Fighting Cancer with Plants from the Rainforest

A Guide to the Remarkable Healing Power of 13 Anti-Cancer Plants

References

Preface

The Healing Power of Rainforest Herbs book by Leslie Taylor: https://amzn.to/4inzE83

The Tropical Plant Database is online at: https://rain-tree.com/plants.htm

Recipes to Leslie's Raintree original multi-plant formulas: https://rain-tree.com/rtmprod.htm

Article: Herbal Medicine Versus The FDA:

https://leslie-taylor-raintree.blogspot.com/2018/12/herbal-medicine-versus-fda.html

Article on the closing of Raintree Nutrition, Inc.:

https://leslie-taylor-raintree.blogspot.com/2018/12/what-happened-to-raintree-nutrition.html

Introduction

Deo, S., at al. "GLOBOCAN 2020 Report on Global Cancer Burden: Challenges and Opportunities for Surgical Oncologists" *Ann. Surg. Oncol.* 2022; 29: 6497–6500.

Rudzinska, A., et al. "Phytochemicals in cancer treatment and cancer prevention—Review on epidemiological data and clinical trials." *Nutrients*. 2023; 15: 1896.

Navarro-Hortal, M., et al. "Role of flavonoids against adriamycin toxicity." *Food Chem. Toxicol.* 2020; 146: 111820.

Chaachouay, N., et al. "Plant-derived natural products: A source for drug discovery and development." *Drug Candidates*. 2024; 3: 184–207.

Gielecińska, A., et al. "Substances of natural origin in medicine: Plants vs. cancer." *Cells*. 2023; 12: 986.

Chapter 1

Links to more information:

The Tropical Plant Database can be found at https://rain-tree.com/plants.htm

More in-depth information about the traditional uses and herbal remedies of rainforest plants (including how Amazonian shamans and healers use them) is found in this author's bestselling book: The Healing Power of Rainforest Herbs: A Guide to Understanding and Using Herbal Medicinals: https://rain-tree.com/book2.htm

Chapter 2

Abotaleb, M., et al. "Flavonoids in cancer and apoptosis." Cancers (Basel). 2018 Dec; 11(1): 28.

Reuter, S., et al. "Oxidative stress, inflammation, and cancer: how are they linked?" *Free Radic. Biol. Med.* 2010 Dec; 49(11): 1603-16.

Singaravelan, N., and Tollefsbol, T. "Polyphenol-based prevention and treatment of cancer through epigenetic and combinatorial mechanisms." *Nutrients*. 2025 Feb; 17(4): 616.

Iqbal, M., et al. "Interplay of oxidative stress, cellular communication and signaling pathways in cancer." *Cell. Commun. Signal.* 2024; 22(7): 1-16.

Chimento, A., et al. "The involvement of natural polyphenols in molecular mechanisms inducing apoptosis in tumor cells: A promising adjuvant in cancer therapy." *Int. J. Mol. Sci.* 2023 Jan; 24(2): 1680.

Briguglio, G., et al. "Polyphenols in cancer prevention: New insights (Review)." *Int. J. Funct. Nutr* 2020 Nov/Dec; 1(2): 9.

Lyubitelev, A., et al. "Inhibition of cancer development by natural plant polyphenols: Molecular mechanisms." *Int. J. Mol. Sci.* 2023 Jun; 24(13): 10663.

Divella, R., et al. "Anticancer effects of nutraceuticals in the Mediterranean diet: An epigenetic diet model." *Cancer Genom. Proteo.* 2020 Jul-Aug; 17(4): 335-350.

Fan, Y., et al. "NF-κB and STAT3 signaling pathways collaboratively link inflammation to cancer." *Protein Cell*. 2013 Mar; 4(3):1 76-85.

Korbecki, J., et al. "Chronic and cycling hypoxia: Drivers of cancer chronic inflammation through HIF-1 and NF-κB activation: A review of the molecular mechanisms." *Int. J. Mol. Sci.* 2021 Oct; 22(19): 10701.

Fernandes, Q., et al. "Chronic inflammation and cancer; the two sides of a coin." *Life Sci.* 2024 Feb; 8: 122390.

Kawanishi, S., et al. "Crosstalk between DNA damage and inflammation in the multiple steps of carcinogenesis." *Int. J. Mol. Sci.* 2017 Aug; 18(8): 1808.

Vladu, A., et al. "Combination therapy using polyphenols: An efficient way to improve antitumoral activity and reduce resistance." *Int. J. Mol. Sci.* 2022 Sep; 23(18): 10244.

Links to more information:

Books by this author on the subject of free radicals, oxidative stress, chronic inflammation and the problems they cause can be found in:

Avenca: Nature's Secret for Weight Loss https://amzn.to/4ojxveG

Acerola: Nature's Secret to Fighting Free Radicals https://amzn.to/4onRtF7

Camu-Camu: Nature's Secret for Disease Prevention https://amzn.to/3XUfwRi

Hibiscus Flower: Nature's Secret for a Healthy Heart https://amzn.to/4ogdJ41

Chapter 3

Schmidt, B., et al. "A natural history of botanical therapeutics." *Metabolism*. 2008 Jul; 57(7 Suppl 1): S3-9.

Efferth, T., and Koch, E. "Complex interactions between phytochemicals. The multi-target therapeutic concept of phytotherapy." *Curr. Drug. Targets.* 2011 Jan; 12(1): 122-32.

Herranz-López, M., et al. "The multitarget activity of natural extracts on cancer: Synergy and xenohormesis." *Medicines* (Basel). 2018 Dec; 6(1): 6.

Hemalswarya, S., et al. "Potential synergism of natural products in the treatment of cancer." *Phytother. Res.* 2006; 20: 239–49.

Wagner, G. et al. "Synergy research: Approaching a new generation of phytopharmaceuticals." *Phytomedicine* 2009; 16(2-3): 197-110.

Li, Q., et al. "Mechanisms of action for small molecules revealed by structural biology in drug discovery." *Int. J. Mol. Sci.* 2020 Jul; 21(15): 5262.

Chapter 4

Fernandes, J., et al. "The role of the mediators of inflammation in cancer development." *Pathol. Oncol. Res.* 2015 Jul; 21(3): 527-34.

Carleton, N., et al. "Immuno-oncology recapitulates ontogeny: Modern cell and gene therapy for cancer." *Mol. Ther.* 2025 May; 33(5): 2229-2237.

American Cancer Society Publication "Known and Probable Human Carcinogens" accessed online at https://www.cancer.org/cancer/risk-prevention/understanding-cancer-risk/known-and-probable-human-carcinogens.html

The Institute of Cancer Research. "How the Human Genome Project shook the world of cancer research." Accessed online Dec 9, 2024: https://www.icr.ac.uk/news-features/latest-features/how-the-human-genome-project-shook-the-world-of-cancer-research

Hudson, T., et al. "International network of cancer genome projects." *Nature*. 2010 Apr; 464(7291): 993-8.

The Human Genome Project: https://www.genome.gov/human-genome-project

The International Cancer Genome Consortium: https://www.icgc-argo.org

The UK Biobank Project: https://www.ukbiobank.ac.uk

The Gut Microbiome Project: https://hmpdacc.org

Chapter 5

Mohammad, R., et al. "Broad targeting of resistance to apoptosis in cancer." *Semin. Cancer Biol.* 2015 Dec; 35 Suppl (0): S78-S103.

Yang, Z., and Wang, T. "Editorial: Recent advances in discovering molecular targets for cancer therapy." *Front. Med.* (Lausanne). 2024 May; 11: 1403466.

Zhong, L., et al. "Small molecules in targeted cancer therapy: advances, challenges, and future perspectives." *Sig. Transduct. Target Ther.* 2021; 6: 201.

Savage, S., et al. "Pan-cancer proteogenomics expands the landscape of therapeutic targets." *Cell.* 2024 Aug; 187(16): 4389 - 4407.

Sochacka-Ćwikła, A., et al. "FDA-approved small molecule compounds as drugs for solid cancers from early 2011 to the end of 2021." *Molecules*. 2022 Mar; 27(7): 2259.

Min, H., and Lee, H. "Molecular targeted therapy for anticancer treatment." *Exp. Mol. Med.* 2022; 54: 1670–1694.

Hou. J., et al. "Evolution of molecular targeted cancer therapy: mechanisms of drug resistance and novel opportunities identified by CRISPR-Cas9 screening." *Front. Oncol.*, 2022 Mar; 12: 755063.

Wu, Q., et al. "Small-molecule inhibitors, immune checkpoint inhibitors, and more: FDA-approved novel therapeutic drugs for solid tumors from 1991 to 2021." *J. Hematol. Oncol.* 2022; 15: 143.

Degenhardt, K., et al. "BAX and BAK mediate p53-independent suppression of tumorigenesis." *Cancer Cell.* 2022 Sept: 2(3): 193-203.

Qian, S., et al. "The role of BCL-2 family proteins in regulating apoptosis and cancer therapy." *Front. Oncol.* 2022 Oct; 12: 985363.

Lavanya, V., et al. "Small molecule inhibitors as emerging cancer therapeutics." 2014; 1(3): 39-46.

Ozaki, T., and Nakagawara, A. "Role of p53 in cell death and human cancers." *Cancers* (Basel). 2011 Mar; 3(1): 994-1013.

Wang, H., et al. "Targeting p53 pathways: mechanisms, structures and advances in therapy." *Nature Sign. Transduct. Targ. Ther.* 2023; 8: 92.

Cyran. A., and Zhitkovich, A. "Heat shock proteins and HSF1 in cancer." *Front. Oncol.* 2022, Mar; 86320.

Li, X., et al. "Autophagy and autophagy-related proteins in cancer." Mol. Cancer 2020; 19: 12.

Boice, A., et al., "Targeting apoptotic caspases in cancer." *Biochim. Biophys. Acta Mol. Cell Res.* 2020 Jun; 1867(6): 118688.

Allani, M., et al. "Caspase-driven cancer therapies: Navigating the bridge between lab discoveries and clinical applications." *Cell Biochem. Funct.* 2024 Mar; 42(2): e3944.

Niland, S., et al. "Matrix metalloproteinases shape the tumor microenvironment in cancer progression." *Int. J. Mol. Sci.* 2021 Dec; 23(1): 146.

Ozkan, E., et al. "The trinity of matrix metalloproteinases, inflammation, and cancer: A literature review of recent updates." *Antiinflamm. Antiallergy Agents Med. Chem.* 2020; 19(3): 206-221.

Zhang, Y., and Wang, X. "Targeting the Wnt/ β -catenin signaling pathway in cancer." *J. Hematol. Oncol.* 2020 Dec; 13(1): 165.

Spirrison, A., et al. "RSK1 and RSK2 as therapeutic targets: an up-to-date snapshot of emerging data." *Expert. Opin. Ther. Targets.* 2024 Dec; 28(12): 1047-1059.

Glaviano, A., et al. "PI3K/AKT/mTOR signaling transduction pathway and targeted therapies in cancer." *Mol. Cancer* 2023; 22(1): 138.

Shi, Q., et al. "Notch signaling pathway in cancer: from mechanistic insights to targeted therapies." *Sig. Transduct. Target Ther.* 2024; 9: 128.

Robinson, N., and Schiemann, W. "Telomerase in cancer: function, regulation, and clinical translation." *Cancers*. (Basel). 2022 Feb; 14(3): 808.

Kumar, N., and Sethi, G. "Telomerase and hallmarks of cancer: An intricate interplay governing cancer cell evolution." *Cancer Lett.* 2023 Dec; 578: 216459.

Ritter, A., et al. "Microtubule dynamics and cancer." Cancers (Basel). 2022 Sep; 14(18): 4368.

Liu, H., et al. "The role of p21-activated kinases in cancer and beyond: Where are we heading?" *Front. Cell. Dev. Biol.* 2021 Mar; 9: 641381.

Part 3: Reference Files for The Anti-Cancer Plants of the Rainforest

Anamu: https://rain-tree.com/Anamu-Cancer-Research.pdf

Bitter Melon: https://rain-tree.com/Bitter-Melon-Cancer-Research.pdf

Cat's Claw: https://rain-tree.com/Cats-Claw-Cancer-Research.pdf

Chanca Piedra: https://rain-tree.com/Chanca-Piedra-Cancer-Research.pdf

Espinheira Santa: https://rain-tree.com/Espinheira-Santa-Cancer-Research.pdf

Graviola: https://rain-tree.com/Graviola-Cancer-Research.pdf

Guacatonga: https://rain-tree.com/Guacatonga-Cancer-Research.pdf

Mullaca: https://rain-tree.com/Mullaca-Cancer-Research.pdf

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Simarouba: https://rain-tree.com/Simarouba-Cancer-Research.pdf

Suma: https://rain-tree.com/Suma-Cancer-Research.pdf

Vassourinha: https://rain-tree.com/Vassourinha-Cancer-Research.pdf