut 68(8):1516–1526. <https://doi.org/10.1136/gutjnl-2019-318427>

197. Mu Q, Kirby J, Reilly CM, Luo XM (2017) Leaky gut as a danger signal for autoimmune diseases. Frontiers in Immunology 8:598. <https://doi.org/10.3389/fimmu.2017.00598>

198. Escalante J, Artaiz O, Diwakarla S, McQuade RM (2025) Leaky gut in systemic inflammation: exploring the link between gastrointestinal disorders and age-related diseases. Geroscience 47(1):1–22. <https://doi.org/10.1007/s11357-024-01451-2>

199. Morena D, Lippi M, Scopetti M, Turillazzi E, Fineschi V (2025) Leaky gut biomarkers as predictors of depression and suicidal risk: a systematic review and meta-analysis. Diagnostics 15(13):1683. <https://doi.org/10.3390/diagnostics15131683>

200. Campbell-McBride N (n.d.) Profile page. Available at: <https://www.researchgate.net/profile/Natasha-Campbell-McBride>.

201. Delaunay-Vagliasindi S, Seneff S, Coro S, Campbell-McBride N (2021) GAPS nutritional protocol as a treatment for PANDAS: a case study. Journal of Orthomolecular Medicine 36(3).

202. Mann EA, Bae E, Kostyuchek D, Chung HJ, McGee JS (2020) The gut microbiome: human health and inflammatory skin diseases. Annals of Dermatology 32(4):265–272. <https://doi.org/10.5021/ad.2020.32.4.265>

203. Thye AY, Bah YR, Law JW, Tan LT, He YW, Wong SH, Thurairajasingam S, Chan KG, Lee LH, Letchumanan V (2022) Gut-skin axis: unravelling the connection between the gut microbiome and psoriasis. Biomedicines 10(5):1037. <https://doi.org/10.3390/biomedicines10051037>

204. Acharya B, Tofthagen M, Maciej-Hulme ML, Suissa MR, Karlsson NG (2024) Limited support for a direct connection between prebiotics and intestinal permeability - a systematic review. Glycoconjugate Journal 41(4–5):323–342. <https://doi.org/10.1007/s10719-024-10165-8>

205. Liang L, Saunders C, Sanossian N (2023) Food, gut barrier dysfunction, and related diseases: a new target for future individualized disease prevention and management. Food Science & Nutrition 11(4):1671–1704. <https://doi.org/10.1002/fsn3.3229>

206. Liguori I, Russo G, Curcio F, et al. (2018) Oxidative stress, aging, and diseases. Clinical Interventions in Aging 13:757–772. <https://doi.org/10.2147/CIA.S158513>

207. Betteridge DJ (2000) What is oxidative stress? Metabolism 49:3–8. <https://doi.org/10.1016/S0026-0495(00)80077-3>

208. National Institutes of Health (2025) Measuring ultra-processed foods in diet. Available at: <https://www.nih.gov/news-events/nih-research-matters/measuring-ultra-processed-foods-diet>

209. Martini D, Godos J, Bonaccio M, Vitaglione P, Grosso G (2021) Ultra-processed foods and nutritional dietary profile: a meta-analysis of nationally representative samples. Nutrients 13(10):3390. <https://doi.org/10.3390/nu13103390>

210. LaFata EM, Allison KC, Audrain-McGovern J, Forman EM (2024) Ultra-processed food addiction: a research update. Current Obesity Reports 13(2):214–223. <https://doi.org/10.1007/s13679-024-00569-w>

211. Chassaing B, Koren O, Goodrich JK, et al. (2015) Dietary emulsifiers impact the mouse gut microbiota promoting colitis and metabolic syndrome. Nature 519:92–96. <https://doi.org/10.1038/nature14232>

212. Capozzi F, Magkos F, Fava F, et al. (2021) A multidisciplinary perspective of ultra-processed foods and associated food processing technologies: a view of the sustainable road ahead. Nutrients 13(11):3948. <https://doi.org/10.3390/nu13113948>

213. Capozzi F (2022) Food innovation in the frame of circular economy by designing ultra-processed foods optimized for sustainable nutrition. Frontiers in Nutrition 9:886220. <https://doi.org/10.3389/fnut.2022.886220>

214. Dludla PV, Cirilli I, Marcheggiani F, et al. (2023) Potential benefits of coffee consumption on improving biomarkers of oxidative stress and inflammation in healthy individuals and those at increased risk of cardiovascular disease. Molecules 28(18):6440. <https://doi.org/10.3390/molecules28186440>

215. Bidel S, Tuomilehto J (2013) The emerging health benefits of coffee with an emphasis on type 2 diabetes and cardiovascular disease. European Endocrinology 9(2):99–106. <https://doi.org/10.17925/EE.2013.09.02.99>

216. Cohen S (1980) Pathogenesis of coffee-induced gastrointestinal symptoms. New England Journal of Medicine 303(3):122–124. <https://doi.org/10.1056/NEJM198007173030302>

217. Iriondo-DeHond A, Uranga JA, Del Castillo MD, Abalo R (2020) Effects of coffee and its components on the gastrointestinal tract and the brain-gut axis. Nutrients 13(1):88. <https://doi.org/10.3390/nu13010088>

218. Lovallo WR, Whitsett TL, al'Absi M, et al. (2005) Caffeine stimulation of cortisol secretion across the waking hours in relation to caffeine intake levels. Psychosomatic Medicine 67(5):734–739. <https://doi.org/10.1097/01.psy.0000181270.20036.06>

219. Papakonstantinou E, Kechribari I, Sotirakoglou K, et al. (2016) Acute effects of coffee consumption on self-reported gastrointestinal symptoms, blood pres-

sure and stress indices in healthy individuals. Nutrition Journal 15:26. <https://doi.org/10.1186/s12937-016-0146-0>

220. Engen PA, Green SJ, Voigt RM, et al. (2015) The gastrointestinal microbiome: alcohol effects on the composition of intestinal microbiota. Alcohol Research 37(2):223–236. <https://doi.org/10.35946/arcr.v37.2.07>

221. Engen PA, Green SJ, Voigt RM, et al. (2015) The gastrointestinal microbiome: alcohol effects on the composition of intestinal microbiota. Alcohol Research 37(2):223–236. <https://doi.org/10.35946/arcr.v37.2.07>

222. National Institute on Alcohol Abuse and Alcoholism (2025) Alcohol's effects on health. Available at: <https://www.niaaa.nih.gov/publications/alcohol-and-brain-overview>

223. Sullivan EV, Harris RA, Pfefferbaum A (2010) Alcohol's effects on brain and behavior. Alcohol Research & Health 33(1–2):127–143.

224. Field M, Wiers RW, Christiansen P, et al. (2010) Acute alcohol effects on inhibitory control and implicit cognition: implications for loss of control over drinking. Alcoholism: Clinical and Experimental Research 34(8):1346–1352. <https://doi.org/10.1111/j.1530-0277.2010.01218.x>

225. Hetta HF, Sirag N, Elfadil H, et al. (2025) Artificial sweeteners: a double-edged sword for gut microbiome. Diseases 13(4):115. <https://doi.org/10.3390/diseases13040115>

226. Ruiz-Ojeda FJ, Plaza-Díaz J, Sáez-Lara MJ, Gil A (2019) Effects of sweeteners on the gut microbiota: a review of experimental studies and clinical trials. Advances in Nutrition 10(Suppl 1):S31--S48. <https://doi.org/10.1093/advances/nmy037>

227. Feng J, Peng J, Hsiao YC, et al. (2024) Non/low-caloric artificial sweeteners and gut microbiome: from perturbed species to mechanisms. Metabolites 14(10):544. <https://doi.org/10.3390/metabo14100544>

228. Shewry PR (2018) Do ancient types of wheat have health benefits compared with modern bread wheat? Journal of Cereal Science 79:469–476. <https://doi.org/10.1016/j.jcs.2017.11.010>

229. Brouns F, Geisslitz S, Guzman C, et al. (2022) Do ancient wheats contain less

gluten than modern bread wheat, in favour of better health? Nutrition Bulletin 47(2):157–167. <https://doi.org/10.1111/nbu.12551>

230. Gulati P, Brahma S, Graybosch RA, et al. (2020) In vitro digestibility of proteins from historical and modern wheat cultivars. Journal of the Science of Food and Agriculture 100(6):2579–2584. <https://doi.org/10.1002/jsfa.10283>

231. Tagliamonte S, Barone Lumaga R, De Filippis F, et al. (2023) Milk protein digestion and the gut microbiome influence gastrointestinal discomfort after cow milk consumption in healthy subjects. Food Research International 170:112953. <https://doi.org/10.1016/j.foodres.2023.112953>

232. Perets TT, Gingold-Belfer R, Dickman R (2026) Lactose intolerance and probiotics: from pathophysiological mechanisms to clinical applications. Antonie van Leeuwenhoek 119(4):67. <https://doi.org/10.1007/s10482-026-02278-x>

233. Kamiński S, Cieślińska A (2025) β-casein A1 and A2 genetic variants and β-casomorphin-7 in raw milk and processed milk products. International Journal of Molecular Sciences 26(17):8612. <https://doi.org/10.3390/ijms26178612>

234. Bolat E, Eker F, Yılmaz S, et al. (2024) BCM-7: opioid-like peptide with potential role in disease mechanisms. Molecules 29(9):2161. <https://doi.org/10.3390/molecules29092161>

235. Özdemir Ö, Kasımoğlu G, Bak A, et al. (2024) Mast cell activation syndrome: an up-to-date review of literature. World Journal of Clinical Pediatrics 13(2):92813. <https://doi.org/10.5409/wjcp.v13.i2.92813>

236. Jochum C (2024) Histamine intolerance: symptoms, diagnosis, and beyond. Nutrients 16(8):1219. <https://doi.org/10.3390/nu16081219>

237. Pimentel M, Saad RJ, Long MD, Rao SSC (2020) ACG clinical guideline: small intestinal bacterial overgrowth. American Journal of Gastroenterology 115(2):165–178. <https://doi.org/10.14309/ajg.0000000000000501>

238. Graf E, Eaton JW (1984) Effects of phytate on mineral bioavailability in mice. The Journal of Nutrition 114(7):1192–1198. <https://doi.org/10.1093/jn/114.7.1192>

239. Petroski W, Minich DM (2020) Is there such a thing as "anti-nutrients"? a narrative review of perceived problematic plant compounds. Nutrients

12(10):2929. <https://doi.org/10.3390/nu12102929>

240. Singh J, Arora S (2023) Antinutritional factors in plant based foods. International Journal of Agricultural Sciences 19:366–375. <https://doi.org/10.15740/HAS/IJAS/19.1/366-375>

241. Grant DM (1991) Detoxification pathways in the liver. Journal of Inherited Metabolic Disease 14(4):421–430. <https://doi.org/10.1007/BF01797915>

242. Hundt M, Basit H, John S (2022) Physiology, bile secretion. In: StatPearls. Treasure Island (FL): StatPearls Publishing. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK470209/>

243. Zhou H, Hylemon PB (2014) Bile acids are nutrient signaling hormones. Steroids 86:62–68. <https://doi.org/10.1016/j.steroids.2014.04.016>

244. Schmidt DR, Holmstrom SR, Fon Tacer K, et al. (2010) Regulation of bile acid synthesis by fat-soluble vitamins A and D. Journal of Biological Chemistry 285(19):14486–14494. <https://doi.org/10.1074/jbc.M110.116004>

245. Larabi AB, Masson HLP, Bäumler AJ (2023) Bile acids as modulators of gut microbiota composition and function. Gut Microbes 15(1):2172671. <https://doi.org/10.1080/19490976.2023.2172671>

246. Heda R, Toro F, Tombazzi CR (2023) Physiology, pepsin. In: StatPearls. Treasure Island (FL): StatPearls Publishing. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK537005/>

247. Gaudichon C, Calvez J (2021) Determinants of amino acid bioavailability from ingested protein in relation to gut health. Current Opinion in Clinical Nutrition and Metabolic Care 24(1):55–61. <https://doi.org/10.1097/MCO.0000000000000708>

248. Esteve M (2020) Mechanisms underlying biological effects of cruciferous glucosinolate-derived isothiocyanates/indoles: a focus on metabolic syndrome. Frontiers in Nutrition 7:111. <https://doi.org/10.3389/fnut.2020.00111>

249. Yoshida K, Ushida Y, Ishijima T, et al. (2015) Broccoli sprout extract induces detoxification-related gene expression and attenuates acute liver injury. World Journal of Gastroenterology 21(35):10091–10103. <https://doi.org/10.3748/wjg.v21.i35.10091>

250. Townsend BE, Johnson RW (2016) Sulforaphane induces Nrf2 target genes and attenuates inflammatory gene expression in microglia from brain of young adult and aged mice. Experimental Gerontology 73:42–48. <https://doi.org/10.1016/j.exger.2015.11.004>

251. Shoulders MD, Raines RT (2009) Collagen structure and stability. Annual Review of Biochemistry 78:929–958. <https://doi.org/10.1146/annurev.biochem.77.032207.120833>

252. Jochum C (2024) Histamine intolerance: symptoms, diagnosis, and beyond. Nutrients 16(8):1219. <https://doi.org/10.3390/nu16081219>

253. Şanlier N, Gökcen BB, Sezgin AC (2019) Health benefits of fermented foods. Critical Reviews in Food Science and Nutrition 59(3):506–527. <https://doi.org/10.1080/10408398.2017.1383355>

254. Hertzler SR, Clancy SM (2003) Kefir improves lactose digestion and tolerance in adults with lactose maldigestion. Journal of the American Dietetic Association 103(5):582–587. <https://doi.org/10.1053/jada.2003.50111>

255. Kieffer DA, Martin RJ, Adams SH (2016) Impact of dietary fibers on nutrient management and detoxification organs: gut, liver, and kidneys. Advances in Nutrition 7(6):1111–1121. <https://doi.org/10.3945/an.116.013219>

256. Sabbione AC, Añón MC, Scilingo A (2024) Characterization and bile acid binding capacity of dietary fiber obtained from three different amaranth products. Plant Foods for Human Nutrition 79(1):38–47. <https://doi.org/10.1007/s11130-023-01116-z>

257. Slavin J (2013) Fiber and prebiotics: mechanisms and health benefits. Nutrients 5(4):1417–1435. <https://doi.org/10.3390/nu5041417>

258. Li Y, Chen Y, Sun-Waterhouse D (2022) The potential of dandelion in the fight against gastrointestinal diseases: a review. Journal of Ethnopharmacology 293:115272. <https://doi.org/10.1016/j.jep.2022.115272>

259. Wang H, Chen M, Li Y, et al. (2025) Exploring the therapeutic potential of beetroot juice in patients with peripheral artery disease: a narrative review. Nitric Oxide 156:57–66. <https://doi.org/10.1016/j.niox.2025.03.003>

260. Fateh HL, Rashid SA, Muhammad SS, et al. (2023) Comparing effects of beetroot juice and Mediterranean diet on liver enzymes and sonographic appearance in patients with non-alcoholic fatty liver disease: a randomized controlled trial. Frontiers in Nutrition 10:1181706. <https://doi.org/10.3389/fnut.2023.1181706>

261. Valcheva R, Koleva P, Martínez I, et al. (2019) Inulin-type fructans improve active ulcerative colitis associated with microbiota changes and increased short-chain fatty acids levels. Gut Microbes 10(3):334–357. <https://doi.org/10.1080/19490976.2018.1526583>

262. Kraft (1997) Artichoke leaf extract – recent findings reflecting effects on lipid metabolism, liver and gastrointestinal tracts. Phytomedicine 4(4):369–378. <https://doi.org/10.1016/S0944-7113(97)80049-9>

263. Hoegberg LCG, Shepherd G, Wood DM, et al. (2021) Systematic review on the use of activated charcoal for gastrointestinal decontamination following acute oral overdose. Clinical Toxicology 59:1196–1227. <https://doi.org/10.1080/15563650.2021.1961144>

264. Hall RG Jr, Thompson H, Strother A (1981) Effects of orally administered activated charcoal on intestinal gas. American Journal of Gastroenterology 75:192–196

265. Bertrand CHA (1777–1849) (n.d.) Available at: <https://litfl.com/charles-bertrand/>

266. Joshi PB, Chavali M, Tripati GK, Tondwalkar S (2023) Activated carbon. In: Activated Carbon: Progress and Applications. Royal Society of Chemistry, ch. 3:42–54. <https://doi.org/10.1039/BK9781839169861-00042>

267. National Capital Poison Center (n.d.) Activated charcoal: an effective treatment for poisonings. Available at: <https://www.poison.org/articles/activated-charcoal>

268. Feizy J, Rahimi A, Tabari DG, et al. (2025) Optimization of modified bentonite mycotoxin binders for enhanced adsorption efficiency. Scientific Reports 15:27513. <https://doi.org/10.1038/s41598-025-13249-z>

269. Kraljević Pavelić S, Simović Medica J, Gumbarević D, et al. (2018) Critical review on zeolite clinoptilolite safety and medical applications in vivo. Frontiers

in Pharmacology 9:1350. <https://doi.org/10.3389/fphar.2018.01350>

270. Kuzminska O, Vitkovska B, Kuvaiskov Y, Hatton CG (2025) Efficacy and safety of the enterosorbent Silicolgel in IBS-D and IBS-M: a randomized, double-blind, placebo-controlled trial. Neurogastroenterology & Motility 37:e70118. <https://doi.org/10.1111/nmo.70118>

271. Sensoy I (2021) A review on food digestion in the digestive tract and the in vitro models used. Current Research in Food Science 4:308–319. <https://doi.org/10.1016/j.crfs.2021.04.004>

272. Cherpak CE (2019) Mindful eating: a review of how the stress-digestion-mindfulness triad may modulate and improve gastrointestinal and digestive function. Integrative Medicine (Encinitas) 18:48–53

273. Healthline (2021) How long should you wait to exercise after eating? Medically reviewed by Grant Tinsley. Available at: <https://www.healthline.com/nutrition/exercise-after-eating>

274. Rezaie P, Bitarafan V, Horowitz M, Feinle-Bisset C (2021) Effects of bitter substances on GI function, energy intake and glycaemia: do preclinical findings translate to humans? Nutrients 13:1317. <https://doi.org/10.3390/nu13041317>

275. Guy RA (1923) The history of cod liver oil as a remedy. American Journal of Diseases of Children 26:112–116. <https://doi.org/10.1001/archpedi.1923.04120140011002>

276. Butawan M, Benjamin RL, Bloomer RJ (2017) Methylsulfonylmethane: applications and safety of a dietary supplement. Nutrients 9:290. <https://doi.org/10.3390/nu9030290>

Chapter 5. Pillar Three: Support Natural Detox

277. Bonnet MS, Roux J, Mounien L, et al. (2012) Advances in deoxynivalenol toxicity mechanisms: the brain as a target. Toxins 4:1120–1138. <https://doi.org/10.3390/toxins4111120>

278. Chang ALS (2023) Toxemia. EBSCO Research Starters. Available at: <https://www.ebsco.com/research-starters/anatomy-and-physiology/toxemia>

279. This is Finland (n.d.) Bare facts of the sauna in Finland. Available at: <https://finland.fi/life-society/bare-facts-of-the-sauna/>

280. Laukkanen T, Khan H, Zaccardi F, Laukkanen JA (2015) Association between sauna bathing and fatal cardiovascular and all-cause mortality events. JAMA Internal Medicine 175:542–548. <https://doi.org/10.1001/jamainternmed.2014.8187>

281. Calderwood SK, Mambula SS, Gray PJ Jr (2007) Extracellular heat shock proteins in cell signaling and immunity. Annals of the New York Academy of Sciences 1113:28–39. <https://doi.org/10.1196/annals.1391.019>

282. Garrido C, Brunet M, Didelot C, et al. (2006) Heat shock proteins 27 and 70: anti-apoptotic proteins with tumorigenic properties. Cell Cycle 5:2592–2601. <https://doi.org/10.4161/cc.5.22.3448>

283. Kuan WH, Chen YL, Liu CL (2022) Excretion of Ni, Pb, Cu, As, and Hg in sweat under two sweating conditions. International Journal of Environmental Research and Public Health 19:4323. <https://doi.org/10.3390/ijerph19074323>

284. Campbell SS, Murphy PJ (1998) Extraocular circadian phototransduction in humans. Science 279(5349):396–399. <https://doi.org/10.1126/science.279.5349.396>

285. Manella G, Sabath E, Aviram R, et al. (2021) The liver-clock coordinates rhythmicity of peripheral tissues in response to feeding. Nature Metabolism 3(6):829–842. <https://doi.org/10.1038/s42255-021-00395-7>

286. Zeitzer JM, Dijk DJ, Kronauer R, et al. (2000) Sensitivity of the human circadian pacemaker to nocturnal light: melatonin phase resetting and suppression. Journal of Physiology 526(Pt 3):695–702. <https://doi.org/10.1111/j.1469-7793.2000.00695.x>

287. Wright KP Jr, McHill AW, Birks BR, et al. (2013) Entrainment of the human circadian clock to the natural light-dark cycle. Current Biology 23(16):1554–1558. <https://doi.org/10.1016/j.cub.2013.06.039>

288. Xie L, et al. (2013) Sleep drives metabolite clearance from the adult brain. Science 342:373–377. <https://doi.org/10.1126/science.1241224>

289. Reddy OC, van der Werf YD (2020) The sleeping brain: harnessing the power of the glymphatic system through lifestyle choices. Brain Sciences 10(11):868. <https://doi.org/10.3390/brainsci10110868>

290. Takahashi Y, Kipnis DM, Daughaday WH (1968) Growth hormone secretion during sleep. Journal of Clinical Investigation 47(9):2079–2090. <https://doi.org/10.1172/JCI105893>

291. Chen Y, Xu W, Chen Y, Gong J, Wu Y, Chen S, He Y, Yu H, Xie L (2024) The effect of acute sleep deprivation on cortisol level: a systematic review and meta-analysis. Endocrine Journal 71(8):753–765. <https://doi.org/10.1507/endocrj.EJ23-0714>

292. Desai D, Momin A, Hirpara P, et al. (2024) Exploring the role of circadian rhythms in sleep and recovery: a review article. Cureus 16(6):e61568. <https://doi.org/10.7759/cureus.61568>

293. Joyner MJ, Casey DP (2015) Regulation of increased blood flow (hyperemia) to muscles during exercise. Physiological Reviews 95(2):549–601. <https://doi.org/10.1152/physrev.00035.2013>

295. Schwartz AB (2016) Movement: how the brain communicates with the world. Cell 164(6):1122–1135. <https://doi.org/10.1016/j.cell.2016.02.038>

296. Kuhn AM, Bosis KE, Wohleb ES (2024) Research in stress, behavior, and immune function. Neuroimmunomodulation 31(1):211–229. <https://doi.org/10.1159/000541592>

297. Kurhaluk N, Kołodziejska R, Kamiński P, et al. (2025) Integrative neuroimmune role of the parasympathetic nervous system, vagus nerve and gut microbiota in stress modulation. International Journal of Molecular Sciences 26(23):11706. <https://doi.org/10.3390/ijms262311706>

298. DeBruyne JP, Weaver DR, Dallmann R (2014) Hepatic circadian clock modulates xenobiotic metabolism in mice. Journal of Biological Rhythms 29(4):277–287. <https://doi.org/10.1177/0748730414544740>

299. Perrier ET, Armstrong LE, Bottin JH, et al. (2021) Hydration for health hypothesis: a narrative review. European Journal of Nutrition 60(3):1167–1180. <https://doi.org/10.1007/s00394-020-02296-z>

300. Popkin BM, D'Anci KE, Rosenberg IH (2010) Water, hydration, and health. Nutrition Reviews 68(8):439–458. <https://doi.org/10.1111/j.1753-4887.2010.00304.x>

301. Sato K, Hara-Chikuma M, Yasui M, et al. (2024) Water intake maintains gut microbiota and immune homeostasis. iScience 27(6):109903. <https://doi.org/10.1016/j.isci.2024.109903>

302. Pawak VS, Loganathan VA, Sabapathy M (2026) Microplastics in bottled drinking water from India. Results in Engineering 30:109954. <https://doi.org/10.1016/j.rineng.2026.109954>

303. Gandy J, Le Bellego L, König J, et al. (2016) Recording of fluid, beverage and water intakes at the population level in Europe. British Journal of Nutrition 116(4):677–682. <https://doi.org/10.1017/S0007114516002336>

304. Mooventhan A, Nivethitha L (2014) Effects of hydrotherapy on various systems of the body. North American Journal of Medical Sciences 6(5):199–209. <https://doi.org/10.4103/1947-2714.132935>

305. Haghayegh S, Khoshnevis S, Smolensky MH, et al. (2019) Passive body heating before bedtime to improve sleep: systematic review and meta-analysis. Sleep Medicine Reviews 46:124–135. <https://doi.org/10.1016/j.smrv.2019.04.008>

306. Bhattacharya A, McCutcheon EP, Shvartz E, Greenleaf JE (1980) Body acceleration distribution and O2 uptake during running and jumping. Journal of Applied Physiology. <https://doi.org/10.1152/jappl.1980.49.5.881>

Chapter 6. Pillar Four: Enhanced Detox

307. Kim HN, Do HH, Seo JS, Kim HY (2016) Two cases of incidental Podostroma cornu-damae poisoning. Clinical and Experimental Emergency Medicine 3(3):186–189. <https://doi.org/10.15441/ceem.15.028>

308. Senn J (2025) Coffee enema: useful or without medical benefit? Univadis from Medscape. Available at: <https://www.univadis.de/viewarticle/kaffeeeinlauf-sinnvoll-oder-ohne-medizinischen-nutzen-2025a10009t9>

309. National Cancer Institute (n.d.) Gerson therapy (PDQ®)--health professional version. Available at: <https://www.cancer.gov/about-cancer/treatment/cam/hp/gerson-pdq>

310. Lu Z, Dockery CR, Crosby M, Chavarria K, Patterson B, Giedd M (2016) Antibacterial activities of wasabi against Escherichia coli O157:H7 and Staphylococcus aureus. Frontiers in Microbiology. <https://doi.org/10.3389/fmicb.2016.01403>

311. Kobayashi J, Jimba M, Okabayashi H, Singhasivanon P, Waikagul J (2007) Beyond deworming: the promotion of school-health-based interventions by Japan. Trends in Parasitology 23(1):25–29. <https://doi.org/10.1016/j.pt.2006.11.006>

312. Homei A, DiMoia JP (2020) Integrating parasite eradication with family planning: the colonial legacy in post-war medical cooperation in East Asia. Social History of Medicine 34(4):1094–1115. <https://doi.org/10.1093/shm/hkaa005>

313. Wikipedia contributors (2026) Mass deworming. Wikipedia, The Free Encyclopedia. Available at: <https://en.wikipedia.org/w/index.php?title=Mass_deworming&oldid=1334320318>. Accessed 15 April 2026.

314. Merck & Co (1899/2012) Merck's 1899 Manual of the Materia Medica. Project Gutenberg eBook #41697. Available at: <https://www.gutenberg.org/cache/epub/41697/pg41697-images.html>. Accessed 23 October 2024.

315. Mwangi J (2023) Usage of human diatomaceous earth. Annals of Limnology and Oceanography 8(1):009–012. <https://doi.org/10.17352/alo.000014>

316. Kharoubi O, Slimani M, Aoues A (2011) Neuroprotective effect of wormwood against lead exposure. Journal of Emergency Trauma and Shock 4(1):82–88. <https://doi.org/10.4103/0974-2700.76834>

317. Song DK, Kim YW (2023) Beneficial effects of intermittent fasting: a narrative review. Yeungnam Medical Science Journal 40(1):4–11. <https://doi.org/10.12701/jyms.2022.00010>

318. Shabkhizan R, Haiaty S, Moslehian MS, Bazmani A, Sadeghsoltani F, Saghaei Bagheri H, Rahbarghazi R, Sakhinia E (2023) The beneficial and adverse effects of autophagic response to caloric restriction and fasting. Advances in Nutrition 14(5):1211–1225. <https://doi.org/10.1016/j.advnut.2023.07.006>

319. Sun M, Yao W, Wang X, et al. (2024) Intermittent fasting and health outcomes: an umbrella review of systematic reviews and meta-analyses of randomised

controlled trials. eClinicalMedicine 70. <https://doi.org/10.1016/j.eclinm.2024.102519>

320. Prousky J (2011) Niacin for detoxification: a little-known therapeutic use. Journal of Orthomolecular Medicine 26:85–92.

321. Kerr K, Morse G, Graves D, Zuo F, Lipowicz A, Carpenter DO (2019) A detoxification intervention for Gulf War illness: a pilot randomized controlled trial. International Journal of Environmental Research and Public Health 16(21):4143. <https://doi.org/10.3390/ijerph16214143>

Chapter 7. Pillar Five: Transition

322. American Brain Foundation (2025) Does gratitude rewire your brain? Available at: <https://www.americanbrainfoundation.org/does-gratitude-rewire-your-brain/>.

323. Kyeong S, Kim J, Kim DJ, Kim HE, Kim JJ (2017) Effects of gratitude meditation on neural network functional connectivity and brain--heart coupling. Scientific Reports 7:5058. <https://doi.org/10.1038/s41598-017-05520-9>

325. Thayer JF, Lane RD (2000) A model of neurovisceral integration in emotion regulation and dysregulation. Journal of Affective Disorders 61(3):201–216. <https://doi.org/10.1016/S0165-0327(00)00338-4>

326. Davidson RJ, Kabat-Zinn J, Schumacher J, Rosenkranz M, Muller D, Santorelli SF, Urbanowski F, Harrington A, Bonus K, Sheridan JF (2003) Alterations in brain and immune function produced by mindfulness meditation. Psychosomatic Medicine 65(4):564–570.