# The Case For Essiac Tea

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Centuries of indigenous use of the Essiac Tea ingredients indicate various applications for various ailments. Scientific research has demonstrated that the combined ingredients contain a wide range of phytochemical compounds, also known as phytonutrients, for effectively preventing free radical damage in cells, and thereby preventing damage to the DNA.

In the 1930's, nurse Rene Caisse ran a clinic and discovered this formulation worked against various forms of cancer. After some years, word reached the medical establishment about her treating cancer patients successfully, and was promptly shut down. Since then and up to current times, this has been a repeated story of every medical doctor or other practitioner who has attempted to inform the public about this and other botanicals.

Literally thousands of studies that have examined and tested the vast number of cancer-destroying compounds in the world's botanicals have shown anti-cancer, immune improving and detoxifying properties. What the vast number of plants in the world has in common are their complex biochemical compounds. Extensive research has discovered over 25,000 phytochemicals in the plant kingdom thus far.

Other natural therapies introduced by practitioners such as animal pancreatic and liver enzyme therapies, respectively, and others, have also been severely discredited, due to threatening conflicts of monetary interests in the medical industrial complex, which includes the pharmaceutical drug industry.

Although science research has not focused on testing the actual tea formulation, much research has focused on its individual botanical ingredients. Therefore, statements that proclaim there is little scientific evidence that the tea formulation works on cancer are grossly misleading.

Items 1 and 2 below are examples of well-conducted studies that were properly designed on the tea itself. Items 3, 4, 5 and 6 are focused on studies for individual botanicals in Essiac tea.

## 1. Essiac tea: scavenging of reactive oxygen species and effects on DNA damage

Botanicals: *Arctium lappa, Rumex acetosella, Ulmus rubra and Rheum officinale*

*Abstract*

*In this study, we examined the effects of Essiac on free radical scavenging and DNA damage in a non-cellular system, as well as the effects Essiac on lipid peroxidation using the RAW 264.7 cell line. We observed, using electron spin resonance, that Essiac effectively scavenged hydroxyl, up to 84% reduction in radical signal at the 50% tea preparation concentration, and superoxide radicals, up to 82% reduction in radical*

*signal also at the 50% tea preparation concentration, as well as prevented hydroxyl radical-induced DNA damage. In addition, Essiac inhibited hydroxyl radical-induced lipid peroxidation by up to 50% at the 50% tea preparation concentration. These data indicate that Essiac tea possesses potent antioxidant and DNA-protective activity, properties that are common to natural anti-cancer agents. This study may help to explain the mechanisms behind the reported anti-cancer effects of Essiac* (Leonard, 2006).

Reference:

Leonard SS, Keil D, Mehlman T, Proper S, Shi X, Harris GK. Essiac tea: scavenging of reactive oxygen species and effects on DNA damage. J Ethnopharmacol. 2006 Jan 16;103(2):288-96. doi: 10.1016/j.jep.2005.09.013. Epub 2005 Oct 13. PMID: 16226859.https://pubmed.ncbi.nlm.nih.gov/16226859/

**2. In vitro comparison of Essiac and Flor-Essence on human tumor cell lines**

*Abstract*

*Essiac (ES) and Flor-Essence (FE) are two herbal teas widely taken by North American cancer patients during chemo- and radiation therapy. In vitro studies on the antiproliferative and differentiation inducing activities of these teas were performed. ES and FE showed negligible antiproliferative activity on Jurkat leukemia cells. Both herbal teas inhibited 50% (IC50) of MCF7 breast cancer cell growth at 1/10 dilution. The IC50 was about 1/40 and 1/10 dilution of FE and ES respectively for MDA-MB-468 human breast cancer cells. The IC50 for HL60 cells was at 1/10 dilution of FE and less than 1/10 dilution of ES. ES at 1/10 dilution induced expression of non-specific esterase in 16% of HL60 cells, compared to about 5% in FE treated cells and untreated controls. ES treatment of HL60 cells induced 47-67% nitroblue tetrazolium positive staining cells compared to 24.6+/-3.1% in cells treated with 1/10 dilution of FE. Flow cytometry analysis showed that both ES and FE treatment between 1/10 and 1/100 dilutions only slightly affected the cell cycle progression of MCF7, MDA-MB-468, Jurkat and HL60 cells. Our data show that both ES and FE herbal teas demonstrated antiproliferative and differentiation inducing properties in vitro only at high concentrations. Further research is needed to elucidate the in vivo activities* (Tai, 2004).

Reference:

Tai J, Cheung S, Wong S, Lowe C. In vitro comparison of Essiac and Flor-Essence on human tumor cell lines. Oncol Rep. 2004 Feb;11(2):471-6. PMID: 14719086. https://pubmed.ncbi.nlm.nih.gov/14719086/

***3. Arctium lappa* (Burdock)**

*Abstract*

*Arctium species are known for a variety of pharmacological effects due to their diverse volatile and non-volatile secondary metabolites. Representatives of Arctium species*

*contain non-volatile compounds including lignans, fatty acids, acetylenic compounds, phytosterols, polysaccharides, caffeoylquinic acid derivatives, flavonoids, terpenes/terpenoids and volatile compounds such as hydrocarbons, aldehydes, methoxypyrazines, carboxylic and fatty acids, monoterpenes and sesquiterpenes. Arctium species also possess bioactive properties such as anti-cancer, anti-diabetic, anti-oxidant, hepatoprotective, gastroprotective, antibacterial, antiviral, antimicrobial, anti-allergic, and anti-inflammatory effects. This review aims to provide a complete overview of the chemistry and biological activities of the secondary metabolites found in therapeutically used Arctium species. Summary of pharmacopeias and monographs contents indicating the relevant phytochemicals and therapeutic effects are also discussed, along with possible safety considerations.*

Reference:

Wang, D., Bădărau, A. S., Swamy, M. K., Shaw, S., Maggi, F., da Silva, L. E., López, V., Yeung, A., Mocan, A., & Atanasov, A. G. (2019). *Arctium* Species Secondary Metabolites Chemodiversity and Bioactivities. *Frontiers in plant science*, *10*, 834. https://doi.org/10.3389/fpls.2019.00834

### *4.* ***Rumex acetosella*** **(Sheep sorrel)**

*Abstract*

*Medicinal and food plants as well as their bioactive fractions have been used by diverse human cultures since ancient times. These plants provide multiple health benefits because of the presence of a plethora of phytochemicals including phenylpropanoids, isoprenoids, alkaloids, sulphated compounds, peptides and polysaccharides that are responsible for various biological activities such as anticancer, antioxidant, antifungal, antibacterial, anti-dysenteric, anti-inflammatory, antiulcer, anti-hypertensive and anticoagulant properties. The genus Rumex includes edible and medicinal herbs belonging to buckwheat (Polygonaceae) family, consisting of about 200 species rich in phenylpropanoids and anthraquinones. Some Rumex species have exhibited health-promoting effects and have been used as traditional foods and herbal remedies, though a limited information has been documented on their specific biological properties. Therefore, this survey aimed at reviewing the Rumex species with documented biological activity, focusing on preclinical evidences on their efficacy and safety.*

Reference:

Mishra, A. P., Rad, M. S., Shariati, M. A., Mabkhot, Y. N., Al-Showiman, S. S., Rauf, A., . . . Iriti, M. (2018). Bioactive compounds and health benefits of edible Rumex species-A review. Cellular and Molecular Biology, 64(8), 27-34. http://dx.doi.org/10.14715/cmb/2018.64.8.5

### *5.* ***Ulmus rubr*** **(Slippery Elm)**

*Introduction*

*IN THE UNITED STATES alone, 60–70 million people are affected by some type of digestive disease.1 Ayurveda is the traditional system of medicine originating in India*

*that emphasizes gastrointestinal health and disease prevention with herbal and lifestyle medicine. The herbal medicines commonly used for gastrointestinal health and disease in Ayurvedic Medicine, as well as other traditional systems of medicine, include* Ulmus rubra *(common name: slippery elm) and* Glycyrrhiza glabra *(common name: licorice), as well as the widely known polyherbal medicinal formulation (common name: triphala) of* Emblica officinalis, Terminalia bellerica, *and* Terminalia chebula*, which were three herbal medicines of greatest interest for the current study.*

Reference:

Peterson, C. T., Sharma, V., Uchitel, S., Denniston, K., Chopra, D., Mills, P. J., & Peterson, S. N. (2018). Prebiotic Potential of Herbal Medicines Used in Digestive Health and Disease. *Journal of alternative and complementary medicine (New York, N.Y.)*, *24*(7), 656–665. https://doi.org/10.1089/acm.2017.0422

*6.* ***Rheum officinale*** (Chinese rhubarb)

*Abstract*

*Chronic renal failure (CRF) is a major public health problem worldwide. Earlier studies have revealed salutary effects of rhubarb extracts in CRF. In this study, we employed lipidomic and metabolomic approaches to identify the plasma biomarkers and to determine the effect of treatment with petroleum ether, ethyl acetate and n-butanol extracts of rhubarb in a rat model of CRF with adenine-induced chronic tubulointerstitial nephropathy. In addition, clinical biochemistry, histological evaluation and pro-fibrotic protein expression were analyzed. Significant changes were found between the CRF and control groups representing characteristic phenotypes of rats with CRF. Treatment with the three rhubarb extracts improved renal injury and dysfunction, either fully or partially reversed the plasma metabolites abnormalities and attenuated upregulation of pro-fibrotic proteins including TGF-β1, α-SMA, PAI-1, CTGF, FN and collagen-1. The nephroprotective effect of ethyl acetate extract was better than other extracts. The differential metabolites were closely associated with glycerophospholipid, fatty acid and amino acid metabolisms. The results revealed a strong link between renal tubulointerstitial fibrosis and glycerophospholipid metabolism and L-carnitine metabolism in the development of CRF. Amelioration of CRF with the three rhubarb extracts was associated with the delayed development and/or reversal the disorders in key metabolites associated with adenine-induced CRF.*

Reference:

Wing-Yan Li, Shun-Wan Chan, De-Jian Guo, Mei-Kuen Chung, Tin-Yan Leung, Peter Hoi-Fu Yu. Water extract of Rheum officinale Baill. induces apoptosis in human lung adenocarcinoma A549 and human breast cancer MCF-7 cell lines. *Journal of Ethnopharmacology,* Volume 124, Issue 2. 2009. Pages 251-256. https://doi.org/10.1016/j.jep.2009.04.030.

*Abstract*

*Chronic renal failure (CRF) is a major public health problem worldwide. Earlier studies have revealed salutary effects of rhubarb extracts in CRF. In this study, we employed lipidomic and metabolomic approaches to identify the plasma biomarkers and to determine the effect of treatment with petroleum ether, ethyl acetate and n-butanol extracts of rhubarb in a rat model of CRF with adenine-induced chronic tubulointerstitial nephropathy. In addition, clinical biochemistry, histological evaluation and pro-fibrotic protein expression were analyzed. Significant changes were found between the CRF and control groups representing characteristic phenotypes of rats with CRF. Treatment with the three rhubarb extracts improved renal injury and dysfunction, either fully or partially reversed the plasma metabolites abnormalities and attenuated upregulation of pro-fibrotic proteins including TGF-β1, α-SMA, PAI-1, CTGF, FN and collagen-1. The nephroprotective effect of ethyl acetate extract was better than other extracts. The differential metabolites were closely associated with glycerophospholipid, fatty acid and amino acid metabolisms. The results revealed a strong link between renal tubulointerstitial fibrosis and glycerophospholipid metabolism and L-carnitine metabolism in the development of CRF. Amelioration of CRF with the three rhubarb extracts was associated with the delayed development and/or reversal the disorders in key metabolites associated with adenine-induced CRF.*

Reference:

Zhang, ZH., Vaziri, N., Wei, F. et al. An integrated lipidomics and metabolomics reveal nephroprotective effect and biochemical mechanism of Rheum officinale in chronic renal failure. Sci Rep **6,** 22151 (2016). https://doi.org/10.1038/srep22151

## Reports of Essiac Tea Side Effects

An ailing person using herbs or other medicinal plants containing potent antioxidant compounds may at first experience nausea, vomiting, headaches, flu-like symptoms, increased bowel movements, swollen glands, or skin eruptions when one consumes medicinal plants or foods that bind to synthetic chemicals or assist the body in eliminating toxins, fecal matter or illness-causing microbials such as parasites and bacteria.

*Abstract*

*Toxic metals such as arsenic, cadmium, lead, and mercury are ubiquitous, have no beneficial role in human homeostasis, and contribute to noncommunicable chronic diseases. While novel drug targets for chronic disease are eagerly sought, potentially helpful agents that aid in detoxification of toxic elements, chelators, have largely been restricted to overt acute poisoning. Chelation, that is multiple coordination bonds between organic molecules and metals, is very common in the body and at the heart of enzymes with a metal cofactor such as copper or zinc. Peptides glutathione and metallothionein chelate both essential and toxic elements as they are sequestered, transported, and excreted. Enhancing natural chelation detoxification pathways, as well as use of pharmaceutical chelators against heavy metals are reviewed. Historical adverse outcomes with chelators, lessons learned in the art of using them, and successes using chelation to ameliorate renal, cardiovascular, and neurological conditions highlight the need for renewed attention to simple, safe, inexpensive interventions that offer potential to stem the tide of debilitating, expensive chronic disease.*

Reference:

Sears M. E. (2013). Chelation: harnessing and enhancing heavy metal detoxification--a review. *TheScientificWorldJournal*, *2013*, 219840. https://doi.org/10.1155/2013/219840,.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3654245/

Once the body has successfully eliminated toxic metals, the above detoxification symptoms usually subside. The person is advised to drink plenty of purified spring water (not tap or distilled) to help flush the circulated toxins through the eliminative organs, which include the kidneys, bowels, lungs, lymph, and skin, as well as the digestive system's accessory organs: the liver, spleen and gall bladder.

Due to conflicts of interest, the medical establishment has chosen to ignore the centuries of empirical evidence and has ignored the scientific evidence, or blocked any funding for research that would further confirm of the Essiac's formula's anticancer properties.

Also, to further prevent information about the health-protective properties of Essiac or any other of the thousands of healing botanicals for that matter, strict FDA guidelines specifically state that there should be no medical claims about any botanical, or any

reference to a body part that infers a plant or its constituents cure any disease or correct any condition.

In spite of overwhelming scientific evidence, supplement manufacturers and any health advisor must not make any such direct claims. Instead, supplement companies, educators, practitioners and individuals must tiptoe around the subject, issuing bland statements that hardly help patients and consumers make informed decisions about managing their nutritional health.

As for studies claiming that Essiac does not cure cancer, following the money trail reveals that not all studies are honest, legitimate, or funded by entities with human health as their priority; quite the contrary. Some so-called “studies” are not performed according to strict rules using the scientific method, and are thrown out by legitimate peer-review panels of scholars that evaluate a collection of studies from different teams of researchers around the world.

If an individual study is included in a peer-reviewed study that evaluates the quality of any scientific study, then one can be much better assured whether or not a claim is true. Searching the Internet and finding various articles from nonqualified sources may appear authoritative, but usually do not provide accurate information, and can therefore lead a person to reach misinformed conclusions.

Furthermore, a poorly concluded study, according to panel review scholars, must not only include in vitro research (observations of isolated cell cultures performed solely in a laboratory). Research must also warrant further studies that include in vivo studies or those on live human subjects.

There are thousands of poorly conducted studies to be found. As a case in point, below is a typical “study” that has political and financial ties to a central monopolistic entity that includes the pharmaceutical and other industries, and that harm people and the Earth. When doing one’s own research, checking into the affiliation or association with questionable entities should be the first thing a truth seeker must check on when examining any alleged scientific study.

Note the conflict of interest affiliation in the example below, which indicates the conflict immediately. This bioengineering lab is not known for advocating the amelioration of diseases through natural botanical medicines. Instead, they are deeply involved in experimental methods on human biology that far deviate from protecting the integrity of the genetic codes of life in human DNA.  Instead, their work is focused on the opposite, of experimenting and altering it. Scientists are concerned that genetically modifying DNA in humans, plants and animals has already had health and environmental impacts that may be irreversible, and can potentially have a destructive cascade effect in the world’s ecology.

Upon reading, this very poorly designed study hardly proved anything about whether Essiac is effective against cancer. This is just one example out of hundreds of thousands of studies that are rejected by expert peer-review panels in the United States (United, 2020).

Reference:

United States, National Information Center on Health Services Research & Health Care Technology (NICHSR), Health Data Sources. (2020). *Peer-reviewed Literature*. Retrieved from https://www.nlm.nih.gov/nichsr/stats_tutorial/section3/mod6_peer.html

Example:

**“Essiac and Flor-Essence herbal tonics stimulate the in vitro growth of human breast cancer cells”**

*Affiliation*
*1Biosciences Directorate, Lawrence Livermore National Laboratory, Livermore, CA*

Reference:

Kulp KS, Montgomery JL, Nelson DO, Cutter B, Latham ER, Shattuck DL, Klotz DM, Bennett LM. Essiac and Flor-Essence herbal tonics stimulate the in vitro growth of human breast cancer cells. *Breast Cancer Res Treat.* 2006 Aug;98(3):249-59. doi: 10.1007/s10549-005-9156-x. Epub 2006 Mar 16. PMID: 16541326. https://pubmed.ncbi.nlm.nih.gov/16541326/

- The findings in the above example do not consider the antioxidant immune stimulating properties of Essiac’s botanical ingredients in a live subject whose immune system plays a role in identifying and destroying cancer cells
- The findings do not consider that body enzymes along with the immune system act on cancer cells, while merely applying the tea mixture to cancer cell line in vitro is not the same environment whatsoever.
- In this study, one can hardly reach the conclusion that it causes cancer in breast cancer cells, especially when cells that are nourished in a petri dish will indeed proliferate, be it a cancer cell or a cell taken from a living thing that is not damaged or diseased.
- Those same breast cell receptor sites tested would respond differently and more intricately with the tea considering the countless actions of the body’s entire biochemistry. Testing cells in isolation without the body’s vastly intricate dynamics can yield a much different result.

Therefore, the conclusion reached in this study remains very unsubstantiated, as any legitimate review board would confirm.