

**HEROES AGAINST CANCER**

**Newsletter**

**September**

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The TRUTH About  
**CANCER**<sup>®</sup>  
educate • expose • eradicate



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Everyone Has Cancer

## Message From Ty and Charlene Bollinger



Welcome to the 40th edition of the *Heroes Against Cancer* Newsletter!

In this edition, Ty discusses the need for adequate protein and how it greatly affects muscle mass and metabolism. And as we get older, exercise and a proper, high-protein diet becomes even more crucial.

Read on as we dive into this topic from many angles.

Next, Charlene, shares hope and light in her Ask the Expert article.

We have both learned so much during our search for answers, and we think you'll really benefit from her article below: "My Top 13 Health Tips for the Newly Diagnosed Cancer Patient."

She's also included three delicious, cancer-fighting recipes. Want to add some extra protein to your diet after reading Ty's article? Check out the Warm Wild Mushroom and Arugula Salad with White Truffle Vinaigrette... and add a few poached eggs.

Lastly, we hear from our good friend Dr. Veronique Desaulniers on the real truth about cancer: we all have it. We all have cancer cells inside of us, so how do you make sure your healthy cells don't turn into cancerous ones?

Enjoy this issue chock-full of cancer-fighting information and hope.

God bless,

  
**Ty Bollinger**

  
**Charlene Bollinger**



## Protein, Muscle Mass, and Cancer: What's the Connection?

By Ty Bollinger

In my bodybuilding days, it was critical that I ate the right foods at the proper intervals to fuel my body's production of lean muscle mass. The most important nutritional element for muscle growth is protein, which was a staple of my daily dietary regimen throughout my fitness career.

Protein is essential for maintaining the muscle mass that I had gained, and so I still adhere to a high-protein diet today. Men and women of all ages require protein in order to support the body's musculature system, which some experts call the "organ of longevity."

Protein is the primary building block of muscle tissue, which is the largest endocrine, or hormone-producing, organ in the body. Muscle tissue is one of the key regulators of hormone production, and protects the body against diseases like cancer.

But the government's official dietary guidelines seem to regard protein as less essential than it actually is for health maintenance and disease prevention. The Recommended Dietary Allowance (RDA) of protein is a mere 0.8 grams per kilogram of body weight (about 15 - 25% of total caloric intake).<sup>1</sup> For a 175lb man, this equates to roughly 64

grams of protein per day – far from enough for optimal health.

### **How Healthy Muscle Mass Supports a Strong Metabolism**

Personally, I wouldn't be able to keep up my strenuous lifestyle on just 64 grams of protein per day. When I fail to eat enough protein, I can feel the negative effects throughout my body. My metabolism is off, I feel fatigued and irritable, and I experience stress more quickly and easily than when I optimize my protein intake.



Building healthy muscle mass boosts your resting metabolism

That's because muscle mass is the engine that drives metabolism, converting fuel into energy. Your muscles are the body's primary energy source, where complex carbohydrates are packed away in the form of glycogen, a stored form of glucose.

This may contradict what you thought you knew about muscles, given that they consist of protein and amino acids. But your muscles are simply where all of this glycogen is *stored* as it awaits conversion back into glucose, the body's primary source of energy.

Every cell in your body is primed to receive and use glucose, as are many of your vital organs. And glucose is the easiest and most efficient fuel for the body to mobilize, especially during strenuous activities like sports or exercise.

The brain loves glucose, too. While the brain itself consists of cholesterol and other fatty compounds, glucose is essentially the only fuel that it can use.

### **Muscle Glycogen Regulates Glucose Release and Blood Sugar Balance**

But isn't glucose sugar, and isn't sugar bad? In excess. Unregulated blood sugar can be lethal, but without regulated glucose release, you would die. This is what glycogen is for, and it relies on healthy muscles to do so.

Glycogen functions as a type of control valve for the body's release of glucose for specific purposes throughout the body. This regulatory system maintains healthy blood-glucose levels, preventing dramatic insulin spikes that can lead to type-2 diabetes and other disorders.

Glycogen is also stored in the liver, but the majority is found inside muscle tissue – which is why a lack of muscle tissue can cause the entire regulatory process to malfunction. This can lead to disease and even death.<sup>2</sup>

Muscle tissue serves many purposes beyond just holding our skeletons in place; it represents a critical command post from which our bodies process and use nutrients, as well as supporting healthy body composition, bone strength, and resilience to stress and chronic illness. It can even protect against cancer.

## Lack of Muscle Mass Linked to Increased Risk of Cancer and Premature Death

When discussing weight and cancer, health experts often focus on the problems associated with being overweight. But being underweight is also a risk factor, as multiple studies have linked low muscle mass (known as sarcopenia) with increased cancer risk. A study published earlier this year in *JAMA Oncology* found that sarcopenia, poor muscle quality, and excess abdominal fat are all associated with higher rates of metastatic breast cancer.<sup>3</sup>

Sarcopenia and the immobility that often accompanies it are byproducts of metabolic breakdown and anabolic resistance – two things that involve unhealthy muscles. These factors of aging traditionally arrive with middle age, beginning as early as the 40s and really kicking in by the 60s. But increasingly, people in their 30s are experiencing premature muscle aging, probably due to the fact that society is becoming increasingly more sedentary.

The loss of muscle function, strength, and mass that results from this persistent inactivity is typically followed by increased levels of fat, leading to more inflammation, free radical damage, cortisol and insulin resistance, and disease. This highly damaging process can also make the body less able to recover from disease.

In women who have breast cancer, are in remission, or are nearing the end of their treatments, low muscle mass is directly associated with poor long-term prognosis and survival.<sup>4</sup> Lead author Dr. Bette Caan of Kaiser Permanente's Northern California Division of Research stated that low muscle mass is an "underappreciated" aspect of breast cancer, and that it's just as problematic as

being overweight or obese in terms of cancer risk and survival outcomes.<sup>5</sup>

Men are similarly harmed by a lack of muscle mass. Science has found that males with the strongest one-rep max on both the bench press and leg press have a 40% reduced risk of colon cancer.<sup>6</sup> A direct product of muscle mass, strength has further been shown to decrease both men's and women's risk of dying from all causes, suggesting that there's something uniquely special about muscle mass in the way that it helps to protect against illness.<sup>7 8 9</sup>

If you think of muscle mass as a complex, independent organ, it all makes sense, since this system is responsible for regulating hormones, insulin, metabolism, and even inflammation throughout the body. Not having enough muscle mass is a recipe for total health disaster. And the problem is multiplied if you're already sick with a disease like cancer, which can cause the body to become even more muscle-depleted.

Keep in mind that stress, a known and prominent cause of cancer, is also a muscle-killer. Dr. Toni Bark from The Center for Disease Prevention & Reversal talked all about this at our 2017 *The Truth About Cancer LIVE* event in Orlando, explaining that whenever the body is in "fight or flight" mode resulting from heavy stress, its response is to pull glucose from wherever it can in order to cope. If there's no glucose to be found from food or other readily-available sources, then the body resorts to stealing it from muscle mass, fat reserves, and anywhere else it can be found. This "wasting" process can quickly lead to all sorts of chronic health failures.<sup>10</sup>

## You Can Build Muscle Mass Even in Old Age When Hormones Are Scarce

So how do we stimulate muscle tissue to avoid all of this? When you're young, it's a largely automatic process driven by natural hormones like insulin and human-growth hormone (HGH), which tend to support robust muscle health. As you age, however, exercise and a proper, high-protein diet become even more important.<sup>11</sup>

Prominent research suggests that consuming a minimum of around 100 grams of protein each day, broken down into at least 30 grams per meal, and three meals per day.<sup>12</sup> This is the baseline recommended by Dr. Gabrielle Lyon of The Ash Center in New York City, though higher amounts are necessary if you want to thrive as opposed to just survive.



Due to sarcopenia, muscle mass tends to decline with age

Dr. Lyon is one of the world's leading experts on protein consumption, and is actually the person who coined "organ of longevity" to describe the muscle system as a whole. Her philosophy is deeply rooted in science, which shows that healthy muscle mass is one of the keys to normalizing things like blood-sugar, antioxidant balance, inflammation control, and fat mediation.

Your muscles are your largest bodily unit for glucose disposal and fat oxidation, both of which are at the core of human health and longevity.

This is why aging adults need to do everything they can to keep their muscles healthy and strong, especially as they lose the sex steroid hormones that would otherwise handle this process. It all starts with protein, and eating the right amounts and types of protein at just the right times.

## Amino Acids in Protein Drive Critical Muscle Signaling Process That Supports Longevity

The amino acids found in high-quality protein are the driving force behind the "lock and key" effect, or mTOR (mechanistic target of rapamycin). mTOR is a natural anabolic process that involves the activation of muscle tissue at key intervals throughout the day, sparked either by protein consumption or intense exercise. Let's take a closer look at the influence of protein on this process.

Since anabolic resistance naturally declines with age, protein is necessary to fill the gap. It does so by promoting modulated mTOR signaling to build more muscle mass – which is *not* the same thing as insulin-mediated, or chronic, mTOR signaling. Chronic mTOR signaling can actually be a *cause* of muscle-wasting and the formation of cancer, usually resulting from poor dietary and lifestyle habits that drive blood-sugar levels through the roof.

"It's the chronic feeding, the grazing of carbohydrates throughout the day" that causes this bad type of mTOR signaling, says Dr. Lyon, adding that this extremely common bad habit is "the worst thing you can do" for your body. That's because it often leads to major insulin spikes that can evolve into type-2 diabetes and other serious health problems.

The type of beneficial mTOR signaling to which I'm referring couldn't be more different, as it involves short-duration signaling "bursts" that are virtually identical to what occurs while lifting weights or exercising. This type of mTOR signaling tells your body that it's time to grow stronger and more robust, utilizing the amino acids found in the protein you should be eating.

### Leucine: The Ultimate Muscle Amino

There's one protein-based amino acid, leucine, that carries much of the load in spurring the growth of new muscle tissue and maintaining existing muscle tissue. This essential amino acid, which *only* comes from diet and isn't produced in the body, is considered to be the premiere muscle-building amino acid, possessing a significantly higher ability to promote muscle synthesis compared than other amino acids.<sup>13</sup>

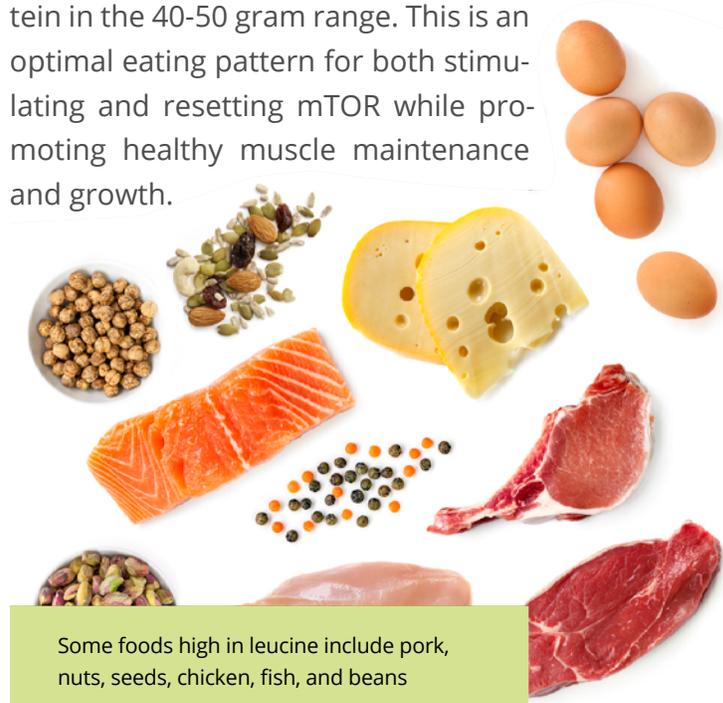
Leucine falls into a special category of amino acids known as branched-chain, or BCAA, and is one of the three essential amino acids that the body requires in order to build muscle tissue, but cannot make on its own. The others are isoleucine and valine. Each of these BCAAs stimulate skeletal muscle protein synthesis, but leucine is by far the most effective – especially in older people who have a tougher time building muscle due to anabolic resistance.<sup>14</sup>

### How to Eat for Leucine Maximization (or Supplement If You're on a Restricted Diet)

For leucine to actually benefit muscle tissue and achieve what's known as the leucine threshold, you have to consume it alongside full-spectrum protein. The body's first priority is to distribute any ingested amino acids into cellular tissue located throughout the digestive tract, liver, kidneys, cardiovascular system, smooth muscles, and

skin. Whatever's leftover is then used to synthesize new muscle mass.

To make sure that you're maximizing leucine's use for this latter purpose, Dr. Lyon and others recommend eating three or four meals per day, depending on your routine level of physical activity. These meals should be evenly distributed throughout the day with 3-5 hour gaps in between, each meal containing high levels of protein in the 40-50 gram range. This is an optimal eating pattern for both stimulating and resetting mTOR while promoting healthy muscle maintenance and growth.



Once your body has reached the leucine threshold during a single meal, it needs time to utilize it all before being replenished. Experts seem to agree that the best way to optimize this is by eating large, high-protein meals high in leucine, followed by refractory periods, followed by another high-protein meal, and so on.<sup>15</sup>

In Dr. Lyon's view, optimal protein intake per day should be around 1.6 grams per kilogram of weight. For the average person, this amounts to about 150 grams of protein per day, or even higher if your weekly routine involves resistance training or other

high-intensity exercise. Current research seems to suggest a per-meal intake level of between 2.5-5 grams, depending on body weight, for reaching the leucine threshold. Eating a six-ounce cut of chicken breast or six large eggs during a single meal is roughly the amount needed to reach this leucine threshold.<sup>16</sup>

Supplementing with leucine is another option, especially if you're not a heavy eater. Just add a 10-gram scoop of BCAAs – roughly one-third of which will be leucine – to your favorite beverage. A 25-gram scoop of pure whey protein isolate also contains about 3 grams of leucine, so whipping up a quick protein shake to accompany your meal is another option. Just remember to eat and supplement all at once rather than “graze,” as this will ensure optimal protein-muscle synthesis.

### **Why Animal Protein Is Better Than Plant Protein for Protein-Muscle Synthesis**

The quality of the protein you eat determines how effectively that protein will help your body – and gram for gram, animal-based protein is superior for supporting proper muscle synthesis. You simply won't find high enough amounts of leucine and other BCAAs in plant-based proteins and foods to achieve this goal, which is why it's much more difficult for vegetarians and vegans to reach the leucine threshold without considerable supplementation – not to mention the fact that many vegetarian and vegan diets are heavy on carbs and low on protein as it is.

Take soy and wheat protein, for instance. According to Dr. Lyon, you would need to consume more than 40 grams of either at one time in order to stimulate the mTOR signaling response that's critical for muscle growth – and even then, this response would be exceptionally weak. 25 grams of whey protein isolate, on the other hand, is



If you choose to supplement with whey protein isolate, be sure to always buy organic

enough to do the trick, easily breaching the 2.5-gram leucine threshold that Dr. Lyon believes is healthy baseline for triggering muscle-protein synthesis.

“There's so much agenda-driven information out there about ‘sustainability’ and those kinds of things that really affect people's health,” she says, referring in part to the claims that vegetable-based foods and proteins are equal to animal protein.

“I saw obese patients, and I also saw the cognitively-impaired, I saw geriatric patients – the other end of longevity. And through a lifetime of yo-yo dieting and low protein, their brains and their muscle tissue is gone. And it's totally preventable,” she warns about low-protein diets that may do more harm than good.

Unless you have a pre-existing health condition, you should have no problem consuming the amount of protein that you need.

Even brain studies in which cognition, wiring, and other metrics were measured using imaging scans have shown that, roughly 4-5 hours after eating a high-protein meal, the brain actually “lights up” in a positive way. The same cannot be said for high-carbohydrate meals and snacking, however, which Dr. Lyon says actively inhibit brain activity and harm cognition.

## Protein Is Good for Virtually Everyone, Regardless of Dietary Restrictions

I tend to side with Dr. Lyon's view that protein supports our body's primary longevity organ: our muscles. There are various reasons why some folks might need to utilize a lower-protein dietary protocol, at least for a while – perhaps one of the most well-known protocols being the ketogenic diet, which involves intentional methionine restriction. But low-protein diets are generally intended to be *temporary* for a very specific purpose – not necessarily a long-term dietary approach.

You can integrate a high-protein diet within other dietary protocols like time-restricted eating and intermittent fasting, both of which synchronize quite well with heavy protein meals. Dr. Lyon actually suggests starting off your day with a 50-gram protein meal if you're a man, or a 35-gram protein meal if you're a woman, and doing so as part of an intermittent fasting routine.



Fasting allows the body to put more energy and focus into the process of effective immune regulation

Even if you're currently on a ketogenic diet that involves only moderate amounts of protein intake, you can take BCAAs, which don't get converted to glucose the same way as other forms of protein. Since the standard keto diet offers little

in the way of muscle stimulation, BCAAs are probably the best way to get your protein and stimulate protein-muscle synthesis while remaining in ketosis.

A helpful tip is to start training your body to endure periods of hunger and avoid the temptation to snack or graze, which completely disrupts the healthy mTOR signaling process. By disciplining your body to eat just three or four high-protein meals per day, with nothing in between, you'll be able to reset your metabolic and mTOR signaling baselines to allow for maximum muscle-protein synthesis every time you eat. This is critical for maintaining metabolic flexibility, which is important for stabilizing your blood sugar throughout the day.

As for amino acids like glutamine and arginine, Dr. Lyon recommends focusing on feeding your muscles first, which means getting as much natural protein from animal-based foods as possible, and adding in BCAAs and whey protein as necessary to supplement. If you're doing all of this right, then the rest of the amino acid chain will take care of itself.

"When you are really hitting enough to look at the macroscopic view of the big tissue, then everything on the cellular level is able to be met," says Dr. Lyon. "If we use food as medicine and we get the food right on a large tissue level, then everything follows suit."

## Exercise Boosts Insulin Sensitivity While Improving Muscle-Protein Synthesis

Finally, exercise is also important for muscle growth. Nothing revs up your metabolism and gets your muscles primed for oxygenation and growth like high-intensity training, which I believe is best done

first thing in the morning before your first high-protein meal of the day. Such activities include things like resistance training, weight-lifting, and interval sprints. Long-distance running and other low-intensity endurance exercises can actually work against the protein-muscle synthesis process because they induce muscle hypertrophy.<sup>17</sup>

According to Dr. Lyon, it's not necessary to stimulate insulin through diet before high-intensity exercise, because the exercise does this itself. Because your muscles are already primed and ready to efficiently intake protein after you're done, Dr. Lyon further says that a reduced post-workout meal containing roughly 25-grams of protein should suffice, while the normal 40-50-gram protein meals are better suited for non-workout days to achieve the same levels of muscle-protein synthesis.

The post-workout insulin spike resulting from both exercise and eating is necessary to optimize your body's glucose and amino acid uptake. Fortunately, it's very brief, and only for the benefit of muscle tissue. Once the BCAAs and other protein molecules are inside your cells and working their magic, insulin levels quickly return to normal. Conversely, carb- or sugar-induced insulin spikes can last hours, causing prolific damage to the body.

This is why a brief, post-workout insulin spike, contrary to popular belief, does *not* ruin ketosis, since these lower levels of circulating insulin actually spur the production of ketones. Sugar-induced insulin spikes are prolonged and highly inflammatory.

Another benefit of strength training is that it helps to protect against cancer. A study out of Spain found that high-intensity interval training

(HIIT) significantly reduces levels of cancer-causing hormones like insulin-like growth factor (IGF), too much of which can spur the growth and spread of cancer cells. It does this by increasing levels of an IGF-binding protein known as IGFBP3 that helps to regulate IGF levels, thwarting cancer potential.<sup>18</sup>

If you're able, engaging in complex, full-body movements like deadlifts and squats are among the most beneficial for prompting protein-muscle synthesis and protecting against diseases like cancer. If you're unable, you can still identify your maximum strength ability for any given exercise and work out a routine where you're able to perform multiple sets of roughly 10 reps each before reaching fatigue. Just be sure to avoid taking antioxidant supplements or foods right after you're done, as low levels of free radical signaling – which antioxidants prevent – are actually important for promoting protein-muscle synthesis.



Deadlifts and squats help rehabilitate the body and prevent future injuries

Most importantly, *listen to your body*. Start to incorporate some of these dietary and lifestyle habits into your daily routine and pay close attention to how you feel. If you start small and work your way up, I'm confident that you're going to feel some major improvements.

If you're unsure about your diet and exercise, you should always consult a qualified professional like who can offer support and further tips.

## 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, father of four wonderful children, devoted Christian, best-selling author, medical researcher, talk radio host, health freedom advocate, former competitive body-builder, and a certified public accountant.

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## Ask the Expert:

# My Top 13 Health Tips for the Newly Diagnosed Cancer Patient

Lessons Learned Through Tragedy, Loss, Research, and Triumph

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By Charlene Bollinger

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[Editor's Note: *This month, we bring you a very special Ask the Expert feature from **The Truth About Cancer** CEO, Charlene Bollinger. With 23 years of research experience into cancer causes and treatments, there are few people better equipped to share impactful advice to those recently diagnosed.*]

It has been 23 years since Ty and I lost dad to a botched surgery due to stomach cancer. That was our first introduction to cancer. And what a blow that was for us. At the time, we were newlyweds, married for a mere 6 months. We were in the clouds, so happy and in love.

Twenty-three years ago, I went to the movies and watched *Braveheart* with friends. As I left that movie theatre, I knew that God had a "Braveheart" in this world for me that would fight all evil. And as he fought evil, I would forever be the princess by his side, helping him to fight the forces of darkness, together forever.

Just weeks later, after seeing *Braveheart* for the very first time, I met Ty. On our first date, he said he loved me. Based on the many frogs and toads I met before him, I didn't know what to think. But 3 days later, after seeing heaven in his eyes, I

said, “I love you, too.” He was instantly my Braveheart, and I was his Princess. We were a match made in heaven beginning our fairy-tale journey together.

Six months after our first date, we were married. We were the happiest two people to ever live. We had no idea what lay ahead for us, but we had a solid foundation of love for God and for one another, so we were certain that no matter what was ahead, we would weather any storm together.



Ty and Charlene Bollinger

But we never guessed that only 6 months after we were married, we would learn that his dad had stomach cancer. I vividly remember the doctors coming out from the emergency room to update us on their progress with dad in the middle of exploratory surgery they were performing to find what they thought was gallstones. They found cancer, and it was so advanced, and he was so young. They looked so troubled and without any hope. I vividly remember the “punch to the gut” feeling, leaving all of us feeling hopeless.

We didn’t have the “outside the box” information back then that is readily available to us today. We didn’t even have the internet. We actually had to go to the library to check out books to learn the truth about cancer. But it was too late for dad. He came out of the surgery without a stomach. They cut it out. Twenty-five days later, dad died. We thought back then that it was the cancer. That’s what the doctors told us. And we believed them, out of sheer ignorance. We thought they were the experts and they knew everything.

Now, after almost 23 years of research on cancer and cancer treatments, we know it wasn’t the cancer that took dad’s life, it was the treatment. The doctors basically botched that surgery. They didn’t stitch him back together properly and dad bled to death.

Six months after losing dad, we lost Ty’s grandfather. We lost his uncle six months after that, and then his cousin, Glen. A few years later we lost his grandmother, then her dad, and finally Ty’s mom, my mother-in-law and best friend. All of them died with cancer, mostly due to the conventional cancer treatments.

Losing mom was the straw that broke the camel’s back. We knew we had to work to save the world from this system that had killed our family. We had to save other families from being plundered by cancer treatments for a lack of knowledge.

Through our many years of research, we learned that there was a better way. Many amazing advanced cancer treatments and protocols are available readily to anyone around the world. You just have to dig a little to find them. And we were determined to bring those many amazing protocols, treatments, and nutritional information to the world. We

were determined to get the lifesaving information we uncovered in an easy to understand format so that everyone around the world and back again could access it and LIVE.

So now, after traveling together on this amazing journey for 23 years, the number one question we are asked is something like this:

**Q: "I was just diagnosed with cancer. Where do I start and what do I do first?"**

That is the one question everyone asks us across the board.

So here it is: my top tips for someone recently diagnosed with cancer. I truly hope some of these bring a bright light and peace to your life during this time.

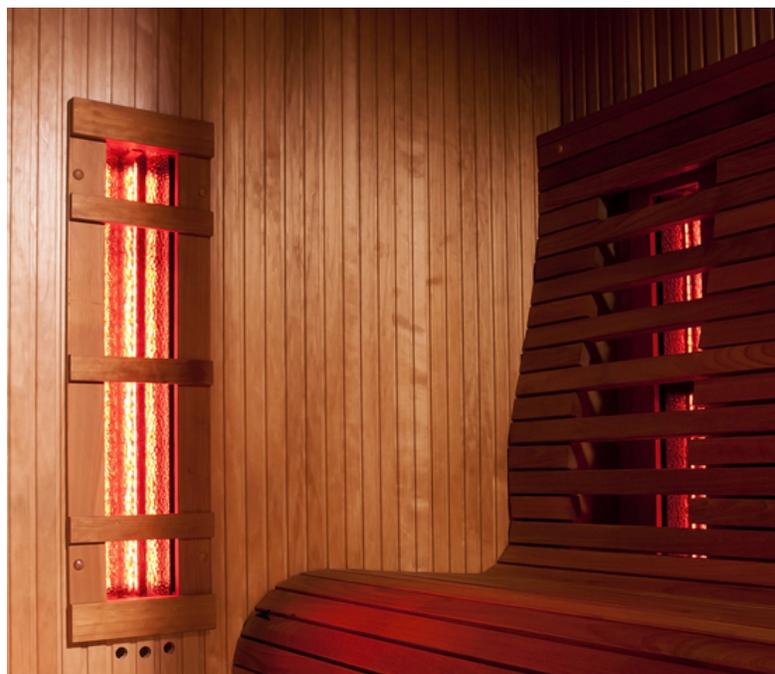
## My Top 13 Health Tips for the Newly Diagnosed Cancer Patient

**1 | Proper Mental Attitude. Replace Fear with Faith.** "A cheerful heart is good medicine, but a crushed spirit dries up the bones." - *Proverbs 17:22*. It is our goal to take the fear out of cancer by providing solid education and information about viable life-saving options outside of the Big 3 standard of care: Chemo, Surgery, and Radiation. Your belief system is the biggest key to recovering and getting well. Hope will take you a long way. And as long as there's breath, there IS hope!

**2 | Proper Hydration.** Read the book *You're Not Sick, you're Thirsty*, by Dr. Fereydoon Batmanghelidj. He treated many sick people in prison with only water, having them drink enough water to be sufficiently hydrated. And most of them recovered from very grave illnesses. The prison water

they had to drink was dirty. So even dirty water is better than a lack of clean water. Of course, if you have access to clean water, drink it in abundance!

**3 | Proper Detox... Sweat, Sweat, Sweat!** We have a great docu-series called *The Truth About Detox*. I highly recommend you watch it, if you haven't already. The bottom line is, [we should all be detoxing](#) regularly. This world is a toxic place, so if nothing else, find an infrared sauna if you can, and sweat regularly. Some toxins clinging to your fat cells will only be released and expelled upon exposure to very high temperatures through your sweat. So do everything you can to sweat regularly!



The routine use of a sauna is one of the most effective means by which to detoxify the body, rejuvenate its cellular system, and promote a vibrant, disease-free life

**4 | Ditch the Sugar!** Sugar feeds cancer. If you want to rid your body of cancer, starve the cancer! Don't feed it.

**5 | Swap Conventional Beauty and Bath Products with Organic Versions.**



There are many toxic chemicals found in beauty products such as lipsticks, nail polishes, skin creams and more

**6 | Get Plenty of Sunlight and Vitamin D.** It has been proven that sufficient levels of vitamin D3 and sunlight (which has an abundance of natural vitamin D3) help keep cancer, depression, and sickness at bay.

**7 | Juice, Juice, Juice!** There are many people we know who juiced their way from cancer to complete recovery and total health. Among the many people who have experienced healing through juicing is one of my best friends: Cherie Calbom, known as “The Juice Lady.” She is fantastic, beautiful, and quite motivating. When you hear her speak, you will want to juice your way back to health, too!

**8 | Overdose on Nutrition.** This is what our good friend, Chris Wark, did to regain his total health after his oncologists left him feeling almost hopeless. Eat plenty of cancer killing foods!

**9 | Rebound!** To optimize the movement of toxins out of our bodies, we need to engage our lymph system by moving. Our good friend, Dr. Wolfe, known as the “Doc of Detox,” tells all his cancer

patients to rebound for at least 20 minutes every single day. Rebounding is by far the very best exercise to help cancer patients regain their health.

**10 | Eat Organic and Non-GMO.** This may sound obvious, but I meet people every day who don't know what GMOs are. Let's keep the food we put into our bodies as natural as possible.

**11 | Healing Sound and Light:** There have been many studies that have shown the healing effects that the *right* sound and light have on the body to help facilitate healing. Our good friend Michael Tyrrell has an amazing company called Wholetones, which provides beautiful, calming, peaceful, healing music. If you haven't yet heard of him, look him up. He is amazing. We love Wholetones!

*Since learning about GMOs, Ty and I only eat organic. When we travel, we always bring our own meals to ensure that our family always has access to real foods. One day, Ty's grandmother asked what the difference between a regular banana and an organic banana was. I replied, "The only difference is that the organic banana hasn't been poisoned." The truth is always uncomfortable to those who are in the dark and you may be mocked by friends and family, as we have. But it will be because of your willingness to be mocked, and your demonstration of empathy and love toward those mockers as you share the truth with them, that many of them will break free from the lies. Your patience and commitment to truth will enable them to implement these healthy strategies for themselves. In living like this, you will save many lives!*

**12 | Fix dental issues.** Since cancer has been directly linked to poor dental health, it is imperative that you take care of your mouth. Visit your local biological dentist for assistance with this critical part of your overall health and wellness program.



Dental cavities are often indicators of other imbalances in your system such as nutrient deficiency

**13 | Wi-Fi Mitigation.** There are different devices out there that help protect your body from the damaging effects of Wi-Fi. With 5G right around the corner, we all need to do what we can to protect ourselves and our families from these damaging frequencies.

Of course, there are always more ways you can help strengthen your body to prevent and fight cancer, but this is a great start. It is my hope that this information will help motivate and inspire you to do all that you can to get healthy, stay healthy, and help those around you to do the same. And remember, even if you have loved ones who think you are totally, off-your-rocker crazy, they still need you to love them enough to share the truth.

And as always, please remember that cancer is NOT a death sentence. As long as there's breath, there's hope. Until next time, keep loving, laughing, and doing all that you can to stay healthy, happy, and strong.

### About Charlene Bollinger



Charlene Bollinger is a devoted Christian, happily married wife, joyful mother of 4 beautiful home-educated children, health freedom advocate, and co-founder and CEO of *The Truth About Cancer*. She is a former model and actress, fitness buff, and lover of healthy food and living.

After losing several family members to conventional cancer treatments, Charlene and Ty learned the truth about cancer and the cancer industry, working together tirelessly to help others to learn the truth that sets them free to live healthy, happy lives.

Charlene speaks at many conferences and is a guest on various health-related radio shows helping people discover that cancer does NOT have to be a death sentence. Together, they host a biweekly internet news program: *TTAC Global Health News*.



*Charlene's*  
Cancer-Fighting  
Kitchen

## Cauliflower Flaxseed Hash



Cauliflower is a proud member of the cruciferous family, and holds many health benefits. The sulforaphane and other isothiocyanates in cruciferous vegetables help prevent cancer metastases, promote cancer cell death, and inhibit cancer cell information. Cauliflower also supports the immune system and increases Natural Killer Cell activity.

Cauliflower contains several powerful nutrients that detoxify harmful estrogenic molecules. It also curbs inflammation and enhances liver detoxification processes.

But cauliflower is not the only shining star in this versatile dish.

Sage is anti-inflammatory, a strong antioxidant, and supports the immune system. Herbs such as sage support the P53 gene, which is a gene that keeps cells under control and growing normally. It is the primary gene that protects men from prostate cancer and women from breast cancer.

*Yield: 4-6 servings*

*Preparation Time: 30 minutes*

### INGREDIENTS:

- 1 tablespoon coconut oil, 1 tablespoon grass-fed pastured butter, (or two tablespoons of either)
- 4-5 shallots, depending on size, chopped
- 6 fresh sage leaves, chopped, more to taste
- Pinch cayenne, or to taste
- One head organic cauliflower, chopped into small pieces (not riced)
- Salt and pepper to taste
- Small bunch of chives, snipped (if you have chive blossoms, pull apart the flowers and add those as well)
- 4 sprigs thyme, leaves stripped and chopped
- 10 tablespoons organic flaxseed, freshly ground

### DIRECTIONS:

1. Melt oil and butter in a large sauté pan over low heat. Add shallots, sage, and cayenne, then cauliflower. Stir often for 5 minutes until beginning to soften. Sprinkle with salt and pepper.
2. Cover partly and cook another 8-10 minutes.
3. Add chives and thyme, stir for 1-2 minutes more.
4. Turn off the heat and stir in flaxseed.

*For added protein, one or two runny eggs go great on top of each portion – simply delicious!*

*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.*

# Mango and Papaya Salad with Citrus-Ginger Vinaigrette



*Yield: 4 servings*

*Preparation Time: 25 minutes*

## **SALAD INGREDIENTS:**

- 1 ripe mango, peeled and sliced  
*(see directions below)*
- 1 ripe papaya, peeled and cubed  
*(see directions below)*
- 1 small red onion, peeled and sliced very thin
- 3 cups baby greens, red mustard greens, or mizuna
- Citrus-Ginger Vinaigrette *(recipe next page)*

## **DIRECTIONS:**

1. Peel the mango with a paring knife; carefully slice the fruit off the pit in long sections, using the knife to peel the contours of the pit. Cut the sections lengthwise into ½ inch slices and cut them again to make cubes.
2. Peel and halve the papaya and scoop out the seeds. Cut the papaya into cubes.
3. Toss the greens with 2 tablespoons vinaigrette and arrange them on 4 plates.
4. Mix the mango with the papaya. Top the greens with the fruit and garnish with onion slices. Drizzle the remaining vinaigrette over the fruit and onions.

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*Lime is the perfect complement to papaya and mangoes. Serve this delicious salad as a light lunch or with grilled fish or chicken for dinner. Always choose the ripest fruit you can find, as the enzyme activity will be stronger and the fruit sweeter.*

*Did you know that papayas are rich in fiber, vitamin C, and antioxidants, which help prevent cholesterol build up in your arteries and lower cancer risk? They also boost immune function, reduce inflammation, and protect your vision from degenerating.*

*Mangoes are rich in carotene, which supports the spleen, liver, brain, and immunity. Mangoes also purge the lymphatic system of toxins and provide bioactive magnesium that calms nerves and promotes sleep. Studies show that mangoes are powerful against cancer, particularly of the breast and colon.*

# Mango and Papaya Salad with Citrus-Ginger Vinaigrette

*continued from page 19*

## Citrus-Ginger Vinaigrette

### INGREDIENTS:

- 1 tablespoon fresh lime juice
- 1 tablespoon fresh orange juice
- ½ tablespoon champagne or white balsamic vinegar
- ½ teaspoon fresh ginger, grated
- ⅛ teaspoon fine Celtic sea salt
- 3 tablespoons extra virgin olive oil
- ¼ teaspoon lime zest, minced

### DIRECTIONS:

1. Carefully remove some of the peel of one lime, avoiding the white pith. Mince the zest and set aside.
2. Combine everything but the lime zest in a blender; blend then whisk in the zest.



# Wild Mushroom and Arugula Salad with White Truffle Vinaigrette



Wild mushrooms are a vital food to help people with weakened immune systems fight off chronic diseases, particularly heart-related conditions, certain cancers, and age-related diseases.

Portobellos are an excellent source of copper, which we need to produce red blood cells and carry oxygen through the body. They are a rich source of selenium and niacin, as well as key B vitamins. An average portobello contains more potassium than a banana – over 600 mg per serving.

The chanterelle mushroom is a distinctively trumpet-shaped wild mushroom with superb flavor and color that ranges from vibrant yellow to deep orange. Though mild, chanterelles have a peppery edge which holds its own against other ingredients. They are a great source of protein and provide many essential B vitamins.

With the egg, this salad makes a perfect lunch, dinner, or even breakfast. If you do not enjoy eggs, this nutritious salad can be served as an appetizer. If you can't find portobello or chanterelle mushrooms, others may be substituted.

Yield: 4 Servings

Preparation Time: 45 minutes - 1 hour

## INGREDIENTS:

- 5 large portobello mushrooms, stems removed, cleaned with a soft brush, and cut into ¼ inch slices
- 9 or 10 chanterelle mushrooms, cleaned with a soft brush under slow running water (be careful not to break the mushrooms)
- 2 tablespoons olive oil
- 1-2 tablespoons garlic, minced (if you love garlic, go for 2 tablespoons)
- 4 cups baby arugula
- White Truffle Vinaigrette (recipe below)
- 1/8 cup sage leaves, cut into chiffonade
- 4 eggs, lightly poached (optional)

## DIRECTIONS:

1. Preheat the oven to 350 degrees
2. In a large mixing bowl, gently toss the mushrooms with the olive oil and garlic and season to taste with salt and pepper.
3. Place in a single layer in a ovenproof baking dish and bake until tender, about 10 minutes. Stir in the sage and set aside. Meanwhile, prepare the vinaigrette.
4. In a large bowl, toss the arugula with 4 tablespoons of the white truffle vinaigrette. Season to taste with salt and pepper. Set aside while you poach the eggs.
5. Mound the greens onto 4 individual plates. Spoon a portion of mushrooms on top of the greens. Top each with a poached egg, if desired. Drizzle with the remaining vinaigrette. *If eggs are omitted, the salad may be arranged on a platter instead of put on individual plates.*

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## White Truffle Vinaigrette

### INGREDIENTS:

- 2 tablespoons chopped shallots
- ¼ cup balsamic vinegar
- 1 teaspoon Dijon mustard
- ¾ cup extra virgin olive oil
- 1 tablespoon white truffle oil
- Salt, to taste
- Pepper, to taste

### DIRECTIONS:

1. Place shallots, vinegar, and mustard in a blender.
2. Allow to sit for 5-10 minutes then blend until smooth.
3. With the motor running, add olive oil slowly and blend until emulsified. Add truffle oil, salt, and pepper and blend for 2 seconds more.



## How to Poach an Egg

### DIRECTIONS:

1. In a deep saucepan add 1 tablespoon organic white vinegar and enough water to the depth of about 2-3 inches. Bring to a simmer over medium heat. The trick to poaching eggs is to use water that is barely simmering. Too many bubbles can break up and disperse the egg whites.
2. Crack one very fresh cold egg into a small cup or ramekin. Fresh eggs have a thicker white near the yolk that will better hold a round shape as it cooks. Stir the water in one direction until it is all smoothly spinning around. Carefully drop the egg into the center of the whirlpool. The swirling water will help prevent the white from spreading out in the pan.
3. Let it poach for 3 minutes, or until the white is set – don't touch it. Remove the egg with a slotted spoon and set it on a clean, dry kitchen towel. To cook more than one poached egg, keep each in warm water, but make sure the water isn't hot enough to overcook the egg. If you want, you can do two eggs at a time.

## About Charlene Bollinger



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## Everyone Has Cancer

By Dr. Véronique Desaulniers

Here is a scientific fact that may surprise you: everyone has cancer cells in their body, including you! For an individual with a robust immune system, the number of mutant cells remains low enough that they do not pose a threat. In fact, cancer cells in the bloodstream don't even raise a red flag on most standard tests until they can be counted in the billions.

So how can you keep the number of cancer cells in your body low? Maintaining your immune system health is the key. Here is how to do it:

### Everyone Has Cancer Cells in Their Body

First, it is important to realize that every cell in your body has the potential to become cancer-

ous. According to Cancer Research UK, on a molecular level, there are three steps that can turn a healthy cell into a cancer cell:

- 1 | The cell divides
- 2 | The cell builds up mistakes in certain genes within it
- 3 | These mistakes become so numerous that the cell grows out of control<sup>1</sup>

You may know the reasons why a scenario like this happens. Drinking excess alcohol, smoking cigarettes, chronic stress, eating a bad diet, not getting enough exercise, being exposed to too

many environmental toxins, and a host of other epigenetic factors come into play. These factors can turn normal, healthy cells into mutant ones that grow out of control.<sup>1</sup>



Environmental toxins such as glyphosate, found in the herbicide Roundup, is a probable human carcinogen

The good news is that long ago our bodies created safety mechanisms to stop cancer cell growth. Take the example of exposure to the sun. Research has proven that a little bit is a good thing for getting vitamin D and other benefits.<sup>2</sup> But if you expose your skin to too much intense sunlight, the powerful UV rays begin to mutate cellular tissue.

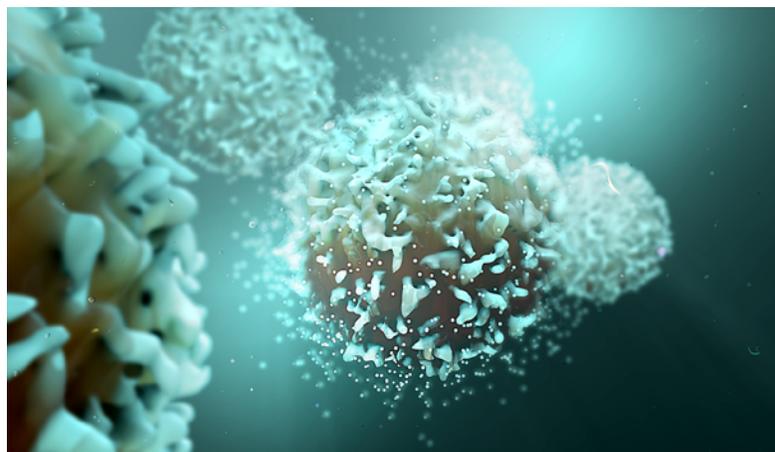
The body, by design, created antioxidants to clean up potentially threatening and cancerous cells. It also has mechanisms that can lock on to the DNA code, looking for faults in order to repair them. Finally, the immune system contains specialized “cancer fighters,” such as Natural Killer cells, which can wipe out damaged DNA or force them to commit “suicide” in a cellular process called apoptosis.<sup>3</sup>

Even with all these ingenious systems in place, it is inevitable that some genetic “blips” will slip through the cracks. In fact, this happens quite regularly.<sup>4</sup>

Think about it: each time a cell divides, it copies billions of DNA “letters” which make up its unique genetic code. The more cancer-causing substances to which a cell is exposed, the more chances a damaged cell has to escape the body’s protective mechanisms and grow into a tumor.

### The Importance of Natural Killer Cells

Natural Killer cells, or NK cells, are a type of white blood cell, or lymphocyte. They are part of the lymphatic system and are formed in the bone marrow, tonsils, thymus, spleen, liver, skin, intestine, lungs, and lymph nodes. They also play a vital role in cancer protection. Their job is to patrol the blood stream for pathogens, especially cancer cells.



NK cells are truly unique in how they react to cancer

NK cells are truly unique in how they react to cancer. You can think of them as the commanders of an army of cancer-seeking and cancer-fighting substances in the body. They have the ability to control both cancer metastasis and tumor growth, according to a 2011 investigation<sup>5</sup> conducted at the Alexander Flemming Foundation Cancer Institute in Brazil. They do this by first spotting cells that they identify chemically as cancerous. When they find something that looks out of the ordinary, they call their “friends” to the scene. Then a

group of NK cells surround the defective cell and blast it with a toxic substance to destroy it. Finally, the NK cells send out another call (in the form of a hormone) to additional immune system cells who clean up the mess.

Be sure to review my [article from June](#), where we go into the role, function, and importance of NK cells in depth, and also outline some concrete steps to boost their production and function in your body.

All of the suggestions outlined below are designed to super-charge your immunity and boost your NK cell count:

» **Eat blueberries!** In a report published in the journal *Applied Physiology Nutrition and Metabolism*,<sup>6</sup> researchers found that the Natural Killer cell count of trained runners who eat blueberries were higher, and inflammation lower, than those who did not after only 6 weeks.

» **Spice up your food.** Turmeric, black pepper, and cardamom have all been shown not only to lower inflammation and boost the immune system, but also to increase the cytotoxic activity of NK cells.<sup>7</sup>

» **Consume more garlic.** Garlic and onions are rich in sulfur compounds which can stimulate NK cell production and action, according to a study at Tarbiat Modares University in Tehran.<sup>8</sup> That same study found that phytonutrients in garlic had a direct effect on breast cancer cells.

» **Consider selenium supplementation.** Selenium is an essential nutrient for the body. Many other minerals, like iodine and magnesium, cannot be processed without the help of

selenium. Since the 1990s, studies have also linked selenium to increased NK cell activity, including a pivotal study conducted by New York University in the mid-1990s.<sup>9</sup>



Foods high in selenium include: Brazil nuts, shellfish, and shitake mushrooms

» **Serve up some mushrooms.** Mushrooms are rich in beta glucans, which are a specific type of polysaccharide known for their super-stimulating effects on the immune system. A 2014 study published in the *International Journal of Oncology* found that beta glucans also helped curb breast cancer by affecting certain kinds of gene expression.<sup>10</sup>

### **6 Things You Can Do RIGHT NOW to Prevent Cancer, Metastasis, and Cancer Recurrence**

Natural Killer cells really are the “it” factor for ensuring that cancer cell counts in your body stay below the radar. But they are not the only factor.

The absolute best way to protect against cancer is to reduce your exposure to cancer-causing

agents (carcinogens) in the first place. Secondly, you must support the mechanisms which protect against DNA mutation. Since the vast majority of safeguards against cancer can be found in the immune system, keeping this system as strong as possible is paramount. Whether you have already gone through traditional cancer therapies and want to boost your immunity, have been diagnosed and are learning about your options, or simply want to prevent cancer from occurring in the first place, getting your immune system back online is essential to keeping cancer cells at bay—and living a vibrant, disease free life!

### **Follow these steps and you will be well on your way to doing just that:**

**1 | Cut the Sugar!** Of all the things you can do to keep your immune system strong and cancer cells weak, cutting sugar and simple carbs from your diet as much as possible is the most important. This is common sense, since glucose is cancer's favorite food. When you consume sugary drinks, desserts, and candy (or even grain products that use refined flour, like bread, pasta, and cookies), you are literally feeding cancer cells and making them stronger.

A 2016 study<sup>11</sup> conducted by MD Anderson Cancer Center Department of Palliative, Rehabilitation, and Integrative Medicine found that when mice were given a diet comparable to the typical Western diet, breast cancer tumor size and metastasis grew significantly compared to those who were fed a no-sugar, no-starch diet.

According to the study's co-author, Dr. Lorenzo Cohen: "We determined that it was specifically fructose, in table sugar and high-fructose corn syrup, ubiquitous within our food system, which

was responsible for facilitating lung metastasis and 12-HETE production in breast tumors."

**2 | Heal Your Gut.** If you think that there is no correlation between gut health and immune system health, keep in mind that as much as 80% of immune system cells reside in your intestinal tract lining. This includes a large number of Natural Killer cells. Again, cutting down on sugar and simple carbs can help restore gut balance, as can upping your intake of probiotics such as kefir, cultured vegetables, and probiotic supplements. Prebiotics are also important, since they are considered fuel for beneficial gut bacteria. Some prebiotics include garlic, onions, leeks, and asparagus.<sup>12</sup>



Asparagus is a natural diuretic, which helps with bloating by flushing excess fluid and salt from the body

**3 | Stay Alkaline.** Cancer loves acidic, low-oxygen environments (the internal environments encouraged by the Standard American Diet). Evict dangerous cancer cells from your body by eating a diet that helps to alkalize the body. The best diet for this is made up of 80% fresh vegetables and vegetable juices, seeds, nuts, and some fresh fruit. If meat proteins are part of your daily rou-

tine, make sure it is clean and green – grass fed and pasture raised. Depending on your weight, portions should not exceed the size of a deck of cards. Wild caught fish can also be beneficial.

A quick tip for alkalizing the body is to enjoy a big glass of clean water (about 8 oz) with a teaspoon or two of organic, raw, apple cider vinegar. This is a very refreshing way to start your day!

**4 | Get Enough Quality Sleep.** When we sleep, the body's systems, especially the digestive and immune systems, heal and repair. It's also when the emotions and thoughts from the day are processed (and sometimes come to life in dreams). This nighttime healing activity helps keep your immune system on track – and you can help this process by getting plenty of quality sleep each night.



Melatonin is often called the body's "pacemaker"

From 1 - 4am, melatonin is produced by the pineal gland. You may have heard of melatonin as a hormone that helps you sleep, but it does much more than that. Melatonin is also a heavy-duty cancer killer. A 2016 Brazilian study<sup>13</sup> on liver can-

cer cells found that melatonin helps the immune system in many ways, including in the regulation of Natural Killer cell production. Melatonin also appears to have an effect on cancer stem cells, according to a 2013 study published in the *British Journal of Cancer*.<sup>14</sup>

**5 | Detox Your Body.** In our modern world, we are exposed to more toxins than ever before – through the air, water, and food that we eat. In addition, our bodies make their own toxic waste in response to stress. All of these toxins are compounded as we age and are subject to *immune senescence*,<sup>15</sup> or the general decline in immune system function. Immune senescence effects NK production as well.

We can curb this rapid decline significantly by helping our detoxification pathways – especially the liver – do their job. First, we can lower the amount of toxins that go into our bodies by eating organic, non-GMO, hormone-free, and antibiotic-free as much as possible. Drinking only filtered water (no BPA-filled plastic bottles!) and using natural sundry products can help as well. Next, we can actively assist our liver and other detoxification pathways through special protocols and herbs. There are literally dozens of ways, both big and small, that you can help your detox pathways.

A periodic cleanse or fast is another option. Intermittent fasting, saunas and other forms of hyperthermia, and coffee enemas are other methods. You can even detox your mouth by consulting with a biological dentist who can advise you on removing amalgams and root canals. Learn to include herbs such as milk thistle and spirulina to your daily diet as well. Spirulina, as well chlorella, has been shown to detox heavy metals.



Lower your risk of developing cancer by supplementing your diet with 200-600 mg of milk thistle daily

**6 | Eat a Cancer-Healing Diet.** I touched on diet when I spoke about alkalinity, as well as key substances to help with NK cell production, but diet is an incredibly important topic for cancer prevention and healing, and bears repeating. For a vibrant life, eat a diet that is high in vegetables (at least 80%), moderate in proteins and complex grains, and as low as possible in sugars. Consider a dairy-free and gluten-free diet if gut health is an issue for you. And ALWAYS go organic, pesticide free, GMO-free, hormone-free, and antibiotic-free whenever possible.

**7 | Reduce Stress!** Finally, there is stress. Let's face it: stress is a part of life in this fast-paced world. When stress becomes chronic, our stress responses become heightened, and don't go down to a steady state for hours, days, weeks, or even years. This is where danger to our physical bodies can become a reality. Activating the "flight or fight" mode increases the hormone cortisol. Studies have linked chronically high levels of cortisol (also known as chronic stress)<sup>16</sup> to inflammation, high blood sugar, depression,<sup>17</sup> and diseases such as Alzheimer's<sup>18</sup> and cancer. Increased

adrenaline has also been shown to increase the risk for cancer metastasis.

Fortunately, you can learn ways to manage stress and slip out of the "fight or flight" mode. In fact, this is critical for maintaining a healthy immune system and keeping cancer under wraps. Like detoxing, there are many ways to reduce stress, including: meditation, walking, Tapping or EFT, yoga or stretching, watching a funny movie, reading an inspiring book, or doing a favorite craft. In fact, the simple act of breathing deeply through the nose automatically signals the body and mind that you are safe, and can calm stress responses.



Emotional Freedom Technique (also known as EFT or Tapping) is a fast, easy, and effective way to reduce anxiety

Everyone has some level of cancer cell production. The good news is that our bodies have amazing and clever ways of sniffing out these cells and destroying them through the immune system, and Natural Killer cells in particular.

All we have to do is [support these mechanisms](#) through healthy eating and lifestyles. Then cancer will become a non-factor in your life – and you'll never have to fear cancer again!

## About Dr. Véronique Desaulniers



Dr. Véronique Desaulniers (also known as “Dr. V”) is a natural health pioneer with over thirty years of 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](http://BreastCancerConqueror.com)

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