

# Summary from “How Not to Die”

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Summary by



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## **Dedication**

These excerpts are dedicated to my dad. I'll always remember what could have been. Thanks for being my inspiration to help others. I hope you are proud. I hope that this will inspire readers to lead a healthier lifestyle and in turn, help those around you. To a healthier you!

## **My Mission**

Time flies. Before we know it, we are looking back at high school or college and realizing how long ago it really has been. Watching children grow up makes this become surreal. I can attest to that as a schoolteacher and tennis instructor! Why bring this up? With so much in our lives we can get lost in the moment and not plan for our future. I'm not talking about your finances but your health. We all have an obligation to our loved ones to be there for them for as long as possible without the strain and burden of having someone take care of you.

I can attest to the pain and suffering of losing a loved one from poor health. My dad passed a couple of years ago from poor health due to neglecting his body for decades. It finally caught up to him. The look of realization that he has done this to himself and his loved ones is something I will never forget. I'm sure many of my readers have a similar story. The thing is, it doesn't have to be that way. Education and support to make healthy habits shows that it is never too late and science can back this up. The problem is that there are no companies that will make millions showing that certain foods can do substantially better with health problems than pharmaceutical drugs. I dug deep into finding a book that would have this type of research-based education on eating right to prevent disease. I found it.

The book is called, "How Not to Die." A medical doctor named Michael Greger writes it. This man saw how broken the system is on how we treat people at hospitals. In fact, less than 5% of all the education the doctors receive is based on diet! His book is loaded with research that show how foods can prevent, stop or reverse the common diseases that kill millions of Americans each year. I decided to read it. As I started, I knew right away this would be a great book to recommend to others but I also realize that this book is a long read and would take a lot of dedication to get through. I decided to spend the next three months going through this book and creating "cliff notes" that take out the research to condense the reading down to multiple pages. Each section is divided on diets to help prevent and cure certain diseases. See the table of contents for specifics. I've written over 11,000 words and 15 pages of information regarding this. Let me say this though. The book is better [Click here](#) to get yourself a copy of it and keep it as a great reference for guidance to a healthier you.

To take it a step higher, I've also written a small blurb after each section called "The bottom line" in which I tell you the most important aspects of that section and recommendations to put it in practice. The last section is Dr. Greger's conclusion that includes my own note on the importance of the book. I can personally say that my diet choices have evolved over time and this book has given me the education to feel confident that I'm doing just about everything I can to ensure a healthy and disease-free life. With my busy lifestyle and ambition for life itself, it's a good thing I've found it now rather than later. I hope you all can take something out of this. Please share as much as possible. I don't want anyone to feel the pain I did the day I watched my father pass from poor health.

## **How to Read This**

To save time, I did not mention the name of most of the studies nor talk about how the study was performed. Please purchase the book for that information but I can assure you that the information in here is accurate and well documented. The way I wrote it does not show much flow. Meaning one sentence may not connect to the other. Most of what I have is research and research only. I will simply go on to the next study and have you make your own conclusions of the information presented to you.

Many of the studies are going to go against many of your beliefs on proper diet. Please have an open mind and understand that there are no emotions tied to this research. It's factual and gives great insight on a healthy diet. At the end of each section, I put some simple guidelines to follow if you want to help avoid the disease the section is talking about. Happy reading!

## **Introduction of Studies and Facts**

42,000 autopsies were carefully examined in a study and revealed that nobody dies of old age. On average, the amount of time a physician will talk to you about nutrition is 10 seconds. Worldwide, over a trillion dollars is now spent on pharmaceuticals. America accounts for 33% of those sales. America is ranked in the upper 20s for worldwide life expectancy. The standard American diet is ranked 11 out of a hundred in nutrition. 32% of our diet comes from meat or animal protein, 57% comes from processed plant food, 11% comes from whole grains, beans, fruits and vegetables.

An interesting study showed that the traditional American diet is very similar to the last meal that prisoners asked for before execution. If we eat like this then death will be near! Not smoking, not being overweight, getting 30 minutes of exercise and eating healthier can wipe out 78% of the risks to the main diseases we suffer from in America. 80,000+ people were followed around for 6 years and found that three main lifestyle choices impacted mortality more than anything else. The three were eating right, not smoking, and engaging in regular activity. Remember these guidelines were pretty weak. For example, smoking meant not smoking currently. Regular activity would be 20 minutes of walking. Also, the diet would be trying to get to the top 40% of what the suggested diet should look like.

A study that tested the vitamin C level of people's blood vitamin C was the indicator of having lots of plant and fruits in their body showed that a high amount of vitamin C can knock off 14 years compared to those that did not. The links of your telomere shortens as you get older. Forensic scientists use this concept to figure out the age of people with blood samples sometimes. The idea is to keep the telomere from shortening otherwise you will die eventually. Smoking will triple the rate of telomere loss so don't do that. Telomerase rebuilds telomeres. These are found in the oldest trees of the world in California. These trees are over 4800 years old and have telomerase. Scientists have found that humans have telomerase as well the only intervention proven to increase the amount of telomerase is eating plant and fruit diets and no dairy or meat. The top 15 deaths are shown to be combated through a plant-based diet.

## Heart Disease

Japanese men living in America in their forties have the same risk for developing heart disease as Japanese men living in Japan in their 60s. The China Study shows research that followed hundreds of thousands of people in China and Africa and the developed countries were the only ones where heart disease was found. And this is not just because a developed country has people living longer. A study showed that 600 deaths of the same age in Uganda had one heart attack while the same aged people in Saint Louis Missouri had over a hundred heart attacks. The odds of getting heart disease in Africa are 1:1,000.

A study showed that heart disease is a choice when researchers tracked people living in low risk heart attack areas that moved to areas known to have higher rates of heart attacks. Those people's risk for heart disease increased dramatically, indicating that genes are only a piece of the puzzle in preventing heart disease. Studies on fish oil and oily fish consumption have shown no correlation to reduce risk to heart disease. 100% of Americans under the age of 10 have already shown signs of early heart disease.

Diets mainly of animal products including dairy and meat have been associated with high LDL levels, which is the only precursor for heart disease. **Research of thousands of people showed that no one died of a heart attack with an LDL of 70 or lower.** This means a total cholesterol level of 150 or lower. There are only two ways of doing this. Take pills or eat a diet mainly of plant-based foods. Studies have shown that even people with heart disease can reverse the effects through a plant-based diet. Their body basically healed on its own when given the opportunity to. A single serving of Brazil nuts can lower your cholesterol more than a statin drug (short and long term). In fact, the cholesterol drops naturally when you initially take the serving of Brazil nuts. 9 hours after eating the serving of Brazil nuts, LDL dropped by 20 points. The effects can last for 30 days.

In 1977 the US Senate on the nutritional needs of the public published a guideline to eat more plant-based diet and avoid dairy and meat. Here is a quote from the document I personally found; *"What are the risks associated with eating less meat, less fat, less saturated fat, less cholesterol, less sugar, less salt and more fruits, vegetables, unsaturated fat and cereal products – especially whole grain cereals? There are none that can be identified and important benefits can be expected."* Soon after that the entire group was disbanded and the guidelines were dismissed due to the pressure of the dairy egg and meat associations. [Here is an article related to this.](#)

**Bottom Line:** Cholesterol is the indicator for heart disease. Cholesterol only comes from animal products. If you want to lower your chance of heart disease, lower your intake of animal products.

## Lung Disease

A study was performed to have smokers take 25 times the amount of broccoli than a normal American does a day, which is one stem. This increase in broccoli increased their resistance to lung cancer. Curcumin is the natural ingredient that can stop and help fight cancer. It is naturally found in the spice turmeric. Curcumin also delays cell death that happens naturally in the body. Surprisingly, it also makes cancer cells more susceptible to dying.

Heterocyclic amines are shown to be released when drying meat. These are carcinogens and have shown high rates of lung cancer for people that are around cooking of fried meats. Nitrosamines are released when frying bacon and have the highest risk to lung cancer when exposed. People that want to reduce their risk or effects of asthma should consider eating less eggs and other meat products such as dairy and meat. Studies have shown that this helps a lot. For example, 100,000 people were tested in India on their risk for asthma and it increased a lot with just an occasional or daily intake of meat. In Australia they took patients that were suffering from asthma and gave them an American type of diet with one serving of fruit or vegetable per day and their conditions worsened while others that took a plant-based diet had a significant decline in their asthma conditions.

In case you are thinking that supplements will help, studies have shown that this did not help asthma patients at all. 30 severely impaired patients suffering from asthma in Sweden were given a full plant-based diet after no medication or other medical help did anything. 70% improved in four months and 90% improved in one year. They also lost an average of 18 pounds and their LDL cholesterol levels dropped.

**Bottom Line:** Don't cook meat in a low ventilated area. Include the spice Turmeric in your foods. Eat more plant-based foods to help your lungs out.

## Brain Disease

Fiber has shown mounting evidence that can help with many diseases including brain diseases as stroke and Alzheimer's. 97% of Americans eat a deficient diet of fiber. You can only get fiber from one source and that is whole plant food. This is because animals have bones to hold them up well plants have fiber to hold them up. Only an increase of 7 grams of fiber can lower your chance of stroke by 70%.

Hundreds of kids were studied for 24 years starting when they were in kindergarten. By the age of eight, there was already a clear difference in the stiffness of arteries leading to the brain with kids that ate a high-fiber diet versus a low fiber diet. We are not talking about a lot of fiber here. An apple for a day or a half a cup of beans are examples of this. It is recommended to eat 25 grams of soluble fiber and 47 grams of insoluble fiber. Soluble fiber comes from beans, nuts and grains. Insoluble fiber comes from seeds and skins of fruit.

Less than 2% of Americans eat the required dosage of potassium. Potassium is mainly found from plants. An increase of 1600 milligrams of potassium has shown a decrease in stroke and heart attacks by 20%. Bananas are not a good source, as they are not even in the top 1,000 foods that have high potassium. They are equivalent to having as much potassium as a Reese's Pieces serving. Leafy greens, beans and sweet potatoes have the highest amount of potassium.

Asparagine is known to increase blood flow throughout the body and is found in oranges. For example, before heading out to ski, you can help your body stay warm by eating an orange. It also lowers your blood pressure. A study revealed this with women who struggled with cold temperatures. Those that trained with citrus had half as cold of hands as the placebo group.

Free radicals are thought to be part of the aging process. To limit this, eat foods with antioxidants. To know which one has a lot, simply cut one open and if it browns quickly, it will not have a lot. Examples are bananas and apples. Melons, on the other hand, have high antioxidants. When trying to lower your risk for brain diseases, think of your heart. Studies have shown that the same foods that help your heart help your brain.

High cholesterol can triple your odds of Alzheimer's. One thing to keep in mind is that although Alzheimer's happens to people in their older age, symptoms start early. It's never too early to eat a healthy diet mainly of plants. Eating a handful of berries per day can lower your age of the brain by two years. Polyphenol has been known to be a great antioxidant and helping with brain function. Look for concord grapes or cranberries.

Polyphenols are known to help with the nerves of the brain and keep plaque from building in the arteries. The spice saffron has clinically been proven to help with the symptoms of Alzheimer's just as much as prescribed medication. Beta-amyloids have been known to be in high amounts in the body when Alzheimer's is prevalent. Beta-amyloids are found in high amounts in meat products. Examples are barbecue chicken, fish, hot dog, and bacon.

Another way to combat Alzheimer's is to exercise. A study performed with Alzheimer's patients that showed exercise allowed for better memory after 6 months of exercising



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for an hour a day for 4 days a week versus another group that just stretched during that time.

**Bottom Line:** Eat foods with high amounts of Potassium and antioxidants. Avoid foods with high cholesterol.

## Kidney Disease

Only 41% of Americans tested had normal kidney function. Low kidney function usually results in death of something else since it can harm other organs due to the inefficiency the kidney is exhibiting. Kidneys are very red because they are packed with blood vessels so a diet related to combating heart disease will be very similar to combating kidney disease.

An indicator of a failing kidney would be that proteins are in your urine. This is because kidneys should be keeping all vital nutrients (including proteins) within the body and just getting rid of toxic material. The three indicators of low kidney function are animal fats, animal protein, and high cholesterol. These are only found in one thing and that is animal products. This has been such a well-known fact that doctors have prescribed statin drugs to lower cholesterol when patients are dealing with low kidney functions. Another factor that damages kidneys would be high uric acid and high blood pressure. This comes from a high sugar diet.

Your kidneys are designed to work hard once in a while due to the times when hunter-gatherers would find large game and eat a lot of protein. Presently we are eating a lot of animal protein daily; which puts a strain on the kidneys and eventually can lead to kidney disease. All protein is not created equal. Kidneys have been shown to handle animal protein differently than plant protein. There is no noticeable stress on the kidneys when eating plant protein. A study showed that eating tuna increased kidney filtration rate by 36% but eating something like tofu put zero strain on the kidneys. Half a dozen studies have proven that replacing animal protein with plant protein can reduce kidney failure. When subjects were given meat proteins and inflammatory drugs, the kidneys did not respond in hyper mode, showing that meats are associated with inflammation.

Another reason not to eat meat or animal products is their acid content. The animal products consumed create acid in the body in which your kidneys have to work overtime to get rid of. Meat products do not necessarily have acid but they have sulfur containing amino acids that will turn into acid when digested. A study of 12,000 Americans shows that the higher the amount of acid in the body, the higher the risk of protein leakage in their urine; which is the common signal for kidney damage.

Your kidneys can also get overworked when they produce ammonia to neutralize the acid from the foods eaten. After a while the ammonia will build up at the kidneys and cause damage. 1 in 11 Americans suffer from kidney stones while two decades ago it was 1 out of 20. A study in the late seventies found that animal meat raised the amount of stone producing minerals that are related to kidney stones by 250%. A 2014 study confirmed this and showed that all meat does this, not just red meat.

No studies have shown that plants are related to higher risk of kidney stones, even the ones with high amounts of oxalates in them. Uric acid is related to the second most common kidney stones. As mentioned before, they are found in meat products. See how acidic your urine is by boiling cabbage in using that water as a pH indicator. Pee into a toilet and pour some of the boiled cabbage water that you made into the bowl. Purple or pink is acidic and blue is basic. Shoot for blue.

Excess phosphorus is thought to have contributed to many problems in the human body

including the kidneys. Even though phosphorus is something we need but too much is definitely a bad thing. Most problematic form of phosphorus is phosphate. This is found in foods to mimic a different color. Coca Cola does this for an example. This phosphate gets absorbed into the blood much faster than the Phosphite form that is found in plants. Meats are injected with phosphate as well to improve their color while showing them off at the meat market. This is a problem because it already has phosphate in it so it's essentially doubling the amount. Europe has banned the use of phosphate in meat because of how detrimental they are in our cardiovascular system. **Be careful with meat products as the FDA has allowed the own producer of their meat to determine what is safe or not in regards to additives they add to the meat.**

Nitrosamines are the reason why cigarettes were banned in public. They are known to cause cancer and have effects beyond just the smoker. They have been banned everywhere except for one thing: meat. One hot dog has the same amount of nitrosamines as four cigarettes. Nitrosamines are also found in fresh meat too. This might help explain the rising effect of cancer in the kidney yet the US has less smokers. Kidney cancer is 4% heritable. To put things in perspective, a study in Europe confirmed that if processed meats were taken out of the diet, 3% of ALL deaths could be avoided. The packages that say no nitrites or nitrates added are probably wrong. What they do is take the nitrates out of boiling celery, which is the meat market's sneaky way of saying they aren't adding any. The reason why vegetables such as celery eaten raw does not harm the body with nitrides is because nitrides aren't harmful without having nitrosamines with it. Only meat has this in it.

**Bottom Line:** Avoid meat. And if you are not going to, eat the highest quality you can find. As a side note, my mom had low kidney function (was showing protein in her urine) and I recommended her to take out meat products from her diet. Within two weeks, her kidney function is almost back to normal.

## Digestive Cancer

Most cancers are preventable through external factors such as diet. Turmeric is known to fight digestive cancers in the Colon. India has a less chance for cancer of any type. It's no coincidence that only 7% of the population eat meat and that they grow more fruits and vegetables than almost any other country. The smaller the stool-size in bowel movements, the higher the risk of colon cancer. The threshold number seems to be right around a half a pound. You can measure your stools by weighing yourself before and after a bowel movement and see where yours is. The average time food gets digested after you eat it in a conventional America diet is about 5 days. If it were plant-based, it would be a day or two. Remember that plants are the ones with fiber in them not animal products.

Uganda has the lowest rate of the second leading killer of cancer in the world, colon cancer. The United States is one of the highest rates with Connecticut being the highest state. Iron is needed to transport oxygen in the body but too much can be a problem. The problem is that iron doesn't work as well if it comes from animal meat compared to plants. This is because the body cannot get rid of the excess iron on a meat-based diet, making it problematic as iron can act as an oxidizing agent that can cause cancer. Avoid drinking tea with iron foods. It will inhibit the absorption. Adding vitamin C to your diet during iron intake will help the absorption.

Phytates seem to be higher in people with low chances of colon cancer. They help get rid of the excess Iron in your blood. The problem with many meats is that they have iron and no Phytates to get rid of the extra iron that will cause free radicals in the body. Interestingly, we were told in the past to soak legumes and other plant-based foods to get rid of the Phytates so that our body can absorb the nutrients that Phytates do not allow us to do. The new studies do not confirm this and actually show that a high Phytate diet increases bone density and mineral bone density. Red meat once a week doubles your risk of colon cancer but a serving of beans can mitigate the effects. Phytates are known to reduce the risk and help treat ALL cancers and they are found in plant food, not meat products. Side effects include lower heart disease and low kidney stone risk.

11 common fruits were tested which will suppress cancer cells the most. Organic berries won. This worked with actual human patients too. The fats from animal fats were related to pancreatic cancer risk while plant fats had no correlation. Poultry viruses have been known to cause cancer in chickens. A new study showed that people who slaughtered chickens for work had a 9x risk of getting pancreatic cancer. This is compared to a smoker of 50 years having only twice the risk of getting pancreatic cancer. How about eating poultry? A 2-ounce consumption of chicken has shown a connection in raising the risk of pancreatic cancer. This is thought to be from the viruses found in chickens.

Cancer in the Esophagus is linked to acid reflux disease. To avoid acid reflux, eat plant food as they are the foods that will not increase the amount of acid in the body. As a side note on acid reflux, [check this cool video out on the effects of an acid based diet.](#) 5% of the Asian population suffers from acid reflux while 28% of the US population

does. Within 5 minutes of eating animal fat, the sphincter relaxes to allow acid to go into the esophagus. This adds to the risk of cancer in the esophagus.

Fiber intake can help lower the risk to as much as 33%. Smaller and firmer stools are related to a low fiber diet. This can cause the stomach to be pushed into the diaphragm and cause hernias. It can also increase the acid spill over into the esophagus. This impacts 1 out of 5 Americans. A study had people eat a pound of strawberries a day that had precursors to cancer in esophagus. After a few weeks, 80% of the participants had no more indications of cancer.

**Bottom Line:** Fiber is huge. Eat a lot of plant-based foods to get your fiber naturally. You should have at least one substantial bowel movement a day.

## Infections

3 out of 4 infections that have impacted Americans come from domesticated animals. Example: the domestication of goats is the origin of Tuberculosis. Immune function is very important to keep you alive. There are diseases in your body waiting for the immune system to weaken. A group of 65- to 85-year-old people were either given five servings of plant-based foods versus one serving per day. The group that ate more servings of plant foods showed a higher resistance to infections.

Kale is known to help your immune systems. You can even cook the kale before consuming it. Broccoli and other leafy greens contain compounds necessary to help the immune system of the intestines. The body has developed a way to boost the immune system during eating only when leafy greens are consumed. The compounds in the greens are considered the “bat signal” of the immune system. Basically, vegetables are the indicators to the body that it’s food time and the immune system can start to boost up. Interesting, camel pee has shown to do the same thing!

Garlic is good to keep infections out of the lungs. Blueberries can boost the type of white blood cells called natural killers. Probiotics eat fiber so the best way to keep your good bacteria healthy, eat plant food. Prebiotics are what probiotics eat. Prebiotics are fiber in plant food. Exercise lowers the number of infections people get by 50%.

95% of infections start at the moist areas of the body (such as the nose and mouth). Moderate exercise increases the antibodies in the saliva and nose. There is a threshold of too much exercise such as someone who just finished running a marathon. Researchers showed that marathon runners who eat brewer’s yeast for a few weeks after the race had half the rate of respiratory illness than the placebo. Mushrooms can do this naturally by boosting antigen production. They show that they also have an anti-inflammatory effect on the immune system.

1 out of 6 Americans get food poisoning every year. The top 3 are animal products. Salmonella infections in the US have increased every year in America. Salmonella can survive all types of egg preparing (scrambled, sunny side up, etc). They can even survive 8 minutes of boiling eggs. Salmonella in chicken is the most common way of getting infected. There is an 80% chance that an infected chicken can spread salmonella when it touches a cutting board. Put that same chicken now cooked on that board and there is a 30% chance of the cooked chicken getting it.

Europe has a much lower case of salmonella. The USA doesn’t do it because it’s way too expensive. A 2014 study shows the true cost of chicken. 97% of chicken was contaminated with bacteria that can harm people that consume it. 38% of all salmonella was resistant to many of the treatments for it.

**Bottom Line:** If you cook meat, be extra careful in cooking it fully and disinfecting the area around it. Plant based diet will help with the immune system. Moderate exercise can do the same thing.

## **Type II Diabetes**

Vegetarians that stop being vegetarian showed in over hundred percent increase in odds of getting diabetes, heart disease, obesity. Also, they lose an average of 3.6 years of their life. Vegetarians saw the same fate but only when they were eating highly processed foods. High sugar in the blood because your pancreas isn't making enough insulin (type 1) or your body is building tolerance to sugar so insulin isn't made (type II). Causes 50,000 annual cases of kidney failure.

To get sugar to your cells, you need insulin. Without it, your glucose builds up in the blood and damages your nerves and arteries. 95% of adolescents that get diabetes are type II. An accumulation of saturated fat keeps insulin from grabbing the glucose to take to your cells. 29 million Americans (9%) have type 2 diabetes. 1 million are diagnosed every year. Almost all type 2 diabetes can be avoided or reversed through diet. Fat inside your muscle cells can block insulin from being used. Giving up meat entirely can reduce the chances of type 2 diabetes.

Number of fat cells does not change in adulthood; they just swell up with extra fat stuffed into them. If they get too full, they can spill the fat out of the blood stream. This leads to keeping insulin from working. 89,000 people in California showed a drop of getting type 2 diabetes by 78% with an all plant-based diet. Even with eating a little meat would reduce the chances of getting type 2 diabetes.

Different saturated fats act differently. Monounsaturated fats are good for letting your insulin work. Polyunsaturated fats have a negative impact on insulin sensitivity. Researchers changed diets of overweight people by adding legumes to their diet. The other group cut 500 calories from their diet. The legume group was just as effective at cutting weight as the group that cut calories.

By age 20, the pancreas does not make any more insulin cells. People eat the same amount of food. Plants are naturally low in calories. Meatless diets have an average of 350 less calories eaten. Gastric bypass surgery that reduces 90% of the size of the stomach, which has a high success in treating type 2 diabetes. A study showed that a low-calorie diet works just as good as the gastric bypass surgery. The largest study (100,000s) ever conducted on meat and weight gain showed that people that eat meat will gain more weight than those that do not even when calories are the same.

Farm salmon has a 10x amounts of PCBs than fresh cut. Toxic chemicals have shown a direct relationship with type 2 diabetes. This is because chemicals like PCBs are absorbed by fats that can stay in your body for decades. The more the fat, the more time toxic chemicals will stay in your blood.

10,000 type 2 diabetics were put into two groups. One was to drop blood sugar levels down through counseling and the other was through medicine. The group that was given the medicine had a HIGHER chance of death than before the medicine was given compared to those that went through counseling. Poultry has been confirmed in studies that chicken can make people gain weight more than any other meat.

Fat content per calorie has increased 10x more than the past decade. Studies show that a plant-based diet can reverse type 2 diabetes without changing the amount of calories consumed. A study of people who had type 2 diabetes for decades were off

insulin injections by eating a plant-based diet within 2 weeks. In the study, patients were made to eat enough so they wouldn't lose any weight. It still worked. Patients were given a plant-based diet and  $\frac{3}{4}$  of them had the nerve damage from type 2 diabetes go away within a week! 9 months after eating a plant-based diet; patients had no trans-fat stored in their body. Having a "pot belly" has shown a higher chance of getting many diseases and lower life expectancy. Location of fat is important. Example: if your waistline is half your height or more, you need to lose weight.

**Bottom line:** A plant-based diet allows for lower calories consumed and most importantly a lower insulin response to the food you eat.



## High Blood Pressure

3,000 institutions in 50 countries made some very accurate recommendations on diet. Examples: 8,000 people per year die due to processed meats. Eating more plants could save 1.8 million lives. 4.5 million lives could be saved through eating more fruit. 9 million a year die related to high blood pressure. Many different things relate to it.

Blood pressure of 120/80 is considered normal. A number higher than this can cause damage to arteries and your heart. As you get older, your blood pressure goes up. But this doesn't need to happen. Kenyans who got older (60) had a low blood pressure, which is much different than the average American. They eat plant-based diets. No case of high blood pressure was found in Kenya during a yearlong study at all the hospitals there.

The two most dietary risks to getting high blood pressure is not eating enough plants and having too much salt in the diet. Sodium can be found naturally in plants, which is all you need. We ate about ¼ tsp. of salt per day until the last few hundred years. 3,500mg of salt is the common intake of what Americans consume. Reducing this in half can save more lives (92,000) than blood pressure pills. Blood pressure can rise within 3 hours of a high sodium meal (such as soup). A no salt culture was studied (amazon tribes) and tested to show the lowest sodium intake ever recorded. The oldest people in the tribe had the SAME blood pressure as young people in the tribe. No one was found to have high blood pressure.

People that were dying (life expectancy of 6 months) of too much sodium were put on a no salt diet. 70% lived a normal life within a month. This was achieved through all plant-based diet. High sodium meals lower the body's ability to pump blood by lowering specific antioxidants. A source that has a lot of sodium that many do not realize is cheese. Processed foods have a ton too (3/4 of salt intake in American diets comes from processed foods). Meat has salt being added to increase how much they weigh. This increases their weight by as much as 20%. Example: the common chicken breast has more salt in it than the same weight of French fries, a fast-food burger or salted pretzels. Salt changes the taste buds and makes it hard to taste natural foods. Lowering your salt intake will make you more sensitive to salt, which means you need less of it to be happy.

Best ways to get salt out of your foods: Don't add salt to your food. Don't add salt to food while cooking. Restaurants will add a lot. Avoid processed foods. It is almost impossible to come up with a diet that is based on having whole foods that have too much sodium. This means only eating foods that are plant based. Harvard graduates showed that brown rice can give you a lower chance of high blood pressure but white rice gives you a higher chance of high blood pressure. Oats and barley are even better.

The man who created the DASH diet to lower blood pressure was the same guy that found that any animal products will raise blood pressure. He has animal products in the diet for lowering blood pressure only because he knows Americans will have a higher chance sticking with that diet. Basically, doctors are starting to not show patients what the science shows but more about what is convenient for the patient.

You can reduce your risk of high blood pressure by 75% if you take away all animal products from your diet. If you eat meat or dairy products once a week or so, the reduction is only 25%. A study was conducted to test the blood pressure of marathon runners on a standard American diet compared to stationary vegans. **The vegans who did not exercise had a better blood pressure than the marathon runners.** Diet trumps all.

Flaxseed is known to lower the blood pressure more than any other food. Two to three tablespoons a day of flaxseed is equivalent to taking a cardiovascular endurance program. Red wine without the alcohol seems to do the trick in lowering blood pressure. Hibiscus tea was rated the number one drink to lower blood pressure.

Nitric oxides are important in the blood because they help dilate the arteries, which will lower blood pressure. This is why people take nitroglycerin when feeling chest pain. Viagra does the same thing too. Nitric oxide is produced by an enzyme nitro synthase. Free radicals lower this enzyme. Flood your body with antioxidant rich whole foods to prevent this from happening. Beets and greens have a lot of nitrate naturally which lowers blood pressure. The green that has the most nitrates in it is arugula. Beets and greens also allow you to use oxygen more efficiently. For example, divers could hold their breath the half a minute longer after having beet juice.

**Bottom Line:** Avoid adding salt to foods, eat flax seed daily and avoid meat.

## Liver Disease

Alcohol consumption of more than one drink per day can lead to a fatty liver. This is the leading cause of death with alcohol. The most common reason for a fatty liver is diet though. Nearly one in three adults suffer from a fatty liver.

There was a study done to replicate the documentary "Supersize Me," where researchers found that after only one week of eating two fast food meals a day, liver enzymes were present in their blood test. This is an indication of a dying liver. A diet rich in animal fat has shown to be linked to a fatty liver.

Many studies show that fat from plants did not have the same effect as animal fat. High amounts of cholesterol from animal products tend to increase the amount of fat that builds up in the liver. Hepatitis C is the leading cause of liver transplants. Numerous studies show that whole grains like oatmeal protect the liver from disease.

Cranberries seem to be the best fruit to use to combat the disease of liver. The problem is that 95% of cranberries at the store are highly processed. To do this the right way, take frozen cranberries in a blender with water, some mint leaves and blend. Pour over ice and you have a cranberry juice that is way healthier and has much lower calories and sugar.

Numerous studies have shown that coffee of all things can lower the inflammation of the liver. The third leading cause of cancer death is the cancer of the liver. The study showed that people who drink coffee had half the likeliness of developing liver cancer.

**Bottom Line:** Avoid meat.

## Blood Cancer

Researchers followed 60,000 people for 12 years and found that people who eat a plant-based diet had a much lower case of cancers, especially blood cancers. Leafy greens like broccoli, kale and spinach are known to not only stop cancerous cells from spreading but also help healthy cells keep multiplying. This is something that chemotherapy does not do. For example, researchers found that people that ate at least five servings of leafy vegetables per week had half the rate of getting lymphoma versus people that only had one serving of leafy vegetables per week.

Be careful about supplements. There have been no studies to confirm that they have helped lower the risk of cancer in many other diseases. Whole Foods is best! Acai berries were used as research for leukemia cells. They sprinkled the juice on the leukemia cells and 86% of them self-destructed. There's no research on ingesting acai berries but that study is promising.

As a side note, the most antioxidants for your dollar are purple cabbage. The spice Curcumin is known to help with the multiple melanoma cancer. Of all meats tested, poultry was the one related with the most prevalence of blood cancers. To put this in perspective, workers who deal with poultry have higher risk of many types of cancers. Even people that grew up on a farm that had livestock had higher risk of cancer including blood cancer.

**Bottom line:** Eat a plant-based diet, including purple cabbage and Curcumin (Turmeric is a good spice that has this)

## Breast Cancer

Early detection is still late detection due to the technology we have. 20% of autopsies performed of women that died of non-related deaths to cancer had signs for development of breast cancer. Women may not be able to stop the initiation phase where cells turn into cancerous cells, but nutrition can help keep those cells from multiplying. A billion cancer cells can be within a tumor when it is first detected. What about the development of those billions of cancer cells before detection? It takes at least two to five days for breast cancer cells to double. The number of days it takes can reach more than a thousand. The number of days it takes depends a lot on what you eat. This can make the difference between dying with cancer cells dying because of cancer cells.

A study showed that if women maintain a healthy weight, with mainly plant-based food and do not drink alcohol, their risk for developing breast cancer is reduced by 62%. It only takes two weeks to start seeing the results. The blood taken from women after two weeks of doing the three things mentioned above were able to suppress cancer cells 20% to 30% more than before the two weeks of healthy living.

Alcohol seems to relate to a higher risk of breast cancer, even drinking less than one alcoholic beverage per day. This excludes red wine, which I'll get to in a little bit :-). It's not the alcohol that's so bad; it's the acetaldehyde that is what can cause cancer. This is what your body breaks the alcohol into before breaking it into a lesser poison to be digested and removed from the body. Back to red wine. Red wine has something that suppresses estrogen synthase that is used to possibly make cancer cells in the breast. You could avoid alcohol and still get the benefits by drinking grape juice but I feel most of my readers will stick with the red wine!

Study shows that breast cancer can be reduced by 90% when eating a plant-based diet. Melatonin is related to breast cancer as well. Researchers studied blind women and found that their chances of getting breast cancer are 50% less. Women who live in neighborhoods with higher light pollution tend to have a higher risk of breast cancer. This all means that women with higher amounts of melatonin in their blood have a lower risk of breast cancer.

Researchers tested this by testing the melatonin levels in the urine in the morning. Researchers found that the only food that lowers melatonin levels was meat.

Heterocyclic amines have shown to cause cancer, including breast cancer. It is created when meat is cooked at high temperatures. The best method for cooking meat to lower this cancer-causing substance is boiling. This also means that meat that is cooked well done is associated with higher risk of breast cancer. An interesting study associated heterocyclic amines with rats. Even though they did develop higher rates of cancer when fed heterocyclic means, their liver was able to detoxify 99% of the substance. Human livers tend to only detoxify 50%, suggesting that we are more susceptible to this substance than rats are.

If you have read the other sections of this mini book, you would notice some similarities in nutrition. Studies also confirm this for example food used to combat cancer also helps with heart disease. For example, cholesterol seems to be a common similarity with patients that have breast cancer and heart disease. Cancer cells were shown to be

more active when surrounded by LDL cholesterol. This has been well documented to the point where researchers are looking for ways to use LDL cholesterol to be the Trojan horse of sending anti-tumor drugs to the cancerous cells. Lowering your cholesterol will be a good way to combat breast cancer but studies have only confirmed that it has to be the natural way. Drugs to lower cholesterol have not been associated with the lowering of your risk of getting breast cancer.

Fiber seems to be an important combat against cancer too. His studies showed that women who had a daily intake of 6 grams of soluble fiber (Equivalent of a cup of black beans) had a 62% less risk of developing breast cancer. Remember that fiber can only come naturally from eating plant food. So, there might be some other things in plants that give you protection from breast cancer other than just fiber. Some specific foods include apples and broccoli. Especially the skin which has a lot of antioxidants in it so make sure not to peel the apple before you eat it! Broccoli has similar results. In fact, broccoli seems to wrap up the liver so much and detoxify substances that come into your body that people that eat a lot of broccoli need to drink more coffee to get the same kick because of the caffeine being digested so much faster by the liver.

There are a lot of stem cells in the breast and are used mainly for pregnancy but they can work against the body as well. This is why breast cancer can redevelop after successfully fighting it because the stem cells can turn cancerous. Research has shown that broccoli represses cancerous stem cell growth. To get the amount needed to suppress this growth would be about a fourth of a cup of broccoli sprouts per day.

Lignans are a substance used to suppress estrogen and help with fighting breast cancer. Flax seed does have a hundred times more of this than other foods. In fact, a tablespoon of flaxseed a day can keep menstruation from happening an extra day which protects the woman from high estrogen levels that can be overall dangerous to the women's health. In a comprehensive study, researchers gave one group of women who had breast cancer 2 teaspoons of flaxseed while the other group did not. The one with flaxseed had less cancerous cells and showed lower indicators of aggressive cancer cells.

Soy seems to be helpful in preventing and helping recovery of breast cancer. Numerous studies have shown that the phytoestrogens in soy are beneficial for women's health. Green tea has been associated with a 30% less risk of breast cancer. Also, mushroom intake seems to lower breast cancer risk. The combination of eating soy, drinking green tea, and eating mushrooms give a partial reason to why Asians have a lower risk for breast cancer because those three things are staples in their diet.

**Bottom Line:** Eat like an Asian to avoid breast cancer. Include foods such as flax seed, leafy greens and green tea.

## Suicide

It is shown through numerous studies that having good mental health will ensure a healthy body as well. For example, researchers found that happy people were able to ward off the common cold much more effectively than those that were not happy. This accounted for other variables as well.

Arachidonic Acid is metabolized by the body into many inflammatory chemicals. This is how aspirin generally works by inhibiting the metabolism of Arachidonic Acid. This acid is naturally good through the healing of wounds but this is also made naturally by the body so any extra is not necessary. The main food sources of getting this acid is from poultry, eggs, beef, pork and fish. Ranking Wise, poultry and eggs have the most by far. Researchers notice that people that ate one of those animal products at least once a day had better moods when switching to an all plant-based diet.

The Institute of Neuroscience posted a study that stated that people who ate a plant-based diet were 62% less likely of developing depression. The brain communicates with monoamines such as serotonin and dopamine. These are neurotransmitters. Monoamine Oxidase, "MAOs," regulate the production of these neurotransmitters. MAOs break down these neurotransmitters and people with depression have shown significant higher amounts of these enzymes in the brain, suggesting that they deplete these neurotransmitters that are needed to help with mood, appetite, and many other behaviors related to a healthy mind. There are drugs that try to lower MAOs in the brain but the side effects are very potent. There are phytonutrients naturally in green tea, onions, grapes, and apples to name a few that naturally inhabit MAOs. Spices such as cloves, nutmeg and cinnamon do the same. The amount matters too. Seven to eight servings a day will show a much more positive effect rather than a couple.

Interestingly, carbohydrates help an amino acid called tryptophan to go from your gut to your brain, which is the precursor for the making of serotonin that helps with mood stabilization. A study showed that after a year of a high carb diet, people had significantly less symptoms of depression compared to those that ate a low carb diet. Foods with high amounts of tryptophan and protein to get access to the brain are pumpkin, sesame and sunflower seeds. Butternut squash seeds have been tested and shown to help with social anxiety and depression. By the way, this was within an hour of consuming the seeds!

The spice saffron was put to the test against some antidepressant drugs and the spice works equally as well as the drug. This isn't saying too much though since antidepressant drugs are not very effective but you can see that there are at least no side effects to including saffron in your diet. Coffee seems to help too. People who drank two cups of coffee a day have half the rate of having depression.

As a side note, people with depression and mood instability have reacted poorly to the sweetener aspartame. A study conducted on diet coke that is sweetened with aspartame showed that people suffering from depression had a much more intense feeling of depression after drinking Diet Coke versus a placebo. These artificial sweeteners to avoid are hard because they are in over 6,000 food products. Look for the label if you're concerned about your mental health.

As many know about this, exercise has been proven to work just as well as

antidepressants for a lot of people. Get a dose of exercise before a dose of antidepressants. Many people with depression have shrunken parts of the brain related to emotion. It is thought that this is caused by free radicals killing some of the nerve cells in that part of the brain. Studies show people that eat a lot of fruits and vegetables having lower cases of depression due to all of the antioxidants in foods.

Studies have shown that a low folate diet can increase your chances of severe depression by as much as three times. Folate comes from leafy greens and beans. An important point to be taken about treating depression with foods is that the media does not support this. **This is mainly because drug companies will not make money if you eat beans and leafy greens but they will if you take Prozac.** Also, it is shown that many of the unpublished research from drug companies have shown a negative result in the use of antidepressants. They just didn't publish them. This isn't to say that antidepressants do not work. It's to say that why not try foods first since there are no side effects.

**Bottom Line:** Eat foods with folate in them. Increase the amount of plants you eat and avoid aspartame.



## Prostate Cancer

50% of all males over the age of 80 have prostate cancer and most that died of something else had some autopsies of prostate cancer developing in the body. The growth hormones in milk have led to many issues of the human body but right now the study will focus more on cancer here. Remember a cow's milk is supposed to put on over 100 pounds in a month for newborn cattle. You could imagine how much growth hormones are in that! 14 separate experiments show that dripping organic cows' milk on prostate cancer cells promoted a high growth rate of those cells. The average growth rate was 30%. Almond milk on the other hand suppressed cancer cell growth by more than 30%. Experiments were done with human populations and show that milk contains a risk for prostate cancer.

As a side note about milk helping with osteoporosis and bone deficiency, research has shown that it is not the case. A study of over 100,000 people bottling them for two decades even shows some correlation towards a higher risk to bone fractures with higher milk intake. Research went so far to show that three glasses of milk a day translated to having a two times more likely risk towards dying early. The reason behind all of this is that our bodies do not do well with the lactose, the sugar found in milk. Even though we have an enzyme to break it down it still has been shown to negatively affect the body. This is why sour milk that is absent of lactose doesn't show the same effects in research.

Men have a very low chance of dying from prostate cancer if it is localized in the prostate. If the cancer spreads, the chance of survival is around 66%. This is why early detection is important. Research has shown that poultry and eggs are the leading cause of foods that lead to prostate cancer for men. Poultry was already talked about in other chapters but with eggs, choline seems to be the culprit that is found in eggs that can increase the risk for cancer. Even the egg industry realizes this in a letter that showed the people of the egg industry admitting to the Harvard study connecting choline with cancer. I did not believe this [but here is the study](#).

An interesting study used blood from men on different diets. The blood from men who eat a plant-based diet suppress cancer cells by 70%. No other diets came close. Another interesting study used blood from people that exercised or eat a plant-based diet. Blood from those that exercise vigorously for years were able to kill two thousand percent more pancreatic cancer cells than the control group but those that did not exercise but ate a plant-based diet killed four thousand percent more than the control group.

Another interesting study took 93 men with prostate cancer that decided not to do conventional cancer treatment. The control group that didn't do anything different had their cancer growth go up by 6%. This is about the standard rate for prostate cancer because prostate cancer grows slow. Those on a plant-based diet showed a decrease of 4% in the cancer growth. After a year, 10% of the control group had to undergo radical surgery to remove the prostate and surrounding tissue while 0% of the plant-based diet group had to do this.

Another study showed that the men who had a dietary change of a one-to-one ratio of animal to plant proteins had their cancer doubling rate reduced from 21 month to 58

months when compared to the control group of having a three to one ratio of animal to plant proteins in their diet. These studies show that a vegan diet can reverse cancer growth of the prostate. The Harvard Prostate Cancer prevention researchers suggest that you should eliminate eggs and poultry from your diet. If you are going to only add one vegetable pick crucifix vegetables such as broccoli. To put things in perspective, a 2% increase in plant protein in your diet can reduce your risk of prostate cancer by 23%!

Lignans are found in high amounts in the prostate glands of healthy individuals. Lignans are high amounts in flax seed. On a side note, BPH is common in men and is the enlargement of the prostate that many men have to undergo invasive surgery. The interesting part of this is that in Asian countries BPH is a rarity. This is attributed to the plant-based diet they have. Everyday about 50 billion cells are remade and over the course of a year your entire cells are remade.

LGF-1 is a chemical signal in your body to keep the production of cells equal to what you're losing so the number doesn't increase which would also increase your chance of getting cancer. Too much LGF-1 will tell your body to make more and more cells which increases your risk for cancer. Research shows that animal protein triggers the production of LGF-1. Research shows that after 11 days of not eating animal protein, your LGF-1 levels drop by 23%.

**Bottom Line:** Avoid eggs, poultry and milk and increase plant-based foods.

## Parkinson's Disease

Every year research has shown that women have amounts of heavy metals, carcinogens and many other harmful pollutants trapped in the body due to all of the exposure we are getting on an everyday basis. Also, of the 300 women whose blood was tested after giving birth, 95% of them had shown that the baby was getting these harmful chemicals as well such as DDT that has been banned for decades. Interesting, women's levels of toxics in their body seemed to go down as they breastfeed more. Suggesting that they are passing the pollutants to the baby. Even more interestingly, the first-born has more pollutants in the body of the baby than the second, third or fourth baby. Also, the mother has fewer pollutants in the body as the number of babies born increases. This is not to say that breastfeeding is bad because it definitely is not. It's more to say that we need to look at the quality of foods we are eating. For example, the food with the most arsenic found in it that affected kids the most was poultry. While the food that affected the adults the most regarding arsenic is tuna.

The top source of lead is dairy and for mercury it is seafood. Fish in particular are loaded with heavy metals and other deadly chemicals. This is because they are eating food that has absorbed some of the heavy metals that has made its way to the ocean. Plants have the lowest amount because they are at the bottom of the food chain so to avoid chemicals in your food, focus on plant food. You would think that the government has regulated chemicals in food but it's not the case. There was a famous case where one third of all catfish was contaminated with a heavy metal and 10 years later the government checked for compliance on regulating this and found that over 90% of all the fish still had a heavy metal in it. Where did the catfish get it? Over half of the food that the catfish are eating was laced with heavy metals. This means the manufacturers of catfish knew they were feeding fish contaminated food that would eventually get to human consumption. **In terms of dioxin intake, researchers have shown that you can wipe out 98% of your intake of dioxins by eliminating meat.**

Interestingly, smoking has been linked to a lower case of Parkinson's disease. Why? Because of the nicotine. Obviously, you want to avoid cigarettes at all costs so how do you get nicotine in the body naturally. Bell peppers seem to have the most nicotine and have been linked to lowering your risk of Parkinson's disease.

Parkinson's disease is closely associated with dairy. For example, your risk increases by 17% for every cup of milk you take on a daily basis. Another interesting fact is that men who have less than one bowel movement a day on average had a four times higher risk of getting Parkinson's disease.

Other than preventing the intake of harmful chemicals in your diet, there are some foods that can help protect your brain from damage of the neurons, which is what the chemicals do to initiate Parkinson's disease. Berries seem to lower the effects of pesticides on brain cells when conducted in research. Caffeine also seems to help prevent damage to the brain from chemicals. So, grab a cup of morning joe or green tea :-)

**Bottom Line:** Avoid dairy and meat, increase your intake of fiber and eat more plants such as bell peppers and berries.

## Interesting Facts

The people that survived the atomic bombs in Japan were tracked for decades and show that there was a 36% less likelihood of getting cancer if the main diet of the survivor was plant-based. Mint leaves, goji berries, ginger root and turmeric have been shown to protect your body from radiation. There is a lot of radiation when you fly on a plane or take tests at a doctor's office.

There is a common misconception that drugs are more helpful than they really are. In fact, the people that take Lipitor for example were surveyed and found to think they work at about 20 times more effective in preventing heart attacks than what they actually do. To put things in perspective, cholesterol lowering drugs and blood pressure lowering drugs have shown to work at about 5% of the people that take it. So why do doctors not tell patients this? It's mainly to do with the idea that if they did, the people that could actually benefit from it would not take it.

Those that take aspirin to reduce the chance of a heart attack can get the same benefits without having gut problems by eating a plant-based diet. The blood of people taking an aspirin containing the active ingredient in aspirin was found in the blood of people eating a plant-based diet. **Over 90% of doctors recommend many surgeries that doctors around the world would not. Why? Unlike doctors in other countries, doctors in America get paid per procedure.**

## Recommendations by Dr. Greger

To figure out what to eat, the best bet is to look at the whole idea of having a 2,000-calorie budget every day. How do you want to spend it? For example, you could get a Big Mac at McDonalds. For the same calorie budget, you can get a quart of strawberries or a five-gallon bucket of salad.

Another way of looking at it is that no matter what you choose to eat there probably is a healthier opportunity. So, don't ask yourself if some food is healthy, compare it to what your options are at the time.

We all know that water is important but it can be boring to drink. Try to add frozen strawberries instead of ice cubes or lemon to spice up your water but not increase the sugar or calorie intake. Green tea is known to be good but how can you incorporate it into your diet? Some ideas include brewing tea like normal as you know but some other ideas would be to throw some tea bags in a pitcher of water and let it sit overnight and you have cool green tea for the summer days.

Another option would be to take the actual green leaves of tea and put it in your smoothie. You can even put it in your water to drink. Try to add water, hibiscus tea leaves and some lemon juice and let it sit in the fridge overnight. Drain out the hibiscus leaves and drink. Hibiscus leaves have been known to lower blood pressure significantly more than any drug. If you want even more antioxidants, throw it in a blender and blend in green tea leaves too.

## Conclusion

That was a lot of information! What to do now? Come up with a game plan that will help you add more plant-based foods in your diet. Personally, I have done a lot of tweaking to my diet and can offer some advice if you have any questions. I'm approaching 40 and feel better than I did in my 20s! You can too. It just takes some time and effort to stay the course. **A small change in diet can lead to huge changes over time.** Need help? Feel free to contact me for any information you need! I also do group presentations on health/fitness as well as one on one-health consultations. I hope this information makes as big of an impact on you as it did with me. To a healthier you!

Cheers,

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