

A hand holding a branch with leaves against a natural background. The background is a soft-focus landscape with green foliage and a bright sun flare on the left side. The hand is positioned in the lower-left quadrant, holding a thick, gnarled branch that extends towards the right. Several green leaves are attached to the branch, some overlapping the hand.

# CANCER'S *Natural* ANTIDOTE

PROTOCOLS FOR  
PREVENTION AND HEALING

# CANCER'S NATURAL ANTIDOTE

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# INTRODUCTION



Cancer, a complex and multifaceted condition, demands a multifaceted approach to prevention and healing. This book delves into natural therapies, offering evidence-based protocols that have shown promise in supporting cancer prevention and enhancing healing. It bridges the gap between cutting-edge research and practical, actionable strategies that can be integrated into daily life.

“Cancer’s Natural Antidote: Protocols for Prevention and Healing” serves as a starting point for understanding and integrating holistic methods into the treatment and prevention of cancer. Many people in today’s healthcare environment seek supplementary techniques that work with traditional therapies to improve general health and strengthen the body’s natural defenses.

A holistic approach to health aims to treat the whole person rather than simply specific symptoms. It combines a range of complementary and alternative therapies to enhance the quality of life, balance the body’s systems, and assist in healing processes. In this book, we will dive into some tried-and-true methods of cancer-fighting protocols, how to integrate them, and some scientific evidence surrounding each subject.

Fighting cancer is stressful in many different ways, and our protocols aim to relieve as much of that stress as possible. Today’s conventional world is filled with controversy, and finding a solution that works for you is vitally important. Everyone’s body reacts differently to certain medications and protocols; therefore, it is important to have a multifaceted approach to supporting the immune system for optimal health and wellness!

Holistic health is not just about achieving temporary relief. Holistic health is an all-encompassing lifestyle for permanently relieving symptoms for a healthier mind and body!

CHAPTER 1  
**Chlorine-Dioxide**



## **ANN VANDERSTEEL**

*“Chlorine dioxide actually treats cancer. There’s studies in the NIH that show you that if you inject chlorine dioxide into a cancer tumor, it gets rid of the tumor inside of minutes, and from there it’ll spread to the distant organs or lymph nodes.”*

Initially used as a gas to treat and disinfect water, chlorine dioxide is an orange-yellow gas that has become a beneficial chemical substance that can help cancer patients and much more. It can also be an antivenom for amphibians, reptiles, spiders, cone snails, and insects.

In recent years, patients have investigated the use of chlorine dioxide for autism. Testimonials state that chlorine dioxide has had incredible benefits for autistic patients, to the point where their bodies function better, and speech is improved in some cases. In an interview with Kerri Rivera, she states how this solution has helped her son and why she continues using it.

## **KERRI RIVERA**

*“I’m a pioneer on the use of chlorine dioxide in autism because my son was diagnosed 20 years ago with autism, and after spending more than a half million dollars on recovery efforts, I would say, my son 6 years later was still not recovered and still not in a place where I was even remotely comfortable with. And I had bought some \$20 drops the year before in 2009. And then I started to Google search back when it used to be a search engine, and I saw that it destroyed virus and bacteria and parasites and Candida and reduced inflammation, neutralized heavy metals. And I’m like, “Wow, this is everything.” And of course, at that point, I was pretty broke and I was like, “Nothing’s going to happen for 20 bucks, because the stem cells didn’t work for my kid.”*

*So, you can imagine I was pretty deflated. And then, of course, it was convincing his father this was a good idea because he was sick and tired of all my really good ideas. And then I just started to really search and search, and I saw it was really good, but still, again, you know nobody wanted to hear anything from me anymore in the house. But I was over at a biomedical clinic at the time with a hyperbaric chamber, and some friends came out of the chamber like, "Oh, we're taking this MMS stuff." And I'm like, "Whoa, I'm investigating about this." "Oh, we feel great." I'm like, "Okay, you got to come to the house." And that was the turning point. So we started to take it and we said, "Well, if we don't die, we'll give it to Patrick." We didn't die, quite the opposite. And then we started giving it to my son.*

*And on that very first day that he started to take it, because there were no protocols for autism at all, but the very first day that he started to take it, he said phrases he had never said before. He could say, "I want chicken, or I want go walk." But he would never say, "I want go bed. I want take bath. I want play blanket, Mommy." He would've never said those things. And that's what started. And he had just turned 10 years old. And then, of course, people would come to my clinic, they're like, "Wow, Patrick looks really good. What are you doing?" And then I'm like, "I bought these drops from this doctor in Guadalajara. Here's his phone number." This is 14 years ago. Nobody had WhatsApp and that kind of stuff. So people were calling and buying the drops, like, "Okay, how do I take them?" I'm like, "I don't really know."*

*So I just started winging it, and that's where the baby bottle method came from. It was kind of, how do you break up one drop into 16 equal parts? You put it into 16 ounces and then you give one ounce. So that was really where everything came from. Then Jim Humble came to live with me in my house for two years. So I had the man with me. And again, that was also, that's a whole other fantastic story. He was really the real deal. He was in it for all the right reasons, didn't really have a big ego. He was pretty opposed when I wrote my first book and I said, "I think it's time to call it chlorine dioxide," he was like, "No, I've made it so many years for MMS." And I said, "But we have to really call it what it is because a real molecule and it has all these really great properties."*

*And I think that if we kind of cheapened the message, you know he didn't really like that so much, which is okay. But anyway, we still, of course, stayed very close. And the book came out, and that was kind of the beginning. And now pretty much everybody who has a child with autism either heard of chlorine dioxide or heard of "bleach" as they might call it. Of course, it's not bleach. In theuniversalantidote.com there's a great documentary on what chlorine dioxide is and isn't. But I believe that chlorine dioxide really made or took the autism diagnosis to something that is I would say, less scary if that's possible to be less scary, because there's a lot of people who have recovered and lost their autism diagnosis, so they no longer have the symptoms known as autism, as my book would say. So it's very encouraging. Chlorine, like you said, "Do you still chlorine dioxide?"*

*It's still, I believe the chlorine dioxide and diet are the pillar of the healing and recovery from this label, because it's a label for something else. I mean, autism unto itself is not really a thing. It is a label for a set of symptoms. And we were just talking about too, you can have autism with PANDAS, you can have autism with Tourettes, PANDAS with Tourettes. And so there's quite a bit of that sort of thing. And it always kind of*



*makes me sad to see, when you hear famous people coming out and saying, "Oh, I just got diagnosed with autism," it's like, "Yeah, my kid could not have starred in a movie and had all those lines and was able to do the banking to be able to receive the money from the-" it's just a totally different thing what's happening to our kids. And of course, by them labeling lots of people as people with autism, or hate groups there's people hate groups against me and they call themselves autistic, and that's not the case.*

*Our kids couldn't create a Facebook group and cause and throw hate. So I think that they're also changing it, and I'm not really sure if the reason is because they want to get away from the fact that it's something that is medical because our kids are sick. I mean, if you look at them, they're high in pathogens, high in heavy metals, lots of oxidative stress, lots of inflammation, and low B vitamins. They have pages and pages of issues. So they're not what you would say, healthy little kids or healthy kids. They're kids that really need our help and we have to help them and not just look at it as a different way of thinking because it's not."*

A 2023 study, Research Gate: Chlorine dioxide solution in metastatic incurable cancer: case series, explains the impressive results of chlorine dioxide solution in metastatic incurable cancer. The recent advancements in immunotherapy show that activated immune cells can kill cancer cells by releasing oxygen species.

When ingested, chlorine dioxide breaks down into similar free radicals in the body. These radicals are potent oxidants with potential anticancer effects. In preliminary studies, six patients with various metastatic cancers (including breast, kidney, prostate, lymphoma, uterus, and melanoma) were treated with chlorine dioxide, administered orally, via enema, or intravenously. The treatment resulted in lasting tumor responses without side effects. These findings indicate that chlorine dioxide is a promising and affordable anticancer agent. <sup>1</sup>

## **DR. THOMAS J. LEWIS**

*"Chlorine dioxide I think has general use against pathogens because that's what it is. It's an oxidizing agent, and you know it's on the continuum with very aggressive oxidizing substances we use in the cleaning industry. That's what it was used for. It's used as a water treatment to reduce toxic pathogen burden in water supplies. But there's not a lot of people that understand that at least I consider a substantial mechanism of cancer having to do with inflammatory process and inflammation's a treasure. Our body is creating inflammation in response. So inflammation is really an elevation and peaking of our immune system. What's at the root of that? Can be toxins, can be any number of things, but infections really drive this process. So, even the American Cancer Society recognizes that a number of pathogens are initiators of tumors or other types of cancer like leukemia.*

*So if you look at HPV, human papillomavirus, if you look at Chlamydia pneumoniae and lung cancer, if you look at H. pylori and stomach cancer, gastric cancer, esophageal cancer or rectal cancer, and colon cancer, it covers the spectrum. And that was the subject of the Nobel Prize in medicine, I think in 2005. So, this is not hearsay. So, that was more on stomach ulcers but we now know that H. pylori as an inflammatory instigator can lead to these various cancers. So Chlorine dioxide, particularly fighting virals, can have a profound impact on cancer. So one of the best markers for cancer, your future risk for cancer, and your survival is called*

*the neutrophil-to-lymphocyte ratio and it's well-published and well-studied. Dana-Farber at Harvard, they published a number of videos explaining the neutrophil-to-lymphocyte ratio. When it gets high, cancer risk goes way up, and when it's high and you're diagnosed with a tumor, your survival goes way down.*

*And what Dana-Farber has shown, the research is that if we can lower the neutrophil-to-lymphocyte ratio, survival improved dramatically. So what is the neutrophil-to-lymphocyte ratio? Neutrophils generally go up with bacterial infection, lymphocytes generally go down with viral infections, and I think most people in the research community in functional medicine realized that I think it's called lymphocytopenia. Low lymphocytes is prevalent in many solid tumor cancers. So the chlorine dioxide treating viral-type pathogens will bring the lymphocytes back up the normal, lower that neutrophil-to-lymphocyte ratio, probably give your body a better chance to fight other types of inflammatory exacerbators to further bring that neutrophil-lymphocyte ratio down. So, I wouldn't say it's a cure, but it's a way you can stop the triggering of the tumor. My belief is that once the tumor establishes itself, it's a challenge. We have to break down the tumor, but let's not forget, there's two parts. There's the initiator, your terrain, and some type of initiator that takes advantage of poor terrain, then the tumor starts. So, we have to manage both parts of that when it comes to cancer treatment, it may be the chlorine dioxide actually breaks down the tumor itself as well. But I know for a fact, based on our studies, is that we're seeing a reduction in these initiator organisms."*

## **DR. LEE MERRITT**

*"Chlorine dioxide, the reason it treats cancer is because it treats parasites. I mean, I think that that's the simplest answer. When I hear what these guys at the NIH are doing, they're trying to come up with all these cockamamie explanations for why these drugs work. But the real answer is, it's parasites. And otherwise, what they're doing it's like it's like they're all counting the beef herd, the herd of cattle. They're counting the herd of cattle by counting their legs and dividing by four. Let's just count. Let's just make the simplest answer here. The reason it works for cancer is because cancer is parasites. And I know a friend of mine treated his own cancer with chlorine dioxide. And he was at somewhere like 25 or 30 drops a day, which is a lot. Okay, that's a lot of chlorine dioxide, and you've got to be really faithful about it to keep your levels up."*



CHAPTER 2  
**Urotherapy**

Urotherapy has been practiced for thousands of years in holistic healthcare due to its many benefits. A published article in the National Institute of Health, The Golden Fountain- Is urine the miracle drug no one told you about?, defines urotherapy and gives a brief history of this golden liquid:

*“Drinking or local application of human or animal urine for medicinal purposes has been practiced all over the world for millennia. Documented prescriptions in Europe originate from ancient Egypt, Greece, and Rome. While many of the advances of antique medicine were forgotten after the fall of the Roman Empire, the use of urine and other excrements enjoyed continued popularity in medieval times. Ancient Indian yogic texts and ancient Chinese documents describe benefits of drinking one’s own urine, and it can be assumed that people in Africa, the Americas, and other parts of the world have traditionally used urine for various medical indications for a very long time, too.”<sup>2</sup>*

## **Use of Urotherapy for Cancer**

A study, Efficacy of cow urine therapy on various cancer patients in Mandsaur District, India- A survey, evaluated the efficacy of cow urine therapy on 68 cancer patients from various Indian states.

The survey found that 92.64% of patients continued with the therapy despite 7.35% withdrawing. The most common cancers reported were throat cancer (30.87%), breast cancer (14.70%), and cervix and uterine cancer (5.88%). Symptoms like pain, inflammation, and difficulty swallowing were assessed and categorized as severe, moderate, or mild.

On the first day, 82.16% of patients experienced severe symptoms, compared to 7.9% on the eighth day, with moderate and mild symptoms increasing over time. Patients who had been on cow urine therapy for 2-3 months showed the most significant benefit, suggesting that this traditional therapy may offer significant relief for cancer patients.

*“Evaluation of cow urine therapy on cancer patients in 8 days camp at Mandsaur district was carried out. The object of this survey was to evaluate efficacy of cow urine therapy on various cancer patients who were reported across from different states of India. Total 68 cancer patients reported during the survey from 8 April 2007 to 15 April 2007. A questionnaire was developed to assess the efficacy of cow urine therapy. During survey, out of 68 patients, 7.35% patients withdrew themselves from the treatment, and 63 (92.64%) patients continued the therapy. There was a high proportion (30.87%) of throat cancer and the other prevalent cancer was breast cancer (14.70%) followed by cervix and uterine cancer (5.88%), buccal cavity cancer, and sinus (4.41%) lung cancer, lymphoma and bone cancer (2.94%), both throat and buccal (5.88%) and other cancer (8.82%), respectively. The symptoms (pain, inflammation, burning sensation, difficulty in swallowing, irritation, etc.) of cancer patients were categorized into severe, moderate, and mild categories, respectively. Intensive study of the data of cancer patients revealed that the degree of severe, moderate, and mild symptoms were 82.16%, 15.8%, and 1.58% on the first day and 7.9%, 55.3%, and 36.34% on the eighth day, respectively. It was evaluated that patients who were receiving cow urine therapy for 2-3 months were most benefited. Hence, this traditional therapy may really be a boon to cancer patients.”<sup>3</sup>*



Additionally, according to the study, Urotherapy for patients with cancer, different antigens cancer cells release into the urine can be used in oral autochemotherapy. Ingesting urine can introduce tumor antigens into the intestinal lymphatic system. This exposure could likely encourage the development of antibodies resistant to specific antigens.

After entering the bloodstream, these antibodies might target and destroy cancer cells selectively. This novel treatment presents a potentially effective way to strengthen the immune system's reaction to cancer.

*"Cancer cells release various antigens, some of which appear in the urine. Oral autourotherapy is suggested as a new treatment modality for cancer patients. It will provide the intestinal lymphatic system with the many tumor antigens against which antibodies may be produced. These antibodies may be pierced through the bloodstream and attack the tumor and its cells." <sup>4</sup>*

## **COLLEEN SEABELL-DUNT**

*"What the urotherapy itself is, it's basically sterile. it's sterile urine that is coming from your body and what that urine is doing is sending out messages of what is going on inside the body. Is the body missing Vitamin C? Is it missing the B Vitamins, that type of thing? It's sending out the message and as it's going through the body and sending out this message, it's looking to see what is happening inside the body. Then what it does is it basically makes medicine for what you need. Then what happens is it goes into the kidneys, the kidneys then excrete what they don't need and use what they do need. And that just means that you then have medicine that is not being used at that time because it's not needed at that time.*

*So if you've taken that medicine that your body has made for you, it's basically completely sterile. And then also what it is, it has got stem cells in it and those stem cells are there for you to take up, enjoy, and make your own medicine as it goes through."*

Gloria Sharlien had toxin build-up and poor overall health. She was going through so many things at a time and had immense pain. When I talked to her about urotherapy and how it had helped me over the years, she was keen on taking a step forward to improve her health and be as active and happy with her family as she was before.

After seven months of urotherapy, she experienced the disappearance of a decade-old cyst in her breast, improved joint health, more robust and longer nails, clearer skin, and healthier hair. She believes urotherapy helps the body's stem cells target and repair various areas, leading to comprehensive health improvements. Sharlein also noted that detoxifying the body through urotherapy may help prevent inflammation and disease, including cancer, by addressing the bioaccumulation of toxins.

## **GLORIA SHARLEIN**

*"All of these healing properties remove poison from your body, any poisons. What I truly believe, and what I've learned is that, now I'm not a doctor but I can only say from what has happened to my body and going through urotherapy, I can say that I've removed toxins from my body that I've had my entire life. And so, I*

*start realizing that I've been poisoned forever. I start realizing that I do have a biochemical accumulation in my body. I did have things in my body that I didn't realize that I've had a cyst in my breast for I would say a decade. And at seven months of urotherapy, I healed that cyst out of my breast. So I don't have a cyst anymore. So I realized that it's absolutely true. Your stem cells will take your cells back to health, and they focus on a part of your body and they'll move to another part and they'll move to another part, heal that, completely heal that part of the body, move to the next part of the body that needs healing. And that's absolutely what I've been seeing. My knees don't pop anymore. My nails are longer and healthier than they've ever been. They're so strong, they don't break. I don't think my nails have ever been this long. My skin is clear, my hair is nice.*

*Every docuseries we make, I can just see my transformation coming together more and more and more, and it's just so beautiful. So I continue. Now, actually, I'm one week till a year of urotherapy, and I'm still every day, almost, there's some days that I missed, but I'm pretty faithful to it. I'm so grateful to be feeling better than I've ever felt in my life. And so, then I realized what the doctors are saying about cancer is true. The bioaccumulation of toxins in our body is gonna lead to inflammation, is gonna lead to disease, and then they start calling these things cancer.*

*So when we start detoxing our body of stuff, and that's why urotherapy, you could look at the research on [urotherapyresearch.com](http://urotherapyresearch.com), you can see from the doctors in Jonathan Otto's series that the urotherapy will eliminate all poisons from the body. So that's why you can use urotherapy for cancer."*



CHAPTER 3  
**Nicotine**



Nicotine is one of the ancient remedies for treating various diseases. Even though it is claimed that a newer discovery on nicotine is being used as a natural therapy for fatal diseases like cancer, it's not true.

Nicotine is a time-old protocol. It has been used to treat infections, respiratory problems, and even gut issues. From smashing the tobacco leaf and applying it over the wound to chewing the nicotine gum and sticking the patches on the skin, it can be used at your convenience.

## **DR. DANIEL NUZUM**

*"In Native American medicine, this is Native American, both North and South America medicine. They used tobacco as a remedy for infection. You would either smash up the leaves and apply it to the skin over an infected area. Not even just open sores or open wound. You might apply it over the chest if they're coughing or on the upper back. If they're having a cougher up or respiratory problem, from a problem in the gut, you smash the leaf and apply it over the skin, which would put nicotine into the system, by the way. They also would take, the medicine man would take a pipe, put it in your nose, you'd plug the other nostril, he would then take burn tobacco in another pipe, inhale the smoke, and then breathe it through that nostril.*

*And then you would allow it to release and come out of the other nostril. Why? For headaches, for sinus problems, for allergies, all of those types of things. This was this tobacco, it was how they use tobacco medically for thousands of years. This was not just a here a recent thing. This is old, old, old medicine. And what we're finding today is that, yes, what happens is, like in this in gliomas, the nicotine is one of the things that helps sensitize the immune system to go after a tumor."*

There is evidence indicating that nicotine may have a role in cancer therapy as a treatment, particularly in enhancing treatment effectiveness and improving patient outcomes. Numerous studies examine how nicotine could impact tumor biology, support existing therapies, and contribute to the development of new treatment methods.

Understanding how nicotine interacts with biological processes gives insight into its potential applications in cancer treatment. This includes its ability to influence cancer cell activity and modulate the immune system.



## The Science Behind Nicotine and Cancer

Recent research on nicotine as a treatment for cancer has caused much interest in the medical field. Nicotine gum and nicotine patches have been found to help alleviate the symptoms of cancer.

Nicotine interacts intricately with the body's systems. Nicotinic acetylcholine receptors (nAChRs), found on various cells, including immune cells and neurons, are one of its primary modes of action. When nicotine binds to these receptors, it can affect various biological functions.

According to a study, Role of  $\alpha 7$  nicotinic receptor in the immune system and intracellular signaling pathways, nicotine's interaction with nAChRs may have several therapeutic effects on cancer management. Nicotine, for example, has been shown to alter immunological responses, which may improve the body's capacity to identify and eliminate cancer cells. Nicotine may help the immune system respond to malignancies more successfully by affecting immune cell function.

*“Acetylcholine has been well known as one of the most exemplary neurotransmitters. In humans, this versatile molecule and its synthesizing enzyme, choline acetyltransferase, have been found in various non-neural tissues such as the epithelium, endothelium, mesothelium muscle, blood cells, and immune cells. The non-neuronal acetylcholine is accompanied by the expression of acetylcholinesterase and nicotinic/muscarinic acetylcholine receptors. Increasing evidence of the non-neuronal acetylcholine system found throughout the last few years has indicated this neurotransmitter as one of the major cellular signaling molecules (associated e.g. with kinases and transcription factors activity). This system is responsible for maintenance and optimization of the cellular function, such as proliferation, differentiation, adhesion, migration, intercellular contact, and apoptosis. Additionally, it controls proper activity of immune cells and affects differentiation, antigen presentation, or cytokine production (both pro- and anti-inflammatory). The present article reviews recent findings about the non-neuronal cholinergic system in the field of immune system and intracellular signaling pathways.”<sup>5</sup>*

### DR. BRYAN ARDIS

*“When the venom hit those receptors and bound to them, they actually cause the glial part of the brain to lay down new neurons really, really quick.*

*They call that proliferation, and they actually timed it. They wanted to know after 24 hours, 48 hours, 72 hours, how quickly is the body replicating new neurons when we introduce venom into the glial part of the brain? They proved that within 72 hours, they could create a glioblastoma, a brain tumor with venoms. Then in the abstract and in the conclusion of the study, it had one sentence. It said, “When we administered less than 1 milligram for every 2.2 pounds of body weight of nicotine, it had 0 effect on the tumor or on the glial cell being proliferated.” It didn't stop it. It didn't stop its growth. It didn't have any impact. That was the only statement.*

*Nicotine when administered at less than 1 milligram per kilogram body weight had no effect on the glial cells or the glioblastoma. Now, I kept seeing that. I was like, "Well, why are you saying that? What else did you try?" So, if you just read the summary and the conclusion, you would've never known that they actually used another dose of nicotine and tested it. If you read the study, the whole study was this, if we can create the tumor, what happens when we introduce nicotine at this dose and this dose? Let's publish the findings. When they used less than 1 milligram per kilogram of nicotine, there was 0 effect in the study. They actually even show pictures of the glioblastoma under electron microscope.*

*They show that when they went above 1 milligram per kilogram of body weight, the entire glioblastoma dissolved in less than 72 hours, the whole thing. What's amazing is they found what they were looking for. Does nicotine have an impact? Does it improve it even if we create it with venom? If we can create a brain tumor with it, will nicotine take it away at this dose or this dose? Why in the world did these authors of this study, why in the summary, at the very top of the study, which most medical doctors only look at, they want to know, well, what did the study find? Do I need to even go read it? Well, all they would've read was nicotine didn't have an effect. Well, the truth is it really did. They just didn't disclose which one, what the dose was in the summary or conclusion.*

*They didn't even state it had an effect that was positive, only the negative. So, I took those pictures. I downloaded that report. I cannot wait to share this with the masses. My concern is this. Over the last 20 years, there has been an exponential growth every year of glioblastoma tumors in the brain."*



CHAPTER 4  
**Red Light Therapy**

Despite its rejuvenating benefits on skin and tissue, red light therapy is becoming more well-known for its application in cancer treatment. This method offers benefits as a primary cancer therapy and as a promising complement to traditional cancer treatments. Red light therapy works by using specific red and near-infrared light wavelengths.

## Understanding Red Light Therapy

Low-level red and near-infrared light is applied topically to the skin as part of red light treatment (RLT). Light wavelengths that commonly range from 600 to 900 nanometers are used in this therapy, however, wavelengths up to and including 1060nm can be used. These wavelengths can penetrate the skin and underlying tissues at different depths. The basic concept of RLT is that certain light wavelengths can improve tissue regeneration and repair by stimulating cellular processes.

Often referred to as photobiomodulation, the treatment functions by boosting cell mitochondrial activity. Adenosine triphosphate (ATP), the main energy carrier in cells, is produced in greater quantities as a result of the improved operation of mitochondria, the energy hubs of the cell. This increase in cellular energy facilitates several functions, such as enhanced cellular repair, decreased inflammatory response, and oxidative stress control.

## Red Light Therapy and Cancer Treatment

A number of fascinating possibilities have been uncovered by recent research on RLT's influence on cancer:

### Modulation of Tumor Growth

According to research, RLT can modify signaling pathways and cellular microenvironment to affect the growth of tumors. The treatment's effects on cellular metabolism and mitochondrial function may have an impact on the growth of cancer cells. RLT may contribute to the creation of an environment that is less conducive to tumor growth, even if the precise mechanisms are still being studied.

An article, Photobiomodulation therapy in management of cancer therapy-induced side effects: WALT position paper 2022, investigated the effects of photobiomodulation on cancer. This article, based on the 12th WALT Congress and subsequent reviews, provides insights into the use of photobiomodulation (PBM) for managing cancer therapy side effects. It highlights PBM's potential benefits in preventing oral mucositis and improving cancer treatment outcomes. It emphasizes PBM's role in addressing various complications like radiodermatitis, dysphagia, and neuropathy, with guidelines aimed at enhancing its use in cancer-supportive care. <sup>6</sup>

Despite advances in cancer treatment and prevention, melanoma incidence is rising, and some patients do not respond to existing therapies. Additionally, this study, Red Light Phototherapy Using Light-Emitting Diodes Inhibits Melanoma Proliferation and Alters Tumor Microenvironments, explored the effectiveness of red light (RL) phototherapy in preclinical melanoma models. In vitro experiments with melanoma cells revealed that RL reduced



cell proliferation and increased apoptosis, particularly at higher doses. In C57BL/6 mice, RL showed promise by significantly inhibiting melanoma growth and increasing CD103+ dendritic cell expression. Importantly, RL did not induce skin inflammation or erythema. These findings suggest that RL could be a safe and effective therapy for melanoma.<sup>7</sup>

## **Enhancement of Conventional Therapies**

RLT has demonstrated promise as a supplemental therapy for conventional cancer therapies including radiation and chemotherapy. RLT may lessen some of the adverse effects of these medicines by enhancing cellular repair and lowering inflammation. For instance, it might lessen the symptoms of oral mucositis and dermatitis brought on by radiation, enhancing the quality of life for patients while they get therapy.

## **Support for Immune Function**

Red light treatment has the potential to increase immune system activity, which is important for immunotherapy-undergoing cancer patients as well as individuals whose illnesses have weakened their immune systems. Because the treatment lowers oxidative stress and inflammation, the immune system may be better able to combat cancer cells.

Inflammation can have detrimental effects on the immune system, impacting overall health and immune function. Chronic inflammation often results in persistent immune activation and can lead to tissue damage, autoimmunity, and a weakened immune response. Prolonged inflammation disrupts the balance of immune cells and their functions, making the body more susceptible to infections, diseases, and impaired wound healing. It can also contribute to the development of various chronic conditions, such as cardiovascular diseases, diabetes, and cancer. Thus, managing inflammation is crucial for maintaining a healthy and well-functioning immune system.

This study, The anti-inflammatory effects of photobiomodulation are mediated by cytokines: Evidence from a mouse model of inflammation, explores the potential of photobiomodulation (PBM), which uses specific light wavelengths, to combat inflammation and protect neurons. Researchers tested PBM in mice with inflammation induced by LPS and found that daily 30-minute treatments with red/NIR light, especially when combined with a 40 Hz gamma flicker, reduced inflammation in the brain and body. PBM effectively decreases key inflammatory markers while increasing anti-inflammatory cytokines. These results suggest that PBM could be a promising anti-inflammatory treatment by modulating cytokine levels.<sup>8</sup>

## **Pain and Wound Healing**

RLT is well-known for its analgesic qualities and capacity to speed up the healing of wounds. This could result in cancer patients experiencing less discomfort from their treatments and recovering from surgeries more quickly. The advantages of the therapy in these areas may greatly accelerate patient comfort and healing.

The study, Efficacy and safety evaluation of systemic red light therapy for burn wound repair, aimed to evaluate the impact of systemic red light therapy on wound healing in burned patients and to explore its potential mechanisms. A total of 138 burn patients were randomly assigned to either a systemic red light therapy group or a control

group receiving routine care. The therapy group received red light treatment daily until wound recovery, while the control group did not. Wound healing was assessed at multiple intervals up to the healing point, and pain levels during dressing changes were also recorded. Results showed that the red light therapy group experienced significantly faster wound recovery (average of 19.86 days) compared to the control group (21.02 days), and reported less pain during dressing changes on days 10 and 14. The findings suggest that systemic red light therapy effectively promotes the healing of deep burns, alleviates pain, and is a safe treatment option.<sup>9</sup>

## **DR. BRYAN ARDIS**

*“For those of you who are interested in learning more about red light technology, I will refer to you immediately to the expert himself. His name was John Harvey Kellogg.*

*He also happens to be the brother of the Kellogg cereal guy, so you got your Kellogg cereals that were poisoning people, and then you had his brother John Harvey Kellogg who had the largest all-natural healing hospital in the world in Michigan between 1880 and 1920.*

*And in 1905 he published a book about the red light saunas he had developed and the actual red light bulbs he had designed with a specific filament winding with red stained glass, that in 1905 said, in the book, *Light Therapeutics*. He wrote a book called *Light Therapeutics*. You can still purchase publications on this.*

*I have a paperback version of it today. Its actual print copyright is 1905. In 1905, he writes in the book that red light therapy has been able to neutralize snake venom in the human body. Also, it is published in there that in 1905 he was able to reverse diabetes, cancer, rheumatoid arthritis, and almost every autoimmune disease including lupus, and he names them. I reversed lupus in 1905 using red light saunas.*

*Let’s talk about the effects that are known and published by every medical journal on Earth that I’ve seen that red light therapeutics or light therapies can help to diffuse the proliferative growth of cancer cells they call tumors, polyps, cysts, lesions. They know and do publish that light therapy which includes infrared light are able to dissolve, it appears, tumors, masses in the body they’re calling cancers.*

*But you don’t hear about that. You’ll hear about chemotherapy, radiation, and surgery as your only options. Why? If you’re already making trillions of dollars a year around the world with this tech, why would you change it? You can study it, but why would you tell anybody you already make trillions off of chemotherapy, radiation, and surgery? Why in the world would you want to shoot yourself in the foot and tell people you can cure them with light?*

*That’s ridiculous. Now I’m going to speak to the red light therapy. There are frequencies that can abolish cancer. Red light and infrared are one of those really miraculous discovered technologies of light produced by our sun that we’ve been able to replicate through red light tech. John Harvey Kellogg was a huge hero, in my opinion, developing what he did back in the 1880s and 90s.”*

CHAPTER 5  
**Cold Plunge**

There is growing acknowledgment of the potential advantages of cold plunge therapy, which is submerging oneself in cold water, in the treatment and recovery of cancer patients.

## **ROBBIE BESNER**

*“The history on cold immersion is actually relatively new, maybe in the last 8 to 10 years. But actually to me, I’m amazed at the amount of excitement around cold immersion that is happening right now. It took us close to 2 years to develop our technology, and during that time, I was monitoring through social media how popular the cold immersion tank was becoming. And then, there’d be a lot of stories with people that created their own little tanks from ice chests or from old bathtubs and old barrels, and they’d throw 20 to 50 pounds of ice in it and then just plunge into it. And it really excited me to see that people were embracing it. Now I live in South Florida, so I’ve acclimated and cold anything doesn’t resonate for me naturally. So it took me actually a while, even though I’m the device developer and I saw the science and the importance of cryotherapy or cold immersion to the body, what it does, I still had a little challenge myself, personally engaging until I tried it once through a clinical doctor that was giving me a treatment.*”

*And part of his circuit at the end was to have me immersed in his cold tank and then go into infrared sauna that he had in his clinic. And so, when I went through a circuit and I experienced it, that was it. It’s my favorite stack right now. Those two hacks to do basically do either heat therapy to raise your core temperature up and then go into the immersion tank. Or if you’ve just come off a competition and you want to lower inflammation in the body, then you go into the tank first and then you warm your body back up by using sauna or you can warm up naturally.”*

## **The Science Behind Cold Plunge Therapy**

Cold plunge therapy, often referred to as cold water immersion, is an immersion of the whole or specific body parts in ice or cold water. Typically, the temperature is between 45°F and 59°F (7°C and 15°C). The main physiological reactions to being in the cold are increased metabolic activity, decreased inflammation, and vasoconstriction.

Exposure to cold initiates multiple biological processes:

### **Vasoconstriction**

Blood vessels constrict in cold weather, reducing blood flow to the skin’s surface and reducing inflammation. This reaction can lessen discomfort and swelling, and aid in preventing the release of inflammatory mediators.

An abstract from the Encyclopedia of Journal Medicine describes vasoconstriction as:

*“Vasoconstriction is the process by which smooth muscle causes contraction and narrowing along the vessel length. The mechanism of vasoconstriction is mediated by intracellular calcium levels and a variety of calcium-binding proteins, particularly calmodulin.*”



*Vasoconstriction is a physiologic cardiovascular regulatory mechanism that has essential functions throughout the body. Vasoconstriction may be triggered locally in the vasculature or from afar by upstream mediators in response to a variety of physical and emotional stimuli. It is also an example of autoregulation, when organism homeostasis is maintained through balance of vasoconstriction and vasodilatory mechanisms. While most changes are in response to blood flow of the vascular bed or an intrinsic reaction to stretch, there are many other stimuli that induce acute and chronic changes. In the event of vascular injury or compression, there is local response thought to be mediated by serotonin.”<sup>10</sup>*

## Enhanced Metabolism

Being in the cold accelerates the metabolism, which raises energy expenditure and may improve fat oxidation. This increase in metabolism can help with recuperation and general wellness.

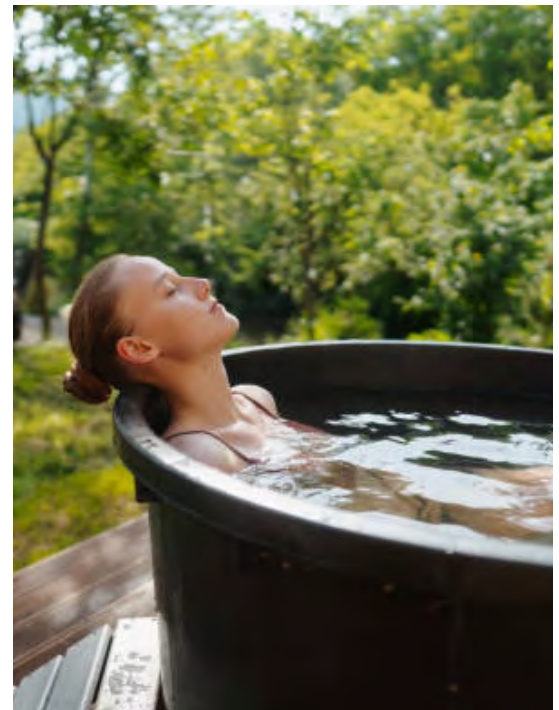
An article, Human physiological responses to immersion into water of different temperatures, highlights the improved metabolic rate after cold immersion therapy:

*“Cold water immersion (14 degrees C) lowered rectal temperature and increased metabolic rate (by 350%), heart rate, and systolic and diastolic blood pressure (by 5%, 7%, and 8%, respectively).”<sup>11</sup>*

## Immune system activation

Being exposed to the cold can also boost immunity by boosting white blood cell production and immune system performance in general.

The study, Immune system of cold-exposed and cold-adapted humans, aimed to explore whether a noninfectious stressor, specifically repeated cold water immersion, could enhance the immune system's function. A single cold water immersion had minimal immediate effects on the immune system. However, after six weeks of cold water immersions three times a week, there were small but significant increases in certain immune markers, including monocytes, lymphocytes with IL2 receptors (CD25), and plasma tumor necrosis factor-alpha. Additionally, some acute-phase proteins, such as haptoglobin and hemopexin, showed increased levels. Trends towards higher plasma concentrations of IL6, total T lymphocytes, T helper cells, and a few other immune cell types were observed, along with a decrease in alpha 1-antitrypsin. The study concluded that repeated cold water immersion, which induces stress and elevates catecholamine levels, leads to slight activation of the immune system.<sup>12</sup>



## Cancer and Cold Plunge Therapy



Several possible advantages of cold plunge therapy for cancer patients have been identified by recent studies:

### **The Reduction of Treatment-Related Side Effects:**

Radiation therapy and chemotherapy for cancer frequently cause serious side effects, like nausea, inflammation, and exhaustion. Through the reduction of inflammation and improvement of healing processes, cold plunge therapy may be able to help with some of these symptoms. For example, calming and cooling the afflicted areas might help in the management of radiation-induced dermatitis.

### **Improvement of Recovery and Quality of Life:**

Patients with cancer who have undergone surgery or intense treatment may recover more quickly with cold plunge therapy. The treatment's ability to reduce pain and inflammation in the muscles may facilitate a quicker recovery and enhance quality of life overall. Furthermore, the increase in metabolism that comes from being in the cold can help offset the fatigue and loss of muscle that are frequently linked to cancer therapies.

### **Enhanced Immune Function:**

As cancer patients frequently have weakened immune systems as a result of their illness or its treatments, the immunostimulating properties of cold plunge therapy may be especially helpful to them. Cold plunge therapy may boost the body's defenses against infections and cancer by boosting white blood cell production and immunological responses.



### **Possible Effect on Tumor Biology:**

Research indicates that exposure to cold may modify the blood flow and metabolism of tumors. There is interest in knowing whether cold plunge therapy could have direct effects on tumor growth or treatment response, even though the evidence is still preliminary.

A study, Brown-fat-mediated tumor suppression by cold-altered global metabolism, states that glucose is crucial for cancer growth and energy, as well as for the thermogenic function of brown adipose tissue (BAT). This study finds that exposing mice with tumors to cold temperatures significantly slows tumor growth, including hard-to-treat cancers like pancreatic cancer. The cold activates BAT, which lowers blood glucose and disrupts cancer cell metabolism. Removing BAT or feeding the mice a high-glucose diet negates these effects, while genetic deletion of a key BAT protein also prevents the cold-induced anti-cancer benefits. Preliminary human studies show that mild cold exposure also activates BAT and reduces glucose uptake in tumors. These results suggest that using cold or BAT activation as a therapy, potentially combined with other treatments, could be an effective strategy for treating various cancers.

*“Glucose uptake is essential for cancer glycolysis and is involved in non-shivering thermogenesis of adipose tissues. Most cancers use glycolysis to harness energy for their infinite growth, invasion, and metastasis. Activation of thermogenic metabolism in brown adipose tissue (BAT) by cold and drugs instigates blood glucose uptake in adipocytes...”*

*We anticipate that cold exposure and activation of BAT through any other approach, such as drugs and devices either alone or in combination with other anticancer therapeutics, will provide a general approach for the effective treatment of various cancers.”<sup>13</sup>*



CHAPTER 6  
**Natural Supplements**



## **DR. VERONIQUE DESAULNIERS**

*“Repair your body with therapeutic plants and herbs. Now, there’s so many supplements and so many things that you can use on your healing journey. It’s very important that you work with somebody to really target and narrow down the hundreds and hundreds of supplements that you could be taking.*

*But to begin with, you’ve got to look at some basic nutritional support. So it’s very important that you have trace minerals like selenium and zinc and magnesium. These are very, very key.*

*Make sure that your Vitamin D levels are optimal between 80 and 100 mgs per ml. If your numbers and Vitamin D are not going up, you may need a liposomal or a fatty-based Vitamin D and always take Vitamin D with Vitamin K to make sure that the calcium is not being deposited in the soft tissue. You want to look at things to boost your immune system.*

*So medicinal mushrooms, Vitamin C, liposomal Vitamin C is really absorbed very well. Getting Vitamin C IVs. Again, you want to work with somebody who understands the process of using Vitamin C properly. Just kind of a side note, when it comes to Vitamin C IVs, you want to ask your practitioner when you get an IV, let’s say you’re getting it in the right arm, right after you’ve had your IV, you have them draw blood and send your blood away to be tested for the levels of Vitamin C in your plasma. Basically you want to be between 350 and 400. This is what we call the tumor lysis range. So let’s say you’re getting 50 grams of Vitamin C IV and you get the results back and your numbers are below 350. That means that they need to bump up the amount of Vitamin C that you’re getting in your IVs.*

*So we’re talking about the immune system, so Vitamin D, Vitamin C, Vitamin A. Even trace minerals like magnesium and zinc play a key role in boosting your immune system. And of course when it comes to targeting cancer cells and really lowering the inflammation in the body, everything from curcumin to Agaricus mushrooms and Poly-MVA and Salicinium. There’s all these different products out there that have been tested and have really shown their ability to really cut back and lower the cancer load and help to boost your immune system.*

*One of the tools that I used on my second healing journey was mistletoe. Mistletoe is a great immune system booster. It is very popular in Europe. It’s been used there for decades, and it is making an appearance more so in the last 5 years in the United States, you can get mistletoe IV or you can get Sub-Q, or you just use a little injection, a little amount underneath the skin and it stimulates your immune system and really helps to ramp that up because something that happens when you have cancer cells in your body, your cancer cells produce something called nagalase.*

*And nagalase literally puts your immune system to sleep, specifically the macrophages, the ones that gobble up the cancer cells. And so it’s very important to weaken the cancer cells so they don’t produce the nagalase as much, and that your immune system can be really charged up and awakened. And mistletoe is a great, great tool for that.”*

## Turmeric

Turmeric is a bright yellow spice known for its active compound, curcumin, which has potent anti-inflammatory properties. When using turmeric, be sure to include a pinch of black pepper, which enhances curcumin absorption.

### Benefits of Turmeric

Turmeric is renowned for its anti-inflammatory properties, and its active compound, curcumin, is primarily responsible for these effects.

Here are some reasons why turmeric is considered a good anti-inflammatory:

#### ***CURCUMIN CONTENT:***

Curcumin is the main bioactive compound in turmeric, responsible for its yellow color and therapeutic properties. It has been shown to have potent anti-inflammatory, antioxidant, and anticancer effects.

#### ***INHIBITION OF INFLAMMATORY PATHWAYS:***

Curcumin can inhibit various molecules that play a role in inflammation, such as NF-kappa B (nuclear factor-kappa B), which is a transcription factor involved in the expression of many inflammatory genes. By blocking these pathways, curcumin helps regulate the inflammatory response.

#### ***ANTIOXIDANT PROPERTIES:***

Inflammation and oxidative stress are closely linked. Curcumin has strong antioxidant properties that neutralize free radicals and reduce oxidative damage to cells. By countering oxidative stress, curcumin helps mitigate inflammation.

#### ***MODULATION OF INFLAMMATORY ENZYMES:***

Curcumin can modulate the activity of enzymes involved in inflammation, such as cyclooxygenase-2 (COX-2) and lipoxygenase (LOX). These enzymes play a role in the synthesis of pro-inflammatory compounds, and curcumin's inhibition helps reduce inflammation.

#### ***IMMUNE SYSTEM MODULATION:***

Curcumin can modulate the activity of immune cells, influencing the immune response. It may help regulate the balance between pro-inflammatory and anti-inflammatory cytokines.

#### ***JOINT HEALTH:***

Turmeric and curcumin have been studied for their potential benefits in managing inflammatory conditions affecting the joints, such as osteoarthritis and rheumatoid arthritis. The anti-inflammatory properties may contribute to reduced joint pain and stiffness.

### **NEUROPROTECTIVE EFFECTS:**

Curcumin's anti-inflammatory and antioxidant properties extend to the brain, where it may protect against neurodegenerative diseases associated with inflammation. It may enhance brain function and support cognitive health.

### **CARDIOMETABOLIC BENEFITS:**

Curcumin has shown promise in improving markers of cardiovascular health and metabolic syndrome, conditions with inflammatory components. It may help reduce inflammation in blood vessels and improve overall cardiovascular function.

While turmeric and curcumin offer potential anti-inflammatory benefits, it's essential to note that curcumin has relatively low bioavailability, meaning that the body absorbs and utilizes it inefficiently. Consuming turmeric with black pepper, which contains piperine, can enhance curcumin absorption.

A review, *The Role of Curcumin in Cancer Treatment*, highlights how curcumin, a polyphenol derived from the turmeric plant (*Curcuma longa*), is known for its anti-inflammatory and anticancer properties. It combats cancer partly by regulating immune modulators like cytokines, COX-2, and ROS. Additionally, curcumin inhibits growth factors, protein kinases, oncogenic molecules, and various signaling pathways, such as NF- $\kappa$ B, JNK, and STAT3.

Clinical trials are underway to assess curcumin's efficacy against different cancers. The compound has shown promise by targeting multiple cancer-related pathways, including those involved in tumor initiation, growth, and apoptosis.<sup>14</sup>

## **DR. CATHLEEN GERENGER**

*"Turmeric is a spice that's well-researched. It was used throughout the ancient time as an anti-inflammatory and also an antiviral, antibacterial spice. The compound in turmeric is called curcumin. Curcumin is a very anti-inflammatory compound. What it does is that it has these powerful anti-inflammatory effects that reduce the inflammation process throughout your body. It's great for pain relief, it's great for your brain health and digestive tract, and also for cancer prevention. When we talk about pain relief and turmeric, what it does is that it helps to reduce muscle soreness. In ancient times when they cook with this root, what they do is that they help to bring down the inflammation because once the body's inflamed, it triggers these pain pathways that can actually exhaust your body and create a lot of muscle soreness or even pain.*

*Turmeric is also well-known to help your cardiovascular health by decreasing the homocysteine levels. Homocysteine is a compound in our body that is actually one of the markers that I check for in blood chemistry. Sometimes when the homocysteine level is very high, we know that that particular person is under a lot of stress, and what organ system do we focus on? The cardiovascular system. So turmeric is actually one of those roots that actually helps, and it's a great spice that we can add to our dietary habits on a regular basis, and I cook with turmeric. I also put in my tea. I also put it in a lot of my soups."*



## Ginger

Since ancient times, ginger, which comes from the root of the *Zingiber officinale* plant, has been used in traditional medicine. Bioactive substances like paradol, shogaol, and gingerol are responsible for their anti-inflammatory, antioxidant, and anticancer actions, and are the source of their medicinal qualities.

### **ANTI-INFLAMMATORY PROPERTIES:**

Strong anti-inflammatory substances found in ginger can help control inflammatory pathways. Reducing inflammation may help reduce these risks as it is known to play a role in the onset and spread of cancer.

### **ANTIOXIDANT EFFECTS:**

Ginger's antioxidants work to scavenge free radicals and reduce oxidative stress. Because oxidative stress can cause DNA damage and the development of cancer, foods high in antioxidants, such as ginger, are helpful in preserving the health of cells.

### **ANTI-CANCER EFFECTS:**

Preclinical research has indicated that gingerol and shogaol may be able to stop the growth of cancer cells and cause apoptosis, or programmed cell death, in a number of cancer types, including colorectal, prostate, and breast cancer.

## **DR. CATHLEEN GERENGER**

*“When we talk about gut health and immune systems, one of the best foods that I love that’s very widely researched is called ginger. Ginger has these anti-inflammatory effects on the body. And ginger is one of those things that you can actually incorporate into your daily routine by simply getting some ginger root, slicing it up, putting it in a little glass container, and keeping it in your fridge. I take two slices with ginger, I actually create ginger tea, so I pour some hot water in that. That’s my ginger tea. If I want to be fancy, I’ll squeeze some lemon in it so I have ginger and lemon. Adding something like that into your daily routine, what that does is that it brings the inflammation down. And ginger has very high medicinal research on it where in traditional Chinese medicine, we use that to help with our gut health in our gut microbiome because it reduces the inflammation, allows us to move our bowels, and it’s well-known to be an anti-nausea type of effect on the body.”*

## **Ginger and Cancer Therapy**

Beyond its immediate impact on cancer cells, ginger may also have other advantages for patients with cancer. Here’s how ginger may help in cancer treatment:

### **MANAGEMENT OF SIDE EFFECTS RELATED TO CONVENTIONAL TREATMENTS:**

Chemotherapy and radiation therapy for cancer frequently result in serious side effects, such as nausea, vomiting, and appetite loss. Ginger’s antiemetic (anti-nausea) benefits have long been known. According to studies, taking



supplements containing ginger may help people feel better during chemotherapy by reducing nausea and vomiting. A study was conducted, Effect of a Standardized Ginger Root Powder Regimen on Chemotherapy-Induced Nausea and Vomiting: A Multicenter, Double-Blind, Placebo-Controlled Randomized Trial, to investigate the effect of ginger on chemotherapy side effects and the results were as follows:

This study evaluated the impact of ginger as an add-on treatment for chemotherapy-induced nausea and vomiting (CINV). In a double-blind, placebo-controlled trial with 103 chemotherapy-naïve adults, ginger capsules were compared to a placebo. Results showed that ginger significantly improved the quality of liferelated to nausea and overall CINV, reduced delayed nausea and vomiting, and decreased fatigue and malnutrition compared to placebo. <sup>15</sup>

#### **ENHANCING IMMUNE FUNCTION:**

The immune-stimulating qualities of ginger may contribute to the fortification of the body's defenses. Ginger helps boost general immune function by lowering inflammation and modifying immunological responses. This is important for cancer patients whose immune systems may be weakened by the disease or its therapies.

#### **SUPPORTING DIGESTIVE HEALTH:**

Patients with cancer who are suffering from digestive problems as a result of their treatments may find that ginger helps facilitate digestion and ease gastrointestinal discomfort. Patients may be able to maintain a higher nutritional status and general well-being with improved digestion and decreased bloating.

Gastrointestinal (GI) cancers, affecting various organs in the digestive system, are among the most prevalent and deadly cancers globally. Despite the development of numerous chemotherapeutic agents over the years, many are costly and come with significant side effects. As a result, there is a growing interest in natural, cost-effective alternatives.

This review, Ginger and Its Constituents: Role in Prevention and Treatment of Gastrointestinal Cancer, discusses the chemopreventive and chemotherapeutic potential of ginger and its components based on in vitro studies, animal research, and clinical trials. Ginger (*Zingiber officinale*), commonly used as both a spice and a remedy for various ailments, has shown promise in treating GI cancer. Active compounds in ginger, particularly 6-gingerol and 6-shogaol, exhibit anticancer properties. These effects are attributed to ginger's ability to influence multiple signaling pathways and molecules involved in cancer progression, including NF-κB, STAT3, MAPK, and others. <sup>16</sup>

#### **DR. DANIEL NUZUM**

*"Oh, by the way, ginger. Now, fresh ginger is excellent for getting the bowels to move. Powdered ginger, not as much. The compounds that are in the fresh ginger will stimulate more bowel activity. Those compounds as they dry into powder, convert into more immune-modulating product. So they become something completely different as they dry. And the chemical structure changes as that juice becomes a powder. And that does completely different thing. That has everything to do with anti-inflammatory, with immune system rehab is what I call it. Does all kinds of other things, but ginger juice is fantastic for getting the bowels moving."*

## Vitamin C

Numerous studies have been conducted on the possible benefits of Vitamin C, a crucial nutrient recognized for its antioxidant qualities and role in immune function, in the treatment of cancer.

Ascorbic acid, another name for Vitamin C, is a water-soluble vitamin that has potent antioxidant qualities. It is necessary for several physiological processes, like the production of collagen, the healing of wounds, and the maintenance of the immune system. Research on its possible application in cancer treatment has been ongoing for many years, especially because of its capacity to impact cellular functions and improve general health.

### **ANTIOXIDANT PROPERTIES:**

Vitamin C has strong antioxidant properties that aid in reducing oxidative stress and neutralizing free radicals. Oxidative stress has the ability to harm DNA and cells, which may result in the development of cancer. Vitamin C may help prevent malignant growth in healthy cells by preventing oxidative damage.

### **SUPPORT FOR THE IMMUNE SYSTEM:**

Vitamin C is essential for keeping the immune system in good condition. White blood cells, which are vital for battling infections and possibly cancerous cells, are produced and operate better when they are enhanced. A strong immune system can aid the body in more efficiently identifying and getting rid of malignant cells.

### **COLLAGEN SYNTHESIS AND TISSUE REPAIR:**

Vitamin C is necessary for the synthesis of collagen, which maintains the integrity and structure of tissues. Collagen synthesis also plays a role in tissue repair. This is especially important for cancer patients since it promotes wound healing and helps them recover from radiation and surgery-related treatments.

## **DR. THOMAS LEVY**

*“Many different ways to get your Vitamin C, and it’s also perfectly fine to have a healthy diet. But never delude yourself into thinking, especially in the toxic world that we live in, because as I said, all toxins are pro-oxidant and oxidized. The greater your exposure to them, the greater the intake of the antioxidants that you need. It’s tit for tat. You can’t just take in a ton of toxins and a small amount of antioxidants and expect your body to have optimal health.*

*It all circulates around that, getting the Vitamin C where you need it and understanding because this continues to be promulgated in the scientific press and the scientific literature that your recommended dietary allowance, your RDA of Vitamin C is something ridiculously low, like 50 to a 100 milligrams.*

*When in fact, in the literature out there to show you this, if you look for it and you make clinical correlations, your Vitamin C intake for most people should be 1000-fold greater than, say, 50 milligrams a day.*

*You should be taking somewhere between 5 and 20, or 30. Some people need very large amounts when they're dealing with advanced chronic diseases, such as cancer, again, to maintain optimal health. A lot of people will stay moderately healthy and moderately sick at the same time. But when you're really aiming for optimal physiological function, Vitamin C dosing and supplementation should be on the order of 500 to 1000-fold greater than the RDA recommendations by the government and other health organizations."*

## **Vitamin C and Cancer Therapy**

Vitamin C has a variety of possible uses for the treatment of cancer. Here's how Vitamin C may help in cancer treatment:

### **ENHANCING CONVENTIONAL TREATMENTS:**

The possibility of using high-dose intravenous (IV) Vitamin C to improve the effectiveness of traditional cancer treatments has been investigated. According to research, Vitamin C can protect healthy cells while increasing the susceptibility of cancer cells to chemotherapy and radiation therapy, hence increasing their efficacy.

### **DIRECT ANTICANCER EFFECTS:**

Research has indicated that Vitamin C in high doses can cause oxidative stress in cancer cells only. Targeted oxidative stress has the potential to kill cancer cells only, preserving healthy cells in the process. This process involves the body converting Vitamin C into hydrogen peroxide, which has the ability to harm cancer cells.

### **REDUCTION OF TREATMENT SIDE EFFECTS:**

Studies have shown that Vitamin C can lessen the weariness, discomfort, and nausea brought on by cancer treatment. Its immune-stimulating and antioxidant qualities may help patients tolerate treatments more readily overall and have a higher quality of life.

Vitamin C, a water-soluble antioxidant, is known for its role in preventing the common cold and its involvement in collagen synthesis, catecholamine production, and gene regulation. Its role in cancer is multifaceted, affecting prevention, progression, and treatment, and can act as a pro-oxidant at high concentrations.

This review, *The Role of Vitamin C in Cancer Prevention and Therapy: A Literature Review*, examines the role of Vitamin C in cancer clinical trials and highlights important considerations for future research, including the measurement of plasma Vitamin C levels, metabolite excretion, and Vitamin C's transport into cancer cells. Evidence suggests that Vitamin C from natural sources may help prevent lung and breast cancer and enhance the effects of treatments like gemcitabine and erlotinib in pancreatic cancer. Additionally, in vitro studies indicate that Vitamin C can work synergistically with DNA-methyl transferase inhibitors.<sup>17</sup>

### **POSSIBILITY FOR PREVENTIVE USE:**

Although high-dose Vitamin C is frequently addressed in relation to cancer treatments that are already underway, there is also curiosity in its possible preventive effects. Although more research is needed in this area, regular consumption of Vitamin C through food or supplements may improve general health and perhaps lower the risk of developing cancer.



## Bentonite Clay

For millennia, many health and wellness methods have made use of bentonite clay, a naturally occurring mineral that is formed from volcanic ash. Because of its possible application in the treatment of cancer, it has drawn attention recently.

The main component that makes up bentonite clay is montmorillonite, a kind of phyllosilicate. Some of its known medicinal characteristics include its negative charge and high absorbent capacity. Bentonite clay has the potential to be beneficial whether applied topically or consumed; it aids in detoxification, binds toxins, and enhances general health.

Nanoclay refers to extremely small clay particles, typically less than 100 nanometers in size, which possess unique properties due to their high surface area and small dimensions. These particles are derived from natural clays, including montmorillonite, kaolinite, illite, and bentonite.

### **PROPERTIES AND COMPOSITION:**

Calcium, magnesium, and potassium are among the many minerals found in bentonite clay. Because of its special composition, it can absorb a wide range of materials, including pollutants, heavy metals, and poisons. Its adsorption ability is a crucial component of its possible medicinal benefits.

### **APPLICATIONS:**

Bentonite clay can be ingested as a supplement or applied physically as masks and poultices. It is usually taken internally, diluted with water, to help with detoxification.

## Cancer and Bentonite Clay

The potential role of bentonite clay in cancer care is explored through its various mechanisms of action:

### **DETOXIFICATION & TOXIN REMOVAL:**

The ability of bentonite clay to bind and eliminate toxins from the body is one of the main arguments in favor of its application in cancer treatment. Toxin buildup is a common side effect of cancer and its treatments for patients. Because bentonite clay binds to these toxic compounds and promotes their elimination, it may have detoxifying effects on the body.

## DR. EDWARD GROUP

*“Another really good detoxifier would be bentonite clay. Bentonite clay, you want to make sure that you can get a really, really good source of that, a very clean source. But bentonite clay has been used for thousands of years. There’s different types of clays. There’s glacial clays, there’s green clays, there’s all different types of clays that actually go in and help detoxify and help pull out chemicals and toxins.”*



**REDUCTION OF INFLAMMATION:**

Poor treatment results and the progression of cancer are linked to chronic inflammation. It has been proposed that bentonite clay possesses anti-inflammatory qualities, which may aid in lowering bodily inflammation. Bentonite clay has the potential to improve general health and create an environment that is more conducive to the treatment of cancer by reducing inflammation.

**SUPPORT FOR GUT HEALTH:**

Immune system performance and general health are greatly influenced by the gut. Bentonite clay is believed to improve the balance of good gut flora and enhance gut health by adhering to toxins. For cancer patients to have an efficient immune system, their gut flora must be in good health.

**DR. TAU BRAUN**

*“There’s another one that’s very, very useful, which is bentonite. Bentonite clay is a clay that has the ability to change the ionic charges.*

*And so when we talked about the sort of extra negative charges in the body, bentonite is predominantly negatively charged, but really the way that it stacks on top of each other is that it provides an armor. Molecularly, it looks a lot like shingles on a rooftop in terms of protecting when you coat the mucosal lining of tissue. Things like in the digestive tract, when you create an armor with using bentonite clay.*

*Then it allows the good gut bacteria to continue growing, flourishing. And so bentonite clay as a detox is extremely useful.”*

**ALLEVIATION OF SIDE EFFECTS:**

Nausea, diarrhea, and skin responses are just a few of the adverse effects that cancer treatments frequently cause. The calming and absorbing qualities of bentonite clay might aid in reducing some of these adverse effects. For instance, bentonite clay administered topically may lessen skin irritation, but oral ingestion may aid in the management of gastrointestinal problems.

**DR. BRYAN ARDIS**

*“Bentonite clay, taking a quarter teaspoon every day and mix in water and drink it or in a smoothie and drink it. It doesn’t really have any taste. This thing is miraculous and it comes from the dirt God created. Drink it, put it in your body. It binds to chemicals. It even binds to venoms, believe it or not, and draws them out of the body. In fact, I got stung by a hornet one time and this left hand swelled up three times size as normal as my other hand.*

*And for three days it was that big and it hurt. I couldn’t move my joints at all. It wasn’t until I put bentonite clay on the outside of my hand. I actually made a paste out of it, like toothpaste consistency, just mixed some of the bentonite clay with water smeared all over my hands. Waited 2 hours while it dried for the first 30 to 40 minutes.*

*And then when it dries, you'll start feeling it sucking stuff out of the skin. Two applications of bentonite clay paste on my hand and rinsing it off. Two hours later, two times I did that in one day. All the swelling was gone. That's how powerful bentonite clay was drawing it from inside the body out.*

*And I had tried for three days every known supplement I've used to increase lymph drainage. It didn't do anything. It wasn't until I put it there. The reason why I decided to put the bentonite clay on my hand versus drinking it is the human body's brilliant. I knew it was keeping the venom here in my hand and not allowing it to cross my wrist to come up my arm and possibly get to my organs. It was actually warding it off. The body does this with staph infections in the legs.*

*It often won't cross the ankle joint if it's in the foot or it won't cross the knee if it crosses the knee. The medical doctors will often amputate the leg because they're worried about the infection, getting up to the thorax to get to your heart, liver, lungs, which are your vital organs, or in your abdomen. So if it gets there, the worry of dying from the infection, getting there is always their concern.*

*So they'll just cut the leg off. But for years, people can have staph infections that are just in their ankles or in their calves and never cross their knee joint. The body's just protecting that pathogen from getting to your vital organs at your thorax. So bentonite clay, beautiful. Use it orally. I would do it every day. The majority of us have toxins we're exposed to every single day. Right now, the EPA, the Environmental Protection Agency, they say there's 25,000 chemicals that we as Americans are exposed to either via air, water, food or cosmetics or clothing, whatever we put on our skin.*

*25,000. There's only 5,000 of those 25,000 chemicals that they even have researched to determine what toxicities they have to the human body and have published.*

*So there's like 20,000 chemicals we're all exposed to that we don't have any information on how toxic it might be to us. But they are registered with the EPA. They just haven't done their due diligence yet to catch up. We're making poisons faster than we can evaluate them worldwide. So a quarter of a teaspoon of bentonite clay every day, either morning and evening or just in the morning is even better than doing nothing."*

Malignant melanoma cases have increased rapidly, with conventional treatments facing challenges such as tumor resistance and adverse side effects. This study, Melanoma treatment via non-specific adhesion of cancer cells using charged nano-clays in pre-clinical studies, explored nano-clays, tiny natural clay particles, as an alternative therapy.

Nano-clays, known for their high absorption and low toxicity, were tested on melanoma in vitro and in an animal model. Results showed that nano-clays significantly reduced melanoma cell proliferation and viability, as well as tumor size and weight, and induced tumor necrosis. These findings suggest that nano-clays are a promising, effective, and low-side-effect treatment option for melanoma and potentially other cancers.<sup>18</sup>

## Allspice

The dried berries of the *Pimenta dioica* tree are the source of allspice, a spice prized for its aromatic, warm flavor similar to a combination of nutmeg, cloves, and cinnamon. Allspice is being studied more and more for its possible health advantages, including its potential to treat cancer, in addition to its culinary usage.

Native to the Caribbean and Central America, allspice has long been used in traditional medicine there. Essential oils, including eugenol, caryophyllene, are some of its active ingredients, and it is thought that these oils aid in the product's healing properties.

### DR. PATRICK QUILLIN

*"Let's talk about herbal medicine, and how grandmother was practicing herbal medicine in the kitchen all day, every day. We seem to have lost that fine art. There are many herbs: rosemary, garlic, onion, allspice, turmeric, cinnamon, capsicum. I could go on with a long list of herbs that have been used. There's about 50 of them right now that have significant scientific documentation to say that they are biological response modifiers, and can be used in the kitchen on a regular basis.*

*There was a wisdom that grandma and grandpa were practicing that we've lost, and that's why we now are at 1 out of 36 children with autism. We've lost grandma and grandpa's wisdom. So, we're going to talk a little bit about herbs and seasoning, and then a little bit about toxins in our food supply.*

*Let's talk about cloves. Oxygen radical absorbent capacity, ORAC, says how powerful is the antioxidant. Cloves are off the chart, and they also generate a substance called eugenol, which helps to nourish the gut. Seasonings, and spices that we need to be using on a regular basis.*

*For instance, grandma would make an apple pie, from her own apples, which included the peelings, and she might use a little sugar in there, but she also added cinnamon. And cinnamon augments blood glucose metabolism. It helps to lower insulin levels, so it improves insulin sensitivity. So, herbs that were used tasted good, and were actually very therapeutic. You worked all day in the fields, you burned 6,000 calories. Now you just sat down to a meal of potatoes, vegetables, and grandma gave you a piece of apple pie. That's not a bad idea. You can eat that if you got a healthy gut, and you worked it off, and exercise."*

### Allspice and Cancer

According to the Massey Comprehensive Cancer Clinic, Allspice has beneficial anti-cancer properties:

*"Allspice is packed with flavonoid, phenolic acid, and phytochemicals. Studies suggest concentrated amounts of allspice may help suppress cancer growth. Allspice tastes like a blend of cinnamon, cloves, and nutmeg – which is how it got its name."<sup>19</sup>*



**ANTI-INFLAMMATORY EFFECTS:**

The progression and development of cancer are known to be influenced by chronic inflammation. Eugenol, an ingredient in allspice, has been shown in numerous studies to have anti-inflammatory qualities. Allspice can enhance general health and minimize variables that contribute to the growth of cancer by lowering inflammation.

**ANTIOXIDANT ACTIVITY:**

An excess of free radicals can lead to oxidative stress, which is another factor associated with the development of cancer. The high phenolic component content of allspice is mostly responsible for its antioxidant qualities, which can help scavenge free radicals and lessen oxidative cell damage. This protective effect might help with managing and preventing cancer.

**ANTICANCER PROPERTIES:**

Although studies on allspice's potential directly against cancer are still in their early phases, some of the spice's constituents may be useful. For instance, studies have looked into eugenol's capacity to stop tumor growth in preclinical models and cause apoptosis, or programmed cell death, in cancer cells.

**SUPPORT FOR DIGESTIVE HEALTH:**

Both general health and successful cancer treatment depend on a functioning digestive system. Traditionally, allspice has been used to ease gastrointestinal discomfort and promote digestion. Allspice may help improve nutrition absorption and general health after cancer therapy by promoting digestive function.

Allspice is known for its diverse health benefits, including antimicrobial, antioxidant, anti-inflammatory, analgesic, and anticancer properties. Its bioactive compounds, such as eugenol, are thought to contribute to these effects. Research has shown that allspice can suppress microbial growth and reduce inflammation, which is linked to cancer risk. Some studies suggest that allspice may influence cancer cell growth by affecting enzyme activity related to detoxification and epigenetic changes. For example, allspice has been found to reduce histone acetylation in certain cancer cells, which might impact tumor growth. However, while these findings are promising, more research, especially in animal models, is needed to fully understand Allspice's potential as a cancer-fighting agent.

A published journal, *Herbal Medicine: Biomolecular and Clinical Aspects*. 2nd edition, highlights the many beneficial health aspects of Allspice:

*"Allspice is claimed to possess antimicrobial, antioxidant, anti-inflammatory, analgesic, antipyretic, anticancer, and antitumorigenic properties. It contains a multitude of potential bioactive agents that may contribute to health promotion, including flavonoids, phenolic acids, catechins, and several phenylpropanoids.*

*Berries contain about 2-5% essential oils that include the following bioactive compounds: eugenol (60-75%), eugenol methyl ether, cineole (eucalyptol), phellandrene, and caryophyllenes. The antioxidant and antimicrobial activities of allspice may be associated with eugenol."* <sup>20</sup>



## Mistletoe

The herb mistletoe, long associated with legend and holiday customs, is also drawing interest from medical professionals due to its possible advantages in the treatment of cancer. Integrative cancer therapies find mistletoe intriguing because of its roots in both traditional traditions and contemporary science.

The active ingredients of mistletoe, such as lectins, viscotoxin, and polysaccharides, are primarily responsible for its medicinal potential. These elements are believed to interact in multiple ways with cancer cells and the immune system.

### **IMMUNE SYSTEM MODULATION:**

By raising cytokine synthesis and boosting the activity of immune cells including T-cells and macrophages, mistletoe extracts are known to stimulate the immune system. It is thought that this immunological stimulation will improve the body's ability to identify and destroy cancerous cells.

### **DIRECT ANTITUMOR EFFECTS:**

According to certain research, mistletoe may directly inhibit the growth of tumors. Mistletoe contains lectins that have the ability to attach to cancer cells and possibly inhibit their development and division. Mistletoe's viscotoxin protein has the ability to cause cancer cells to undergo programmed cell death or apoptosis.

Beyond its ability to directly target cancer cells, mistletoe therapy may also be able to lessen the symptoms of cancer and the medications used to treat it. Patients have reported better quality of life, with less pain, weariness, and nausea.

Mistletoe (*Viscum album*), a semiparasitic plant, has been used for centuries to treat various ailments and is particularly popular in Europe as a complementary cancer therapy. In Europe, mistletoe extracts are marketed as injectable prescription drugs, though they are not available or approved for cancer treatment in the United States. Clinical trials have shown mixed results, with some studies reporting benefits such as improved survival and quality of life for cancer patients, but these studies often have significant limitations that cast doubt on the reliability of these findings.

Mistletoe extracts contain compounds like viscotoxins, polysaccharides, and lectins, which may enhance immune responses and inhibit tumor cell growth. These extracts are believed to stimulate immune cells, reduce tumor cell migration, and potentially have antiangiogenic effects.

### **DR. RAOUL GOLDBERG**

*"So all our therapies are working in the same way to stabilize and create this balance and that we do for the next four weeks, every day virtually or four times a week. And after that, we put our patients on the maintenance treatment phase three, which is mistletoe injections. Mistletoe was developed by Rudolf Steiner*

*and a Dr. Ita Wegman in the early 1900s, 1916-17, they came out with a product that they claimed, could and did because they had experimented. She was a gynecologist in Zurich and found that this particular substance produced from the sap of the mistletoe bush had a direct effect on curing cancer. And since 1917, it has been in the hands of doctors and is now being promoted all over the world as an adjuvant treatment for cancer. Mistletoe is a bush that grows only on trees. It never touches the ground. It has unique botanical features.*

*It is a rebel, you can say. And it grows in a sense like a cancer, one branch making two branches and so on. Just like one cell makes two cells and each cell makes another and so on, and it grows and grows, and grows, and then it just continues for long periods. But it has a very ordered growth and it's not regarded as a parasite, more as a helping hand for the tree that needs a certain support. It has chlorophyll that draws the light in beyond most plants that exist. It has a huge capacity to draw light into the darkness of the tree. And cancer is something like that.*

*It's a condition where there's not enough light in the body. There's too much darkness in the body, and mistletoe brings that into the body. But it has also a whole range of other properties that have now in the last 30 years been investigated scientifically. Chemical substances such as lectins and viscotoxins, all which inhibits and attack and even destroy cancer cells and stimulate the immune system at the same time. There's an abundance of papers now that show this, so that the oncological, more enlightened practitioners are starting to embrace mistletoe as an adjuvant, as a post-radiation post or even during the chemotherapy. It is something that reduces the side effects, the negative side effects, improves the quality of life tremendously, and aids in the overall prognosis in a profound way. And so we've been using mistletoe here in South Africa, for the past, well, I've been using it for over 40 years.*

*It was the first modality cancer treatment that I discovered when I was working in the clinics in Switzerland where they were treating their cancer patients primarily with mistletoe therapy. That was in the 70s. And since this time, now I know in America there's a real surge of interest in mistletoe. Mistletoe comes in different forms. We not need to go into that. But there's enough now scientific background evidenced to show and also clinical. Thousands of patients, Hundreds of thousands of patients have benefited. And so that is a long-term maintenance treatment that I make use of. However, with all the treatments, if the psychological triggers and the patterns that may have had a lot to do with this development over many years is not addressed, relapses can occur because basically the trigger is still disrupting this balance between the cells and the immune system."*

In Europe, *Viscum album* extract (Iscador), derived from European white-berry mistletoe, is commonly used as a complementary cancer treatment. A review of controlled clinical studies, Survival of cancer patients treated with mistletoe extract (Iscador): a systematic literature review, on Iscador's impact on cancer survival was conducted using multiple databases. The analysis included 49 publications, with 41 studies providing sufficient data for evaluating survival outcomes. Results showed a generally positive effect of Iscador on survival, with a hazard ratio (HR) of 0.59, indicating a potential benefit.<sup>21</sup>

Additionally, mistletoe extracts (ME) are utilized in integrative cancer care to potentially improve survival and quality of life, with non-fermented ME being a specific focus of this meta-analysis, *Survival of Cancer Patients Treated with Non-Fermented Mistletoe Extract: A Systematic Review and Meta-Analysis*. A comprehensive search across multiple databases identified 11 randomized controlled trials (RCTs) and 8 non-randomized studies of intervention (NRSIs) meeting the inclusion criteria. Despite moderate to high risks of bias, the analysis found a pooled hazard ratio (HR) of 0.81 (95% CI 0.69-0.95,  $p = 0.01$ ) for survival benefits associated with non-fermented ME in RCTs, suggesting a potential positive impact.<sup>22</sup>

## Cardamom

Known as the “queen of spices,” cardamom has long been valued for both its flavor and its therapeutic qualities throughout history.

Cardamom’s reputation as a good therapeutic spice has been enhanced by emerging research suggesting that it may have potential applications in cancer treatment.

Cardamom, which is made from the seeds of Zingiberaceae plants, is widely utilized in traditional medicine and cooking in many different cultures. Its bioactive ingredients, which include phenolic acids, flavonoids, and essential oils, are thought to be responsible for some of its health-promoting qualities.

Cardamom has long been used to help with digestion, reduce inflammation, and treat respiratory problems; these traditional uses have paved the way for its potential application in cancer therapy.

### **BIOACTIVE COMPOUNDS AND MECHANISMS OF ACTION:**

There are numerous bioactive chemicals found in cardamom that may provide cancer-prevention advantages.

#### **TERPENES:**

1,8-cineole and  $\alpha$ -terpineol, two terpenes found in cardamom essential oils, have been demonstrated to have anti-inflammatory and antioxidant properties. These substances could contribute to the development of an unfavorable environment for the growth and division of cancer cells.

#### **FLAVONOIDS:**

Cardamom contains flavonoids that are well-known for their antioxidant qualities, such as kaempferol and quercetin. They have the ability to neutralize free radicals, which lowers oxidative stress, a known risk factor for the development of cancer.

#### **PHENOLIC ACIDS:**

Studies have shown that the phenolic acids found in cardamom, such as ferulic and caffeic acids, have anti-inflammatory and anticancer properties.



## Cardamom and Cancer

### **ANTIOXIDANT ACTIVITY:**

Cardamom's antioxidants may help prevent DNA damage and inhibit cancer cell mutations by scavenging free radicals.

### **ANTI-INFLAMMATORY EFFECTS:**

Cancer is predisposed to chronic inflammation. The anti-inflammatory qualities of cardamom may aid in reducing inflammation and lowering the likelihood that cancer will progress.

### **APOPTOSIS INDUCTION:**

According to certain research, cardamom chemicals may cause cancer cells to undergo programmed cell death, or apoptosis, which will slow the growth of tumors.

In chapter 17, Herbs and Spices in Cancer Prevention and Treatment, of the medical journal, Herbal Medicine, it discusses how cardamom is used in Indian and European cooking, and comes from the ginger family and has antioxidant properties. Research shows that black cardamom extracts can effectively neutralize harmful free radicals and increase antioxidant enzyme levels in rats, which suggests potential health benefits. Cardamom oil has also been found to reduce liver cancer markers and enhance detoxifying enzymes, indicating it might help prevent cancer. Additionally, cardamom boosts immune system activity, particularly when combined with black pepper, which could further support its potential anticancer effects. Overall, cardamom appears to offer several health benefits, including antioxidant, anti-inflammatory, and possible anticancer properties. <sup>23</sup>



Additionally, this study, In vitro investigation of the potential immunomodulatory and anti-cancer activities of black pepper (*Piper nigrum*) and cardamom (*Elettaria cardamomum*), explores how black pepper and cardamom impact immune functions. The findings show that both spices enhance splenocyte proliferation in a dose-dependent and synergistic manner. Black pepper boosts T helper (Th)1 cytokine release and increases nitric oxide production, while cardamom suppresses Th1 cytokines and reduces nitric oxide. Additionally, cardamom enhances Th2 cytokine release and black pepper suppresses it. Both spices improve the cytotoxic activity of natural killer cells, suggesting they may have anti-cancer properties. Overall, black pepper and cardamom appear to have significant immunomodulatory and potential antitumor effects, indicating their potential as natural tools for regulating inflammation and preventing cancer. <sup>24</sup>



## Garlic

Garlic (*Allium sativum*) is an essential ingredient in kitchens worldwide, famous for its distinctive flavor and a wide variety of health benefits. Beyond its culinary purposes, garlic has been recognized in traditional medicine for generations, and current studies suggest it may provide great potential in cancer therapy.

For thousands of years, people used garlic as a culinary element and a medicinal herb. It has been used historically to treat a wide range of illnesses, including infections, heart conditions, and digestive problems. Garlic's abundance of sulfur-containing chemicals, antioxidants, and essential oils are responsible for its health advantages. Among them are:

- **Allicin:** The most well-known ingredient in garlic, allicin is also the source of many of its medicinal properties and gives garlic its unique smell.
- **S-allyl cysteine (SAC):** One strong antioxidant that can aid in preventing oxidative damage to cells is S-allyl cysteine (SAC).
- **Diallyl sulfide (DAS):** Known for having possible anticancer effects is diallyl sulfide (DAS).
- **Flavonoids and Phenolic Compounds:** Garlic is able to fight oxidative stress in part because of its flavonoids and phenolic compounds, which are antioxidants.

### Garlic For Cancer

The possible anti-cancer benefits of garlic are thought to result from multiple mechanisms:

#### **ANTIOXIDANT ACTIVITY:**

The antioxidants found in garlic, including allicin and SAC, help scavenge free radicals and lessen oxidative stress, which is a significant contributor to the development of cancer. Garlic may help minimize the chance of DNA alterations that can result in cancer by lowering oxidative damage to DNA.

#### **ANTI-INFLAMMATORY EFFECTS:**

Cancer and chronic inflammation are closely related. Because of its ability to alter inflammatory pathways, garlic may be able to lessen inflammation and lower the chance that cancer will grow. It has been demonstrated that substances like allicin suppress inflammatory cytokines and enzymes.

#### **INDUCTION OF APOPTOSIS:**

It has been discovered that garlic causes cancer cells to undergo apoptosis or programmed cell death. Through this process, aberrant cells that may otherwise continue to grow and develop into tumors are eliminated. Studies have shown that extracts from garlic can cause apoptosis in a variety of cancer cell lines, such as those from the prostate, colon, and breast cancers.

### **INHIBITION OF TUMOR GROWTH AND METASTASIS:**

By interfering with multiple signaling pathways, garlic may prevent cancers from growing and spreading. In animal models and cell cultures, compounds like DAS have been demonstrated to limit metastasis and suppress the development of tumor cells.

### **MODULATION OF DETOXIFICATION ENZYMES:**

Glutathione S-transferase is one detoxification enzyme that garlic can increase in activity. These enzymes are essential for eliminating the risk of cancer and detoxifying carcinogens.

Garlic is well-known for its potential cancer-fighting properties, providing strong protection against cancer risk through its diet. While past research has focused mainly on garlic's ability to prevent cancer, there's limited evidence on its therapeutic potential for treating existing cancers. An article, *Phytochemicals of garlic: Promising candidates for cancer therapy*, highlights how garlic appears to act against cancer through multiple mechanisms and exhibits low toxicity, making it a promising candidate for selective cancer cell targeting.<sup>25</sup>

Additionally, this review, *Types of garlic and their anticancer and antioxidant activity: a review of the epidemiologic and experimental evidence*, highlights garlic's various types, its active compounds, and its potential anticancer benefits, particularly through its antioxidant activity. Research on animals and cell lines shows that garlic and its OSCs can inhibit cancer development by inducing apoptosis, reducing cell proliferation, scavenging radical oxygen species (ROS), enhancing antioxidant enzyme activities, and shrinking tumors. Epidemiological studies suggest garlic lowers colorectal cancer risk but show mixed results for stomach, breast, and prostate cancers. The effectiveness of garlic's OSCs varies with its preparation and form.<sup>26</sup>

## **Cayenne Pepper**

Originating from the *Capsicum annum* plant, cayenne pepper is well-known for its intense heat and bright flavor. In addition to its culinary applications, cayenne pepper has long been used for various therapeutic purposes due to its supposed health benefits. According to recent scientific studies, cayenne pepper might help treat cancer. The possible therapeutic effects of cayenne pepper are explored in cancer prevention and therapy, with a particular emphasis on the spice's bioactive components.

Cayenne pepper has a lengthy history in traditional medicine, especially in Asian and Latin American civilizations. It has been used to treat various illnesses, including circulatory and digestive disorders. Capsaicin, the active ingredient in cayenne pepper and other compounds, is primarily responsible for its medicinal potential. These other compounds include:

- **Capsaicin:** The ingredient that gives cayenne pepper its distinct spiciness is called capsaicin. The anti-inflammatory and antioxidant qualities of capsaicin are well-known.
- **Vitamins:** Vitamins C and A are abundant in cayenne pepper, which adds to its general health advantages.

- **Minerals:** It has important minerals like magnesium and potassium that are necessary for a number of body processes.

## Mechanisms of Action for Cancer

The possible anti-cancer properties of cayenne pepper are associated with multiple mechanisms:

### **APOPTOSIS:**

Research has demonstrated that capsaicin causes cancer cells to undergo programmed cell death or apoptosis. It spares healthy, normal cells but activates the mechanisms that lead to cell death exclusively in malignant cells. One reason capsaicin is interesting as a cancer treatment is because of its specific cytotoxicity.

### **ANTI-INFLAMMATORY EFFECTS:**

A major cancer risk factor is chronic inflammation. By suppressing pro-inflammatory cytokines and enzymes, capsaicin's anti-inflammatory qualities help reduce inflammation and may even cut the chance of cancer development.

### **ANTIOXIDANT ACTIVITY:**

Capsaicin reduces oxidative stress and neutralizes free radicals as an antioxidant. Antioxidants are essential for the prevention of cancer because oxidative stress can cause DNA damage and accelerate the growth of cancer.

### **INHIBITION OF TUMOR GROWTH:**

Studies show that capsaicin can stop some types of cancer cells from growing. It disrupts the signaling pathways of cancer cells, which are essential for the growth and survival of these cells. In animal studies, capsaicin has been shown to decrease tumor size and stop cancer cells from spreading.

### **ENHANCED DRUG DELIVERY:**

Capsaicin may also improve the efficacy and delivery of several cancer therapies. Its capacity to increase permeability and blood flow can help deliver chemotherapeutic drugs to tumor areas more successfully.

An article, *Cancer-Fighting Food: Can Herbs and Spices Treat Cancer?*, published by the National Cancer Fighting Foundation highlights the anti-cancer properties of cayenne pepper:

*"At the University of California, a study found capsaicin, a powerful antioxidant found in cayenne pepper, stifled the growth of prostate cancer cells. In some instances, capsaicin may even be able to kill cancer cells."*

27

Gastrointestinal (GI) cancers are among the most common and deadly cancers, with distinct molecular and organ-specific mechanisms driving their development. Treatment is challenging due to issues like chemoresistance and side effects from existing drugs, prompting the search for new therapies. This review, *The Effects of Capsaicin on Gastrointestinal Cancers*, examines the scientific evidence on capsaicin's effects on major GI cancers and



its interactions with the molecular pathways involved in these diseases. Phytochemicals, known for their anti-inflammatory, antioxidant, and anti-tumoral properties, are being explored for their potential in cancer treatment. Capsaicin, a prominent phytochemical, is the focus of significant research for its possible role in complementing cancer therapies.<sup>28</sup>

## Safety and Recommendations

When used in moderation as part of a diet, cayenne pepper is generally considered safe. It is readily available as a dietary supplement and is frequently used in cooking. However, taking too much or high amounts of cayenne pepper can lead to stomach irritation or heartburn, among other gastrointestinal problems. Before drastically raising their intake of cayenne pepper or utilizing it as a supplement, people with pre-existing diseases or those receiving cancer treatment should speak with healthcare workers.

## Saffron

One of the most costly spices in the world, saffron is extracted from the flower of the *Crocus sativus* plant and is highly valued for its distinct taste, hue, and therapeutic qualities. Saffron has been used in traditional medicine to treat a wide range of conditions, such as mood disorders and digestive problems. Recent studies have started to investigate saffron's possible use in cancer treatment. The scientific evidence for saffron's anticancer effects, mechanisms of action, and potential as a supplemental treatment in cancer care are all examined in this chapter.

Many different cultures have long used saffron for both culinary and medicinal purposes. Its abundance of bioactive components, which include the following, is thought to contribute to its medicinal potential:

- **Crocins:** The carotenoid pigments that give saffron its characteristic yellow hue. Crocins play a part in saffron's antioxidant and anticancer effects.
- **Safranal:** An oil that is soluble in saffron and has been associated with anti-inflammatory and antidepressant properties.
- **Picrocrocin:** Saffron's flavoring agent, picrocrocin, also contributes to the herb's medicinal properties.
- **Minerals and Vitamins:** Saffron contains trace amounts of minerals and vitamins that are good for general health, such as potassium and magnesium, as well as vitamins like C.

## Saffron's Effects on Cancer

The possible anti-cancer properties of saffron are linked to multiple important mechanisms:

### **ANTIOXIDANT ACTIVITY:**

The bioactive components of saffron, especially safranal and crocins, have potent antioxidant qualities. Saffron helps shield cells from oxidative stress, which can cause DNA damage and the advancement of cancer, by scavenging free radicals.



**ANTI-INFLAMMATORY EFFECTS:**

It is well known that chronic inflammation has a role in the development of cancer. By blocking inflammatory cytokines and enzymes, saffron's anti-inflammatory qualities contribute to the reduction of inflammation. This decrease in inflammation may help with overall cancer management and reduce the risk of cancer.

**INDUCTION OF APOPTOSIS:**

It has been demonstrated that saffron chemicals cause cancer cells to undergo programmed cell death or apoptosis. This kind of targeted cell death keeps healthy cells intact while eradicating malignant ones. Research has shown that saffron can cause apoptosis in a variety of cancer cell lines, such as those for lung, prostate, and breast cancer.

**INHIBITION OF TUMOR GROWTH:**

Studies suggest that saffron may have an inhibitory effect on the survival and multiplication of cancer cells. It has been demonstrated that some signaling pathways, particularly those related to the proliferation and spread of cancer cells, are disrupted by crocins.

**ENHANCEMENT OF CHEMOTHERAPY:**

Saffron has the potential to increase the potency of traditional chemotherapy medications. According to certain research, saffron may make cancer cells more sensitive to chemotherapy, which could enhance treatment results and lessen adverse effects.

Studies demonstrate the potential of saffron in both cancer prevention and treatment. Research indicates that saffron can boost the activity of antioxidant enzymes including GST, GPx, and catalase in the liver and prevent chemically induced skin carcinogenesis.

Notable anticancer qualities include the ability of saffron to prolong the life of lymphoma-stricken mice and block the growth of malignant cells more efficiently than normal cells. Saffron's ability to cause apoptosis in cancer cells by means of pathways involving caspases and Bax protein is a major topic of research, even if the precise processes are still being investigated.

Medicinal plants have been integral to human health since the Stone Age, with 80% of people in Asia and Africa relying on them for wellness, according to the WHO. Among these, saffron has emerged as a notable herbal compound for cancer treatment. This review, Toxicity of Saffron Extracts on Cancer and Normal Cells: A Review Article, explores saffron's anti-tumor activity through in-vitro and in-vivo studies, highlighting its ability to target cancer cells selectively while preserving normal cells. It also appears to reduce the toxicity of conventional cancer drugs. However, saffron can be toxic in high doses, far beyond typical dietary levels. Overall, saffron shows potential for cancer prevention and treatment, with its safety profile for normal cells suggesting it could be a valuable therapeutic option. <sup>29</sup>

The journal Herbal Medicine, Herbs and Spices in Cancer Prevention and Treatment, highlights saffron's anti-cancer properties:

*“Saffron, derived from the saffron crocus plant, is a costly spice with a bitter taste and golden hue, containing over 150 compounds. It has shown potential in inhibiting cancer by affecting carcinogen bioactivation and tumor proliferation. Saffron and crocus can suppress tumor growth in neoplastic cells, impacting cell viability and increasing host longevity through apoptosis induction.”<sup>30</sup>*

## **Safety and Recommendations**

When used as a spice or supplement, saffron is generally regarded as safe in moderation. Small amounts are typically used in cooking and are unlikely to have negative consequences. However, using saffron supplements for an extended period of time or at large levels may cause allergic responses, gastrointestinal distress, or other negative effects. Before including saffron in their routine, cancer patients should speak with their medical professionals to be sure it won't conflict with other treatments.

## **Vitamin D**

Often called the “sunshine vitamin,” Vitamin D is essential for immune system support and bone health. Recent studies suggest that it is also necessary for preventing and managing cancer.

As a fat-soluble vitamin, Vitamin D can be produced by the skin when exposed to sunlight or taken from food and supplements. Its main job is to control blood levels of calcium and phosphorus, which is crucial for healthy bones. Vitamin D also helps with a number of biological processes, like cell proliferation, differentiation, and apoptosis, in addition to its function in bone metabolism.

Numerous studies have associated low Vitamin D levels with an increased risk of breast, prostate, and colorectal cancers, among other cancer types. Vitamin D's ability to affect cancer cell behavior and lower inflammation is believed to account for some of its preventive benefits. It binds Vitamin D receptors (VDR) to cancer cells in its active form, calcitriol. This combination can stop the growth of cancer cells, trigger apoptosis or planned cell death, and stop metastasis.

## **Mechanisms of Action**

Vitamin D affects the development of cancer through a number of mechanisms, including:

### **CELL CYCLE REGULATION:**

Cyclins and cyclin-dependent kinases, which are essential for cell division, are modulated by Vitamin D, which aids in the regulation of the cell cycle. Vitamin D can inhibit the growth of cancer cells by decelerating the cell cycle.

### **APOPTOSIS INDUCTION:**

By stimulating pro-apoptotic proteins and inhibiting anti-apoptotic factors, Vitamin D induces cancer cells to undergo apoptosis. This procedure aids in the removal of faulty or altered cells that may otherwise promote the growth of tumors.

**ANGIOGENESIS INHIBITION:**

Vitamin D has the ability to prevent angiogenesis, which is the growth and dissemination of new blood vessels that cancers require. Vitamin D restricts the amount of oxygen and nutrients that may reach the tumor by interfering with angiogenesis.

**MODULATION OF THE IMMUNE SYSTEM:**

Vitamin D improves the ability of the immune system to identify and eliminate cancer cells. By encouraging immune cell differentiation and decreasing chronic inflammation—which is linked to the advancement of cancer—it aids in the modulation of the immune response.

An article, Vitamin D and Cancer, published by the National Cancer Institute discussing the link between Vitamin D and cancer prevention. It states that researchers have explored the link between Vitamin D levels and cancer risk or mortality through observational studies and randomized controlled trials. Observational studies suggest higher Vitamin D levels are associated with reduced risks of colorectal and, to a lesser extent, bladder cancer. These studies also indicate lower Vitamin D levels are linked to higher overall cancer mortality.

*“For example, a meta-analysis of 12 cohort studies found a 14% higher cancer mortality among people with the lowest 25-hydroxyvitamin D levels than among those with the highest levels. Similarly, an analysis of approximately 4,000 cancer cases within the Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial found a 17% lower cancer mortality among men and women in the highest category of Vitamin D than in the lowest category.”<sup>31</sup>*

Another study, conducted by ScienceDirect, The impact of Vitamin D on cancer: A mini review, states that:

*“In this review, we summarize the most recent advances in Vitamin D cancer research to provide molecular clarity, as well as its translational trajectory across the cancer landscape. Vitamin D is well known for its role in regulating mineral homeostasis; however, Vitamin D deficiency has also been linked to the development and progression of a number of cancer types. Recent epigenomic, transcriptomic, and proteomic studies have revealed novel Vitamin D-mediated biological mechanisms that regulate cancer cell self-renewal, differentiation, proliferation, transformation, and death. Tumor microenvironmental studies have also revealed dynamic relationships between the immune system and Vitamin D’s anti-neoplastic properties. These findings help to explain the large number of population-based studies that show clinicopathological correlations between circulating Vitamin D levels and risk of cancer development and death. The majority of evidence suggests that low circulating Vitamin D levels are associated with an increased risk of cancers, whereas supplementation alone or in combination with other chemo/immunotherapeutic drugs may improve clinical outcomes even further.”<sup>32</sup>*

The review highlights recent discoveries about Vitamin D and cancer. While Vitamin D is known for its role in maintaining mineral balance, low levels of Vitamin D are linked to various cancers. Recent studies using advanced techniques have uncovered how Vitamin D affects cancer cells, including their growth and survival.



Research also shows that Vitamin D interacts with the immune system to impact cancer. Most studies suggest that low Vitamin D levels increase cancer risk, but supplementation may improve outcomes, especially when combined with other treatments. More research is needed to develop new strategies that target Vitamin D pathways to better manage cancer.

## **DR CATHLEEN GERENGER**

*“Also, Vitamin D is so important. A lot of times when we have labs coming in with Vitamin D less than 50, when a person has a Vitamin D less than 50, their chance of having cardiovascular disease or a cardiovascular episode is 60% more. The range of Vitamin D is between 30 to 100. Our optimal level is between 50 to 70.*

*Vitamin D is a prohormone. It is also in the gut. What it does is that it helps to boost your immune system. So going back to Vitamin D, when a person has a Vitamin D level less than 30, their chance of having cancer or any type of diseases goes up 10 times more. So with all the supplementation that you look at, it's so important for you to figure out where your Vitamin D level sits because that is one of those things that really not only helps to increase your hormonal levels, it also helps your cardiovascular health, microbiome and immune system, so that's really important.”*

## **Milk Thistle**

The blooming plant milk thistle (*Silybum marianum*) is well-known for its therapeutic qualities, especially its active ingredient, silymarin. Although milk thistle has historically been used to promote liver function, a new study indicates that it may also be helpful in the treatment of cancer.

Milk thistle belongs to the Asteraceae family and has been utilized in herbal therapy for centuries. Silymarin, the main active ingredient, is a class of flavonoids with hepatoprotective, anti-inflammatory, and antioxidant characteristics. The milk thistle plant's seeds extract silymarin, frequently used to treat liver diseases like cirrhosis and hepatitis.

### **Milk Thistle and Cancer**

The potential of milk thistle and silymarin as cancer therapies has just come to light. Several important topics have been the focus of research:

Milk thistle (*Silybum marianum*) has been used to treat conditions like jaundice, hepatitis, and various cancers. Recent patents and research show that silymarin, a critical extract from milk thistle, has potential cancer-fighting properties. This review, A review of therapeutic potentials of milk thistle (*Silybum marianum* L.) and its main constituent, silymarin, on cancer, and their related patents, summarizes patents and studies on silymarin's anticancer effects gathered from multiple sources.

Milk thistle and silymarin are used in medicine to treat cancers such as skin, prostate, and colorectal cancers, as well as to protect the liver. Silymarin helps prevent cancer by activating cell death pathways and working with other cancer-fighting agents. Silymarin is noted for its ability to modulate cell death pathways and enhance the effects of cancer therapies. The findings suggest that silymarin could benefit oncology patients, especially in managing chemotherapy side effects.<sup>33</sup>

**ANTIOXIDANT EFFECTS:**

Silymarin's antioxidant qualities aid in scavenging free radicals, which can lead to oxidative damage and accelerate the development of cancer. Milk thistle may help shield healthy cells from harm and boost the body's natural defenses against cancer by lowering oxidative stress.

**ANTI-INFLAMMATORY EFFECTS:**

Prolonged inflammation is known to be a risk factor for the onset of cancer. It has been demonstrated that silymarin inhibits pro-inflammatory cytokines and signaling pathways to reduce inflammation. This anti-inflammatory action might aid in delaying the development and spread of cancer.

**MODULATION OF CANCER CELL GROWTH:**

Research indicates that silymarin may have an impact on the proliferation and growth of cancer cells. It seems to stop tumor development while causing apoptosis, or programmed cell death, in different cancer cell lines. Numerous signaling pathways, including those involved in apoptosis and cell cycle regulation, that are crucial for cancer cell survival may be impacted by silymarin, according to research.

**CHEMOTHERAPY AND RADIOTHERAPY SUPPORT:**

Milk thistle has the potential to reduce the negative effects of radiation and chemotherapy, including gastrointestinal problems and liver toxicity. According to certain research, silymarin may make these therapies more tolerable and raise cancer patients' general quality of life.

Additionally, an article published by The National Cancer Institute, Milk Thistle (PDQ®), highlights the anticancer properties of milk thistle:

*“Other in vitro studies have demonstrated that components of milk thistle extract can enhance the effects of certain cytotoxic agents against various cancer types (i.e., etoposide against LN229 glioma cells, cisplatin against A2780 ovarian cancer cells and MCF-7 breast cancer cells, and tumor necrosis factor-alpha against DU145 prostate cancer cell.”<sup>34</sup>*

Milk thistle has potential as an adjuvant therapy for cancer treatment, especially when it comes to its active component, silymarin. Given its anti-inflammatory, antioxidant, and cell-growth-modulating qualities, it is a good subject for additional study.

## CONCLUSION

Throughout this book, we have explored various innovative and traditional therapies, each offering unique insights and potential advantages in cancer prevention and treatment. We have highlighted multiple strategies, from innovative therapies like red light therapy and chlorine dioxide to traditional remedies like garlic and turmeric.

An important lesson from our research is the significance of an integrative approach to cancer care. Combining conventional and alternative therapies may improve patient outcomes and overall efficacy. For example, herbs like ginger and turmeric can help strengthen the body's defenses and reduce the adverse effects of treatment. At the same time, red light therapy has shown the potential to regulate tumor growth and enhance immune function alongside conventional cancer treatments.

New and promising cancer treatment and prevention approaches, such as urotherapy and chlorine dioxide, are currently under study and should be used cautiously. However, their inclusion in our discussion underscores the dynamic nature of cancer research and the ongoing quest for innovative approaches that may potentially revolutionize cancer treatment.

The thorough analysis of dietary supplements and plants demonstrates their potent potential in cancer treatment. With herbs like milk thistle, garlic, and cayenne pepper, Vitamins C, D, and saffron offer a powerful arsenal for bolstering the body's innate defenses and complementing medical interventions. These organic materials have many advantages, ranging from direct anticancer actions to antioxidant and anti-inflammatory qualities, demonstrating the vital role that nutrition and supplements play in comprehensive cancer care.

The book consistently addresses the need for personalized treatment tailored to each reader's requirements. Since each person's experience with cancer differs, a treatment that works for one individual may not be suitable for another. Crafting a treatment plan that best suits the patient's specific condition and overall health entails a comprehensive evaluation of all available options and consultation with healthcare professionals, both essential under this individualized approach.

In conclusion, "Cancer's Natural Antidote: Protocols for Prevention and Healing" offers a comprehensive overview of established and cutting-edge treatments. Being informed about and utilizing a wide range of treatment alternatives can help people better cope with the challenges of cancer care. Embracing a holistic approach that integrates the best aspects of traditional medicine with alternative and natural therapies may lead to more effective, personalized, and compassionate cancer treatment plans.



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## ABOUT JONATHAN OTTO



Jonathan Otto is an investigative journalist, natural health researcher, documentary filmmaker, and humanitarian.

In addition to serving as a producer for *The Truth About Cancer* and *The Truth About Vaccines*, Jonathan has created several highly-acclaimed, groundbreaking docuseries — *Depression, Anxiety & Dementia Secrets*, *Autoimmune Secrets*, *Natural Medicine Secrets*, and *Autoimmune Answers* — covering innovative, effective natural remedies for autoimmune disease, neurodegenerative disease, mental health, cancer, and heart disease.

These docuseries — watched by millions around the world — represent Jonathan’s unceasing quest to discover the root causes of debilitating diseases by interviewing over 120 world-renowned natural medicine doctors, scientists, natural health experts, and patients.

In response to this life-saving knowledge, Jonathan created **Well of Life**, a line of doctor-formulated, 100% natural supplements specially designed to detox and fortify the body.

When the global elite took away the human and medical rights of people around the world — and coerced billions into taking the toxic, experimental COVID “vaccines” — Jonathan was determined to get the truth out, despite being repeatedly censored and deplatformed.

He interviewed the world’s top medical doctors, health experts, and legal experts on vaccine injuries who risked their own careers to expose the lies behind the deadly COVID “vaccines” — which have caused deaths and injuries to millions of people — to create his newest docuseries, **Vaccine Secrets**, **COVID Secrets**, and **Unbreakable: Destined to Thrive**.

Jonathan’s greatest reward has been hearing the testimonials from people whose lives have literally been saved with the protocols he developed.

His work has been featured in international TV broadcasts, print media, national news, and radio broadcasts. He received the awards, **Young Citizen of the Year** and **International Volunteer of the Year**, by the Australian government for international humanitarian contributions, which he continues to support.

Jonathan and his wife, Lori, welcomed their first son, Asher, in January 2019 and their second son, Arthur, in May 2021.