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How to Use Intermittent Fasting Strategies to Prevent or Overcome Cancer

By Dr. David Jockers

I will often ask people… "if there was something you could do that every great sage and spiritual leader throughout history has done, was no-cost, and would have a significant impact on your overall health and vitality… would you do it?"

Fasting has been practiced by all of our ancestors unintentionally due to a lack of available food at times. It has also been practiced consciously by many of the most intelligent and spiritually advanced people around the world. This healing strategy costs no money and has an incredibly rejuvenating effect on the immune system and cellular mechanics. The only challenge is that we have to break free from the societal programming that tells us we need to have three meals a day plus snacks in between. We have to liberate ourselves from the idea that we are going to starve if we skip a meal.

Historical Mentions of Fasting

In Biblical times, fasting was a normal part of a spiritual life. Jesus fasted for 40 days before beginning his ministry. Many of the prophets discussed fasting, and Jesus, when talking to his disciples and followers said, "When you fast…"This reference shows that fasting was a normal way of life for the Hebrew people.

Fasting is mentioned in the Bible and is part of many religious and spiritual practices, both past and present

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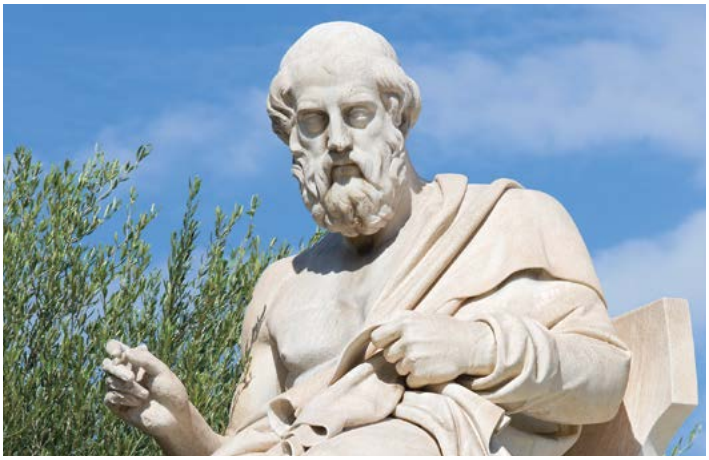
The Greek historian Herodotus (484-425 BC) believed the Egyptians to be much healthier than the Greeks due to their regular fasting practices. He was quoted as saying that "The Egyptians are the healthiest of men, since each month for 3 days they conduct purification by vomiting and enemas, believing that a person receives all illness through food."

Hippocrates, the Father of Modern Medicine, once said, "The addition of food should be much rarer, since it is often useful to completely take it away while the patient can withstand it, until the force of the disease reaches its maturity. The man carries within him a doctor; you just have to help him do his work. If the body is not cleared, then the more you feed it, the more it will be harmed. When a patient is fed too richly, the disease is fed as well. Remember – any excess is against nature."

The Greek philosopher Plato said, "I fast for greater mental and physical efficiency." He was saying that he felt as though fasting helped him be more efficient with both his mental and physical energy. Modern scientific research shows that Plato was correct in that fasting improves both metabolic flexibility and energy efficiency.



The Greek philosopher Plato fasted for greater mental and physical energy

Fasting for Metabolic Flexibility and Energy Efficiency

As you begin to understand how fasting benefits your body, you need to know some basic terminology. The key terms are metabolic flexibility and energy efficiency.

Metabolic flexibility is the ability to change your metabolism to meet the demands of your environment.

Energy efficiency is the ability to use your energy in the most efficient matter possible to meet all the energy needs of the body.

As humans, we had to adapt to a number of different challenging environments in the past. We have been forced to run, climb, fight, lift, starve, and even kill in order to survive.

Our ancestors did not always have ready access to food and would regularly experience times of food shortage and famine. These challenges primed our physiology and gave us a stronger survival advantage by developing our ability to change our metabolism to meet the unique demands we face.

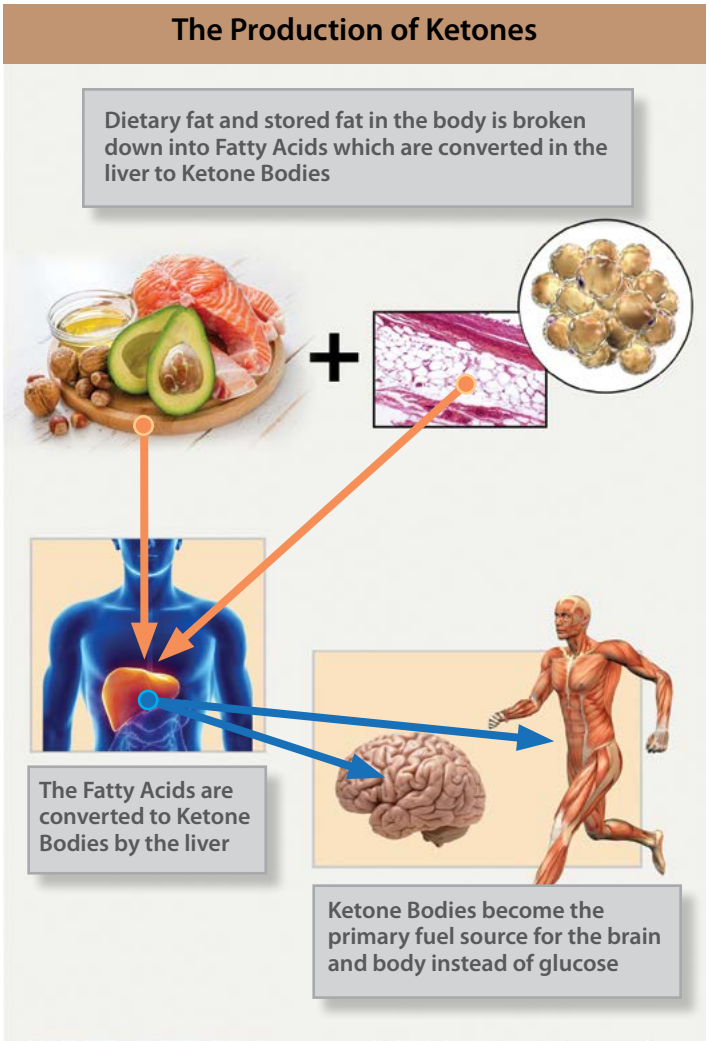
In our modern 21st century society, we don't have to do many of these things any more. We can basically sit back and stay stationary all day while continuously feeding ourselves. This causes a loss of metabolic flexibility and energy efficiency – making us weaker as a species and more susceptible to infections and chronic diseases including diabetes, heart disease, Alzheimer's disease, and even some types of cancer.

How to Improve Your Metabolic Flexibility and Energy Efficiency

Someone with a high level of metabolic flexibility and energy efficiency will be able to immediately produce a high level of strength and speed to accomplish a particular task. They are also able to think sharply and clearly and be productive and creative in their endeavors. Finally, they are also able to comfortably go at least 16 to 18 hours without food.

There are a number of different ways to improve your overall metabolic flexibility and energy efficiency. **Here are 5 key ways:**

1. Intermittent Fasting or Prolonged Water Fasting Periods
2. Ketogenic Diet or Cyclical Ketogenic Diet
3. Interval and Resistance Training Exercises
4. Improving Digestive Health
5. Nutritional Supplementation



Burning ketones instead of glucose as a primary fuel source provides numerous health benefits, including for many types of cancer

All of these strategies work to help the body to run more efficiently. In this article we will do a deep dive into fasting and touch on the ketogenic diet which plays a role with fasting.

What Is a Ketogenic Diet or Cyclical Ketogenic Diet?

A ketogenic diet works by restricting glucose and supporting the body's ability to produce an alternative energy source called ketones. Ketones are the breakdown product of fatty acids that the body uses to produce cellular energy in the form of adenosine triphosphate (ATP).

In order for your body to produce and utilize ketones, you must restrict your consumption of foods that get converted into glucose in the body. This includes both sugar and starch as well as high levels of protein.

Ketone metabolism produces an abundant amount of cellular energy (36 ATP) as compared to glucose metabolism (2 ATP). In addition, glucose metabolism produces a tremendous amount of metabolic waste and inflammation, compared to ketone metabolism. This makes ketones a much cleaner energy source than glucose. As a result, a ketone- or fat-adapted

individual will have lower levels of metabolic waste production as well as **lower levels of inflammation in their body**.

When the body is trained to use ketones for energy, it becomes much more metabolically flexible and energy efficient. The individual is then able to go longer periods without food and is able to preserve muscle mass even in times of famine.

Any individual who is fasting will burn fat stores and produce ketones. These ketones provide the energy source needed to continue to move and do all the things necessary for living. Using ketones as a primary energy source also helps the body to cleanse and detoxify more effectively during a fast.

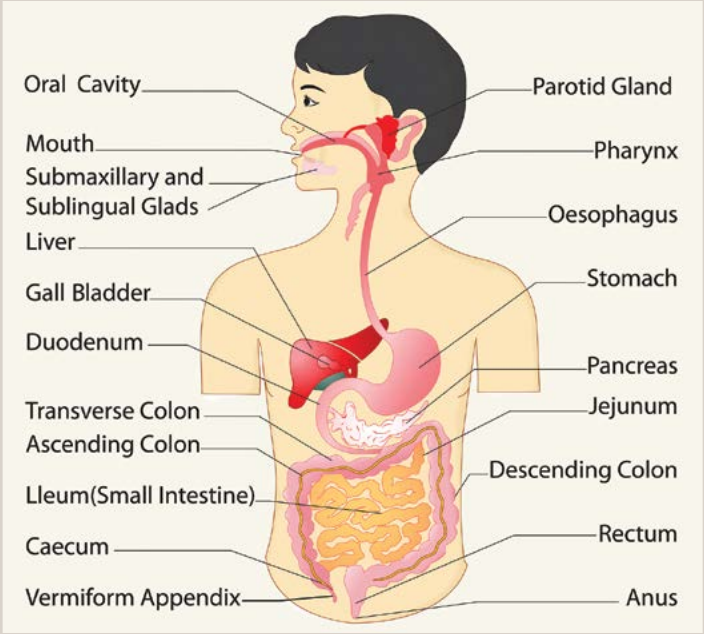
Fasting Allows Energy Conservation and Reduces Digestive Inflammation

In physics, the law of conservation of energy states that the total energy of an isolated system remains constant, and it is said to be conserved over time. The body – even though it is not exactly an isolated system – has a certain amount of energy it can produce at any given time. **The key to great health is in how efficient we are at using that energy**.

You need energy for the digestive system, the immune system, tissue regeneration, physical movement (kinetics), to maintain mental focus, and to carry out many other activities. We all have a certain amount of energy that remains constant in order to do all of these things.

Digestion is a very energy demanding process, meaning that it takes a lot of energy to break down and digest the food you consume and absorb the nutrients into your body. Fasting allows you to utilize stored nutrients without the energy demand of digestion. It also challenges your body to be more efficient with the resources it has.

When you eat food, you also increase inflammation in the body. This happens even when you consume so-called "anti-inflammatory" foods. This is because the actual process of digestion stimulates inflammation.



The digestive process uses a lot of energy and stimulates inflammation, even when consuming anti-inflammatory foods

A healthy diet will produce significantly less inflammation than an unhealthy diet, but both will increase inflammation in the body. The harder the meal is to digest, the more inflammatory activity it will provoke.

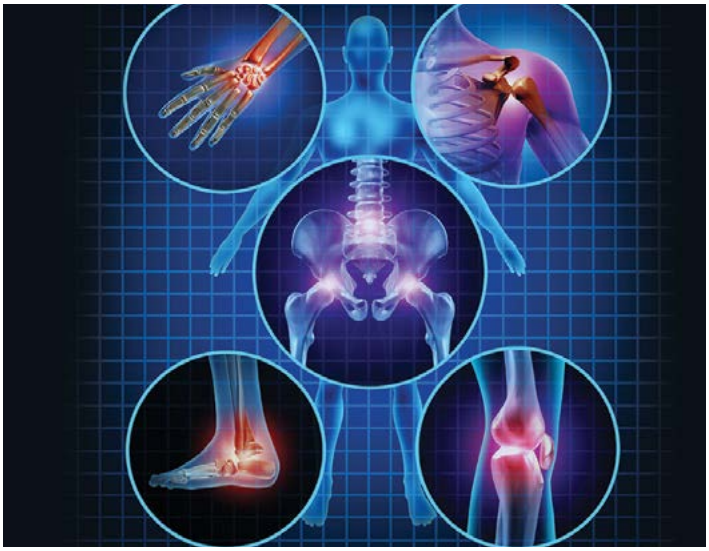
In order to heal from an illness, you need as much energy as possible devoted towards the immune system and tissue regeneration. This is why when people are ill they naturally lose their appetite. This is an innate mechanism of the body to influence us to fast so we can produce the proper environment for optimal healing.

Fasting Improves Immune Regulation

The practice of fasting allows the body to put more energy and focus into the process of effective immune regulation. Fasting while drinking water and other cleansing beverages flushes out the digestive system and reduces the number of natural microorganisms in the gut. The microorganism count is typically regulated by the immune system, allowing it to divert energy to other more important areas.

Intermittent fasting is a terrific regulator of the immune system as it controls the levels of inflammatory cytokines that are released in the body. In particular, two major cytokines – Interleukin-6 (IL-6) and Tumor Necrosis Factor alpha (TNF-alpha) promote very potent inflammatory responses in the body.

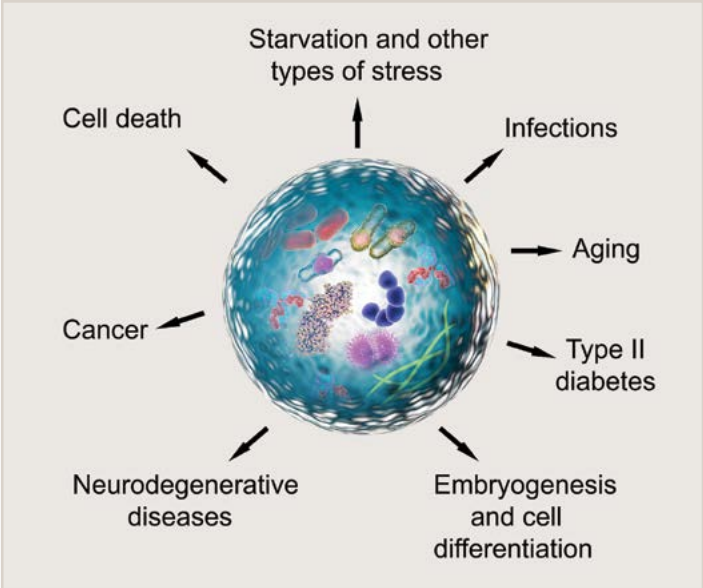
Studies have shown that fasting reduces the release of these inflammatory mediators. The immune system modulation that intermittent fasting provides may also be helpful if you have moderate to severe allergies.



Intermittent fasting reduces inflammatory cytokines which usually results in decreased inflammation in the body

Fasting Stimulates Cellular Autophagy

Fasting also stimulates the process of autophagy – a process where the body breaks down old damaged cells and abnormally developing cells to recycle their contents for energy. The process of autophagy is part of the innate immune system and utilizes pattern recognition receptors to identify viral cell invaders.



Fasting stimulates autophagy, which is the destruction of cells that are old and/or damaged from disease and stress so their parts can be recycled by the body

Intermittent fasting stimulates autophagy processes, which restrict viral infections and the replication of intracellular parasites. This catabolic process helps the body rid itself of intracellular pathogens as well as stop abnormal cancer cell development. It is also important in protecting the brain and tissue cells from abnormal growths, toxicity, and chronic inflammation.

Fasting Improves Genetic Repair Mechanisms

Research has shown that cells have a greater lifespan during times of food scarcity and famine. Intermittent fasting enhances cellular rejuvenation

by acting on certain genetic repair mechanisms. We use less energy to repair a cell than to divide and create new cells.

When food consumption is low, the body slows down cellular division to conserve energy. This is a very important finding as cancer cells are driven by very fast and out of control cellular division. In this way, **the act of fasting will reduce the very mechanism that cancer cells use to take control**.

The main hormone that governs this cellular repair process is human growth hormone (HGH). HGH creates changes in our metabolism that favor fat burning and muscle tissue sparing. It signals an increased focus on tissue repair where the body uses amino acids and enzymes to repair tissue collagen, which improves the overall functionality of the muscles, tendons, ligaments, and bones.

Researchers at the Intermountain Medical Center Heart Institute found that men who had fasted for 24 hours had a 2,000 percent increase in circulating HGH. Women who were tested had a 1,300 percent increase in HGH. The researchers found that the fasting individuals had significantly reduced their triglycerides, boosted their HDL cholesterol, and stabilized their blood sugar.

Fasting Improves Insulin Sensitivity

Thousands of years of food scarcity has led our bodies to develop a protective mechanism to adapt to alternating phases of food abundance and scarcity. During times of food scarcity, our cell membranes become more sensitive to insulin. This is especially important when food is scarce, because it ensures that every bit of food is efficiently used or stored.

During times of food abundance, the body desensitizes the cells to insulin in an effort to avoid the stress of a heavy calorific intake. **This results in elevated insulin levels, increased fat storage, and increased oxidative stress and inflammatory conditions in the body**.

An overabundance of food leads to elevated insulin levels and increased fat storage, oxidative stress, and inflammation

Today, we have a massive abundance of food sources. We can virtually eat anytime we would like. In fact, many health coaches recommend eating 5-6 small meals throughout the day. However, this process sends the body the signal of surplus that inhibits key tissue repair hormones that have powerful anti-aging effects.

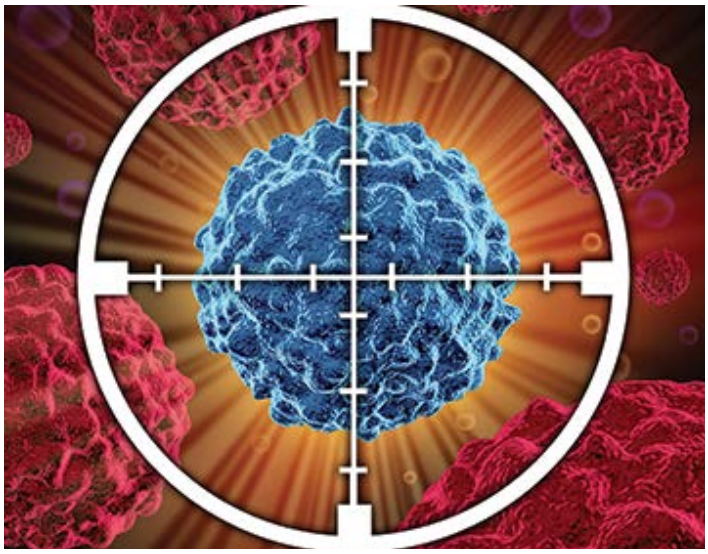
HGH and insulin are endocrine opposites. This means that they trigger your physiology in an opposite manner to each other. HGH is designed to help improve tissue repair, while signaling efficient fuel usage and anti-inflammatory immune activity. Insulin works to stimulate energy storage and increases both cellular division and inflammation in the body. Insulin is the dominant player in this chess match. When the bodily conditions demand

an insulin release – such as when food is consumed (especially sugar and starch) – then HGH is inhibited.

Fasting has been shown to reduce insulin secretion and improve cellular insulin sensitivity. This results in the body using insulin better, so that less insulin is needed when eating. By reducing the overall demand for insulin, you reduce inflammation in the body and improve HGH levels.

Intermittent Fasting and Chronic Diseases

Many individuals with autoimmune diseases such as systemic lupus, rheumatoid arthritis, colitis, and Crohn's disease have seen a tremendous improvement in symptoms with the incorporation of intermittent fasting. This process reduces the hyper-inflammatory processes these individuals undergo and allows for more normalized immune function. Cancer cells are known to have anywhere from 10 to 70 times more insulin receptors than normal cells and depend upon anaerobic metabolism of sugar for fuel. **Intermittent fasting starves cancer cells and leaves them vulnerable to free radical damage and ultimate destruction**.



Intermittent fasting starves cancer cells and leaves them more vulnerable to destruction

Tips for How to Perform Intermittent Fasting

There are many fasting strategies you can try, including intermittent fasting, where you go anywhere from 12 to 36 hours without food. You could also do a 3 to 5 day water fast, or a longer one such as a 7 to 10 day water fast.

For the purpose of this article, we will stick with intermittent fasting strategies that can be applied on a daily or weekly basis.

With fasting, we have what we call our building window and our cleansing window. These are defined as follows:

- **Building Window** – This is the time between your first meal of the day and your last meal. This can also be called the "eating window."

- **Cleansing Window** – This is the time between your last meal of one day and the first meal of the next day. This can also be called the "fasting window."

For example, if you ate between noon and 8:00 pm and then fasted until noon the next day, then you would have an 8-hour building window and a 16-hour cleansing window.

To begin fasting in a non-intimidating way, I have divided the fasting strategy into 6 variations. Pick one that you feel good with and stick with it, or change it up and challenge yourself with a deeper fast from time to time. **Having some sort of a consistent pattern with intermittent fasting is the best way to develop the metabolic flexibility and energy efficiency that will strengthen your body's internal resistance**.

If you have never done an intermittent fast before, begin with the simple fast and stick with it for a while until you feel that it is simple. Be sure to drink 8 to 16 ounces of water at a minimum when you first wake up to help reduce morning hunger, prolong the fast, and improve the cleansing process.

Fasting Variations:

1. **Simple Fast:** Basic fast with water only for 12 hours between dinner and breakfast which gives the liver a chance to complete its cycle.
   Example: Finish dinner at 7:00 pm and don't eat again until 7:00 am.

   This is really the best way to start. Everyone – other than pregnant women and infants – should be able to do a simple fast. This is the first goal to get into a regular pattern of simple fasting.

2. **Brunch Fast:** This is where you do a 14-hour fast between dinner and breakfast. It is called the brunch fast because you are going to eat your breakfast a bit later than most people do.
   Example: Finish dinner at 7:00 pm and don't eat again until 9:00 am.

3. **Cycle Fast:** Three times each week you fast for 16 hours by skipping either breakfast or dinner.
   Example: Finish dinner at 7:00 pm and eat again around 11:00 am to noon the next day. Do this on Monday, Wednesday, and Friday each week.

4. **Strong Fast:** Consume all food in a 6 to 8 hour eating window each day. You would eat 2 meals per day and fast through either breakfast or dinner.
   Example: This would mean fasting in the morning and eating between noon to 7:00 pm each day or 8:00 am to 3:00 pm each day, or whichever 6- to 8-hour period you like best.

There are many types of fasts. Start with a simple fast before gradually working your way up to longer periods of fasting

5. **Warrior Fast:** Ancient warriors would often march all day and would feast at night. Consume all food in a 3 to 5 hour eating window each day.
   Example: Consume 2 meals in a 3 to 5 hour eating window such as 2:00 to 6:00 pm or 3:00 to 7:00 pm.

6. **1-Day Food Fast:** For 24 hours each week only consume water, greens powders, and herbal tea. Some people may also consume a diluted organic broth during this fast.

You could also do green juices as long as they don't have any fruit in them other than lemons or limes, which contain very little carbohydrate. As an example, making a green juice with lemon, celery, cucumber, kale, parsley, and ginger root would be acceptable to get nutrients into the body while also maintaining the benefits of the fast.

Overcoming Challenges with Intermittent Fasting

Most people will do quite well by reducing starches and sugars and consuming more good fats such as coconut oil, olives, and avocados and incorporating a simple fast each day. The good fats help with blood sugar stability, so the fast will be easier.

When you begin your fast it is important to make sure your blood sugar is stable and you want to focus on hydration during your cleansing window. As mentioned above, I recommend drinking at least 8 to 16 ounces of water in the first 15 minutes after waking.

Over time you will have a natural craving for more water in the mornings and will easily drink 32 to 48 ounces (at a minimum) of water in the first few hours of waking. I drink one full gallon of clean water (as herbal tea, organic broth, with added lemon or apple cider vinegar, etc.) before noon every day. It gives me incredible energy, takes away hunger, and helps me to move my bowels a few times to fully get rid of the waste from the day before.

While intermittent fasting has numerous benefits, here are a few conditions to be aware of that may make it difficult to sustain longer fasting periods.

1. **Adrenal Fatigue:** When an individual is not able to produce enough stress hormone, they can feel fatigued as they fast.

2. **Constipation:** If the bowels are not moving, it will create a toxic buildup that will drive an increased stress response in the body.

4 Ways to Deal With Adrenal Fatigue and Constipation

1. **Super Hydration:** Drink as much clean (filtered) water, herbal teas, etc. as possible. The hydration will help reduce levels of stress hormones and stimulate bowel motility. Drinking 1 to 2 cups of water immediately upon arising and then continuously hydrating your body throughout your cleansing phase will reduce hunger, stabilize the adrenal glands, and keep your bowels moving appropriately.

Drink 8 to 16 ounces of water within 15 minutes of waking up

2. **Minerals:** We need minerals to produce electrochemical energy and adrenal hormones. When fasting or on a low-carb diet, we excrete sodium, so it is VITAL to replace this mineral in the body. I recommend adding some Himalayan sea salt to your water, using greens powders, or organic broth or bone broths (Epigenetic Labs makes a very high quality bone broth which is available at https://epigeneticlabs.com/bone-broth-protein/) during the cleansing phase in order to ensure adequate mineral intake.

3. **Magnesium supplementation:** The body uses magnesium much like a car uses oil. We need magnesium for over 300 vital functions in the

body. Magnesium is also key for calming the adrenals and improving bowel motility. Using a good magnesium citrate, glycinate, malate, or threonate supplement can help you function much better during a fast. (You can find a report ranking magnesium supplements here: https://labdoor.com/rankings/magnesium)

4. **Probiotics:** Probiotic supplementation can help to improve bowel tone and reduce gut-induced inflammation that would trigger the adrenals. Good probiotic choices include Epibiotics from Epigenetic Labs (https://epigeneticlabs.com/probiotic/), Garden of Life's Raw Probiotics (https://www.gardenoflife.com/content/product/why-choose-raw-probiotics/), and Probiocharge available from my website.

Is Fasting Safe for Everyone?

The only population groups that should NOT consider fasting are pregnant women, in particular during the 2nd and 3rd trimesters, as their babies are rapidly growing during this stage. During the first trimester, the pregnant mother can do a simple fast so long as she feels good doing it.

Fasting is not recommended for women in their 2nd and 3rd trimester of pregnancy

Newborn babies up until 6 to 8 months will most likely not do a simple fast as they are rapidly growing and their bodies need more calories than their small stomachs can handle during a 12-hour feeding period. After about 8 to 9 months, a child will typically sleep for roughly 12 hours overnight and will essentially do a simple fast.

Most children and teenagers can do a simple fast, although heavy volume athletics may compromise this. If a child is working out intensely for over an hour each day (such as playing basketball or football), then a simple fast may be very challenging.

Each of these scenarios should be dealt with on a case by case basis, but the same rule of drinking 16 to 32 ounces of water upon arising can help to dramatically reduce morning hunger and extend the fast and cleansing period for the body.

Conclusions

Incorporating periods of intermittent fasting and using the strategies shared in this article can help your body become stronger and more resilient and help it to fight against the development of chronic diseases.

Fasting is one of the few health modalities that actually saves you money. It has been spoken about by wise men and spiritual leaders throughout the centuries and has the potential to greatly improve the health of your mind, body, and spirit. I hope you are inspired to begin practicing intermittent fasting from here on out!

About Dr. David Jockers

Dr. David Jockers is a functional nutritionist, corrective care chiropractor, exercise physiologist, and certified strength & conditioning specialist.

He runs one of the hottest natural health websites: DrJockers.com and is the author of *SuperCharge Your Brain*, the complete guide to radically improve your mood, memory, and mindset, and the *SuperCharged Recipe book* with over 180 full-color recipes to help you take back control of your health. He is a regular contributor to thetruthaboutcancer.com and has well over 1,200 professionally published natural health articles on the web and in print magazines.

Dr. Jockers is a sought after speaker around the country on such topics as weight loss, brain health, functional exercise, natural detoxification, and disease prevention. He currently owns and operates Exodus Health Center in Kennesaw, Georgia.

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Sound Healing: Could Music Help You Heal from Cancer?

Dr. Véronique Desaulniers

The late Mitch Gaynor shares a powerful story in the introduction to his 2002 book, *The Healing Power of Sound: Recovery from Life-Threatening Illness Using Sound, Voice, and Music*. The story is of Dr. Alfred Tomads, a well-known French physician of the 1960s.

Dr. Tomads was asked by the head of a Benedictine monastery in southern France to investigate a mysterious case. Why had the majority of the usually healthy monks who resided there suddenly gotten sick? "Seventy of the 90 monks were slumping in their cells like wet dishrags," wrote Tomads. No cause could be found until Tomads made an intriguing discovery…

A new abbot at the monastery had recently discontinued the tradition of Gregorian chant singing that the monks had participated in previously for up to six hours every day. Forward-thinking Tomads reinstated the practice on "doctor's orders."

The result? All the monks who had fallen ill quickly regained their health. **Make no mistake about it, the power of music to heal is very real.**

In the 1960s, Dr. Alfred Tomads helped Benedictine monks in France recover their health by reinstating their daily Gregorian chant singing

Music and Sound Therapy Can Calm the Stress Response

"This mind/body science is real physiology," said physician David Felten, executive director of the Susan Samueli Center for Complementary and Alternative Medicine at the University of California at Irvine, in a recent interview. But just how does music heal? Many theories abound, but the common consensus is that listening to "pleasing sounds" as well as actively participating in the act of making music (see section below) can **dramatically reduce stress responses** that would otherwise lead to cortisol level spikes and the shutting down of the immune system.

Engaging with certain kinds of music in specific ways calms cortisol levels and allows the so-called "parasympathetic" nervous system to bring back the healing mechanisms of the immune system. This includes the production of Natural Killer (NK) cells used to destroy cancer cells.

[Note: The parasympathetic nervous system conserves energy by slowing the heart rate, increasing intestinal and gland activity, and by carrying out other similar actions in the body.]

Need proof? Here are just a few examples of how music has been proven to help your body heal:

- A 2011 study conducted at McGill University in Quebec, Canada, showed that listening to music that was agreeable to the listener stimulated

dopamine production in the brain. Dopamine is a "feel good" brain chemical that plays an important role in movement, memory, and reward behavior in response to listening to music and other pleasurable activities.

This study was also the first to prove that healing hormones can be "turned on" in human beings in anticipation of an abstract stimulus such as listening to music, and not just in response to tangible things like food or sleeping.

- A 2005 study published in the *Medical Science Monitor* found that recreational keyboard playing significantly reduced 19 of the 45 genetic stress response markers tested. The report authors stated that these results support the idea that recreational music making can be a credible stress reduction strategy.

- A study conducted by Oxford University suggests that listening to music that matches the natural rhythms of the body (i.e. Beethoven's *9th Symphony Adagio* and Franz Schubert's *Ave Maria* in Latin) could reduce heart rate and help prevent hypertension and cardiovascular disease.

Along the same lines, a 2013 study conducted at the University of Nis in Serbia found that cardiac disease patients who exercised, in addition to listening to music that they enjoyed for 30 minutes every day, had the highest rate of heart function improvement. Many of the risk factors for heart disease are the same as those for cancer.

A 2013 study found that the combination of music and exercise training led to the most improvement in heart function

- Finally, a recent joint study conducted by Finish, American, and British researchers has hypothesized that melodies could be used to "hear" how certain proteins are functioning in the human body by using a technique they call "sonification," in which composed music and mathematical algorithms interconnect. By "listening to" protein interactions, this method may someday help doctors be more effective at discovering and treating disease.

Fabien Maman and the Power of Vibrational Singing

One of the earliest and most dramatic studies (conducted over the course of a year and a half) was carried out in 1981 by French composer and biologist Fabien Maman and French biologist Helene Grimal, who worked with the French National Center for Scientific Research in Paris.

In a laboratory study, they exposed uterine cancer cells to low-volume acoustic sound (30-40 decibels) at short intervals and mounted a camera on the

dishes where the cells were located. The results were remarkable – **the sounds literally caused uterine cancer cells to disintegrate**.

Interestingly, the most effective sound was the human voice, which caused the cells to literally "explode" in just nine minutes. After the success of their laboratory experiment, Maman and Grimal then worked with two women diagnosed with breast cancer who committed to "tone" (i.e. to make an elongated tonal sound) for three and a half hours every day for a month.

Amazingly, in one of the women, the breast tumor disappeared completely. The other woman elected to have surgery, although her tumor had reduced in size considerably by the time her procedure was performed.

Said Maman of their findings: "…the cancer cells show evidence of cell nuclei incapable of maintaining their structure as the sound wave frequencies attack the cytoplasmic and nuclear membranes."

Maman's theory was that tumor cells are not in "resonance" with the body. Therefore, as a sound that *is* in resonance continues uninterrupted, the cell is not able to stabilize itself and will eventually self-destruct.

Some very recent studies centered around the concept of *resonant frequencies* on ovarian cancer cells is currently being conducted by researchers at Skidmore College in New York. This research is proving what Maman and other pioneering researchers such as Dr. Mae-Wan Ho, Dr. Matsuro Emoto, and Dr. Royal Rife knew decades ago – by exposing tumor cells to particular vibrational and tonal frequencies that are disharmonious to them (but have no effect on healthy cells), **cancer cells can be destroyed**. Some contemporary functional medicine practitioners, employ techniques which are based on the same premise.

Dr. Tony Jimenez explains to Ty Bollinger how the Hope4Cancer clinic uses sono (sound) therapy to kill cancer cells during filming for The Truth About Cancer: A Global Quest

The Healing Power of Making Music

Simply exposing oneself to healing sounds has definitely proven to be effective at calming the stress response, turning on healing mechanisms, and possibly even directly reducing tumor growth. However, actually **participating in music-making in some way can also have a profound effect on individual healing** – especially when done in a group.

"It's not what music DOES for us; it's what music UNDOES," explains pioneering music therapist Christine Stevens. Stevens is the author of *The Healing Drum Learning Program* and *Music Medicine,* and founder of *Upbeat Drum Circles,* which provides group-drumming experiences for individuals and groups.

"…Like when a person is engaging in exercise, self-expression, creativity, and spirituality, it is nearly impossible to worry or be thinking about the past or future when you are in the present moment of making music. Research has shown that recreational music making can actually change our genetic switches and reverse our individualized genomic stress signature."

"So many people have been told they have no musical ability," says Stevens, who has conducted drumming workshops with groups ranging from breast cancer survivors and oncology nurses to political refugees. "They can't hold a tune in a bucket or keep a beat. But the truth is we are all wired for rhythm by our circadian sleep and wake cycle, our brain waves, our cardiac beats, and even our neural firings."

Author and music therapist Christine Stevens

Stevens recently created the *Healing Drum Learning Program* (Sounds True, 2016) to teach people who have never played to drum 24 healing rhythms. This product was the first of its kind to be available in natural foods stores such as Whole Foods. That's why Stevens calls it "Vitamin 'D'– D for Drum."

The healing power of group music making is not just a fluffy concept; it is based on both historical and research-based evidence. One of the fathers of music therapy is psychologist and music therapist Dr. Mark Rider. He is known for coupling musical experiences with active visualization for pain reduction. Dr. Rider has written about the power of group sing-alongs as a way to treat trauma responses in World War II veterans.

Group drumming has also been shown to directly activate the immune system and calm stress responses. A 2001 study published in the journal *Alternative Therapies in Health and Medicine* found that Natural Killer (NK) cell activity increased in participants who were actively drumming when compared to controls. It also found that group drumming changed the cellular biology of the participants and reversed the stress response.

In addition, a 2004 study conducted on first-year nursing students found that the act of drumming improved their mood by close to 30 percent (leading to an estimated 29.1 million dollars in savings to U.S. nursing schools and a 1.5-billion-dollar savings for the U.S. healthcare industry as a whole).

"The drum circle offers a holistic experience in body, mind, and spirit that is as old as the first tribes that sat in circles while drumming and chanting to achieve a higher state of community and individual expression," explains Stevens. "It's been tested on human subjects for thousands of years!"

In fact, **a big part of the healing effect of any music-making experience is caused by the support one feels by simply being part of a connected group**. A comprehensive 2006 study of close to 3,000 nurses diagnosed with breast

cancer concluded that the women who had been isolated socially before diagnosis had **twice the risk of breast cancer mortality** and those who went through the cancer experience alone were **four times more likely** to succumb to the disease than those who had a group of ten or more friends to support them.

4 Ways You Can Heal Yourself Through Music

Here are four things you can do right away to help turn on the healing by turning up the music:

1. **Make Your Own "Healing Playlist.**
   "The best way to go about this is to make a playlist of songs you find calming or energizing. Studies conducted at Michigan State University and others have found that the most effective kind of music for a person's unique healing journey is the songs that that person enjoys listening to. "You are your inner DJ", Stevens explains in *Music Medicine. "*Load the playlist onto multiple devices and make music a *conscious listening practice*. Play your healing music whenever you feel anxious or have low energy – in the car, at home, in a hospital room."

Create a playlist of songs you love. Include some that calm and others that energize you

2. **Practice "Toning" then find your Power Song.**
   Toning is using your voice as a healing tool. There are four simple steps. First close your lips, smile, and hum. Second, feel the sound vibrating. Third, open up your mouth and turn it into a sound. "Vowels have power: from ah, ee, oh, to ohm," says Stevens. "Self-sounding is a precursor to singing to open the heart." The last step is to choose a power song – a theme song for your healing journey – and sing along.

Practice "toning" by closing your lips, smiling, and humming. Then open your mouth and turn it into a sound

3. **Drum Away Pain.**
   "I remember working with a bone marrow transplant patient who was experiencing pain that medicine wouldn't even help," says Stevens. "I had him play the drum gently laying it on his body, while I drummed along with his beat and guided him on a visualization. There is strong clinical evidence from the work of Belleruth Naparstek and others of the effectiveness of using your imagination to envision your own healing."

4. **Join the Jam!**
   Community drum circles, ukulele circles, or singing activities are all ways that you can connect as a group through music. Even if you feel low in energy, just being in the space where music is being created can enliven you. "This takes your mind off fear, doubt, and worry: you can't think while you're playing music," says Stevens. "Based on the research known as the 'Jazz Brain' by Dr. Charles Limb, when jazz musicians improvised a tune versus played a written piece of music, the activity deactivated the brain areas of self-monitoring and judgment activity."

Group drumming can activate the immune system and reduce the stress response

From DJ to drummer, music is yet another way that YOU can become an empowered partner in your own healing journey. Educate yourself on the ground-breaking work that Maman, Limb, Naparstek, Stevens, and so many others in the field of Sound and Music Therapy are doing. Then put on your favorite music, get out an instrument, and start making your own healing music TODAY!

About Dr. Véronique Desaulniers

Dr. Véronique Desaulniers (also known as "Dr. V") is a natural health pioneer with over thirty years active practice in Bio-Energetics, Digital Thermography, Meridian Stress Analysis, Homeopathy, and Chiropractic.

After she was diagnosed with breast cancer in 2004 and healed herself through natural means, Dr. V decided to devote her time to sharing her personal, non-toxic healing journey with others. Her years of experience and extensive research have culminated in the award-winning book *Heal Breast Cancer Naturally and The 7 Essentials*™, her coaching program that unravels the mystery of healing the body in seven easy steps. Dr. V's story, wisdom and knowledge has touched the lives of thousands internationally. Her website is BreastCancerConqueror.com

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Charlene's Cancer Fighting Kitchen

Strawberry Chia Prune Compote with Buckwheat Crepes

This delicious compote features strawberries with their amazing ability to detoxify the body from heavy metals and restore the system from free radical damage. Prunes are, of course, well known for their ability to keep you regular.

Chia seeds are a super food that protects against high blood pressure, free radical damage, and contain essential fatty acids. Buckwheat is a wonderful seed that satisfies the craving for grains without the gluten.

This tasty combination can be enjoyed for breakfast or any time of day.

For all recipes, please use fresh, organic, locally-grown ingredients whenever possible, including organic, non-irradiated spices. This will give you the maximum cancer fighting benefits.

Yield: Twelve 5-inch crepes
Preparation time: 30 minutes + batter resting time

Important Note: The batter must rest in the refrigerator covered for 6-8 hours before making the crepes. Then it must be warmed to room temperature (about an hour) before preparing the crepes.

Crepe Ingredients:

- 1 cup raw buckwheat flour (use only raw untoasted flour)*
- 3 large chicken eggs or 6 quail eggs
- 1¾ cups of your favorite nut milk OR filtered water
- 2 tablespoons cold pressed, unrefined coconut butter, melted**
- ½ teaspoon turmeric powder
- 1 teaspoon vanilla extract
- 1 teaspoon Ceylon cinnamon
- ¼ teaspoon pink OR sea salt to taste and a pinch of freshly ground black pepper
- 1 teaspoon cold pressed coconut oil for coating the crepe pan

Compote Ingredients:

- 1 cup fresh organic strawberries, diced
- 4 prunes, coarsely chopped
- 2 teaspoons raw honey
- 2 teaspoons chia seeds***
- 1 teaspoon Ceylon cinnamon
- Pinch of pink OR sea salt and freshly ground black pepper

Strawberry Chia Prune Compote with Buckwheat Crepes *(continued)*

Directions:

1. Place all the dry crepe ingredients into a bowl and blend with a wire whisk or fork. Then whisk together the milk and eggs in a separate bowl.

2. Add the wet ingredients to the dry and whisk together. Place in the refrigerator covered for 6-8 hours. Remove from the refrigerator one hour before desired serving time to warm the batter to room temperature before cooking.

3. Whisk again before cooking and add more liquid until batter is the thickness of heavy whipping cream. (the thickness of the cream before it is whipped)

4. Put all the filling ingredients into a bowl and gently fold together. Set aside covered with a tea towel. If you want the filling to be warm you can place it in a pot over simmering water (a double boiler idea) or in the oven on low while you are making the crepes.

5. Coat the inside surface of a small crepe or sauce pan with ¼ teaspoon or less of coconut oil. Place over medium heat for one or two minutes until a drop of batter bubbles and turns brown quickly, to show the pan is ready.

6. Pour ¼ cup of batter in center of pan and swirl it to coat it evenly. Flip the crepe when it begins to bubble or looks like a dry skin has formed on top. The first two may not come out well, but don't worry as it gets easier with practice. Think of it like thin pancakes and adjust the heat as necessary. Place finished crepes on a plate and cover with a saucepan lid or tea towel to keep them warm.

7. Garnish with coconut butter and serve with filling immediately. Enjoy!

Sources:

**Buckwheat: This product is a whole grain that you can grind in a food processor or blender:* http://www.bobsredmill.com/organic-raw-buckwheat-groats.html

*** Coconut butter is NOT the same as coconut oil. Coconut butter can be purchased in many health and specialty stores and online, or you can refrigerate a can of full-fat coconut milk and use the hardened part on top.*

****Chia seeds can be obtained from most health food stores or ordered online from Amazon.*

Sweet Potato Cabbage Soup

Sweet potatoes are one of autumn's prized root vegetables and are readily available through the winter. They are naturally sweet and rich with cancer fighting carotenoids and stress-relieving minerals.

Cabbage further enhances this dish with its powerful anti-oxidant, anti-inflammatory, hormone balancing attributes. Together with the spices this soup is a comfort food that can be enjoyed regularly on chilly evenings.

Yield: Eight 10-ounce servings
Preparation time: 20 minutes

Ingredients:

- ½ small green cabbage cut into ½ inch strips (approximately 2 cups)
- 3 cups sweet potato chunks (1 inch square pieces)
- 1 leek, chopped
- 2 heaping cups tomato, diced
- 2 fresh celery stalks, chopped
- 1 large yellow onion, diced
- 3 cloves garlic, crushed
- 6- 8 cups spring OR filtered water, depending on heartiness desired

Spices:

- 1 tablespoon dried oregano
- ½ teaspoon fresh cayenne pepper OR 1/8th teaspoon dried
- 1 cup fresh parsley leaves, chopped
- 1 teaspoon turmeric powder
- 1 teaspoon pink OR sea salt
- 1 teaspoon freshly ground black pepper

Directions:

1. Pour the water in a 4-quart soup pot and place it over medium heat on the stove.
2. Add all the ingredients above except spices and fresh herbs.
3. Bring to a gentle simmer and cover allowing vegetables to cook for 20 minutes or until tender but not mushy.
4. Remove pot from heat and add the spices and salt and pepper. Cover and allow to rest on the stove for another 15 minutes.
5. Meanwhile, finely chop the herbs and add to the soup just before serving. Adjust the seasoning to taste.
6. Serve in bowls with parsley garnish and optional extra virgin olive oil drizzled on top. Enjoy!

Egg Omelette Supreme

Quinoa is naturally gluten-free with nine essential amino acids to make it an excellent protein choice. It also contains magnesium and phosphorous which are healthy minerals for your brain and nervous system as well as stress relieving.

The mushrooms, garlic, and onion further help to alleviate inflammation, estrogen mimickers, and free radicals. All these factors contribute to an anti-cancer champion in this easy to make recipe.

Yield: Two 12-ounce servings
Preparation time: 20 minutes

Ingredients:

- 4 free range chicken eggs
- 1 cup pre-cooked quinoa
- ½ red sweet pepper, diced
- 1 medium tomato, diced
- 1 small handful fresh basil or parsley, finely chopped
- 8 medium button mushrooms, sliced
- 1 small yellow onion, diced
- 1 clove garlic, minced
- 1 teaspoon cold pressed coconut oil
- ½ cup spring OR filtered water

Directions:

1. Put two tablespoons spring water and one teaspoon of coconut oil in a 10-inch skillet over low heat. Add the onion and gently simmer for two to three minutes or until translucent.

2. Once the onions are cooked, stir in the peppers, mushrooms, garlic and pre-cooked quinoa with a pinch of pink or sea salt and ground black pepper. Simmer with ¼ cup water and cover with a lid for a few minutes.

3. Meanwhile, in a medium bowl, whisk the four eggs with the remaining ¼ cup water until frothy.

Egg Omelette Supreme *(continued)*

4. Add the eggs to the vegetables in the skillet. Keep the heat low and replace the lid on top for approximately 5-7 minutes or until omelette is cooked.

5. Garnish with the fresh herbs, sliced green onion, and drizzle some extra virgin olive oil on top. Serve immediately and enjoy!

About Charlene Bollinger

Charlene Bollinger is a devoted Christian, happily married wife, joyful mother of 4 beautiful home-educated children, health freedom advocate, co-founder of CancerTruth.net, former model/actress/fitness buff, and lover of healthy food and healthy living.

After losing various family members to conventional cancer treatments, she and her husband, Ty, learned the truth about cancer and the cancer industry and together work tirelessly helping others learn and live free, healthy lives.

Currently, Charlene is working on compiling a cookbook to help families learn that they can indeed cook healthy, delicious food in this toxic world. Along with her husband, Ty, she is also the co-owner of Infinity 510 Squared Partners Publishing Company.

Mistletoe & Wormwood: Powerful Cancer Fighters American Cancer Patients Don't Know About

By Ty Bollinger

What does a famous holiday kissing tradition have in common with an apocalyptic end times event? Very little, unless we're talking about two of the world's most fascinating, anti-cancer healing plants. These two unique herbs are gaining notoriety as being among the safest natural remedies for treating cancer – each boasting a solid, evidence-based track record of success. I'm talking about the popular holiday decoration **mistletoe**, and the other is the "fire from heaven" spice more popularly known as **wormwood**.

The age-old tradition of stealing a smooch from someone of the opposite sex when encountering a sprig of mistletoe hanging from above is a playful holiday pastime. Maybe it's even one that you yourself have participated in on New Year's Eve or during Christmastime. But did you know that mistletoe has long been used throughout Europe and other areas as a medicine to treat cancer? Only just now is it starting to make its way to North America for this purpose.

Or how about wormwood? This is the herb used in the distillation of botanical absinthe that the Holy Bible mentions as being symbolically representative of one of God's holy judgments. The extract of sweet wormwood, which scientists have dubbed **artemisinin**, contains powerful anti-cancer compounds that have long been used throughout China and elsewhere to naturally keep cancer at bay.

Both mistletoe and artemisinin are currently at the forefront of modern holistic cancer research. They function complementarily when it comes to how they target and destroy cancer cells. One modulates the immune system in order to better destroy cancer cells. The other essentially tricks cancer cells into accepting a nutrient they need for survival… only to then present them with a hidden "Trojan Horse" killer that stops the cancer cells dead in their tracks.

Medicinal Uses of Mistletoe

Mistletoe is actually poisonous when consumed, but is powerfully medicinal when used appropriately. It holds esteem both clinically and historically as a plant that possesses amazing healing potential.

Mistletoe comes in many different varieties (around 1,200!) and grows on a variety of host plants. The most common being trees such as apple, lime, oak, poplar, blackthorn, hawthorn, rowan, willow, fir, spruce, and pine. The only place in the world where mistletoe doesn't grow is in Antarctica – demonstrating the prolific nature of this woody, parasitical shrub.

The ancient Greeks used mistletoe to treat all sorts of health conditions ranging from menstrual cramps to organ damage, prompting its massive spread throughout Europe. This somewhat invasive plant is readily available because it survives exceptionally well through harsh winters and other adverse weather conditions. This is likely why the Celtic Druids as far back as the 1st Century AD looked to mistletoe as being a sacred symbol of vivacity and fertility.

Mistletoe is a parasitic shrub that grows readily on trees and other plants in all regions except for Antarctica

Fast-forward to more modern times and mistletoe is featured throughout the European science journals. It's recognized as an anti-cancer therapy that, when injected, strengthens the immune system and causes cancer cells to effectively commit suicide (a process known as apoptosis). Extracts of mistletoe are commonly administered to ill patients in Germany and Switzerland as a first-line adjunct treatment for cancer, and it continues to be utilized there with incredible success.

Amongst the many known varieties of mistletoe, it is primarily those of European origin that are used to treat inflammatory conditions, autoimmune diseases, and cancer. Extracts are made from the leaves, twigs, and berries of the mistletoe plant. These combined extracts are most often injected subcutaneously, as well as on occasion directly into a tumor, producing the desired results evidenced in the scientific literature.

Considering it's been in use in Europe for close to 100 years, it's perplexing (or should I say criminal?) that mistletoe treatment is not better known in the U.S. There has been a rare mention on this side of the Atlantic. Johns Hopkins University, for instance, lauded the success of mistletoe therapy in the Spring 2014 issue of its *Johns Hopkins Magazine*.

The magazine article tells the story of a woman by the name of Ivelisse Page who was diagnosed with colon cancer that spread to her lymph nodes and eventually to her liver. Ms. Page opted for the therapeutic components of this woody plant as opposed to traditional chemotherapy, and the results speak for themselves. Under the direction and supervision of her open-minded oncologist, Page overcame her cancer and went on to live a healthy, pain-free, and most importantly… cancer-free life.

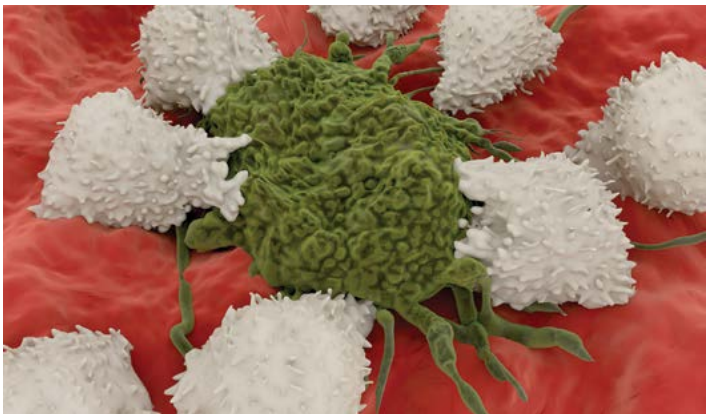
"The one thing I noticed was that as soon as she went on it, she started feeling better," Luis Diaz, Page's doctor, revealed in the publication about the incredible success of what was essentially a single-patient clinical trial involving mistletoe. "That's a universal feature I've seen in all patients who get mistletoe. Their [color] improves; they have more energy."

Understanding How Mistletoe Helps Conquer Cancer

So how does mistletoe therapy work? Dr. Meighan Valero, ND, is from the "Be Well" clinic in Windsor, Ontario. Dr. Valero is one of a handful of North American doctors who specializes in individualized oncologic care that utilizes mistletoe as an adjunct therapy for cancer and associated palliative care. Her clinic has successfully treated all sorts of patients using this method. As a result Dr. Valero has shared this process on various radio shows; one of which I got the chance to listen to recently.

What I gathered is that mistletoe contains certain lectins, or proteins, that are selectively cytotoxic (toxic) to cancer cells. They basically inhibit other proteins that, if left unchecked, will trigger cancer cell replication and the formation of tumors.

Mistletoe lectins also stimulate lymphocytes, which are cells of the immune system. Lymphocytes help the body better detect, deal with, and destroy cancer cells before they even have the chance to form into tumors. And they do this at a much more efficient rate than normal – especially when stress or disease are already present.



Lymphocytes are important immune system cells that detect and destroy cancer cells

Specific to cancer cell destruction are certain viscotoxins, or polypeptides, in mistletoe that likewise break the cell membranes of cancer cells and induce rapid cell death. Through this process, large phagocyte cells known as macrophages are also activated. These particular white blood cells act like an army of cellular "Pac-Man" soldiers to clean up all the waste and debris left behind by this immune process. As an adjunct to conventional cancer treatment, mistletoe is helpful in activating eosinophils, a type of white blood cell that tends to get depleted during chemotherapy. This aids in further boosting immune function.

Types of Mistletoe Used in Cancer Treatment

As I mentioned earlier, mistletoe is a common treatment in both Germany and Switzerland, where the most viable sources of it are extracted for therapeutic use. Dr. Valero says three types of mistletoe are most commonly used due to their unique effectiveness:

- **Type A: *Abies* (fir)**
  Abies mistletoe is gentle, but not necessarily less effective, than other forms. It is commonly used on patients who are frail, or who are undergoing radiation or chemotherapy treatment. Since it causes fewer reactions than other forms of mistletoe, *Abies* is an excellent choice for palliative care, helping to relieve pain, strengthen appetite, and improve quality of life. *Abies* can also be used to treat cancers like leukemia and myeloma that aren't the best fit for other forms of mistletoe.

- **Type M: *Malus* (apple)**
  Malus is a much stronger form of mistletoe than *Abies*, hence why many people can't tolerate it. It works well for gynecological and other forms of cancer where the area of injection is in close proximity to a tumor, such as in the abdomen or on a limb. But patients often have to run a full course of *Abies* before *Malus* in order to modulate their tolerance levels to the treatment.

- **Type P: *Pinus* (pine)**
  This type of mistletoe is great for skin tumors, testicular cancers, sarcomas, and people with depleted bone marrow due to cancer or some other cause. In certain pathology subsets where bone marrow cells are lacking, the use of *Pinus* is likewise appropriate.

What makes mistletoe in all of its forms especially interesting is the fact that **it can be used for every type of cancer and at every *stage* of cancer**. It provides added benefits for pain management and

palliative care in conjunction with chemotherapy or radiation treatments. In Germany, it is even injected intravenously as well as directly *into* cancer tumors, though these methods are currently forbidden in the North American context. It is also common for mistletoe to be injected into the body prior to surgery to help strengthen the immune system and connective tissues.

Outside of North America, mistletoe is commonly injected before surgery to strengthen the immune system and connective tissues

4 Reasons Why Mistletoe Is a Powerful Cancer Fighter

What further sets mistletoe treatment apart from other therapies is the fact that:

- **Mistletoe works alongside other cancer treatments without issue.** Since it is not an antioxidant and does not get metabolized by the liver, mistletoe will not interfere with other cancer treatments such as chemotherapy or radiation.

- **Mistletoe is an immune-modulator.** While it helps to build up white blood cell counts, mistletoe doesn't indiscriminately boost the immune system. For cancers like lymphoma, for instance, that require a temporary immune *decrease,* the immune-modulating effects of mistletoe merely keep the immune system balanced and functioning optimally.

- **Mistletoe induces apoptosis while cleaning up the mess.** Mistletoe not only promotes cell suicide, it also cleans up the mess afterwards. Or rather, it aids the immune system in doing this effectively and efficiently. Mistletoe also activates natural killer (NK) cells in the immune system that join the ranks in destroying cancer cells.

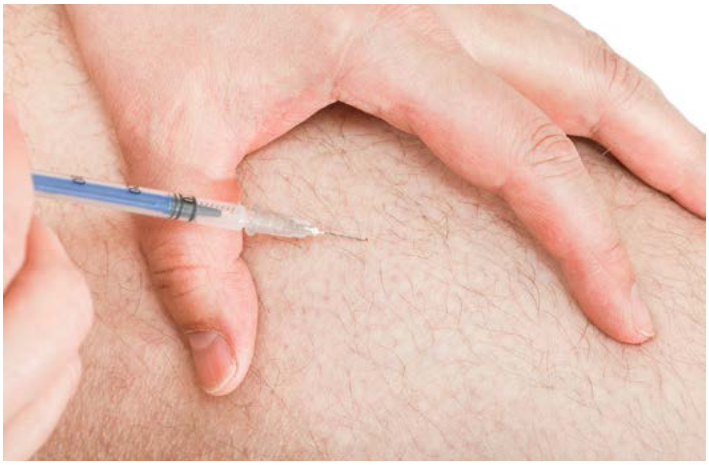
- **Mistletoe promotes angiogenesis.** When a tumor starts creating its own blood supply to deliver more oxygen and other "food" supplies, we call this angiogenesis. It's a sign that cancer has progressed to the next stage. If left unchecked, this process will cause cancer to metastasize and spread, a process that mistletoe intervenes to prevent.

Where Can You Get Mistletoe Therapy?

The two most common brands of injectable mistletoe are Iscador, a fermented variety, and Helixor, a non-fermented variety. Both come from Germany, and unfortunately, neither one is readily available in the U.S. They are, however, available in Canada, including at Dr. Valero's clinic. Iscador can even be found for purchase on Amazon.ca. The cost is about $150 USD for a case of seven vials, which depending upon the treatment regimen will last from anywhere between a week or two to a month or two, or even longer.

Since it is an injection-based therapy, mistletoe should only be administered by a qualified healthcare practitioner (i.e. a naturopathic or integrative oncologist) who can properly supervise the process.

Side effects such as fever or flu-like symptoms are usually limited, but the doctor will be looking for other signs that indicate the therapy is working. With Helixor, for instance, reddening or swelling of no more than 2 inches (5 cm) in diameter around the injection site is an indication of a sufficient dose.



Mistletoe products are injected subcutaneously, often around the navel or into the upper thighs, as these areas are less sensitive to pain

Dosing is also patient-specific, as one person might require only 1 milligram injections compared to someone else who requires 50 milligrams. The amount and frequency of these injections also depends upon a patient's health state and where they are along the disease stage spectrum. For most common cancers, Dr. Valero says injections typically occur every other day, three times per week, or potentially daily at lower doses for palliative care.

Helixor describes the optimum dosage as being achieved when the patient's "overall well-being and/or specific symptoms (such as pain, fear, or depression) improve and the body temperature increases slightly, by about 1 °C (1.8 °F)."

Once remission has been achieved, a patient may decrease their dose to only one injection of mistletoe per week, followed by a week or two of rest, then another dose, and so on and so forth. The Helixor website does state that mistletoe therapy is often administered for several years.

Regarding who should *not* use mistletoe, Dr. Valero says everything is situational and should be evaluated with the guidance of a qualified health professional. Patients with lymphatic or leukemia-type cancer should be cautious, as should those with brain tumors due to possible site-specific reactions.

If you're looking for clinical evidence to back up mistletoe's health claims, most of it comes out of Europe. Overall though the research shows that patients experience significant pain reduction, increased quality of life, and in the case of cancer… an improvement in survival expectancy with mistletoe treatment.

The Amazing Abilities of Artemisia (Wormwood)

Wormwood (artemisia) is a herbaceous, perennial plant that contains a compound known as artemisinin that studies are showing is powerfully anti-cancer. While there are many varieties of wormwood, *Artemisia annua* is considered the best source of this healing nutrient.

Also known as "sweet wormwood," *Artemisia annua* has been used for thousands of years, particularly in Traditional Chinese Medicine (TCM). Its uses include treating and even curing conditions such as hemorrhoids, parasitic infections, and malaria. With malaria specifically, it has an almost 100 percent curative success rate! Wormwood is also an incredibly powerful anti-inflammatory herb that, when used in combination with iron, is a potent anti-cancer remedy.

Sweet wormwood (Artemisia annua) is native to Asia and has long been used in Traditional Chinese Medicine (TCM)

The reason is that the artemisinin in sweet wormwood releases a cascade of free radicals when exposed to oxidizing agents like iron to which they are attracted. Cancer cells, it turns out, are loaded with iron. They contain considerably more iron than healthy cells… which makes a great target for the cancer-destroying potential of artemisinin. And this potential is further amplified when even more iron is added into the mix.

Researchers from the University of Washington, Seattle, did just that in a study they published in the journal *Life Sciences* back in 2001. In it, they demonstrated that **artemisinin effectively destroyed iron-enriched breast cancer cells while leaving healthy cells alone**, much in the same way that wormwood targets and destroy iron-dense malaria parasites.

Remember earlier when I used the term "Trojan Horse" to describe how this process works? This is exactly what the team that conducted this important research accomplished. By "tagging" artemisinin to the iron-carrying glycoproteins that cancer cells readily absorb, the cancer cells receive an extra delivery that destroys them.

Later research out of the University of Washington (UW) in 2008 not only confirmed these findings, but added to them. This more recent research pointed out that artemisinin has been observed to be **up to 1,200 times more specific in its destruction of certain kinds of cancer cells** compared to FDA-approved pharmaceutical drugs – all of which cost far more while providing far less in terms of effective treatment.

"The compound is like a special agent planting a bomb inside the cell," is how Tomikazu Sasaki, lead author of that study and a professor of chemistry at UW, described artemisinin. He added that the compound is effective in treating cancers of the breast, prostate, and more, all without producing the deadly side effects commonly associated with chemotherapy and radiation.

Chemotherapy is responsible for killing roughly one healthy cell for every five to 10 cancer cells. But according to Sasaki, artemisinin only kills one healthy cell for every 12,000 cancer cells! This speaks volumes as to its potency and effectiveness, which further demonstrates its potential to replace existing treatment modalities. Cancer treatments that, for all intents and purposes, are antiquated and in dire need of more advanced alternatives.

Other Healing Uses for Artemisinin

Like me, my good friend Dr. Josh Axe recognizes that artemisinin is an effective therapy both for cancer and parasites. He also points out that its benefits extend even further as a remedy for ridding the body of harmful bacteria, viruses, and fungi. It can be used to treat gastrointestinal disorders like Crohn's disease, and also helps to balance the gut microbiota.

How does it do all this? Here's how university post-doctorate researcher Leila S. Ross described it to *Chemical & Engineering News* when discussing a study on artemisinin published by the University of Singapore:

"The central finding is consistent with previous lines of thought: Artemisinin has a fuse that is lit in the heme-rich parasite (which contains iron), where it then indiscriminately attacks like a bomb. Artemisinin kills by jamming up a large variety of cellular processes rather than a single pathway."

Other studies have come to similar conclusions, including one co-authored by researchers out of the United Kingdom and Thailand. This particular study declared artemisinin anti-malarial drugs (the term "drugs" here loosely referring to the natural compounds derived from sweet wormwood) to be a "magic bullet" for malaria, possessing a "wide therapeutic index." The study further states that artemisinins are "far superior to any available alternatives."

Where to Find Artemisinin

So, where can you get artemisinin and how should you use it? If you recall, I shared earlier that *Artemisia annua* contains more of the artemisinin compound than other varieties of wormwood.

It can be a bit confusing in that *Artemisia annua* also has a number of names in addition to Sweet Wormwood. Other names this herb goes by include: Qing Hao, Sweet Annie, Sweet Sagewort, and Annual Wormwood.

The next thing you need to know is that the herb is dried and turned into a number of forms including tablets, tincture that includes the full essential oil, tincture with reduced essential oil, conventionally produced tincture, and dried leaf. Shops that sell Chinese herbs and spices are likely to carry it, and you can also readily find various forms online. As with everything you plan to ingest, look for a quality, organic source. One well-known and affordable brand is Herb Pharm, which offers a certified organic, non-GMO tincture product made from *Artemisia annua*.

DIY Artemisinin Recipes

If you happen to have sweet wormwood growing in your garden, here are a couple of DIY recipes you may be interested in trying. You can also make the tea with purchased dried sweet wormwood.

Sweet Wormwood Tea

- Steep ½ to 1 teaspoon dried wormwood (leaves & flowers) in 1 cup boiling water for 5–15 minutes, using no more than 1 tsp of leaves.
- Consume unsweetened if possible for best effects. Or add dried peppermint and/or anise to improve taste, if necessary.

Homemade Tincture With Wormwood

- For a tincture you use freshly cut stems from the plant (including the flowers and leaves).
- Chop finely and put into a lidded jar.
- Cover with 40 percent vodka or another high-proof liquor.
- Shake every day for 2 weeks.
- Strain through a cloth or fine strainer, pour liquid into dark glass bottles and date.
- Store in a cool dark place.

Precautions When Using Artemisia

Pregnant women should not take wormwood. Before taking wormwood in any of these forms, first verify that you're not allergic to any of wormwood's other active constituents, including the highly volatile oil thujone. The FDA considers thujone to be toxic, though small amounts commonly used in food and beverages are considered to be safe. Also, if you are allergic to ragweed or other plants in the Asteraceae/Compositae family, it is best to avoid wormwood.

It is best in all cases to avoid the use of wormwood essential oils in aromatherapy, as these contain unnaturally high levels of thujone that can lead to convulsions and even neurotoxic damage. Like with mistletoe, consult with a qualified physician or naturopath who is well-versed in the proper use of wormwood and/or artemisinin before using.

About Ty Bollinger

After losing several family members to cancer (including his mother and father), Ty Bollinger refused to accept the notion that chemotherapy, radiation, and surgery were the most effective treatments available for cancer patients. He began a quest to learn all he possibly could about alternative cancer treatments and the medical industry.

Ty has now made it his life's mission to share the most remarkable discovery he made on his quest: the vast majority of all diseases (including cancer) can be easily prevented and even cured without drugs or surgery.

Ty is a happily married husband, the father of four wonderful children, devoted Christian, best-selling author, medical researcher, talk radio host, health freedom advocate, former competitive body-builder, and also a certified public accountant.

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Here we are starting a brand new year... and we have a brand new print version of our Heroes Against Cancer newsletter with which to celebrate.

If you've been receiving our digital newsletter for some time, please drop us a note (support@thetruthaboutcancer.com) and let us know what you think about having a printed edition to read. If you're a brand new subscriber... a hearty welcome and thank you for joining us!

When it comes to health and the start of a new year, I'm always reminded of that classic fable of "The Tortoise and the Hare." It's supposed to teach us that slow and steady progress ultimately wins us the race – and I definitely agree. But the hare, with his sprint out of the starting gate, can also be a fantastic role model when it comes to creating healthy new habits. Sometimes taking fast action is necessary and it's often easier to make a big change all at once – especially when you're feeling motivated.

In fact, I've had countless folks write and tell me about the big lifestyle changes they were inspired to make after watching one of our docu-series, and/or after receiving a cancer diagnosis. They are proof that change is always possible. And that making lifestyle changes such as quitting sugar, replacing processed "food-like substances" with real, organic foods, and/or reducing your toxic burden can have an immediate and drastic effect on how you feel.

Speaking of toxins, one thing Charlene and I personally do each January is a detox protocol to kick off the new year. We'll have lots more coming from The Truth About Cancer about detoxing this month, so be sure to keep an eye on your email inbox for that.

In the meantime, please enjoy this inaugural print issue of your newsletter and know that we've got lots more to come to support your health endeavors throughout the year.

Wishing you and yours a very happy and healthy 2017!

Ty Bollinger