

Cancer: Is There Hope?

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WHAT CAUSES CANCER?

Cancer has now surpassed heart disease as the number one cause of death for Americans below 85.¹ More than 10 million Americans have a history of invasive cancer. Two and one half million Americans will be diagnosed with cancer this year, (one million skin cancers). Cancer will claim over half a million victims this year.² Why all this cancer? What causes cancer? Can it be avoided? What is the answer for cancer?

As a medical student, I was presented one day with a patient who had a lesion on his lower leg.

"Dr. Clark, examine Mr. Doe's leg and tell the class your diagnosis."

The leg was well developed and muscular with clean skin, except an ugly purple raised area.

"Does Mr. Doe have Kaposi's sarcoma?" I queried, mostly guessing.

"Yes", came the affirming reply, "And..."

"Oh no," I thought, "here comes another question."

"Why do you think Mr. Doe has Kaposi's sarcoma?"

To my limited knowledge Kaposi's sarcoma occurred only in people with AIDS as a consequence of HIV infection, so I asked, "Is the patient HIV positive?"

"No", came the reply, "but that is a good guess. Mr. Doe has had a kidney transplant and so is on drugs that suppress his immune system."

This was my awakening to the fact that cancer often arises when the immune system is compromised or suppressed for any reason. It is true that Kaposi's sarcoma is 1300x more likely to occur in AIDS patients, but lymphoma, (a cancer of the lymph glands throughout the whole body), is 135x more likely, and lung cancer about five times more likely to occur in HIV positive individuals. Just to give you a perspective, ALL cancers are more than twice as common in people whose immune system is disabled or compromised by HIV infection.

Some years ago, a series of studies examined how sugar consumption weakens the immune system. Results showed that if a person ate no sugar for 12 hours, each white blood cell could destroy 14 dangerous bacteria. When 24 teaspoons of sugar were eaten (the amount in 2 cans of soda), the white blood cells were so compromised that they could only destroy one bacterium each.

Cancer has now surpassed heart disease as the number one cause of death for Americans below 85.

"But what does the immune system's ability to eat bacteria have to do with cancer?" you may be asking. A diet high in refined carbohydrates such as sugar, starch, etc. suppresses the immune system, leaving the body unprotected from diseases like cancer. In fact, studies show that a person on a high glycemic index diet (high in refined carbohydrates) has a significantly increased risk of acquiring breast,³ prostate,⁴ colorectal,⁵ endometrial,⁶ gastric,⁷ ovarian,⁸ or pancreatic^{9,10} cancer. Malnutrition is another cause of a poor immune system. Malnutrition comes in two forms, severe caloric starvation and consumption of empty calories.¹¹ Additionally as people get older their immune systems tend to age, losing the power to fight diseases like cancer.¹²

CANCER AND VIRUSES

You may be wondering why cancer crops up in the absence of an active immune system. For this puzzle piece, let's return for a minute to the AIDS/Kaposi's association. Kaposi's sarcoma is now known to be the result of a viral infection with either human herpes virus number 8 (HHV-8) or a virus known as Kaposi's Sarcoma-associated Virus (KSV).¹³ More and more,

infectious agents are being identified in relation to cancer.

So where do people get exposed to these infectious viruses? More and more, animal products such as beef, pork, chicken, turkey, milk and eggs are infected with cancer-causing viruses. Blood of workers in meatpacking plants show evidence of these viruses. These workers have an increased incidence of cancer, including cancers of the lung, mouth and throat, colon, bladder, and kidney.¹⁴ Poultry slaughterhouse workers have an increased incidence of throat cancer, liver cancer, lymphoma and leukemia.¹⁵

Animal products are known to increase the risk of cancer. The "Adventist Health Study" revealed that prostate cancer was 41% higher in meat eaters, colon cancer¹⁶ was 85% higher and ovarian cancer¹⁷ was 130% higher than in people who were vegetarians.

THE ANIMAL CONNECTION

A study out of Harvard revealed that consumption of meat and dairy products doubles the risk of metastatic prostate cancer. Meat by itself increases metastatic prostate cancer by 66%. Processed meats such as bacon, beef, pork or lamb also increase the risk of metastatic prostate cancer.¹⁸

The increased risk of getting cancer from animals is not limited to the consumption of their bodies. In a 4 year case control study in Italy, the consumption of cheese was found to increase the risk of non-Hodgkin lymphoma by 66%.¹⁹

Compared to normal breasts, cancerous breasts have 3 times the incidence of infection with bovine leukemia virus, (a virus common in milk and meat).²⁰

There are other reasons for the meat/cancer association. One of these is the way meat is prepared for marketing and the way it is cooked. Red meat is associated with increased formation of N-nitroso compounds. These compounds cause DNA damage which results in increased colorectal cancer.²¹ When people cook meat "well-done" at high temperatures, in an effort to kill all the trichina or "mad cow" disease, they produce mutagenic compounds called heterocyclic amines, which significantly increase the incidence of colorectal cancer.²²

Animal foods prepared by frying, broiling or microwaving have been shown to increase the risk of cancer by the formation of toxins called heterocyclic amines.²³

Protein, as much as we need it, is safe only in low quantities. Too much protein tends to suppress the immune system. Compared to a low protein diet (5%), a high protein diet (25%) like ours has been shown to both promote tumors and increase metastasis to the liver and lungs.²⁴

Let's take a minute to look a little closer at dairy products. To begin with, it will help you to know that one of the important parts of your immune system is a white cell called the "natural killer cell". Milk is immunosuppressive-the more you drink, the worse your natural killer cells will function. What's more, tripling your milk protein intake triples your cancer risk.²⁵ One of the reasons for this is that cows are fed high protein diets and given growth hormones.²⁶ Cows today produce more milk than they did 100 years ago. Three servings of milk per day significantly increase insulin like growth factor in humans.²⁷ Insulin-like growth factor elevation is linked to cancer of the prostate,²⁸ breast,^{29,30} and lung.³¹

HORMONES AND CANCER

At this point it would be well to understand the role of hormones in breast cancer initiation and progression. Anything that increases or prolongs a woman's exposure to estrogen increases her risk of breast cancer. Estradiol, one of the estrogens, is a potent cell growth stimulator, which is why it also can promote cancer. Thus, there is a greater incidence of cancer associated with: early onset of menarche, late menopause, (because the woman is exposed to more years of elevated hormones), hormone replacement therapy, postmenopausal obesity, (because fat cells can produce estrogen) and history of an abortion (because after the loss of the fetus the woman is exposed to the estrogens that were meant to support the pregnancy).³²

One often unrecognized source of large doses of growth hormones comes from the use of animal foods. Estradiol is used as a growth promoter in farm animals. Estradiol can actually induce tumors in rats, mice, and hamsters. When levels become artificially elevated in humans there is a corresponding increase in breast and uterine cancer.³³ Postmenopausal women with estradiol levels > 9 units (in their entire blood volume) had a 7-fold higher rate of breast cancer than that of women with undetectable levels.³⁴ If a level of nine or greater is bad, you may ask, what would be a source of

estradiol that might send my hormones that high? I was interested to find that one American beefsteak had 20 units, one liter of milk 18 units, 2 eggs 13 units, 50 gm of butter 4 units, and 100 gm of cheese 3 units!³⁵ One beefsteak has twice the hormones as found in the entire blood volume of one woman.

Another food that will drive up your hormones is fat. Studies show that high dietary fat intake is associated with elevated serum estrogens and androgens.³⁶ In 1975 Carroll and Khor produced charts showing increased rates of breast, colon, and prostate cancer with increased calorie, fat, and protein intake, country by country. There was a linear relationship between a country's per capita fat intake and the death rate from cancer.³⁷ Some fats are more dangerous than others. High saturated fat intake triples the risk of dying from prostate cancer.³⁸ Another dangerous fat is the chemically produced fat known as trans-fat. Trans-fat intake has been shown to increase breast,³⁹ prostate,⁴⁰ and colon cancer.⁴¹

My first clinical experience was in gynecology/obstetrics. Besides delivering babies and attending surgeries, much of my time was spent in clinic. Within a few days it became very apparent that from the day a girl came in complaining of discomfort with the onset of menses to the time that a middle aged woman came in to tell of her discomfort with hot flashes, we had women on pharmacological doses of hormones.

"And what are the consequences?" you may ask.

In a study of 37,000 women, oral contraceptives significantly increased breast cancer risk.^{42,43} Perimenopausal hormone-replacement therapy with estrogen alone increases the risk of endometrial cancer by 45%.⁴⁴ And when estrogen is combined with progesterone, breast cancer increases.⁴⁵ Some replacement hormones are from "natural" sources such as pregnant horse urine. But many are simply chemicals from the laboratory.

VITAMIN D AND SUNSHINE

Vitamin D has received a lot of attention recently as an immune stimulator and an anti-cancer agent. Its primary source is ultra-violet light striking the skin.

"But", you may say, "sun causes skin cancer."

Here is where the discriminating mind will discern the real cause of skin cancer. In a study of precancerous skin lesions, it was found that

people on a high fat diet developed three times the number of lesions compared to those on a low fat diet. Thus, in order to get your anti-cancer vitamin D from the sun, you need also to limit the fat in your diet.⁴⁶

WEIGHTY MATTERS

We have been talking about the fat that you eat, but now we need to make mention of the fat that you wear. Fat cells are actually involved in estrogen production. Excess estrogen production in obese women gives them a greater risk of dying with breast cancer.⁴⁷ Obesity is also a risk factor for pancreatic cancer⁴⁸, not to mention diabetes and arthritis. Don't underestimate the contribution of overeating of any kind to the development of cancer.⁴⁹ When you consume extra food, it tends not only to make you grow, but to make cancer grow also.⁵⁰

Obesity is usually linked with elevated triglycerides and cholesterol. Elevated cholesterol and triglycerides are associated with significant increases in breast cancer. On the other hand, high levels of HDL, the good cholesterol, significantly decrease breast cancer risk.⁵¹

CHEMICAL TOXINS

This brings us to our next topic--chemicals in our environment. Chemicals can act like hormones, increasing the risk of cancer.⁵² Insecticides such as DDT and DDD have hormonal activity⁵³ suppressing the immune system,^{54,55} and increasing the risk of cancer.⁵⁶ Chemicals tend to accumulate in our environment. Plants can take on small portions of these chemicals. Small creatures eat the plants and then are eaten by larger ones. As you go up the food chain a process called biomagnification occurs. For example, sea otters tested for PCBs and DDT showed up to 240x greater levels than that found in their prey.⁵⁷ The closer to the beginning of the food chain (eat from the garden) the safer your food.

The body is constantly surveying its DNA for damage and making repairs. When DNA damage accumulates, cancer can result. It has been found that lung cancer patients have suppressed DNA repair.⁵⁸ One commonly encountered substance, which prevents repair of damaged DNA, is caffeine.⁵⁹ Consequently, two or more cups of coffee per day more than double the risk of ovarian cancer.⁶⁰ What's more, when caffeine is combined with a high fat

diet, it significantly increases breast cancer risk.⁶¹

In this age of scientific discovery, the lung cancer/tobacco connection need hardly be mentioned. But few realize the extent to which other cancers are affected by this poison. Tobacco's influence can be seen in many malignancies, including cancers of the lip, mouth, throat, voice box, trachea, esophagus, stomach, liver, pancreas, bladder, kidney, cervix, leukemia, colon, skin, and penis.⁶²

Alcohol, a poison to the cells, is involved in 75% of esophageal cancers, 50% of mouth and larynx cancers, 30% of liver cancers, as well as colon, rectal and breast cancer. All totalled, 60,000 deaths per year are related to, not traffic accidents, domestic violence or homicides, but alcohol related cancer.⁶³

New building materials are a common source of environmental toxins.

Workers in a newly remodelled office were found to have increased chemicals in their blood stream and significant decline in their immune function.⁶⁴ Cancer causing chemicals found indoors include: chloroform, acetaldehyde, formaldehyde, dichlorobenzene, styrene, methylene chloride.⁶⁵

Another source of environmental toxins is the chemicals added to food as preservatives or flavor enhancers.⁶⁶ There are many additives to food for which side effects are unknown. Others are questionable or have produced cancer in animals such as BHA,^{67,68} BHT,^{69,70,71} and potassium bromate,^{72,73,74,75} etc.

In our modern age of plastics more and more of our food is being presented to us in poly containers. Today we get products such as milk, peanut butter, bottled water, apple sauce, and some jams, just to name a few, in plastic containers. It might cause concern to realize that the people making these containers--workers at plastic factories, have 5x the risk of pancreatic and liver cancer.⁷⁶

A lot of the toxic chemicals in our environment that have carcinogenic potential are halogenated polycarbons. The most common halogens in these substances are fluoride,^{77,78} bromide, or chloride. In these compounds, a halogen such as chloride is attached to a carbon structure, like gasoline, which makes the carbon structure more toxic and poisonous. Should it be any surprise to discover that these halogens are not much better for us if put in our water? A study in Canada revealed that consumption of

chlorinated water increases the risk of cancer of the esophagus and stomach and leukemia.^{79,80}

When I was a medical student I did research with the General Surgery Department. I was looking at the previous five years of pancreatic cancer patients. To my surprise, none of them was still alive. All had died, and this usually after several surgeries and much pain. The risk of pancreatic cancer is significantly increased by obesity⁸¹ and high consumption of: salt, smoked meat, fried food, refined sugar, food with preservatives or additives,⁸² and coffee.^{83,84,85} Salt also increases the risk of brain cancer.⁸⁶ Knowing the risk factors helps us understand what lifestyle changes we can make to improve our chances of avoiding this killer disease.

We all have seen a diesel truck grinding its way up a hill belching black smoke from its exhaust pipe. Products of combustion surround us even in our everyday life (exhaust from cars, gas stoves, etc.) all of which have carcinogenic potential.⁸⁷ Railroad workers exposed to diesel fumes have a 40% increase in mortality from lung cancer.⁸⁸

In recent years the phrase "oxidative stress" has become popular. Oxidative stress is merely a measure of the inflammation in the body. Measuring the number of free radicals in the blood often assesses this. Oxidative stress damages DNA that leads to the development of cancer. Chronic inflammation increases the risk of cancer in the gastrointestinal tract.⁸⁹ For example gastro-esophageal reflux can cause esophagitis, known as Barrett's Esophagus. In Barrett's Esophagus, cancer develops because the esophagus is constantly healing itself and just can't stop healing.⁹⁰ Cancer is basically cells that are growing or healing out of control.

MELATONIN

Melatonin is a protective, anti-cancer hormone and strong antioxidant.⁹¹ Light at night suppresses melatonin and increases cancer cell growth rates. Evidence now links exposures to light at night to elevated breast⁹² and colorectal cancers in night workers.⁹³

STRESS

Stress and depression increase cancer because they decrease the immune system's ability to find and destroy cancer cells.^{94,95} In a ten year follow up study, in which social coping skills, along with the traditional risk factors; smoking, drinking and medical diseases were

considered, people with greater stress from poor interpersonal skills had a 40% higher death rate from cancer.⁹⁶ In another study, divorced or separated women had a 126% higher risk of getting breast cancer, and widowed 100% higher.⁹⁷ Cancer develops more commonly and grows faster in people with suppressed anger.⁹⁸ These mental / emotional causes of cancer are some of the most powerful risk factors known to man.

RADIATION

One threat to DNA integrity is all the modern sources of radiation. Sources of radiation include radioactive elements, X-rays, gamma rays, microwaves, radio transmitters, electromagnetic fields, ultraviolet light, solar radiation, and nuclear radiation. For example, children living within 2 km of an AM radio station have more than double the chances of getting leukemia as those 20 km or more away.⁹⁹

Another modern source of radiation is the cell phone. Cell phones significantly increase astrocytomas (brain cancer) in the temporal area of the brain (right where you hold your cell phone). There is also an increase in acoustic neurinomas (ear cancer).¹⁰⁰

Electric blankets can also be a significant source of radiation. Breast cancer risk associated with electric blanket use increases with the number of years of use, the number of seasons of use, and the length of time of use each night.¹⁰¹ It has been suggested that if you want your bed warmed, turn on the electric blanket or heating pad until the desired temperature is reached, then unplug it before getting into bed. Breast cancer risk associated with electric blanket use increases with the number of years of use, the number of seasons of use, and the length of time of use each night.

The relation between breast cancer and electromagnetic field exposure has been the object of much study. For women telephone installers, repairers, and line workers, the risk of breast cancer goes up 117%; for system analysts and programmers 65%; for telegraph and radio operators 40%; and for telephone operators 27%.¹⁰²

Children are affected by radiation as well. For example, the risk of leukemia is elevated in: children whose mothers used an electric blanket or an electric mattress pad during pregnancy; children who themselves use electric blankets or electric mattress pads, hair dryers, video

machines in arcades, or video games connected to a television.¹⁰³

HEAVY METALS

Elevated levels of heavy metals including: iron, nickel, chromium, zinc, cadmium, mercury, and lead have been found in tumorous tissues of cancer patients.¹⁰⁴ These heavy metals increase oxidative stress and DNA damage, which result in cancer. Mercury, when combined with chloride, produces cancer by acting as a hormone, binding to and activating estrogen receptors.¹⁰⁵

SUMMARY OF CANCER CAUSES

To summarize: each cell in the body is regulated by code (DNA), much like a computer. If the code goes bad, so does the cell. As we've seen, there are a number of things that can derail the DNA code. DNA damage results from: viruses, toxins, oxidative stress, and radiation. Cancer arises when the immune system fails to identify and deal with cells running on altered DNA. Too many hormones, and chronic healing and inflammation, initiate the development of cancer and accelerate its growth.

THE SOLUTION

"Okay", you're thinking, "So what do I do now? Everything causes cancer, I'm doomed!"

Please don't throw in the towel just yet. Thus far our approach has been to show the avoidable causes of cancer. Now we are going to show you that the answer to the cancer problem.

Disease is an effort of nature to free the system from conditions that result from a violation of the laws of health.

"The only hope of better things is in the education of the people in right principles. Let physicians teach the people that restorative power is not in drugs, but in nature. Disease is an effort of nature to free the system from conditions that result from a violation of the laws of health. In case of sickness, the cause should be ascertained. Unhealthful conditions should be changed, wrong habits corrected. Then nature is to be assisted in her effort to expel impurities and to re-establish right conditions in the system."¹⁰⁶

“Pure air, sunlight, abstemiousness, rest, exercise, proper diet, the use of water, trust in divine power—these are the true remedies”¹⁰⁷, “Gratitude, rejoicing, benevolence, trust in God's love and care--these are health's greatest safeguard.”¹⁰⁸

A good understanding of these laws of health is essential to minimizing cancer's risk factors. Let's look at each of these principles of health and what their impact is on cancer.

FRESH AIR

Pure, fresh, outdoor air is a wonderful stimulant to the immune system. This is because of the negative ions present in outdoor air, which significantly decrease the incidence of cancer and inhibit tumor growth by the enhancing natural killer cell activity.¹⁰⁹ Some toxins come from mold (mycotoxicosis and aflatoxins).¹¹⁰ Mold toxins are felt to be responsible for liver¹¹¹ and lung¹¹² cancer growth. Keeping the premises and basement of your homes free from mold help prevent cancer. Outdoor air has much less toxins.

Thrash and Thrash in their book *“Hope For Cancer”* report, “A group of rats with cancer were allowed to breathe negatively charged (outdoor) air, while an equal number breathed common indoor air. After one month the cancer in the rats breathing the indoor air was twice the size of the cancer in the rats breathing the negatively charged air.”¹¹³

“When the weather will permit, all who can possible do so ought to walk in the open air every day, summer and winter. But the clothing should be suitable for the exercise, and the feet should be well protected. A walk, even in winter, would be more beneficial to the health than all the medicine the doctors may prescribe.”¹¹⁴

SUNLIGHT

Sunlight is a precious gift from God, which brings us a sense of wellbeing from the endorphins it creates. We have already mentioned that vitamin D is essential to the prevention of cancer. Everyone should get at least 20 minutes of sunshine a day with at least 25% of their skin exposed to the sun. These 20 minutes should be without sunscreen, (which blocks synthesis of vitamin D). Vitamin D is a potent inhibitor of cancer growth and protects against prostate, breast, pancreas and colon cancer. Colon tumor growth rate increases by 60% when there is a deficiency in Vitamin D.¹¹⁵

TEMPERANCE

Temperance or abstemiousness is avoiding all things that are harmful and using wisely those things that are good.

An example for need for total abstinence would be tobacco or alcohol. Is there any hope for a smoker or drinker? Lung cancer risk decreases and survival improves the moment you quit. But the longer the time since smoking, the better the survival outcome.¹¹⁶ Similarly esophageal cancer risk declines with time since last drinking.¹¹⁷

An example of appropriate moderation is in the area of diet. We all have to eat, but we don't necessarily have to all eat as much as we are accustomed to. Much research now exists pointing to the fact that caloric restriction, (eating less food), actually helps fight disease and promotes better health. Calorie restriction decreases cancer by keeping the normal cell cycle under tight regulation and by keeping in check growth factors, hormones, and stress hormones like cortisol.¹¹⁸ Studies now show that caloric restriction both reduces DNA damage and enhances DNA repair (thus reducing cancer risk).¹¹⁹ Okinawans have taught us a lot in this area. They eat 40% fewer calories than Americans yet they have 80% fewer breast and prostate cancers, and 50% fewer ovarian and colon cancers.¹²⁰ We mentioned that increasing age is associated with a decline in the immune system making cancer more prevalent as people get older. Caloric restriction, while maintaining good nutrition, restores immune function to that found in younger individuals.¹²¹ Obesity also impairs the immune system's ability to find and destroy cancer cells, but again, caloric restriction has been shown to restore immune responsiveness.¹²²

REST

I'm sure we can all testify to the necessity of proper rest. Jesus Christ said, “Come ye yourselves apart into a desert place, and rest a while.”¹²³ People who sleep well have significantly better immune function than people with insomnia.¹²⁴ Getting between 7 and 8 hours of sleep each night significantly reduces the risk of dying from cancer and other diseases. Sleeping 6 hours or less, or 9 hours or more, increases the risk of dying by 70%.¹²⁵ Another aspect of rest is regularity. You should go to bed at the same time and get up at the same time

every day. It is important not to disturb the sleep wake cycle. Disrupting the sleep wake cycle disrupts your circadian rhythms. Disruption of circadian rhythms is associated with accelerated growth of malignant tumors.^{126, 127}

Yet another aspect of cyclic rest is a weekly rest. A study in Georgia discovered that Seventh-day Adventists have higher levels of immune stimulating antioxidants. The study went on to show that vegetarian Seventh-day Adventists have even higher levels of immune stimulating antioxidants.¹²⁸ While it was interesting that vegetarians have higher antioxidant levels, what interested me was that even the non-health conscious Sabbath keepers showed health improvements over the general population.

EXERCISE

Now that we've written about rest, we're going to talk about just the opposite—exercise. As individuals age their immune system declines. Being physically fit helps attenuate this decline. The immune system responds positively to moderate exercise. Studies have shown that people who cultivate healthy lungs and hearts, (cardiopulmonary fitness), have one-half the risk of mortality from cancer as people who don't take fitness seriously.¹²⁹ Observe though that over fatigue increases the risk of viral infections, (of which cancer can be one).¹³⁰ Regular moderate exercise reduces risk of breast cancer by up to 66%^{131,132,133,134} and also reduces the risk of cancers of the ovaries,¹³⁵ uterus,¹³⁶ prostate,¹³⁷ colon,^{138,139} and lungs.¹⁴⁰ Exercise minimizes cancer by reducing serum estradiol¹⁴¹ and insulin like growth hormone¹⁴² which, we showed earlier, cause cancer. It has been said that those who can't find time to exercise will have to find time to be sick.

PROPER DIET

We will now discuss proper diet. This is the section that people tend to fixate on, to the exclusion of all others. But let me say right here that while diet is very important, all the other components of a cancer free lifestyle are equally important, and should not be over looked. Your lifestyle should be examined as a whole.

A fresh uncooked fruit and vegetable diet has been shown to invigorate the immune system, reduce inflammation, lessen allergic diseases, heal infections and help fight cancer.¹⁴³ This is

partly because fruit and vegetables are filled with micronutrients that help prevent and combat cancer.^{144,145} As constant inflammation often produces cancer, you will be happy to know that naturally occurring flavonoids and phytochemicals found in fruits, vegetables, grains, seeds and nuts contain anti-inflammatory properties. Flavonoids and phytochemicals are micronutrients as important to your body as vitamins.¹⁴⁶

Antioxidants are additional micronutrients found in fruit and vegetables. They help boost your immune system and restore it if it has gotten out of shape.¹⁴⁷ Oxidation is the word we use to describe what happens when something, (usually a chemical such as a protein or a fat), interacts with oxygen. This oxidized chemical can now oxidize another body part. It's kind of like a game of tag. Tag, you're it! A body part that you definitely do not want to get oxidized is your DNA, because this would lead to the formation of cancer cells. Antioxidants stop the process long before it reaches the DNA. They also promote the repair of oxidized DNA.

FRUIT

Fruit is especially high in antioxidants; vitamin C, flavonoids, limonoids, fiber, pectin and phytochemicals that neutralize cancer-causing agents entering the body.¹⁴⁸

Vitamin C is an antioxidant found in fruit and vegetables that reduces the risk of kidney cancer,¹⁴⁹ breast cancer,¹⁵⁰ and leukemia,¹⁵¹ a type of blood cancer. Oranges, grapefruit, and lemons, are a great source of Vitamin C. Vitamin C also helps neutralize the cancer-causing nitrosamines found in red meats.¹⁵²

Citrus fruits also contain limonene that actually neutralizes cancer-causing substances that cause stomach and breast cancer.^{153,154} Pectin, a soluble fruit fiber, found in citrus and other fruit, prevents the spread or metastases of cancer.¹⁵⁵

If I were looking for a super fruit to help fight cancer I think it might be kiwifruit. Kiwifruit provides protection against DNA damage by enhancing antioxidant levels and actually stimulating the repair of damaged DNA.¹⁵⁶

Pineapple prevents stomach cancer because it inhibits the formation of the nitrosamines that come from meat.¹⁵⁷ Perhaps it would be well to eat a pineapple with each well-done beefsteak in order to be safe!!

Many people eat prunes, or dried plums to help them with their bowel movements because

they know these foods are high in fiber. What they may not realize is that the fiber from these plums or prunes decreases colon cancer by mopping up toxins, such as bile acids, coming out of the liver.¹⁵⁸

We've all heard it said, "An apple a day keeps the doctor away." And while that may have been a commercial advertisement by the fruit growers of America for their product, apple pectin has indeed been discovered to strengthen the immune system and prevent growth of cancerous tumors in the colon.¹⁵⁹

Studies coming out of Italy, (and other countries where the "Mediterranean Diet", high in tomato products, predominates), reveal that high consumption of tomatoes protects against cancers of the mouth, esophagus, stomach, colon, rectum and prostate.^{160,161} This protection may come from the phytochemical lycopene found in tomatoes.¹⁶²

VEGETABLES

High in vitamin A, vitamin C, phytochemicals and fiber, vegetables have the ability to oppose the action of carcinogens,¹⁶³ and are very important in the fight against cancer.¹⁶⁴

Carcinogens are substances that can cause cancer. Powerful anticarcinogens are found in cauliflower.^{165,166} These anticarcinogens inhibit the formation of malignant tumors.¹⁶⁷ High levels of vitamin A and phytochemicals give broccoli high anticarcinogenic properties as well.¹⁶⁸

Phytochemicals found in cruciferous vegetables increase the urinary excretion of hormones and hormonally active substances that promote cancer.

Cruciferous vegetables, (which include broccoli, cauliflower, Brussels sprouts, and cabbage), are extremely valuable for cancer prevention. They can actually keep cancer-causing toxins from binding to DNA in the cell, thereby reducing DNA damage. What's more they increase the elimination of cancer causing toxins from the liver and intestines.¹⁶⁹ Remember all those hormones and hormonally active substances that cause cancer? Phytochemicals in cruciferous vegetables increase the urinary excretion of estrogens.¹⁷⁰

Cabbage is a key food in the prevention of pancreatic^{171,172} breast and ovarian cancer.¹⁷³

Cabbage contains phytochemicals that can reduce the carcinogenic effects of benzopyrene, a cancer-causing chemical found in tobacco smoke.¹⁷⁴ The phytochemicals in cabbage prevent, as well as have a curative effect on, tumor growth.¹⁷⁵

The bulb foods, (onion and garlic family), are also known to have anti-cancer properties. They lower the risk of stomach cancer,¹⁷⁶ prevent the development of tumor cells,¹⁷⁷ and are helpful in the treatment of cancers of the stomach and colon.¹⁷⁸ Garlic is especially helpful in the prevention of cancer of the stomach,¹⁷⁹ breast,¹⁸⁰ prostate,^{181,182} endometrium,¹⁸³ and bladder.¹⁸⁴ It works to combat cancer by stimulating the immune system, detoxifying carcinogens, and by a direct toxic effect on cancer cells.¹⁸⁵

There are other vegetables which aid in the fight against cancer. Spinach prevents cancer of the throat, breast, colon, and bladder.¹⁸⁶ The vitamin A, carotenoids, and fiber in carrots give them powerful anticarcinogenic effects.¹⁸⁷ Don't be fooled though, taking vitamin A pills does not provide this same protective effect.¹⁸⁸ It's hard to reproduce nature in the laboratory. Eating pellets created in a commercial factory can in no way substitute for good whole food. Yellow orange vegetables all contain beta-carotene, vitamin A and other "carotenoids" which have been shown to reduce the risk of cancer of the lungs, prostate and pancreas.¹⁸⁹

Squash contains beta-carotene, vitamin C, and fiber that counteract the effects of carcinogenic substances on the colon.^{190,191}

Radishes have valuable properties that impede DNA changes that lead to cancer.¹⁹²

Beets have properties that are anticarcinogenic.¹⁹³

Peppers are high in antioxidant vitamins A and C which are powerful anticarcinogens.^{194,195}

Legumes (beans) are good cancer fighters too. Regular consumption of beans is associated with a significant decrease in cancers of the pancreas,¹⁹⁶ prostate,^{197,198} and endometrium,¹⁹⁹ (the lining of the uterus). One legume that has come to special attention is the soybean. Soy has strong antioxidant properties and is a potent immune stimulant.²⁰⁰ It has shown benefits for viral illnesses, particularly cancer.²⁰¹ Soy products also possess anti-inflammatory properties that decrease the potential for cancer development.^{202,203} Soy products have been shown to protect against cancer of the prostate, breast, colon, rectum, stomach and lung.^{204,205,206}

Soy, as well as the common seasoning turmeric, help counteract the estrogenic effects of hormones and hormonally active environmental toxins on breast tissue.^{207, 208} We call the substances in soy and turmeric phytoestrogens. Phytoestrogens, such as those contained in soy, have been shown to counter the carcinogenic effects of estradiol on the cells of the body, reducing not only the risk of breast cancer, but lung,²⁰⁹ prostate,²¹⁰ and endometrial^{211, 212, 213} cancer as well. Since soy phytoestrogens only weakly stimulate the estrogen receptor they are not cancer-causing.²¹⁴ And since they bind the estrogen receptor, other estrogens cannot bind to the receptor. Thus, the weak phytoestrogens replace the strong estrogens, (such as estradiol), protecting the cells from being stimulated to cancer formation.²¹⁵ It's like having a weak politician in public office rather than a strong one who can get things done. Whereas in politics this would not be desirable, in the body is preferable.

FIBER

Research indicates that diets high in fat and meat, and low in fiber, markedly increase oxidative stress in the digestive system, which in turn increase the risk of colorectal cancer.²¹⁶ High fiber intake effectively reduces the oxidative stress caused by high-fat and high-cholesterol intake.^{217, 218} Grains, (such as wheat, rye, and oats), are a good source of this fiber.²¹⁹ Rye helps reduce the carcinogenic effect on the intestines of toxins processed by the liver.²²⁰ Wheat and wheat bran have antioxidant and anticarcinogenic properties.^{221, 222} One way fiber prevents cancer is by acting as a sponge to mop up and remove excess hormones from the body.^{223, 224} As a result, diets high in fiber can reduce the risk of breast cancer.²²⁵

While diets high in animal, trans, and oxidized fats cause cancer, natural fats high in omega-3s are anti-inflammatory, and have anticarcinogenic properties.²²⁶ In addition to promoting blood flow, omega-3 fatty acids, found in walnuts, flax and olive oil, have anti-inflammatory properties.²²⁷ Olive oil has been shown to reduce the risk of breast cancer by up to 33%.²²⁸

There is abundant research that a diet of fresh fruit, grains, nuts and vegetables provides the best protection against cancer. Some may be wondering why meat is not as beneficial. The cow, for example, consumes wheat grass and

barley green so that he will not get heart disease, cancer, diabetes and arthritis, but she does not pass these benefits along to the consumers of her body. Meat has very little in the way of nutrition capable of cancer prevention. When you come down to it, the biggest reason people come down with cancer is because they fail to eat enough fresh fruits and vegetables.²²⁹ Should it be any surprise that what we have been talking about is the original, Creator's diet,

"Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat." "And thou shalt eat the herb of the field".²³⁰

WATER

Water is the fluid life sails on. Water carries nutrition from the blood to the cells. It then carries waste products from the cells to the blood for excretion by liver, kidneys, lungs, and sweat glands. Daily water needs including drinking water, water in beverages, and water in food. You need between 8 and 12 eight-ounce glasses of water a day. Strenuous physical exercise and heat can greatly increase daily water needs, and there is substantial variability between individuals.²³¹

In modern times, with the advent of convenience machines and antiperspirants, perspiration has been nearly eliminated from our societies. As a consequence, more stress is placed on the kidneys, liver and lungs to eliminate cancer-causing toxins from the body. If we know what toxins are involved in our particular cancer, we should make every effort to eliminate it. One useful way to accomplish this by sweating. Drinking water, exercising, and taking saunas to produce sweat, expel toxins from the body.²³²

TRUST IN GOD

Trust in God's love and care, can have a positive effect in several ways.

Trust in God is a part of good spiritual health. Those with good spiritual health, have longer life expectancy, greater well-being and life satisfaction. They deal better with illness, have fewer hospitalizations and shorter hospital stays. They suffer less anxiety and depression,

and enjoy better immune system function that helps in the fight against cancer.²³³

God has said that all healing comes from Him and that listening to His voice and obeying His commands brings health. Trusting Him is part of the healing process.

“And said, If thou wilt diligently hearken to the voice of the LORD thy God, and wilt do that which is right in his sight, and wilt give ear to his commandments, and keep all his statutes, I will put none of these diseases upon thee, which I have brought upon the Egyptians: for I am the LORD that healeth thee.”²³⁴

Trusting God brings the benefit of social ties at church. On the other hand, socially isolated people are more likely to die of cancer.²³⁵

Studies reveal that giving support to friends, relatives, neighbors, and family, significantly reduces mortality, while merely receiving support does not improve mortality.

Most people who enter into a full trusting relationship with God are led to a life of service to others. Studies reveal that giving support to friends, relatives, neighbors, and family, significantly reduces mortality, while merely receiving support does not improve mortality.²³⁶ A study from the university of Michigan revealed that volunteers of community organizations are 2-1/2 times less likely to die than those who do not become involved in volunteer work. voluntary work, more than any other activity, dramatically increased life expectancy.²³⁷ Haven't we always known that, "It is more blessed to give than to receive."²³⁸ Although merely attending religious services is beneficial, one surprising study showed that among religious people, volunteers, had 60% less mortality.²³⁹

GRATITUDE

Studies show that gratitude--an attitude of thankfulness, significantly improves long-term breast cancer survival.²⁴⁰ Our health would be greatly improved if we made a list of ten things for which we are thankful every day of our lives.

REJOICING

Research confirms that happy people have better physical health, increased longevity, and fewer illnesses. If they do get sick, they have less pain.²⁴¹ Happy people have more IgA, (an immune system antibody), in their saliva and less cortisol in their blood.²⁴²

SUMMARY

In summary: cancer is most often the result of a failure of the immune system to destroy bad cells. Bad cells are created by viruses, toxins, oxidative stress, hormones, poor nutrition and/or radiation. Once cancer begins it is often driven on by hormones or inflammation.

The solution is to maximize our health and expel toxins through the natural remedies: pure air, sunlight, abstemiousness, rest, exercise, proper diet, the use of water, gratitude, rejoicing, benevolence, and trust in God's love and care.

Take advantage of all the benefits:

- Eat foods as grown.
- Exercise in the open air and sunshine.
- Drink plenty of pure water.
- Rest in bed at night and in the love and providence of God.
- Avoid animal products high in protein, fat, viruses, toxins and growth hormones.
- Avoid foods and substances that damage DNA and suppress the immune system; like sugar, animal products, tobacco, alcohol, caffeine, heavy metals and pesticides.
- Choose a lifestyle and diet which expels toxins from your body, invigorates your immune system and keeps you at peak physical, mental and spiritual performance.

For further ideas on how to incorporate what you have just learned into your daily life, see the chapter entitled, "How Can I Apply Healthy Principles in My Daily Life".

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