

51. P. Jesse, et al, Apoptosis-inducing activity of *Helleborus niger* in AML and AML. Op. cit.
52. J. Wilkens, *The Healing Power of the Christmas Rose*, Op. cit.
53. Ibid.
54. M. Girke, *Internal Medicine*, Op. cit.
55. K. K. Auyeung, et al. "Astragalus membranaceus: A review of its protection against inflammation and gastrointestinal cancers," *The American Journal of Chinese Medicine*, vol. 44, No. 01, pp. 1–22 (2016) <https://doi.org/10.1142/S0192415X16500014>.
56. M. Girke. *Internal Medicine*, Op. cit., pp. 100, 218.
57. Ibid., pp. 110, 215, 279. 393.
58. Ibid., pp. 171, 1008, 1014.
59. Ibid., pp. 242, 319.
60. C. Scheffer, et al. "Potenzierte Organpräparate in der anthroposophischen Medizin. Teil 3: Goetheanistische Betrachtungen zu Schwein und Rind als Spendertiere" [Potentiated organ preparations in anthroposophic medicine. Part 3: Goetheanist considerations on pigs and cattle as donor animals], *Der Merkurstab*, 2019;72(1):12-20. Article-ID: DMS-21045-DE. DOI: <https://doi.org/10.14271/DMS-21045-DE>.
61. "Best Practices for Mistletoe Uses in Cancer Care," *Vademecum of Anthroposophic Medicines*, Association of Anthroposophic Medicine in Germany (GAAD), 2019, p. 139.
62. M. Girke, *Internal Medicine*, Op. cit., pp. 45, 506, 575.
63. R. Heine (ed.). *Anthroposophic Nursing Practice: Foundations and Indications for Everyday Caregiving*. Hudson, NY: Portal Books, 2020.
64. This case story was originally published by Fatima Zehra Raza, Smita Ranjan, Goetz H. Kloecker (University of Louisville), and James Graham (Brown Cancer Center, Louisville, KY), in *Journal of Clinical Oncology*, vol. 31, no. 15 supplement 2018.

CHAPTER 9

1. C. A. Buckner, et al. "Complementary and alternative medicine use in patients before and after a cancer diagnosis," *Curr. Oncol.*, 2018;25(4): e275-e281. doi:10.3747/co.25.3884.
2. J. Jou and P. J. Johnson. "Nondisclosure of complementary and alternative medicine use to primary care physicians: Findings from the 2012 National Health Interview Survey," *JAMA Internal Medicine*, vol. 176,4 (2016): 545-6. doi:10.1001/jamainternmed.2015.8593.
3. R. L. Smith, et al. "Metabolic flexibility as an adaptation to energy resources and requirements in health and disease," *Endocrine Reviews*, vol. 39,4 (2018): 489–517. doi:10.1210/er.2017-00211.
4. J. Araújo, et al. "Prevalence of optimal metabolic health in American adults: National Health and Nutrition Examination Survey 2009–2016," *Metabolic Syndrome and Related Disorders*, 2018. doi: 10.1089/met.2018.0105.

5. I. Spreadbury. "Comparison with ancestral diets suggests dense acellular carbohydrates promote an inflammatory microbiota, and may be the primary dietary cause of leptin resistance and obesity," *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy*, vol. 5 (2012): 175–89. doi:10.2147/DMSO.S33473.
6. C. Marbaniang and L. Kma. "Dysregulation of glucose metabolism by oncogenes and tumor suppressors in cancer cells," *Asian Pacific Journal of Cancer Prevention: APJCP*, vol. 19,9 2377–90. 26 Sep. 2018, doi:10.22034/APJCP.2018.19.9.2377.
7. K. A. Schwartz, et al. "Investigating the ketogenic diet as treatment for primary aggressive brain cancer: Challenges and lessons learned," *Front Nutr.*, 2018 Feb 23;5:11. doi: 10.3389/fnut.2018.00011. PMID: 29536011; PMCID: PMC5834833.
8. According to topical search at ClinicalTrials.gov, search conducted Apr. 24, 2021.
9. J. Tan-Shalaby. "Ketogenic diets and cancer: Emerging evidence," *Federal Practitioner: For the Health Care Professionals of the VA, DoD, and PHS*, vol. 34, Suppl 1 (2017): 37S–42S.
10. A. Poff et al. "Targeting the Warburg effect for cancer treatment: Ketogenic diets for the management of glioma," *Seminars in Cancer Biology*, 56 June 2019.
11. C. R. Marinac, et al. "Prolonged nightly fasting and breast cancer prognosis," *JAMA Oncology*, vol. 2,8 (2016): 1049–55. doi:10.1001/jamaoncol.2016.0164.
12. J. Fung, *The Cancer Code: A Revolutionary New Understanding of a Medical Mystery* (New York: Harper Wave, 2020), pp. 203–208, 229–238, 285–292.
13. "Hyperthermia in cancer treatment," National Institutes of Health (NIH), National Cancer Institute (NCI) monograph; reviewed Aug. 31, 2011 (<https://www.cancer.gov/about-cancer/treatment/types/surgery/hyperthermia-fact-sheet>). Accessed Apr. 29, 2021.
14. Z. Behrouzkia, et al. "Hyperthermia: How can it be used?" *Oman Medical Journal*, vol. 31,2 (2016): 89-97. doi:10.5001/omj.2016.19.
15. L. Wang, et al. "A systematic strategy of combinational blow for overcoming cascade drug resistance via NIR-light-triggered hyperthermia," *Advanced Materials* (Deerfield Beach, FL), e2100599. Apr. 8, 2021, doi:10.1002/adma.202100599.
16. B. E. Dayanc, et al. "Dissecting the role of hyperthermia in natural killer cell mediated anti-tumor responses," *International Journal of Hyperthermia: The Official Journal of European Society for Hyperthermic Oncology, North American Hyperthermia Group*, vol. 24,1 (2008): 41–56.
17. K. Jeziorski. "Hyperthermia in rheumatic diseases: A promising approach?" *Reumatologia*, vol. 56,5 (2018): 316-320. doi:10.5114/reum.2018.79503.
18. A. Thorne, et al. "Hyperthermia-induced changes in liver physiology and metabolism: a rationale for hyperthermic machine perfusion," *Gastrointestinal and Liver Physiology*, vol. 319, no. 1; July 2020:G43–50.

19. "Off target: Investigating the abscopal effect as a treatment for cancer," National Institutes of Health (NIH), National Cancer Institute (NCI) monograph. Reviewed Jan. 28, 2020. <https://www.cancer.gov/news-events/cancer-currents-blog/2020/cancer-abscopal-effect-radiation-immunotherapy>). Accessed Apr. 29, 2021.
20. Registered at https://clinicaltrials.gov/ct2/history/NCT02093871?V_4=View.
21. Described at "Clinical trial—ovarian cancer," Verthermia website: <https://www.verthermia.net/clinical-science-ovarian>.
22. J. Hussain and M. Cohen. "Clinical effects of regular dry sauna bathing: A systematic review," *Evidence-based Complementary and Alternative Medicine: eCAM*, vol. 2018 1857413. 24 Apr. 2018, doi:10.1155/2018/1857413.
23. S. J. Genuis, et al. "Clinical detoxification: elimination of persistent toxicants from the human body," *The Scientific World Journal*, vol. 2013 238347. Jun. 6, 2013, doi:10.1155/2013/238347.
24. A. Boretti and B. K. Banik. "Intravenous vitamin C for reduction of cytokines storm in acute respiratory distress syndrome," *Pharma. Nutrition*, vol. 12 (2020): 100190. doi:10.1016/j.phanu.2020.100190.
25. M. J. Gonzalez, et al. "High dose intravenous vitamin C and chikungunya fever: A case report," *Journal of Orthomolecular Medicine*, vol. 29,4 (2014): 154-156.
26. R. Chuen Fong, et al. "Effects of high doses of vitamin C on cancer patients in Singapore: Nine cases," *Integrative Cancer Therapies*, 2016, vol. 15(2) 197-204.
27. S. J. Padayatty, et al. "Vitamin C pharmacokinetics: Implications for oral and intravenous use," *Annals of Internal Medicine*, Apr. 6, 2004 vol. 140, no. 7, Page: 533-537.
28. A. C. Carr, et al. "The effect of intravenous vitamin C on cancer- and chemotherapy-related fatigue and quality of life," *Front. Oncol.*, 2014 Oct 16;4:283. doi: 10.3389/fonc.2014.00283. PMID: 25360419; PMCID: PMC4199254.
29. Y. C. Raymond, et al. "Effects of high doses of vitamin C on cancer patients in Singapore: Nine cases," Op. cit.
30. E. Klimant, et al. "Intravenous vitamin C in the supportive care of cancer patients: a review and rational approach," *Curr. Oncol.*, Apr. 2018;25(2):139-148. doi: 10.3747/co.25.3790. Epub 2018 Apr 30. PMID: 29719430; PMCID: PMC5927785.
31. T. Hidenori, et al. "High-dose intravenous vitamin C improves quality of life in cancer patients," *Personalized Medicine Universe*, vol. 1, no. 1, 2012, pp. 49-53, <https://doi.org/10.1016/j.pmu.2012.05.008>.
32. S. Mousavi, et al. "Immunomodulatory and antimicrobial effects of vitamin C. *Eur. Journal of Microbiol. Immunology* (Bp). Aug. 2019 16;9(3):73-79. doi: 10.1556/1886.2019.00016. PMID: 31662885; PMCID: PMC6798581.
33. N. A. Mikirova, et al. "Anti-angiogenic effect of high doses of ascorbic acid," *Journal of Transl. Med.*, Sep. 2008, 12;6:50. doi: 10.1186/1479-5876-6-50. PMID: 18789157; PMCID: PMC2562367.

34. N. Mikirova, et al. "Effect of high-dose intravenous vitamin C on inflammation in cancer patients," *J. Transl. Med.*, 10, 189 (2012). <https://doi.org/10.1186/1479-5876-10-189>.
35. AUTHOR NOTE: I run the G6-PD test before initiating *any* IVC again for a patient if it has been more than six months since their last IVC and if a cytotoxic therapy has been used in the interim.
36. S. J. Padayatty, et al. "Vitamin C pharmacokinetics: implications for oral and intravenous use," *Op. cit.*
37. M. Di Rosa, et al. "Vitamin D₃: A helpful immuno-modulator," *Immunology*, Oct. 2011;134(2):123-39. doi: 10.1111/j.1365-2567.2011.03482.x. PMID: 21896008; PMCID: PMC3194221.
38. C. F. Garland, et al. "The role of vitamin D in cancer prevention," *Am. J. Public Health*, Feb. 2006;96(2):252-61. doi: 10.2105/AJPH.2004.045260. Epub 2005 Dec 27. PMID: 16380576; PMCID: PMC1470481.
39. P. D. Chandler, et al. "Effect of vitamin D₃ supplements on development of advanced cancer: A secondary analysis of the VITAL randomized clinical trial," *JAMA Netw. Open*, 2020;3(11):e2025850. doi:10.1001/jamanetworkopen.2020.25850.
40. S. Gutiérrez, et al. "Effects of omega-3 fatty acids on immune cells," *Int. J. Mol. Sci.*, Oct 11, 2019;20(20):5028. doi: 10.3390/ijms20205028. PMID: 31614433; PMCID: PMC6834330. AUTHOR NOTE: If omega-3 levels are low, the immune system is not responsive to modulation.
41. A. P. Simopoulos. "The importance of the ratio of omega-6/omega-3 essential fatty acids," *Biomedicine and Pharmacotherapy (Biomedecine and Pharmacotherapie)*, vol. 56,8 (2002): 365-79. doi:10.1016/s0753-3322(02)00253-6.
42. D. Friedmann-Morvinski and I. M. Verma. "Dedifferentiation and reprogramming: Origins of cancer stem cells," *EMBO Reports*, vol. 15,3 (2014): 244-53. doi:10.1002/embr.201338254.
43. E. Doldo, et al. "Vitamin A, cancer treatment and prevention: The new role of cellular retinol binding proteins," *BioMed research international* vol. 2015 (2015): 624627. doi:10.1155/2015/624627.
44. W. B. O'Shaughnessy (1838-40). "Case of tetanus, cured by a preparation of hemp (cannabis indica)," *Transactions of the Medical and Physical Society of Bengal*. 8: 462-469.
45. M. B. Bridgeman and D. T. Abazia. "Medicinal cannabis: History, pharmacology, and implications for the acute care setting," *P and T: A Peer-reviewed Journal for Formulary Management*, vol. 42,3 (2017): 180-188.
46. D. Downs. "The science behind the DEA's long war on marijuana," *Scientific American*, Apr. 19, 2016, online edition. <https://www.scientificamerican.com/article/the-science-behind-the-dea-s-long-war-on-marijuana/> Retrieved Apr. 29, 2021.
47. M. A. Lee. *Smoke Signals: A Social History of Marijuana—Medical, Recreational and Scientific*, New York: Scribner, 2012.
48. K. Mackie. "Mechanisms of CB₁ receptor signaling: Endocannabinoid modulation of synaptic strength," *Int. J. Obes.*, 30, S19-S23 (2006). <https://doi.org/10.1038/sj.ijo.0803273>.

49. A. Dhopeswarkar and K. Mackie. "CB2 cannabinoid receptors as a therapeutic target—What does the future hold?" *Molecular Pharmacology*, vol. 86,4 (2014): 430-7. doi:10.1124/mol.114.094649.
50. S. Hryhorowicz, et al. "Pharmacogenetics of cannabinoids," *European Journal of Drug Metabolism and Pharmacokinetics*, vol. 43,1 (2018): 1-12. doi:10.1007/s13318-017-0416-z.
51. U. Reimann-Philipp, et al. "Cannabis chemovar nomenclature misrepresents chemical and genetic diversity: Survey of variations in chemical profiles and genetic markers in Nevada medical cannabis samples," *Cannabis and Cannabinoid Research*, vol. 5, No. 3, 2 Sep. 2020 <https://doi.org/10.1089/can.2018.0063>. <https://www.liebertpub.com/doi/10.1089/can.2018.0063>.
52. AUTHOR NOTE: Nutrition Genome is one of the epigenetic testing services that I rely on (see "Resources" in this volume). It is especially valuable for uncovering these SNPs.
53. S. Hryhorowicz, et al. "Pharmacogenetics of cannabinoids," *European Journal of Drug Metabolism and Pharmacokinetics*, vol. 43,1 (2018): 1-12. doi:10.1007/s13318-017-0416-z.
54. V. Di Marzo and C. Silvestri. 2019. "Lifestyle and metabolic syndrome: Contribution of the endocannabinoidome," *Nutrients*, 11, no. 8: 1956. <https://doi.org/10.3390/nu11081956>.
55. D. I. Abrams and M. Guzman. "Cannabis in cancer care," *Clinical pharmacology and therapeutics* vol. 97,6 (2015): 575-86. doi:10.1002/cpt.108.
56. Guillermo Velasco, Sonia Hernández-Tiedra, David Dávila, Mar Lorente, "The use of cannabinoids as anticancer agents," *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, vol. 64, Jan. 2016, pp. 259-266, ISSN 0278-5846, <https://doi.org/10.1016/j.pnpbp.2015.05.010>.
57. A. Sainz-Cort, et al. "Anti-proliferative and cytotoxic effect of cannabidiol on human cancer cell lines in presence of serum," *BMC Res. Notes*, 13, 389 (2020). <https://doi.org/10.1186/s13104-020-05229-5>.
58. M. Scherma, et al. "The endogenous cannabinoid anandamide has effects on motivation and anxiety that are revealed by fatty acid amide hydrolase (FAAH) inhibition," *Neuropharmacology*, vol. 54,1 (2008): 129-40. doi:10.1016/j.neuropharm.2007.08.011.
59. Ibid.
60. R. N. Donahue, et al. "The opioid growth factor (OGF) and low dose naltrexone (LDN) suppress human ovarian cancer progression in mice," *Gynecologic Oncology*, vol. 122,2 (2011): 382-8. doi:10.1016/j.ygyno.2011.04.009.
61. D. Jackson, et al. "The effects of low dose naltrexone on opioid induced hyperalgesia and fibromyalgia," *Frontiers in Psychiatry*, vol. 12 593842. 16 Feb. 2021, doi:10.3389/fpsy.2021.593842.
62. J. Younger, et al. "The use of low-dose naltrexone (LDN) as a novel anti-inflammatory treatment for chronic pain," *Clinical Rheumatology*, vol. 33,4 (2014): 451-9. doi:10.1007/s10067-014-2517-2.
63. T. Schwaiger. "The uses of low-dose naltrexone in clinical practice," *Natural Medicine Journal* (Apr. 2018), vol 10, no. 4 <https://www>

- .naturalmedicinejournal.com/journal/2018-04/uses-low-dose-naltrexone-clinical-practice. Retrieved Apr. 30, 2021.
64. L. A. Hammer, et al. "Opioid growth factor and low-dose naltrexone impair central nervous system infiltration by CD4 + T lymphocytes in established experimental autoimmune encephalomyelitis, a model of multiple sclerosis," *Experimental Biology and Medicine* (Maywood, NJ), vol. 241,1 (2016): 71–78. doi:10.1177/1535370215596384.
 65. I. S. Zagon and P. J. McLaughlin. "Intermittent blockade of OGF α r and treatment of autoimmune disorders," *Experimental Biology and Medicine*, vol. 243,17-18 (2018): 1323–30. doi:10.1177/1535370218817746.
 66. AUTHOR NOTE: This is primarily a clinical observation (that LDN appears to calm over-zealous reactions in the immune system). Such reactions are often invoked in patients undergoing SOC immune therapy. Clinically, LDN has been a powerful tool to enhance outcomes and lower side effects to these drugs, which can otherwise wreak havoc in 80 percent or more of patients receiving them, as noted in "New drugs, new side effects: complications of cancer immunotherapy," National Institutes of Health (NIH), National Cancer Institute (NCI) monograph. May 10, 2019. At: <https://www.cancer.gov/news-events/cancer-currents-blog/2019/cancer-immunotherapy-investigating-side-effects>. Accessed Apr. 2021.
 67. Z. Li, et al. "Low-dose naltrexone (LDN): A promising treatment in immune-related diseases and cancer therapy," *International immunopharmacology*, vol. 61, Op. cit.
 68. N. Sharafaddinzadeh, et al. "The effect of low-dose naltrexone on quality of life of patients with multiple sclerosis: A randomized placebo-controlled trial," *Multiple Sclerosis* (Basingstoke, UK), vol. 16,8 (2010): 964-9. doi:10.1177/1352458510366857.
 69. Washington State University. "Insights on how night shift work increases cancer risk," *ScienceDaily*, Mar. 8, 2021; www.sciencedaily.com/releases/2021/03/210308091744.htm.
 70. T. C. Erren, et al. IARC 2019: "Night shift work" is probably carcinogenic: What about disturbed chronobiology in all walks of life?" *J. Occup. Med. Toxicol.*, 14, 29 (2019). <https://doi.org/10.1186/s12995-019-0249-6>.
 71. J. Hansen. "Night shift work and risk of breast cancer," *Current Environmental Health Reports*, vol. 4,3 (2017): 325-339. doi:10.1007/s40572-017-0155-y.
 72. IARC Monographs, vol. 124 group. "Carcinogenicity of night shift work," *Lancet Oncol.*, 2019 Aug;20(8):1058–59. doi: 10.1016/S1470-2045(19)30455-3. Epub 2019 Jul 4. PMID: 31281097.
 73. E. McNeely, et al. "The self-reported health of U.S. flight attendants compared to the general population," *Environ. Health*, 13, 13 (2014). <https://doi.org/10.1186/1476-069X-13-13>.
 74. A. N. Viswanathan, et al. "Circulating melatonin and the risk of breast and endometrial cancer in women," *Cancer Letters*, vol. 281,1 (2009): 1–7. doi:10.1016/j.canlet.2008.11.002.
 75. Y. Li, et al. "Melatonin for the prevention and treatment of cancer," *Oncotarget*, vol. 8,24 (2017): 39896-39921. doi:10.18632/oncotarget.16379.