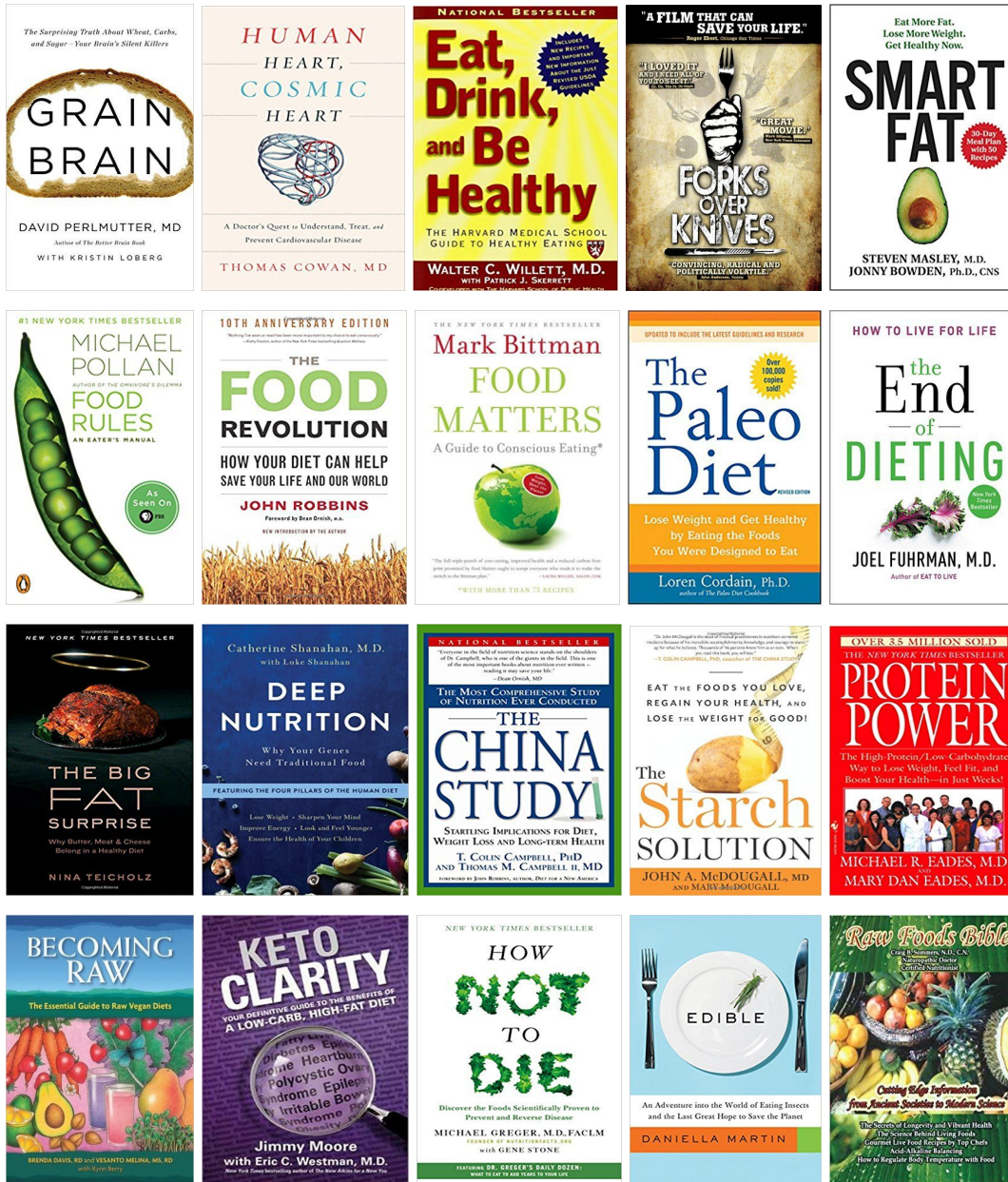


Eating 20/20

A Vision for the Perfect Diet

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ABSTRACT

My sixteen-month journey to find out the *truth* about food. What foods are healthiest? What makes up an ideal diet? There is so much information out there; how do I decipher between the truth and lies? The conclusions I have reached come from extensive, personal research - nineteen books and one documentary from authors with a myriad of perspectives.

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Introduction

In January 2016, I volunteered on a permaculture farm in Costa Rica for two weeks. I signed up on a whim and didn't realize it was a vegan farm until I arrived. I had no choice but to embrace veganism for two weeks. Though I was passionate about the environment, it never occurred to me to eat vegetarian, much less vegan. Being on the farm, I felt the best I ever had - physically and mentally. It had never occurred to me that eating vegan, (specifically organic mostly raw fruits, vegetables, whole grains and no processed food) could make me feel so incredible. By no processed foods, I mean I threw out eight pieces of trash in a two-week span. After the farm, I decided to continue eating vegan with a caveat; I would eat any food I found going to waste, to have as little environmental impact as possible. Freegan.

The farm opened my mind and made me question societal norms that we passively accept as truth. The farm was raw, whole-foods, vegan, but that was one perspective. I wanted to learn for myself what the optimal diet consists of. In terms of human health, what should we eat? What should we avoid? I decided to research for myself - what is the perfect diet? I set out to read 20 books from several authors with different perspectives on food, not just about veganism. What would they say in common? We hear so many things about food; it all becomes a jumbled mess. "Carbs are bad" "Eat a low-fat diet" "Get enough protein, calcium, & iron" "Go vegan" "Try the Atkins diet". It's confusing and exhausting to make sense of all the noise.

It was an incredibly fulfilling experience and I learned a ton. I have a clear vision of what I consider to be the perfect diet and am incredibly excited to share it with you.

The Process

1. List - I created a list of books by reading a quick synopsis of popular books online to ensure I examined a variety of perspectives. I reserved each one from the library.
2. Reading - I read each book in its entirety, including the appendices.
3. Notes - After finishing a book, I took notes on key points, interesting tidbits and made side comments when I wasn't convinced or had new ideas.
4. Food Thought Stream - I then wrote a short reflection for each book, doing my best to keep it to 1-1.5 pages. I summarized main and interesting points as well as how I felt about the book. This journal captured my vision of food as it evolved over time. I call this the "Food Thought Stream" and made edits in it for readability and grammar only, keeping the authenticity of the moment. This is the appendix.
5. Eating 20/20 - I summarized my journey, findings, and beliefs about food here into this comprehensive 16-page overview.

In 15 months, I read 19 books totaling 5,000 pages, watched a 90-minute documentary, took 158 pages of notes, and wrote reflections in a 26-page "Food Thought Stream". The next month was spent putting it all together. At times, it felt like the only thing I did outside of work and sleep. I devoted roughly 350 hours - 3% of my life - on average 43 minutes every single day for the last 16 months - to this project. This may seem excessive, but I sought truth and conviction. I view this journey as an investment for the rest of my life. I believe eating the right way will bring a longer, healthier, and happier

life. I hope this investment pays further dividends by improving the lives of those around me and anyone who reads this.

The Journey

My vision of a perfect diet did not happen right away. It evolved over time and became clearer as I read more. The journey can be broken out into three distinct parts. The first part “Looking Out” (books 1-6) was an initial discovery of nutrition. The second part “Double Vision” (books 7-12) was about distinguishing between two schools of thought. The last part, “Coming into Focus” (books 13-20) was when my vision for the perfect diet became clear. This is how it unfolded...

Part I: Looking Out

The first six books were an exploration of how food interacts with our bodies and what evidence science has to offer. I learned a lot of basic concepts and ideas about food. At the outset, I saw some trends across all books:

1. Processed food (candy, prepackaged goods, etc) and refined carbs (white pasta, white rice, white bread, etc) are unhealthy and should be avoided.
2. Vegetables are excellent for you and should be consumed in abundance.
3. Dairy has an overwhelming amount of negative effects on your body. It should be avoided at all costs.
4. Animal feed in factory farms is pumped with growth hormones, antibiotics, and pesticides. When consuming the meat (or dairy) from said farms, you are consuming the toxins and chemicals that are stored in the tissue and fat as well. Furthermore, when those animals are eating grains as opposed to grass, the fat is stored as inflammatory Omega-6 fatty acids as opposed to healthy Omega-3 fatty acids. The inflammation causes pain and damage to our organs and tissues. At this point, I was still unsure whether, grass-fed, pasture-raised, organic meat was good for you, but was confident that avoiding factory farmed meat was wise.
5. Some fats are good for you. Monounsaturated and polyunsaturated fats are healthy. Saturated fat is up for debate. Saturated fat from coconuts is great for you. Trans fats are horrible for you and should be avoided.

Part II: Double Vision

The second part of my journey was about deciphering between two emerging narratives. The first one was a Paleo-leaning, carb-restrictive, fat and protein-heavy diet while the second one was a Whole Foods, Plant-Based diet.

The Paleo-Leaning/Carb-Restrictive (Paleo-Leaning) Argument

The books advocating for a Paleo-leaning diet focused on how we become insulin resistant. When we absorb carbohydrates, they break down into glucose (essentially sugar) that our bodies use as fuel. In order for our cells to absorb glucose, the pancreas must secrete insulin. This hormone signals to our cells to open up so we can absorb glucose. However, if we flood our body with too much insulin, we become insulin-resistant. Our cells become less sensitive and we must secrete more insulin in order to absorb glucose. Because not all of the glucose can be absorbed, our cells store glucose as body fat. This clogs our arteries, leading to obesity, diabetes, and heart

disease. Alzheimer's Disease is often referred to as Type III diabetes because it is highly associated with Type II diabetes. It occurs as the result of decreased blood flow inflammation from excess glucose in our bloodstream.

These authors argue that carbs should be avoided, including whole grains and starchy vegetables. Non-starchy vegetables are healthy and eating a lot of them is encouraged. Contrary to popular belief, they argue fat is the optimal fuel source for our bodies and brains. When we minimize carbohydrates and consume more fat, our body goes into ketosis, or fat-burning mode. We experience mental clarity and feel better.

A few authors talked about explorers Vilhjalmur Stefansson and Karson Anderson, who met thriving Inuit Eskimos in the early 1900s relying on a diet primarily of whale blubber. The explorers went to New York and ate essentially only meat for a year. From a one-year experiment on these two individuals, they concluded eating only meat led to excellent health benefits. Eskimos today however are subjected to the SAD (Standard American Diet) and are out of shape and suffer chronic illness. There are other places in the world where this trend is observed.

There was variation among the Paleo-leaning authors but this was the general philosophy.

The Whole Foods, Plant-Based (WFPB) Argument

The books advocating for a WFPB diet focused on how a WFPB diet was linked in major study after major study to lower rates of heart disease, cancer, obesity, diabetes and other major chronic illnesses. When it comes to carbohydrates, they agree that processed or refined foods are unhealthy. The difference is that vegetables, fruits, legumes and whole grains are sources of carbohydrates loaded with micronutrients, antioxidants, vitamins, and minerals. They provide a myriad of health benefits in addition to fiber, which slows digestion and the absorption of glucose into the bloodstream. You won't experience surges and plunges in blood sugar.

Cholesterol is the strongest risk factor for heart disease and is not found in plants. Eating high amounts of trans and saturated fat found in meat raises your cholesterol and clogs your arteries. Animal protein contains IGF-1, a hormone that triggers the growth of cells. Consuming too much leads to the growth of cancerous cells. Furthermore, your body must operate within a narrow, neutral pH range near 7.4. When you eat acid-forming foods, your kidneys must balance it with something alkalizing to maintain the pH level. The most readily available alkalizing substance is the calcium in your bones. Your kidney extracts calcium from your bones to neutralize the environment. This is problematic for two reasons. First, this leads to the formation of calcium oxalate, the most common form of kidney stones, an extremely painful condition often requiring surgery. Second, your bones are more susceptible to breaking due to calcium loss. In one frequently referenced study of ten countries, it was shown that the countries which drank the most milk had the highest rates of hip fractures. Got Milk?

Speaking of milk, we are the only species that drinks the milk of another species. Other animals do drink milk, yes, but only when they are babies from their own mothers. Most books, not just WFPB ones, advised against dairy.

There were solid arguments on both sides; I was leaning towards a WFPB diet but wasn't completely convinced.

Part III: Coming Into Focus

I was feeling fatigued. I had finished 12 books in 12 months and it felt tedious at times. Nevertheless, I set out to read twenty books and had to finish strong. The next four books I finished in three months and the last four in one. Almost all of my free time that last month was devoted to *Eating 20/20*. Food aside – cutting the distractions and wasting zero time to finish this was an incredibly fulfilling experience.

In these last eight books, it became clear that eating a WFPB diet was the best diet. I could no longer, in good conscience, recommend Paleo-leaning diet to anyone.

The China Study

The China Study, book thirteen of the project, was the best book I read - by far. Colin Campbell conducted several large-scale experiments on rats and on humans. He acknowledged that animal testing is not the most ethical but his hope was that his findings would save many more animal lives in the future. His most notable study is the China Study. The premier of China in the 1970s, Chou Enlai, was dying of cancer and commissioned a nationwide comprehensive study of dietary and lifestyle factors associated with disease mortality in mainland China and Taiwan across 170 villages spanning 65 counties (24 of 27 provinces). Widely known as the China Study, researchers took blood tests, urine samples, examined food in local market places, and took surveys on adults from 6,500 families (half men, half women). Campbell teamed up with Dr. Junyao Li, a key scientist in China's Academy of Medical Sciences and Richard Peto of Oxford University. They found over 8,000 statistically significant correlations varying from 95%, 99% or 99.9% correlation. Among them, those who ate the most animal foods had the most chronic disease.

At the time of the study in the 1980s, China ate a plant-heavy diet. The China Study compared differences in health outcomes between participants that consumed a very low level of animal protein vs. a moderate level of animal protein. Studies in western countries usually compare health outcomes of a diet with a high level of animal protein vs. a very high level of animal protein. Even vegetarians in the U.S. can be consuming high levels of animal protein from milk, cheese, and eggs.

The bottom line: animal protein greatly increases your risk for heart disease, cancer and several other chronic diseases. I loved how thorough Campbell was in explaining every detail, assumption, and note in his study. After finishing this book, I decided to eat food going to waste *only* if it were vegan. The personal damage no longer seemed worth the environmental or financial reward. I highly recommend reading *The China Study*.

The Enormous Health Benefits of Plants

A huge focus became how healthy plants are, especially vegetables. If there was one thing universally agreed upon, it was that you should eat a ton of vegetables. Plants are loaded with nutrients that work synergistically to bring health. They have been repeatedly

shown to decrease the odds of getting certain diseases. Plants provide almost all essential vitamins and minerals needed for proper bodily function. Dark, leafy greens seemed to be the most nutrient-dense and health providing, although several others merited special attention: berries, seeds, alliums (onions, garlic, leeks, etc), turmeric and more. It's not just about cutting out meat. It's about eating healthy foods. Potato chips are not on the path to good health. Great health can be attained by eating whole plants.

Credibility

This project in many ways was a study of credibility and my Food Thought Stream reflects that. Size, breadth and length of studies were one example. In this regard, *The China Study* set the bar extremely high. It became increasingly difficult for me to pay attention to results from studies that did not have thousands of participants. Results from 24 people eating a certain diet for six months are meaningless. It is not enough people or time to gather meaningful results. While some WFPB books referenced small-scale studies, I noticed Paleo-leaning books relied more on small-scale studies and individual anecdotes.

Another source of credibility (or lack thereof) was the authors themselves. I hated the book *Protein Power* by Michael and Mary Dan Eades. They lost all credibility for me when their recipes used specific brand names like Miller Lite, Hellman's Light, Progresso, NutraSweet, Pillsbury Shake & Blend Flour and more. Why would calling out those specific brands be necessary (as opposed to just the ingredient)? It made me wonder who was funding these books. I did search the Internet to figure out how each book was funded but didn't have much success figuring this out. They advocate for a diet high in animal protein.

Jimmy Moore, author of *Keto Clarity*, was not at all credible either. Several times he mentioned his podcast, ostensibly for more streams. He relied on anecdotes almost exclusively and suggested in his book that large-scale studies were not always reliable. He advocates for a diet heavy in animal fat.

How Not to Die by Michael Greger was my second favorite book. Greger runs a website called nutritionfacts.org which has no advertisements and is entirely run on donations. He accepts no money personally from the website. Joel Fuhrman, author of my third favorite book *The End of Dieting*, sells some food products, as many authors do, only to fill what he believes are gaps in the market. He donates all proceeds to nutritional research. Talk about credibility and doing societal good. Both of these authors advocate for a WFPB diet.

The Real Paleo Diet?

In the China Study, most villages were not eating a lot of meat. This made me wonder, were our ancestors really eating a meat heavy diet as *The Paleo Diet* claims?

In *Keto Clarity*, Moore criticized Dr. John McDougall, author of *The Starch Solution*, for a discussion they had on Moore's podcast. Having read both books, I listened to the episode. While I thought Moore was a much nicer person than McDougall, he had no answer for any of McDougall's arguments. McDougall asked Moore to name one

thriving population that has survived a long period of time on a meat-heavy diet. As most Paleo-leaning authors reference, Moore named the Inuit Eskimos. McDougall explained to Moore that Inuit Eskimos relied on whale blubber when necessary in the winter for 7 months of the year. Their survival was a testament to the human body's ability to *survive* many diets. This was a small population of 2 or 3 thousand people. It was not a large, thriving population. When McDougall pressed Moore to name a *large, thriving population* that had survived hundreds of years on a meat-heavy diet, he had no answer.

McDougall argues humans across the globe have been relying on a grain and vegetable-heavy diet for hundreds of thousands of years. This is found in fossil remains from all over the world. At one point, McDougall wrote about how ancient mummified Egyptians (the wealthiest Egyptians) were found to have a meat-heavy diet and most of them died from heart disease or cancer. The rest of the population relied on a grain-heavy diet and did not suffer the same consequences. After reading *The Starch Solution*, I read *Protein Power*. The authors discussed how Egyptians relied primarily on a starch-based diet and how their mummies had died from heart disease and cancer. They missed or elected to omit the fact that mummies ate a meat-heavy diet. I found it quite amusing to read these two books back-to-back.

This made me wonder about what the Paleo diet would mean from a practical perspective if we lived in the wild. Isn't it more likely that meat would have to be eaten raw and large quantities would not be readily available on a daily basis as they are today? Catherine Shanahan, author of *Deep Nutrition*, was a strong advocate for raw meats. She was very thorough and though I didn't agree with everything she wrote, I did find her a lot more credible than others. Joel Fuhrman adds, "The Paleo diet is a passing fad that caters to the like-minded meat-obsessed crowd, helping them justify how they want to eat."

Perfecting the Prescription

The evidence mounted for a WFPB diet while the credibility dwindled for a Paleo-leaning diet. There are not large-scale studies to show that a Paleo-leaning diet has been successful for a large group of people over a long period of time. Around book 16 or 17, I became convinced a WFPB was the healthiest diet. The last few books were about rounding out the edges with a couple of more varied perspectives.

Bugs?

I read the book *Edible*, which examined eating bugs from a perspective of reducing environmental footprint (vs. eating large animals), overcoming society's prejudices against bugs, anthropological origins of eating bugs, a brief nutritional overview, and several stories from the author's life. While it was certainly unique, it didn't add much to the discussion nutritionally. There are few studies on bugs and health.

Raw Veganism

I also read more about raw veganism, meaning food is not cooked above 118 degrees Fahrenheit. When I worked on the farm in Costa Rica, it was almost entirely raw vegan and I felt amazing. However, I'm not sure if that was attributed to eating a WFPB diet or if it was attributed to a purely raw WFPB diet. From what I read, the evidence isn't necessarily clear that a purely raw WFPB diet has significant benefits over a WFPB diet.

The book *Becoming Raw*, discussed possible pros and cons to eating a living or raw vegan diet. It references seven raw vegan studies, however, these were all small (tens or hundreds of people at most). One quality of this book I loved was how the authors didn't set out to declare raw veganism as the best way. They presented the evidence they had, not all of which supported raw veganism. They acknowledged that there may be pros to eating raw but more research is needed.

The last book I read, *Raw Foods Bible*, was the one food book I started reading on the farm but never finished. At the time I was highly engaged, but after reading a lot of quality books, this book underwhelmed. The author was able to reference some large-scale studies in favor of a WFPB diet, but I thought he used too many 'stretch' personal anecdotes. There wasn't enough compelling evidence to convince me a purely raw WFPB diet was significantly healthier than a WFPB diet.

How Not to Die briefly discussed the pros vs. cons of eating raw. According to Greger, raw foods typically do contain more nutrition but there are exceptions. More about this in the section, "Guiding Beliefs and Principles."

My Conclusion: The Perfect Diet

The benefits of a WFPB diet are two-fold. On the one hand, animal and processed foods are extremely detrimental to your health; they are correlated with higher rates of chronic disease. On the other hand, plants are extremely healthy. Whole plants are nutrient dense, abundant in phytochemicals, minerals, antioxidants, and vitamins that help your organs run smoothly and protect you from inflammation. I believe too much of the focus is on finding the perfect macronutrient balance of carbs, fat and protein. Plants have been shown to slow and even reverse some of the most common chronic illnesses. Their health benefits cannot be ignored.

No doubt, it was hard to overcome initial biases, which is why I intentionally read books with a variety of views. This project was not about how to best eat vegan. It was about examining a variety of views and determining, based on commonalities and evidence, what the best diet would be. The evidence presented for a WFPB diet was more compelling than the evidence for a Paleo-leaning diet. The books that advocated for a Paleo-leaning diet relied heavily on anecdotal scenarios while the books that advocated for a WFPB diet relied on studies of large groups of people over long periods of time.

I believe the term "Whole foods, plant-based," is often interpreted too loosely. Some people might interpret that as eating mostly plants with a bit of animal products. I believe no amount of animal products is healthiest.

What is the perfect diet? In one word: plants. In more detail: whole-foods, plant-*only*, leaning raw and organic, with a ton of variety - and a small dose of B12.

Supplements

Almost all of the authors that recommended a WFPB diet insisted on taking a B12 vitamin. It is essential for your nervous and circulatory systems. A small dose like 250mcg every day or 2,500 mcg every week is sufficient. B12 is water-soluble, hence the

need for a much larger dose if taken once a week. Vitamin D: 15-20 minutes in the sun a few times a week satisfies this need. While some authors suggested a Vitamin D supplement in the winter months, most said it was not necessary. All other micronutrients, vitamins, and minerals could be obtained from plants. There are several studies showing multivitamins or isolated vitamins do not have significant health benefits. The plant consumed as a whole has much stronger health benefits than isolating specific components of the plant. Plants work in ways scientists still don't completely understand, but the synergy and plethora of all their nutrients create potent benefits.

This does contradict the vitamin B12 suggestion. B12 is found from microorganisms in the soil and microorganisms in intestines of animals. Most soil is less healthy than it used to be, which makes it hard to get adequate B12. It can be found in some algae, but from a cost and practicality perspective, a vitamin is easiest. I don't love the idea of a supplement but authors across the board insisted on taking B12.

The topic of vitamins was another reason I found a WFPB diet much more compelling. Several Paleo-leaning diets recommended taking multiple vitamins or a multivitamin. If a diet is optimal then shouldn't you be able to get the requisite nutrition from the food alone? Dr. Robert Atkins, famous for the Atkins diet (high meat, low carbs), recommended all sorts of vitamins to his patients. Not surprisingly, he had a history of heart disease and hypertension.

Why Are We All Confused?

“He who has the gold makes the rules”.

For an insider's look, I highly recommend reading *The China Study*. Campbell writes 116 pages about the collaboration of science, industry, government, medicine, academia and food. The whole system promotes profits, technology, and confusion over health, food, and clarity. Campbell's experience working with key figures and committees in government, science and academia is fascinating.

According to their website, the “USDA is responsible for providing a safety net for millions of Americans who are food-insecure and for developing and promoting dietary guidance based on scientific evidence” Currently it has MyPlate. In the past, it has been a Food Guide Pyramid. The rules are established under the guise of public health. Growing up, I assumed the food pyramid to be accurate about what is healthy. I believe most Americans assume the same. Wouldn't the government want us to be healthy? The USDA is an organization that promotes agricultural interests, not public health. In fact, in 2005, four companies processed 84% of U.S. beef, 64% of U.S. pork, and a significant portion of chicken and turkey (Tyson, Cargill, Swift & Company, and National Beef Packing Company). Who is the USDA protecting?

The National Institute of Health (NIH) is the primary agency of the United States government responsible for biomedical and public health research. How does the NIH spend its research money? Not on nutrition. In the early 2000s, nutrition ranked last in funding behind clinical research, prevention, cancer research, brain disorders, neurosciences research, women's health, aids and cardiovascular research.

The Food and Nutrition Board (FNB) advises public agencies on implications of nutrition research for food safety, nutritional status & health, food technology, food resources, and food processing. The FNB has received funding for reports from food and drug companies directly. Corporate members have included representatives from Coca Cola, Taco Bell, Burger King, Pfizer, Roche Vitamins and more. Big Food and Big Pharma are businesses. They are not focused on your health.

Why are there vending machines selling junk in hospitals? If people are taught proper nutrition and aren't getting sick, that is bad for healthcare and pharmaceutical revenue. Surveys from 2010 show medical students receive on average only 20 hours of nutrition classroom education in four years. Academics can also accept funding on studies from corporate sponsors.

This is just scratching the surface. It's worse than corruption. Systems we trust as beacons of authority and public service are misleading us. They are working in sync to reap profits for themselves, regardless of the cost of everyone else. Knowing this made me feel responsible to share what I learned with other people. It is the right thing to do.

Guiding Beliefs and Principles

This section represents my views, principles, and answers to frequently asked questions about food based what I've read:

Overview

- Health is inextricably linked to diet, far more so than genetics.
- Genes do not determine disease on their own. Food plays a critical role in determining which genes, good or bad, are expressed. People with the same ethnic background living in different places suffer different diseases. Obesity has exploded in the past 25 years and cannot be blamed solely on genetics.
- Chronic diseases like heart disease, diabetes, and cancer can be prevented and reversed by eating the right foods. We must view health proactively.
- The way we are currently eating is not working. 67% percent of Americans are overweight. People who eat a plant-based diet on average weigh less and suffer fewer diseases.
- Health = Nutrition / Calories (Joel Fuhrman)
- "A diet composed of the healthiest foods is the healthiest." We should be aiming for the best health possible. Why half-ass food recommendations? I love this quote by Joel Fuhrman in reference to a claim that the Mediterranean diet reduces heart disease risk by 25%, "I don't know about you, but a 25 percent reduction in the risk of heart disease doesn't excite me. I want it reduced by 100 percent."
- Keep an open mind to new research and ideas while still thinking critically.

Carbohydrates & Processed Foods

- Vegetables, fruits, legumes and whole grains are very healthy. Eat a lot of them!
- Refined carbs like white pasta, white rice, and white bread are not healthy. Processed food is stripped of its fiber and nutrients.
- Whole grains like brown rice, sweet potatoes, quinoa, oats, sorghum, amaranth and several others are associated with good health.

- How can you tell if something is whole grain? According to Michael Greger: use the Five-to-One rule. If the ratio of total carbohydrates to dietary fiber is five or less, it is likely whole grain. Wonder Bread serving: 30g carbohydrates and 3 grams of fiber - a ratio of 10 – avoid. Ezekiel bread serving, 15 grams carbohydrates and 3 grams of fiber - a ratio of 5 – good to go.
- Beans are incredibly healthy for you. They are a great source of fiber and protein, have significant digestive benefits, and help fight against cancer. Home cooked beans are better than canned beans due to the salt content, so best to rinse canned beans before eating.
- Many Paleo-leaning advocates unfairly lump processed carbohydrates with vegetables and fruits and then make conclusions about carbohydrates as a whole.
- Gluten intolerance or sensitivity likely affects only 1-2% of the population. It may not be the gluten that is causing the reaction but the processed wheat.
- Fiber is extremely health for you. It slows the digestive process, allowing for a more gradual increase in blood sugar after eating. Fiber is associated with positive health outcomes, especially digestive health.
- Always blend over juicing! Juicing removes the fiber and several nutrients. Juice, even from fruits and vegetables, is like drinking sugar water.

Micronutrients

- Plants are loaded with antioxidants. Antioxidants *are* the colors. An apple has antioxidants in its skin. When you peel it, the inside starts to brown. The antioxidants protect food from oxidizing. In the same way, antioxidants protect us from inflammatory free radicals that oxidize and damage our tissues. They protect us from getting sick in the short and long term
- Leafy greens, berries, herbs and spices are some of the most antioxidant-rich foods. Spice it up!

Protein & Animal Foods

- You can get more than enough protein from a WFPB diet. The need for protein is greatly exaggerated. If you are looking for plant foods with high protein: beans, lentils and soy provide plenty.
- Several plants contain all eight essential amino acids the human body cannot synthesize. Some examples: brown rice, oatmeal, sweet potatoes, broccoli, tomatoes, pumpkin, white beans and more.
- I think adequate daily protein can be calculated by taking your weight in pounds dividing by 2.2 and multiplying by 0.8 in grams. If you weigh 165 lbs, that's 60g a day – easily attainable on a WFPB diet.
 - An example of 60g of plant protein: 1 cup soybeans (28.6g), 3 oz almonds (18.2g), 2 cups spinach - (15.2g)
- Animal protein increases the production of insulin-like growth factor-1 (IGF-1). It is an important growth promoter when we are young, however it accelerates the aging process and promotes the growth of cancer cells as we age.
- Plant protein does promote growth but does not promote cancerous growth. Children can grow tall eating a WFPB diet.
- A highly acidic diet is associated with kidney stones and bone loss. Which foods have the greatest acid load? Fish, pork, poultry, cheese, beef & eggs all have an acidic load over 4.0 pral. Dairy, bread and rice range from 1.2-0.56 pral. Which foods are alkalizing? Beans, fruit and veggies range from -4.0 to -9.9 PRAL.

- If you can't live without meat, I recommend a quantity no more than 5% of your diet in calories. Avoid any meat that you cannot verify is grass-fed, organic, pasture-raised. Animals that eat grain feed store fat as inflammatory Omega-6 fatty acids. The toxins from pesticides, growth hormones, antibiotics and dead animal parts they are eating are concentrated into their tissues. Factory farmed meat is *horrible* for you. I cannot stress this enough.
- Avoid fish due to high levels of pollutants like mercury concentrated in their tissues. The bigger the fish, the more concentrated the pollutants.
- AGEs (advanced glycation end products) lead to accelerated aging by cross-linking proteins together. This especially ages our cognitive function. Elevated levels of AGEs are found in Alzheimer's patients.
- Meat has the most AGEs, averaging 20 times more processed AGEs than highly processed foods like cereal. Meat averages 150 times more AGEs than fruit and vegetables. The foods with the most AGE in order are: BBQ chicken, bacon, broiled hot dog, roasted chicken thigh and leg, pan-fried steak.
- Most foodborne illness is derived from meat. "Spinach doesn't poop." *E.Coli* on spinach was likely contaminated by animals.

Fat

- I don't recommend a low-fat diet. You don't need to eat fat in excess but be sure to consistently eat healthy plant fat, especially monounsaturated & polyunsaturated fat found in nuts, olives, avocados and seeds.
- Flax, chia, and hemp seeds are excellent for you and are great sources of Omega-3 ALA fatty acids. Try to consume these daily.
- "Why are beans, nuts, and whole grains so health promoting? Maybe it's because they are all seeds. Think about it: all it takes for an acorn to explode into an oak tree is water, air, and sunlight. Everything else is contained within the seed." - *How Not to Die*
- Most oils are not good for you. Some authors completely avoid using oil. The ones that do recommend oil only advise olive, coconut or avocado oils. If you do need to use these, I would use these lightly. Any oil besides these, like vegetable oil, canola oil or palm oil, I can confidently say avoid.
- Saturated fat is not good for you except for the saturated fat in coconuts, which has repeatedly been linked to good health. Coconuts are uniformly recommended.

Supplements

- Avoid supplements. Many drugs or supplements perform worse than plants. A varied WFPB diet provides all necessary micronutrients. Adequate vitamin D can be absorbed from 15-20 minutes of sun exposure a few times a week. The one exception – B12. Most authors insist a small dose is essential.

Calcium & Iron

- You can get more than enough calcium on a WFPB diet. Elephants, gorillas, and other herbivores have massive skeletons and have no problem with this.
- Darky, leafy greens are excellent sources of iron.

Turmeric

- Turmeric deserves special attention and should be eaten daily, if possible. According to Dr. Greger, "In recent years, more than 5,000 articles have been published in medical literature about curcumin, the pigment in turmeric that gives it its yellow color." This doesn't apply to curcumin supplement.

Salt

- High salt intake has been associated with decreased cardiovascular health. Most processed food and animal foods are loaded with added salt.

Raw Foods

- Serve food raw if it doesn't sacrifice taste and pleasure too much. There is no evidence to suggest eating exclusively raw foods is better than a mix of raw and cooked foods. On average, cooked vegetables lose some of their nutrients but this varies by cooking method. There are some vegetables whose nutrients absorb more readily when cooked.
 - Best foods to eat raw: peppers and cruciferous vegetables, like broccoli
 - Best foods to eat cooked: carrots, celery, mushrooms, and green beans
 - Foods hardly affected by cooking: beets, onions, and artichokes

Organic vs. GMO

- Most authors agreed that organic food is better than GMO food, however there are not a lot of studies weighing the two. Michael Greger estimates organic produce as 20-40% healthier, but buying organic produce is often similarly expensive. Whenever possible, organic is better. If not, the benefits of plants still outweigh the risks from pesticides.

Drinks

- Water is the healthiest drink.
- Tea and coffee (no additives) have been linked to positive health outcomes.
- Alcohol has been shown to have a slight benefit if it's only one drink a day (best to keep it to 3-4 times a week max). Red wine is best. Two or more drinks is not advised. If you don't drink, there is no significant benefit of starting.

Exercise and Sleep

- Exercise is an essential part of health and should be done daily. Exercise that elevates your heart rate is better than stretching although both are good. Exercise is shown to enhance memory and brain functionality.
- Get a good night's sleep. 7-9 hours per night has been correlated with better health than sleeping less than six or more than nine hours.

The Government and Big Food

- The USDA is an organization focused on agricultural sales, not public health.
- When people are sick, medical and pharmaceutical industries make money. We spend 20% of our GDP on healthcare.
- People who work in healthcare are admirable people who help and improve other people's lives. However, there is not enough nutritional education. As of 2010, only ¼ of medical schools offer a single course on nutrition and a medical school student receives only 20 classroom hours of nutrition education in four years.

Diabetes

- Some argue when we eat refined sugar, our cells become insulin-resistant and our pancreas must secrete more insulin to use the glucose as fuel. Excess glucose is stored as fat, leading to clogged arteries, obesity, and diabetes. Others argue fat and cholesterol clog our arteries and block glucose absorption. They mention the positive correlation between meat consumption and diabetes and reference studies that show vegans having the lowest prevalence of diabetes. I lean towards the former explanation but there may be truth to both. What do they have in common? They are the result of eating calorically-dense foods.

The Paleo Diet

- There is enormous debate around what the real Paleo diet is. According to some, over the last 5,000-105,000 years and beyond, cultures across the globe have been relying on a starch-based diet. Others contend hunting was always a route for our main fuel source. The debate almost warrants its own anthropological research project. Regardless, the strong scientific evidence pointing to a WFPB diet makes that debate almost irrelevant.
- It is possible to notice benefits from being on a Paleo diet because you are cutting out processed foods. For optimal health, I recommend a WFPB diet.

Added Bonuses of a WFPB Diet

- Things good for your health often have added benefits. A WFPB diet lowers your environmental impact, increases animal welfare and can save you money.
- A WFPB diet is cheaper than the Standard American Diet (SAD). You are saving by not buying pre-packaged food, meat and sugary, processed foods. Joel Fuhrman estimates a WFPB diet could be about 10% cheaper than the SAD.

Social Stigma

- Smoking tobacco accounts for about 90% of lung cancer risk and is one of the top risk factors for death. I strongly advise against smoking.
- Speaking of stigmas, here's a thought. It is generally known that UV exposure from tanning beds increases our risk for skin cancer. Most people avoid tanning salons. I wonder why is it that most people continue to eat in such a way that significantly increases their risk for several cancers.
- I believe eating processed food, and animal foods especially, will soon be as stigmatized as smoking. Eating meat will be something a minority of people do and will eventually be viewed as archaic.

15 Eye-Popping Statistics

1. In one study, a team of scientists found on average plant foods have 64 times more antioxidants than animal foods.
2. 78% of disease risk can be attributed to not smoking, not being obese, getting at least ½ hr of daily exercise and eating healthier (more fruits, veggies, whole grains and less meat).
3. “The largest study of diet and health in history is the NIH-AARP study... Over the course of a decade, researchers followed about *545,000 men and women* (my emphasis - over half a million!) aged fifty to seventy-one in the largest study of meat and mortality ever conducted. The scientists came to the same conclusion as Harvard researchers: Meat consumption was associated with increased risk of dying from cancer, dying from heart disease, and dying prematurely in general... after controlling for other diet and lifestyle factors.” – *How Not to Die*
4. Exercise can increase immune system activity by 25-50%. When kids run around for 6 minutes, the level of immune cells in the blood circulate increases by 50%.
5. 3 out of 4 Americans don't eat a single piece of fruit per day.
6. In 2007, American Institute for Cancer had nine independent research teams sift through 500,000 studies and one of their biggest cancer-prevention recommendations was eat whole grains and/or legumes with every meal.
7. Over 43 studies found sitting was associated with a shorter life span regardless of physical activity level.

8. From 1980-2016, there has been a 50% increase in the cases of obesity.
9. 40% of Americans will die from heart disease. (A preventable disease. 400 out of every 1,000. This stat blows my mind).
10. A 12-year study of 34,000 people (Adventist study) showed a direct correlation between having lower Body Mass Index (BMI) and lifespan.
11. A cancer study of 157 countries showed cancer rates were the highest in populations consuming the most animal products.
12. In the early 2000s, the dairy industry was spending between \$4-5 million annually towards research to find something healthy about milk to talk about.
13. It takes about one year to detox 99% of the mercury in the body. Other industrial pollutants like dioxins, PCBs and DDT by-products take over a century to detox 99% from the body.
14. An estimated 232,000 people die every year from medication side effects, receiving the wrong medication, hospital errors and hospital acquired infections.
15. A meta-analysis of 148 studies examining the correlation between strong relationships and good health showed a 50% increase in the likelihood of survival among those who enjoy strong social relationships.

What's My Diet Like Now?

It is interesting to see how my diet changed throughout the journey. Whereas I used to eat any and all food going to waste, now I only eat plants going to waste. I've cut out a lot of processed food, including white bread, white pasta and white rice. I am definitely not perfect: I do eat these foods sometimes. I never eat animal foods unless it's something like a marginal amount of cheese accidentally sprinkled on a meal at a restaurant. After reading *The China Study* in December 2017, I realized eating animal products is like eating poison. Would I eat poison going to waste? No.

In short, I eat freevegan: freegan but vegan only. I prioritize and try to eat WFPB food going to waste before I buy. I also take a B12 supplement.

I saw a talk by Trevor Noah, a popular TV host, about politicians priding themselves on never changing, "I've stood by this for the past 20 years!" Why are we so proud of this? If we never change, we never get better. We have to use new information, respond to the way the world changes, and keep an open mind if we want to make ourselves better and the world a better place.

Life Lessons: Things I Learned Not Necessarily Related To Food

- **Discipline** - In the last two months, I cut out all time wasters like Facebook, YouTube, ESPN, etc. I came home and right away read, took notes or wrote a reflection. I read while eating on my lunch break. I finished the last 4 books (1,000 pages, 33 pages of notes, and 6 pages of reflections) in one month. It's amazing what you can get done when you cut all distractions and focus. Life is too short to waste on things you don't care about.
- **Accomplishment** - There are few feelings more satisfying than setting out to do something and doing it - achieving a goal. There is true joy in the journey and the little wins throughout the process.

- Credibility - As I outlined in the section “Coming into Focus,” this became an exercise in credibility. I began to scrutinize more closely as the project went on. What was the author’s background? How many people were in each study and over what period of time? I think this significantly improved my critical thinking ability and will change the way I learn new things.
- Holistic Lense – As much as I wanted to look at food from the perspective of nutrition only, that paints an incomplete picture of health. Diet may be the most important health factor, however exercise, sleep, not smoking, limiting stress, and surrounding yourself with a loving social circle are essential elements to health. Similarly, individual elements of plants do not provide good health; all parts of the plant working together provide good health. The tomato itself provides health, not the lycopene supplement. The same holistic view is applied to eating a large variety of plants to enjoy complete health. The environmental damage from eating meat degrades our soil and makes the quality of our food worse. The inhumane living conditions in factory farms makes the animals even less healthy to eat. It’s important to understand the full picture when looking at health.
- Short-Term Health = Long-Term Health – What’s good for you long term is good for you short term. In the four months since I cut out animal products entirely, I have not gotten sick (knock on wood). Knowing about antioxidants in plants and foodborne diseases from meat encourages me to eat plants.
- Love – I think a common misconception of vegans is they want others to eat vegan because it’s their way or there is some agenda. I believe the reason most vegans encourage their family and friends to become vegan is love. Speaking for myself, I understand the excellent health a WFPB diet brings and know the severe health dangers of eating meat and processed food. I want family, friends, coworkers, and others close me to live the healthiest and fullest life possible.

What to Eat: A One Page Guide

This sheet can be used as a guide for healthy eating. If you'd like, take a picture or post this on your fridge or somewhere convenient. This is a collection of guiding principles from my three favorite books:

The China Study - T. Colin Campbell and Thomas M. Campbell

“Eat a whole foods, plant-based diet, while minimizing the consumption of refined foods, added salt and added fats.”

How Not to Die – Dr. Michael Greger

Try to eat on a daily basis - Dr. Greger's Daily Dozen (paraphrased):

Servings	Food	Example of Serving
3	Beans (Legumes)	¼ cup of hummus, ½ cup of cooked beans, etc.
1	Berries (small edible berries)	½ cup fresh or frozen, ¼ dried
3	Other Fruits	Medium sized fruit or cup of cut up fruit
1	Cruciferous Vegetables	½ cup – broccoli, cabbage, collards, kale, etc
2	Greens	Cup of leafy vegetables
2	Other Vegetables	½ cup or ¼ cup mushrooms
1	Flaxseeds	1 tbsp
1	Nuts	Cup of nuts or 2 tbsp of nut or seed butters
1	Spices	¼ tsp turmeric, along with other herbs and spices you would like
3	Whole Grains	½ cup hot cereal/cooked grain, 1 cup cold cereal
5	Beverages	1 – 12 oz glass
1	Exercise	90 min of moderate-intensity activity (brisk walking) or 40 min of vigorous activity (jogging, sports, weightlifting, etc)

The End of Dieting - Dr. Joel Fuhrman

- Health = Nutrition/Calories
- G-BOMBS (greens, beans, onions, mushrooms, berries, seeds + tomato sauce)
- Six Basic Guidelines:
 1. Eat a large salad every day as your main dish
 2. Eat at least a half cup, preferably closer to 1 cup, of beans a day (½ can)
 3. Eat one large serving of lightly steamed green vegetables a day
 4. Eat at least 1 oz of nuts and seeds per day if female and 1.5 oz if male
 5. Eat mushrooms and onions every day
 6. Eat 3 fresh fruits a day

My Additions

- Roughly 250 mcg of B12 vitamin daily or 2,500 mcg once a week
- Get at least 15-20 minutes of sunlight three times per week
- 7-9 hours of sleep per night
- Surround yourself with a strong circle of people you love and who love you

Appendix: Food Thought Stream

This “Food Thought Stream” is a journal/stream of consciousness I kept throughout the last 16 months. After reading and taking notes on each book, I wrote a reflection summarizing the main points and discussed I felt about the book and where I was at with my vision of the perfect.

I have edited this only for grammar and occasionally for clarification. Otherwise, I kept the content as is to reflect my thinking as it evolved throughout each moment over the past 16 months. I hope it provides an authentic expression of my journey.

Before the Books - Early/Mid December 2016

After embarking on a 7-month trip and having a life-changing experience working on a fully organic, vegan farm in the Costa Rican jungle for 2 weeks, I more and more wanted to really understand what are the best foods to eat. Food is so important; it’s something that is a must every day. If we eat right, we will think better, operate better and ultimately be more successful in our day-to-day activities and live a longer, healthier, and happier life. We take it for granted but these lifestyle changes are really small in ways and have huge impacts.

Being vegan, I definitely noticed how much happier I was. I felt lighter and, very notably, had less anxiety. I still can get mad or feel different emotions, but they last brief and I stay really even keeled.

Cleaning through some of my notes from the trip, I found a list of things I wrote down that I wanted to learn. I figured that internet research would be distracting and all over the place. I read a lot online as everyone else does, but a lot of it is hard to contain. Personally, I love the feeling of reading out of a book. I also wanted to get a better feel of varying opinions, especially as the U.S. is so polarized. It’s important to hear out a lot of different opinions to discover for yourself what is truth. I wanted to see what would these different authors/opinions have in common, what would be different and what could I incorporate into my life.

I wanted to find out how could I best optimize my 1. Health 2. Environmental Impact 3. Time 4. Wallet and 5. Social life and 6. Unintended consequences based on what I am eating.

We have one life, so why wouldn’t we want to live the best life possible?

A secondary reason for wanting to do this is to be able to explain to people why I have the diet I do. When you are vegan, your diet comes up nearly every meal. People say “Oh, you’re vegan, wow, why is that?” “How do you get your protein?” I have to explain it every time, which I don’t mind because choosing to be vegan has social consequences and I believe in the causes I promote by doing it.

I also generally mention that I don’t want to be a vegan that critiques the way people eat. For one, I don’t care what other people do, it’s their life and I can’t control it so I shouldn’t let it bother me or be my business. Secondly, I would prefer that people don’t critique the way I eat. Would I like people to be vegan or at least give it an honest try? Sure, but nobody likes being told what to do. I’d like to show people what kind of options exist. Maybe they can see how I eat and if they like it, they’ll try it.

Another reason for doing this is that I want to be able to explain specific scientific reasons for my diet or scientific attributes about food. I have a basic understanding of nutrition (at least I think) and I have definitely been exposed to more vegan opinions and content, it just naturally comes with the territory.

On my trip, I had made a focus of trying new things once we were at the farm. You REALLY don't know what something is like until you try it. This motivated us to try more and more things. That was a common thread on the trip, traveling forces you to go new places and try new things and open yourselves up to new experiences. I want to make sure I keep doing that throughout my life.

One note I should make: I am not a pure vegan. I am a Wasterian (note: this is what I called it before I learned of the more common term "Freegan". This means that if I come across food that is going to eat, I will always try to eat that first. I had thought of being vegetarian or vegan before the experience because of its environmental impact and impact on animals, but had never done tried it. I felt so great on the farm that it just made it a no-brainer for me to become vegan. I was surprised at all the health benefits and especially the way I feel.

Okay back to Wasterian. If food is going to waste and I can't share the non-vegan food with people or with the homeless, I will eat it, and try to eat the vegan parts first. Why waste water and energy and tax our land to produce more food when so much of it is waste. In fact 40% of food is wasted in the U.S. That's insane. It also saves me tons of money. I'll eat the food that is going to be thrown out at my work every Friday, garbage pick if something looks fresh on the top of a garbage or bring home food from events. There are many ways that I find free food and it's not too hard when you look for it. Don't buy when you have food in your fridge already, don't buy too much in advance, etc. On the occasions that I do have to buy, I will always buy vegan. I know that my choice to buy non-vegan contributes to animal killing, deforestation, and more. Wasted food first, vegan second, and then if I have no options or I really can't contain my hunger, I'd buy vegetarian. But being vegan, well wasterian, is really easy. So even having to eat vegetarian would be rare.

If we cook it usually consists of 2 main ingredients (pasta, rice, beans or potatoes). I usually like beans and definitely prefer sweet potatoes over normal potatoes. I was and my roommate moreso is skeptical of pasta.

I am really motivated to understand food and its impact well now, and then hopefully I can explore some different topics and do more personal projects about them to make my life great. Change is good, it helps us grow, and if I find good reason to make change, then I will definitely go for it. I saw a great Trevor Noah talk recently about how politicians pride themselves in holding the same view for 20 years, when times change. That doesn't make a lot of sense. So I went to the library, checked out a book called *Grain Brain* and put a hold on a few other books and DVDs to look into, all with different topics.

If we win 4 out of 7 days, we win the week. If we win 3 out of 4 weeks, we win the month. If we win 7 out of 12 months, we win the year. If we win 6 out of 10 years we win the decade and if we win 51 out of 100 years, we win the century. If you win 4 out of 7 games, you win the World Series. Life is only one season, so we might as well play for the championship.

We only have one life and we might as live the best life possible

Grain Brain – David Perlmutter M.D. - Early January 2017

I started *Grain Brain* excited to get this project and open my mind to new ideas. From the cover and title, I could see that this book would be talking about Carbs. And for the most part it did.

David Perlmutter argued that carbs, and gluten especially, are bad for us. They stimulate insulin production and fat production. Many people are gluten sensitive and he has had countless patients see health improvements after trying a gluten-free or carb-free diet. They lead to diabetes, which greatly increases the risk for Alzheimer's disease. Fat, especially saturated fat, is the preferred fuel source of the body. Cholesterol is great for brain function. For 2.6 million years, ancestors diet was wild game, seasonal plants and veggies, and occasional berries, and diabetes has exploded in the 20 years after the U.S. government made a recommendation to have a high-carb diet.

He makes a lot of very compelling arguments. He pushes for a diet composed of 60% healthy fat, 30% protein and 10% carbs. It does have a lot of meat with eggs being his golden child. Fruit is okay in small doses and veggies, greens especially.

Beyond food, he has a few good chapters that talk about the benefits of occasional fasting, a consistent sleep-wake routine, and the enormous benefits of exercise.

I really like his focus on treating causes and not the symptoms, it's much cheaper and beneficial in the long run. He also has a great demeanor about him. It's impossible to be perfect and he's okay with that. Do your best and aim for 80% or even 90% on target with these guidelines.

3 of the main supplements he recommended I had great experience with. Coconut oil, which I had coconut all the time on the farm, always made me feel great. Turmeric, which was in nearly every sauce we had on the farm, made me felt great and I got shit-tons of Vitamin D in Central America being in the sun all the time.

I bike to work, weather permitting, and it makes me happy to know how important that (exercise) is. I agree with him but I'm biased.

Overall, the points he made all made sense to me but I'd love to hear what other people say. It is kind of hard because he has meat or eggs in basically every meal. He generally advocates against cow's milk, which I thought was good. He had a few cases where he recommended a dairy-free diet. He also was against preservatives, pro-organic, and pro-water. He was pro meditation too. I loved the way he said you could eat whatever you want for whatever meal as long is it is good for you.

- His general meal plans look like this
 - o Breakfast: 2 eggs with some cheese
 - o Lunch: chicken and salad
 - o Dinner: Large portion of meat with roasted veggies
 - o Dessert: chocolate pieces or 2/3 cup of fruit

I wish he would have addressed any potential downsides of meat and talked more about nutritional/vitamin benefits of fruit. He also advocated against legumes but didn't talk about why. The book was written in 2011 so it was pretty recent. Overall I like his arguments. Being vegan is

restrictive, not too bad, but if I followed a vegan diet and his perfectly, I see it being challenging. But I need to check ingredients and see what I can do. Part of me wants to try his diet out completely but I don't want to not be vegan. I haven't been convinced enough.

I definitely do want to eat more fat-based and less carb-based. I am motivated to keep a consistent workout schedule and biking I'll be more motivated to do because of the health benefits. Strength training I've been doing 3x a week and I want to keep that.

He outlined a daily routine and I'd like to keep my routine similar to his but Wasterian with a more fat-based focus:

- 6:20 Wake up, meditate and get ready
 - 6:50 Breakfast and pack lunch
 - 7:20 Walk 5 minutes and bike 20 minutes to work
 - Work 7:45 - 5 ish
 - 9:50 Snack, something fat based like nuts or avocados
 - 12:20 Lunch, leftovers from dinner, jungle mash
 - 12:50 After lunch walk for 20 minutes
 - 3:50 Snack, something fat based or fruit
 - 4:45-5:30- Bike home and walk home 5 minutes
 - 5:45 Workout at home on the days I workout, read or do something fun
- 6:50 Dinner
7:30 Free Time
10:20 Lights Out

It's also going to be hard to convince me not to be wasterian. If there is a pizza going to waste in front of me, how can I justify that waste and money spending on other food? As long as I'm exercising and sleeping well and eating right when I'm buying, I think that is good. So if this diet is just for food I buy, as of now that works for me. I do feel more informed about impact of carbs and fat. I'm also really excited to start my next book. Reading, taking notes, copying notes onto the computer and summarizing how I feel really drives the key points of the book home for me.

I did do a brief search about where is the book funded and it was hard to see any results. I'm pretty tired right now and I think this is something I may have to do for a lot of the books. Plus if I start reading random things on the internet, then you start hearing other people's opinions and things get cluttered.

Time for something new!

Human Heart, Cosmic Heart – Thomas Cowan M.D. - Mid January 2017

So I read through this book after a recommendation. It wasn't quite entirely focused on food, but it's impossible to address the food situation without looking at health as a whole. From the details I got, it's consistent with *Grain Brain's* approach of low-carb, high fat diet, requiring plenty of exercise and sun. It also adds on barefoot walking, which my mentor on the farm always preached and touch from others, including sex.

I liked his view of connecting things to nature and connecting everything together but thought that he often looked for convenient correlations, anecdotes or coincidences. I like his focus on talking about eating things as they should be and avoiding industrialized food. This coincides

with industrialized life and misery. Sometimes I felt like it was too off the deep end but I think it was good for the most part.

I am encouraged to eat high-fat, low-carb, medium-protein and still see coconut as a super fruit. I also love his view of focusing on wholesome preventative (more so just healthy) diet and not treating the symptoms. I'm growing more and more weary of medicine too. It's also the second book to talk about fasting but this one is even more so. Does fasting every 1-5 days a week make sense vs. 4 times a year? Hard to say, it's probably a combo of both. Both diets aim to reflect traditional diets. I also got to say that I was thinking more and more about veganism after I finished the book, because I watched *Forks over Knives* casually as I was halfway through taking these notes. I am behind on my notes.

Also I gotta check out CSAs. And his point about money and controlling the Cowans was very Ishmael*-esque. Like money isn't real. Some people get it and others don't.

*Ishmael is my favorite book. It's about a gorilla named Ishmael telling a human how humans live. I thought Cowan viewed it in a similar way the Ishmael

Eat, Drink, and Be Healthy – Walter C. Willett M.D. - Early March 2017

I really enjoyed this book. His moderate and practical approach made him very likeable. I also probably liked it because it was more closely aligned with my views than the previous two books. I like that right away he discusses the current pyramids and its inherently problematic nature being associated with the USDA. He has a style where he “generally recommends” or says things “may reduce” I'm sure to cover himself from any lawsuits but also because there “may” not be one perfect solution.

In all three books, it has been stressed that keeping a healthy weight and consistent exercise are nearly more important than diet. You should be exercising at least 30 minutes a day, always trying to get a walk in and building muscle, as the more muscle you have, you will burn more calories. A key difference with this book is the break in saturated fats as well as cholesterol. He argues that saturated fats are not good and as a result, you should really be avoiding dairy and red meat. Everyone is in agreement about trans fats.

The diet is also very vegan-friendly. The first 4 of 7 layers of his proposed food pyramid are vegan, meaning that you would probably be completely fine with just that as those base layers would compose the bulk of your diet. In that aspect, he is very hesitant not to be too pushy with this, because people get sensitive about their meat consumption. But the protein he stresses is always from nuts or beans first, from both a health and environmental perspective.

He is definitely in agreement with the first two books that refined sugar (white bread, white rice, potatoes, soda and sweets) should basically be avoided entirely. It's crazy to think because it is so common. As it currently stands, I have gotten insanely good at finding free food. I still haven't bought food from a grocery store since November. This was a big part of the reason that I was really slow to get this write up going even though I got through this book pretty quickly. If I ever do buy, or eat at a restaurant, my current feeling is that I won't order any white carbs while still keeping it vegan unless I'm out to eat with friends and I'm pretty limited with my options making it would be awkward not to eat anything.

The interesting differentiation on whole grain is the discussion of fiber as well as the nutrients from the bread, which I really don't recall too much exploration of that from *Grain Brain*. *Grain Brain* came much more from a (macronutrient) energy-source perspective.

Protein he doesn't get too worked up about. While *Grain Brain* stresses protein, this book said we get so much protein from our food that it's easy to get the recommended amount. When we get too much it might decalcify our bones.

Another source of agreement is alcohol, a drink or two (one drink generally) per day is really something they can all get on board with, but don't overly recommend it. They also agreed that an ounce of prevention is worth a pound of cure.

Everyone's in agreement about veggies. Willett aims for 2-3 fruits a day, while *Grain Brain* says keep it minimal, like one a day. Again, not a ton of focus on the nutrients, it's more about the sugar. I personally really like the strategy in *Eat, Drink, and Be Healthy* but I am still only 3 books in (well 4, because I watched *Forks over Knives*), so I want to stay really open.

***Forks over Knives* – Directed by Lee Fulkerson - Early March 2017**

I had been waiting to watch *Forks over Knives* for a while and it's hard not to get excited about it after watching. The views of this documentary almost perfectly line up with what I had been feeling before I started this. The only real thing they are getting after in this documentary is the correlation between meat, dairy, and processed sugar and heart disease, cancer and diabetes, among other chronic illnesses.

You can really see how easy it is to be convinced in movie form vs. a book just due to the human connection. For most, I think it would be hard to believe that plant based diets would have such a reversal on diseases. Multiple people stopped taking medication and saw dramatic improvements in their health in the movie.

I had watched this a few weeks ago, but one great thing about this was the realization that going vegan as a country is also a massive savings to our wallet and the national health care discussion. Much in the same way people complain about the EPA, the exact same thing is happening with our healthcare system. I always find it extremely interesting when a certain action carries with it a host of other positive benefits. It makes it a lot harder to disagree with.

The views of *Forks over Knives* essentially mirror those of *Eat, Drink and Be Healthy*. The food pyramid they propose is essentially the same and they would cut out the dairy, red meat, fish chicken and eggs and processed carbs. So at their very cores they're the same.

It made me really happy watching this because it most closely aligns with my dietary habits, not counting freeganism. I do need to get rid of simple sugars though, which is tricky on the freegan diet. I need to continue to read much more before I can really feel confident. I'll need to push my comfort side and challenge my beliefs. It's really hard to know exactly which books to read as well, because I'm so swayed by my own bias to begin with. I think I need to deliberately seek out things that contrast my views, as well as books that have unique perspectives or just things I choose at random the best I can.

As far as freeganism goes, this is something I still need to consider. What is the cost of eating poorly? What does my average diet look like on freegan living? Maybe I should weigh the cost of living on this pure diet (well really the diet of whatever I come up with) short term and long term vs. the cost short term and long term of a freegan diet. That's probably how I'll have to do it, but I think it could be an examination for later. I think this is the point that I should probably start recording what I eat throughout the day.

Phew! Took me 6 weeks to get through the past books and DVDs. I really see now how precious time is and if you waste it you can run out. I could have gotten through this easier. Going on the internet and wandering around is really a time suck and you can get so much done when you focus. I'm really excited for the next couple of books. I definitely want to dive into protein some more, that is one thing that comes to mind. I also had *How Not to Die* on there but seems like my library hold expired.

So what will the next books be? After thinking about it, *The China Study* is extremely convincing. *Forks over Knives* in general was, man. Another crazy thing is that when reading and fully engaged in a book you can really become convinced of what they are saying. Also makes me wonder about experiencing diet vs reading about diet. This will be more interesting the more I read.

Smart Fat – Steven Masley M.D. and Jonny Bowden PhD - April & May 2017

This was probably my favorite book and I'm starting to notice commonalities among all 5 sources so far. Here they are:

- White carbs (pasta, rice, white potatoes) are not good for you
- Vegetables are very healthy and should be eaten in an unlimited fashion
- Factory farmed meat is not good for you. Especially when fatty it contains toxins that are harmful for you
- Polyunsaturated and Monounsaturated Fats are good for you (i.e. seeds, nuts, certain oils)
- Aerobic exercise is great for you (even moderate walking)
- Getting a great night's sleep is very important

They key pillars of Smart Fat were:

- Choose Smart Fats (avocados, nuts, coconut oil, dark chocolate, eggs, fatty fish)
- Avoid dumb fats (factory farmed meat, trans fats "hydrogenated", vegetable oils, fats from omega-6s (grain fed) and
- Neutral fats in moderation: clean dairy, red meat, palm oil
- Eat lots of fibrous foods
 - Veggies are full of nutrients and fiber
- Lean, clean protein (1.4-1.5 weight in kg per day)
- Have good herbs and spices
 - You'll stick with a plan if it tastes good

I really loved their approach. It felt like they were coming from a place of genuine honesty and thoughtfulness without forcing their views upon you. Like other books, this one also stressed the importance of sleep, stress management and having a strong social network. They really understood that diet can't be simply seen in isolation. They had an especially interesting passage about how the sedentary lifestyle really has done a ton of damage for us.

They also got that it was about balance. You aren't going to be perfect and you shouldn't bother making exact measurements. This rings true with their daily recommendation of 5-5-10 (5 smart fats, 5 protein, 10 fiber servings) model. They don't expect an exact science and that's an easy way to remember the basics. This like the other books also said alcohol (a drink or two) 5 times a week has some health benefits. I'm not sure if *Forks over Knives* said anything about it but seems like at a minimum one drink 4 times a week has some benefits.

I also particularly liked their explanation of how animals store fat as inflammatory omega-6 when eating grain feed plus the fat stores toxins found in factory farms. Like the books before it, it agrees that processed carbs are out of the question. That is pretty damn clear by now across the board.

It almost feels like I'm at a stopping point now because I've found so much in common but it's not quite enough. I think I liked this book because it really summarized how I was feeling and is a nice summary/middle ground of the other books. I need to pick up the pace a bit no doubt, it is definitely always exciting starting a new book.

Food Rules – Michael Pollan - June 2017

Food Rules was great from the perspective of its simplicity. And it was all seemingly common sense, at least at this point. I love that I was able to finish the book in one day. It's main message: Eat Food, Mostly Plants, Not Too Much. Eat food, meaning something naturally occurring that we can all visualize and pronounce; mostly plants, rich in nutrients, and avoid meat or ingredients that have crazy names; and not eating too much, slowing down aging and keeping us slim.

Nothing provided here was groundbreaking but it was another voice reinforcing some common trends: eat natural food, eat a lot of plants, and don't eat too much. Avoid sugar, eat vegetables and fruits, opt for a traditional diet, and don't eat too much meat. A lot of the advice was to remember to pay attention and look at the obvious. If something seems bad or unnatural, it probably is.

The Food Revolution – John Robbins – July 2017

Overall this book addressed eating from a more holistic point of view, which wasn't my focus. Broken into 4 parts, they were: health, animal cruelty, environmental impact and GMOs. Reading the book became a little tedious after awhile, but there are a few important points. For one, he is the son of the Baskin Robbins founder. His credibility is outstanding. He could have inherited a career that would inevitably make him a fortune, but instead he pursued the truth (in his mind). Secondly, it's very hard to focus on a diet while ignoring the environmental and animal abuse impacts. People always ask me what my main reason for being vegan is and while the main reason would be environmental, once you're vegan you realize that it's more of a lifestyle. At this point, I realize it is 100% I'm going to stay freegan. It seems like I can get nutrition, be very healthy and live with a clean conscious by not inflicting pain on the environment and animals around us. And from the perspective of factory farming, the meat is so toxic, that it's so risky to eat it, whether you care environmentally/animally or not, the risk of getting cancer or another disease is greatly increased because of it.

- His diet: lots of fruits and vegetables, low and refined and processed foods and sugars, no hydrogenated or trans fats, low in saturated animal fats and vegetable oils, more water and less pop, more baked potatoes and less french fries, more whole grains and fewer refined carbs; locally and organically grown when possible, no msg or artificial preservatives or colors; for infants no products that would replace breast milk; vegans should get B-12 from fortified foods or vitamins

I realize at this point that I really need to focus on reading some opposing or outside diets to push my beliefs. But so far most books continue to push towards a plant-based diet. Not necessarily entirely plants (although many do), but eating lots of plants, avoiding factory farmed meat and processed food. Seems pretty intuitive. One thing to note about this book is that it was written in 2001.

(Also one idea I have is to list all the books at the end or beginning or after each footnote and write down their main pillars.)

Food Matters - Mark Bittman – August 2017

I wasn't a fan of this book. I feel that he would say things like "and there have been shown to have some benefits of X" and then not explain or elaborate it. He had an extensive bibliography so I don't doubt the research but it doesn't make for an effective argument. Along a similar line, I didn't like it because it lacked conviction. His general argument was: eat less meat and fewer animal products, eat way less junk food, eat far more vegetables, as much as you can. He also pushed for unsaturated fats, whole grains and more protein from vegetables. While so far I agree with that all, it just felt like he didn't commit all the way to what he thought was the truth. I will say however that it could be a good transition book for people who aren't quite ready to make a full leap to veganism. His book also does provide credibility when he's lost 35 lbs and isn't the most strict. Lastly, I will concede that moderation is a good practice and he's a good example of that.

This book, like many others, discussed how big food is marketing what can make them the most money, irrespective of animal health, environmental wellbeing or social health. The USDA has favored corporate profits over public health. That hasn't or isn't the focus (wasn't my intention), but it's so hard to ignore when it's just blatantly in your face and everywhere. It really helps to explain why some foods are so prevalent and helps you understand the full picture. That also made the book a little hard to get through because it was out of my focus. Overall this echoes many of the books I had read previously and certainly leans towards whole-food, plant-based diet. As I've said (or especially thought recently), it's hard to ever envision leaving a vegan (or freegan) lifestyle. I'm close to 100% sure I won't. 6 out of 8 books so far close to or entirely endorse being vegan.

The Paleo Diet – Loren Cordain PhD - Late August 2017

Before I start reading this book, this is seemingly for sure - processed/refined carbs are gone, dairy is gone, trans fat is gone, eat tons of veggies, saturated fat is 90% gone barring a couple of things, factory farmed meat is gone, get lots of sun, monounsaturated fats are great and 90% polyunsaturated are too.

(after finishing the book)

The Paleo Diet was the book I needed. It brought a different perspective from some of the books (well, all of the last 5 books essentially). It advocates for 55% lean meats and the rest fruits and vegetables. No grains, legumes, dairy, or added salt and essentially only grass fed meat. The idea is that this is what hunter-gatherers were/are eating. Hunter-gatherers needed meat for the amount of energy they had to expend to get their food. Processed foods and oils wouldn't have been able to provide it and the idea of dairy would have been insane/not practical as well. Succinctly, these are the 7 keys:

- High animal protein
- Fewer carbs than most recommendations but good carbs from veggies and fruits
- Large amount of fiber from fruits and veggies
- Moderate amount of fat (good fat from mono- and polyunsaturated and equal amounts of omega-3 and omega-6)
- Eat foods with high potassium content and low sodium content

- Eat a diet with a net alkaline load
- Eat foods rich in plant phytochemicals, vitamins, minerals and antioxidants

I liked the thinking of how this is the way healthy people eat, but I found the book flawed and mildly irritating in a few ways:

1. He frequently cited studies with low amounts of people over a short amount of time (12 people, 24 people). Not useful.
2. The last section about global impact he talked about how it would create healthier livestock but mentioned nothing of the polluted air or waters as a result of farming. Though he doesn't promote factory farming, he hardly touches on it.
3. He makes no mention of possible downsides of meat other than to get lean cuts of meat
4. He critiques a vegan/vegetarian diet with the eye that it is very starch heavy and not from the whole-food, plant based view

There are more points, like meat being more acid-base heavy than grains but I digress. Overall I just didn't trust it. Maybe that's because it goes against my current eating, but a lot of it just didn't feel thorough or trustworthy.

He is also relying heavily on the assumption that this was the way hunter-gatherers ate. I was thinking that if they caught an animal, they had to distribute it to their tribe and the meat wouldn't keep for too long. I think the assumption that they were having meat for every meal seemed bold. He also promoted flaxseed and olive oils as healthful when there's no way Paleo people would be making those. He also rejected beans, blaming lectin as a culprit in digestive issues. This is especially interesting as beans are practically hailed across all other books for their protein, fiber and micronutrients.

It did make me think about it pretty hard however and it is a pretty interesting theory. There are probably some valid points, but I think the meat consumption is probably excessive. The points I made at the beginning of this section still hold. You seemingly can't eat enough veggies.

And this one is huge. He shoes case studies or small samples of what happens but he doesn't show cancer rates backed by strong data. It's all anecdotal. And when it comes to cancer there's never any long-term data behind eating things and causing cancer. Not at all. He doesn't even do it for dairy.

Post Research

At the end of this I need to look at pictures of authors, how it's funded, and general critiques (maybe, that's slippery, needs to be subjective).

The End of Dieting – Joel Fuhrman M.D. - Early September 2017

This book was quite possibly my favorite. It took a very long time to take notes on but it was, shall we say, nutritionally dense. One thing I loved was his conviction. It goes hand in hand with this lean picture of him:



Above: *Joel Fuhrman flexing on a table. Image not my own.*

The way he explains health makes total sense. Focusing on micronutrients and not macronutrients will make the difference. If we satisfy our nutritional needs, then we won't will feel satiated and not fill up on low-quality calories. Health = nutrients / carbs.

I loved his steadfast dedication to science and not preconceived beliefs. He acknowledges that the food system is messed up but he cuts it based on facts and studies with huge amount of time and people. It turns out that most of it is vegan, but that it is high in good fats (as suggested in many previous books). Like the other books he says completely avoid refined carbs. Obviously avoid meat and dairy as well. No more than 5% of your calories. Eat as many green veggies as you want from G-BOMBS (greens, beans, onions, mushrooms, berries and seeds). He also mentions exercise, rest, good social ties and personal achievement as keys to health.

During this book I really really felt like after I hit a year of not buying groceries, that I want to eat only the right foods. And pretty much I'd like to eat according to what he recommends. It feels like the best option. Lately, I've thrown out some yogurt and avoided certain foods. I'm at 10.5 months now without buying groceries so it's not much longer but it's exciting to start eating close to perfect. It seems like it's worth it. Obviously we are saving waste from going to a landfill so our food impact is definitely negative. However, the difference in environmental impact savings of eating freegan vs. vegan still isn't as big as if you were eating vegan vs. non-vegan. So, there's that consolation.

He did make a couple of jumps that I thought were a little bit presumptuous, but I liked his honesty overall. He made a disclaimer when he suggested his foods saying there was an honest need in the market and he donates proceeds to nutritional research. I'm definitely leaning towards DHA/EPA supplements as well and I thought he made a nice guide for supplements. Overall, I loved his love for truth and conviction.

The Big Fat Surprise – Nina Teicholz - Late September 2017

This book easily comes in at last place so far. I really wanted to give it a chance based on its title, and I'm surprised I even finished. The whole books goes like this:

Accepted science has been that a low-fat diet is good for you, driven by key figures such as Ancel Keys. However, the evidence from these results is shaky at best. The push to get rid of saturated fats led to the use of trans fats and eventually polyunsaturated oils, a progression that she says got worse and worse. Towards the end of the book she starts advocating against a high-carb diet and shows studies that a diet high in saturated fat has not been shown to have negative effects. She mentions after concluding that it has no negative effects, that it even shows good effects. From that point she encourages that you should eat a lot of “whole fat dairy, eggs and meat, even fatty meat. In short: all those rich, forbidden fruits we’ve denied ourselves of for so long”.

This book and her logic bothered me for numerous reasons:

- She lumps carbs together, not willing to distinguish between refined carbs, legumes, fruits or vegetables.
- She waits until the very end to see that these trials were done with mostly fruits, vegetables and mostly whole grains, however none of this was mentioned as she was talking about the trials throughout the book.
- So many of the studies she cited had few participants (hundreds or tens of people) studied over a short period of time. The one she does frequently reference is the women’s health study over 49K ppl that did not show benefits of a low fat diet (but she stops short of expanding on that or saying anything about benefits of a high fat diet)
- Her “Note on Meat and Ethics” at the end is awful. In short saying, cultures of the past cherished and worshipped animals. The environmental effects are complicated: cows produce methane, which contributes to GHG more than plants, but that red meat may be more nutrient-dense per unit of resources consumed and more nutritious than plant foods so the healthcare effects could even it out. And what if eating animal fats allowed us to lower the demand on our land for plants grown for vegetable oils. They are complicated questions beyond her scope
 - I absolutely hate this. She acknowledges there could be an issue, but isn’t sure and makes claims that the health care costs might outweigh the impact and than land might not be used to make vegetable oils. That’s such a leap to even put that in print without any kind of evidence around that.
- Why does she assume that a diet without animal products automatically must contain polyunsaturated oils?
- She talks about beef consumption steadily declining and being replaced by chicken, which is [mostly true estimated by the USDA](#). She doesn’t talk about cancer rates or obesity rates during that time. Is it possible that there could be some correlation? Meat consumption going up has not correlated with good health in the U.S.
- There is zero discussion of the health benefits of fruits or vegetables - zero
- She made no discussion of factory raised meats and health consequences (i.e. omega 6 fats, toxins in meats, etc).

I wanted to stop so many times through, but I wanted to give it a fair chance. My overall feeling leaving this book is that there is nothing I can really take away from it in any direction, because I feel like so many of the leaps she were taking were unsubstantiated. Her ideas are: avoid polyunsaturated oils, olive oil is okay, avoid a low-fat diet, eat a diet high in saturated fat and that’s it. It’s very limited and while I agree with all of the above (saturated fat I’m still not sure on). I don’t feel comfortable drawing any conclusions beyond that. And I would agree from previous reading about polyunsaturated oils, olive oils and avoiding a low-fat diet while I’m unsure on saturated fat. But eating a ton of animal meats and fats I probably wouldn’t at this point. I have to weigh this book in my considerations minimally at best

The one point that I still think about from *Grain Brain*, I think, is that saturated fat is 54% of breast milk. That I find rather interesting. It should be noted that this is human milk, however. Another thing I think about with Paleo-related thinking is that ancestors weren't eating cows, chickens and pigs all the time and definitely not from cages.

Deep Nutrition – Catherine Shanahan M.D. and Luke Shanahan - Late September-Early December 2017

This book was a very slow read at first but it picked up steam. At the start, she talked a lot about how our genes are susceptible to change or damage from environmental factors. Our genes play an important role in everything from our health to our beauty, and there is a strong correlation. Off the bat, I found it slightly obnoxious that there was a large section in the book about the science of beauty. I think that beauty is more of a subjective thing and poor basis for scientific argument although I will stay open-minded to there being some truth to it. She was focusing on beauty as an indicator of good health and healthy genes.

Nearly 90 pages of *Deep Nutrition* discussed how various polyunsaturated fats (PUFAs), vegetable oils to be precise, are causing sickness and damage to our brain and genes. It is impairing our brain, organ and circulatory function in a variety of ways. I thought her evidence was strong and combining that with what I've read previously, I don't see any benefit in continuing to consume vegetable oils.

That was followed up with a how a carbohydrate-rich diet, specifically processed carbs, are causing further damage and contributing to chronic illness.

The four pillars of her "Human Diet" were to consume Meat on the Bone, Organ Meats, Fermented and sprouted foods, organs and other "nasty bits", and Fresh unaltered "raw" plant and animal products. She also made a point to avoid pasteurized milk as much of the nutritional quality is damaged in the process. But she is one of the rare authors to be a big advocate for dairy.

The stress on raw meat is interesting. For all the *Paleo Diet* talks about meat and eating what our ancestors ate, it doesn't stress eating raw meat enough. For that argument, I can see eating raw meat as more effective. Another thing she stressed was bone broth and its benefits for collagen. She also claims that organ meat is more nutrient rich than broccoli. I found that so interesting that it could contrast so sharply with Joel Fuhrman's analysis. Two complete opposite conclusions. It's no wonder why we're all confused.

There are seemingly two schools of thought emerging. I'll call them School A and School B. School A is whole foods, plant-based diet. School B, which *Deep Nutrition* falls into, is typically meat-heavy, high-fat or high protein and low carbs. I find myself learning more inclined to School A.

My issue with the School B is that they rely on weak data or make anecdotal claims about a people, often referencing a few recurring ones like the Inuit or Masai Tribes. They are not citing large studies in terms of time and people. A key failing of School B is that the argument is typically, "Here is the history of carbs and why they are bad for you and thus meat is good for you." They fail to go into enough detail about the positive correlation between a high-meat diet and long-term health. It is often anecdotal evidence, citing a few ancient cultures among the many thousand in the world.

Furthermore, School B often refers to carbohydrates in general when they fail to specify the type of carbohydrate. This leads to confusion. They often discuss how Ancel Keys discovered with questionable evidence that a low-fat diet is bad for you. So a push for more carbohydrates was made. Food producers created polyunsaturated oils or trans fats to maintain the taste and texture, not worrying about possible health impacts. Those from School B use this reasoning as an opportunity to widely discredit carbs as a whole.

Like almost every other book I've read to this point, this book talked about the shift away from whole foods to a more processed regimen. Nearly all of the books have talked about how this industrialization is problematic. The USDA is not in the interest of public health, but of corporate profits. This has become obvious to me. She was not a fan of supplements on the whole.

Furthermore, both camps agree that refined, processed or simple carbs they should be avoided. I've read enough to agree.

However, I find it interesting that a vegan/vegetarian is still possible in almost all of the books, but in the whole foods plant-based leaning books, they rarely recommend eating meat or animal products.

My main takeaway from this book is strong evidence for avoiding vegetable oils and refined sugar. It really made me want to avoid eating anything with it. It also struck me how those oils are in nearly every single processed food. Even granola/protein bars that most of us assume are very good for you. I liked the book overall and did keep my mind open to raw or organ meats.

The China Study – T. Colin Campbell PhD and Thomas M. Campbell II M.D. - Late December 2017

This book to date was easily my favorite and after finishing it took me awhile to even write my notes and reflections, because the evidence was so compelling for a whole-foods, plant-based diet, that continuing further would be trivial. I absolutely loved it.

Campbell establishes instant credibility talking about growing up as a dairy farmer and doing research early in his career to show the health benefits of (animal) protein. But what he found from his work in the Philippines was that the kids who were getting liver cancer were those from wealthy families consuming diets high in animal protein. He soon found it against his conscious to endorse animal protein.

I loved that he was so precise and thorough with his work. He said towards the beginning that he wouldn't rely on anecdotal stories to make his arguments but statistically significant science and research. He does not half-ass his work. He makes sure all his bases are covered. His research is first-hand, explained thoroughly. Again, I can't stress how refreshing it was to read minimal personal anecdotes. He had the strongest conviction of any authors I've read so far. Maybe only Joel Fuhrman comes close.

One of the key differences of Campbell's work compared to others is that he's taking a largely holistic view of health. Macro and micronutrients do not work in isolation. He breaks down diseases into two classes. Diseases of Affluence like cancer (many kinds), diabetes, coronary heart disease, which are almost always found in more meat eating, "Western diet" countries. Diseases of Poverty are Pneumonia, intestinal obstruction, peptic ulcer, digestive disease, tuberculosis, parasitic disease, rheumatic heart disease, metabolic and endocrine disease other

than diabetes, disease of pregnancy and others are found where people in developing countries that don't have access to adequate food.

He discusses his research with lab rats experimenting between 5% and 20% casein (cow's milk protein) and how it related to cancer activation. He discussed how animal protein allows carcinogens to enter the cells and create mutagenic reactions. Rats who were fed a 20% casein diet were all dead within 100 weeks while rats on a 5% casein diet were all alive. The rats on the lower protein diet all voluntarily exercised more as well.

But the Grand Prix is his work in China. Campbell, a Cornell professor, teamed up with Dr. Junyao Li, a key scientist in China's Academy of Medical Sciences and Richard Peto of Oxford University. They conducted a nationwide comprehensive study of dietary and lifestyle factors associated with disease mortality in 170 villages in mainland China and Taiwan (widely known as the China Study). They found over 8,000 statistically significant correlations.

The uniqueness of this study is that China at the time of study was a widely plant-based society. Many western diets are comparing diets between other western diets. They might be comparing a diet of meat vs. vegetarian when the traditional western vegetarian might be consuming a lot of cow's milk or eggs. This study truly allowed them to compare people who ate a mostly plant-based diet to those that ate more meat.

Across the board, from heart disease, cancer and various other diseases, it was found that consuming a whole-foods plant based diet was associated with the best health. The data is overwhelming. It's gathered based on blood markers, food in the markets and local family diets.

Between the China Study and his further research, he finds the plant-based diets help while animal-based diets hurt in cardiovascular disease, cancer, kidney stones, macular degeneration, bone health, cognitive function, diabetes, obesity and more. I'm honestly overwhelmed at succinctly trying to summarize his main points. There is so much breadth and depth to his work that it's hard to put here.

He also spends about 100 pages talking about the science, medical industry and government all working together to put forth profit over health. Doctors are barely trained in nutrition and they often receiving funding or support from pharmaceutical companies or organizations like the national dairy council. He discusses the committees he's served on and first hand he's witnessed the way people on these committees, such as a the Food and Nutrition Board, responsible for creating the pyramid and marketing to school lunch programs, had direct business ties to meat or dairy industries. I think this sums it well "Companies that profit from sickness are the ones telling us how to be healthy"

As I read this book, I started really thinking about my family and those that I care about. It's hard to say that it's not your place to tell someone what to do, but at the same time, I want them to live a healthy and full life. Furthermore, when you combine this fact, knowing that healthcare is costing our country so much money and knowing the environmental destruction and mass suffering caused to animals, it becomes harder and harder to say nothing.

The beauty of his argument is that it's so easy. "We now have a deep and broad range of evidence showing that a whole foods, plant-based diet is best for the heart...best for cancer... best for diabetes and autoimmune diseases...best for our kidneys, bones, eyes and brains". It can

be summarized in this one sentence “It can be stated in one sentence: “eat a whole foods, plant-based diet, while minimizing the consumption of refined foods, added salt and added fats.”

It’s getting harder and harder to see how an alternative could be better...

***The Starch Solution* – John A. McDougall M.D. and Mary McDougall - January 2018**

The Starch Solution is based on essentially the following 8 principles:

1. Eat as much starch as you like.
2. Choose the least processed starches and other foods you can find. (For example, brown rice is better than white)
3. Eat plenty of fruits and vegetables
4. Eliminate animal food from your diet, including meat, poultry, fish, eggs, cheese & milk
5. Keep your fat intake as low as possible, enjoying avocado, coconut, other nuts and seeds only as occasional treats
6. Avoid any added fat in your food, including butter, margarine, and all vegetable oils, even olive oil
7. When eating soy foods, skip those that are highly processed (e.g. soy burgers) and enjoy minimally processed foods like tofu, edamame, and soy milk as infrequent additions.
8. Go easy on sugar and salt, but don’t sweat the unimportant stuff. Add them to the surface of the foods for flavor.

Overall, I was pretty disappointed with this book. Though I had just read about McDougall in *The China Study*, there were a few things that I didn’t like. The main thing was that he would say what was bad or good without going into too much detail as to why. He would maybe give a sentence or two with a reference but he didn’t provide enough context or enough explanation as to why certain food would have a certain effect. I found it pretty hard to be convinced in many instances.

The second thing I disliked was the “Star McDougaller” sections of the book that highlighted specific case studies and emails to McDougall. Truthfully, this has been the case for many of these books. I understand building the individual connection, but after coming from *The China Study*, it was a let down. Lastly, I disliked how we promoted his and his wife’s foods and product line throughout the book. It may be good for his book sales and personal wealth, but wasn’t helpful for the purposes of this project and scientific credibility.

Although McDougall is referenced and revered in *The China Study*, I had actually put this book on my list earlier as I was gathering my initial list. I saw that he had wrote a critique of the *Paleo Diet* and I was interested in learning more. Sure enough in the first chapter, he goes into an anthropological discussion. According to him and his sources, over the last 5,000 to 13,000 to even 30 or 105 thousand years and beyond, cultures across the globe have been relying on a starch-based diet. This ranges from rice, potatoes, corn, millet, wheat, legumes and more. It isn’t until recently that after the Industrial Revolution are we eating so much more animal foods and getting sick as a result. This stands in direct contrast with the *Paleo Diet* and almost warrants an anthropological research project.

He talks about how traditional people are in much better shape and discusses the 5 major poisons found in animal foods: animal protein, animal fat, cholesterol, methionine and dietary acid.

Like almost every other book, he talks about Big Food, Big Pharma and government collaborating to encourage far more animal foods than necessary. He also talks about the damaging effect eating animal foods has on the planet, from depleting the oceans, to polluted water run-off, to emissions and climate change. These two problems, while not necessarily related to nutrition, help to put nutrition into context.

He is not a fan of supplements citing that they have often been correlated with increased disease risk. Vitamin D he encourages by going outside or taking a very small 200IU in extreme cases. The only supplement he recommends on the Starch Solution is a very small dosage of vitamin B12 if you have low levels and have been vegan for over 3 years. Even then he reluctantly recommends it. I will say his analysis was more compelling to take very small amounts of B12, and I am inclined to take a very small amount or try to consume more nori seaweed.

He goes into detail about how starches and plants provide all the essential amino acids that the body can't otherwise produce. You will get your protein no problem and frankly, the amount of protein recommended is far higher than necessary.

He also spends a significant amount of time talking about calcium. While plants provide plenty of calcium, milk is actually extremely damaging to our bones. In fact, most of the books argue milk is damaging to the bones. The rate of osteoporosis correlates highly with the countries that consume the most milk. The animal protein creates an acidic environment and leeches calcium from the bone to neutralize the environment in the digestive system.

If plants can provide enough protein and calcium for large creatures like elephants, rhinos, gorillas and giraffes, they can surely provide enough for humans. This is especially true when you think about how genetically similar humans are to chimpanzees.

He is also generally against fat, even of the whole plant form. It's okay to have every now and then (see number 5 above), but on the whole he wasn't for it. He does however point out that it is okay to add some salt and sugar on top of your meals. The minor additions of salt and sugar used to season the food would be worth the flavor. The caloric impact is minimal and eliminating animal products and processed foods will drastically lower your salt intake and sugar intake in many cases as well.

His views essentially fall into the Whole Food, Plant-Based Diet group, however he more strongly supports starches whereas most books (WFPB books included) would be more in favor of vegetables than starches. While most books warn that consuming starchy foods will cause major spikes and dips in blood sugar, he says that it is a much more natural fill and you feel satiated more easily on this diet. I kept waiting for him to put a stronger emphasis on vegetables. However, I will note that flipping through the recipes, there are more vegetables in them than his book would let on.

This was also the fastest I finished a book in this project. It took me 3 days to get through the book and notes, which I'm quite happy about. I can feel the light at the end of the tunnel. I'm thinking I need to find a book on diet more anthropological focused that almost doesn't relate to nutrition. We'll see what's out there.

Protein Power – Michael Eades M.D. and Mary Dan Eades - January 2018

This book was so bad that it's barely worth the 30 or so minutes it will take me to write this. I'll get right to it.

In the recipes, there were several instances where Michael R. and Mary Dan Eades recommended specific brands. They named, Pepperidge Farm, Nutrasweet, Sriracha, Hellman's, Philadelphia Cream Cheese, Pillsbury, Progresso, Giovanni's, and several others. At one point, they discussed alcohol in moderation, "Forget about beer, except Miller Lite (3.2 grams of carbohydrate per can)," pg 165. If all of this isn't the most blatant advertising, I don't know what is.

Their argument was essentially that carbs lead to insulin resistance, which is responsible for a myriad of cardiovascular related diseases. Cancer wasn't even discussed. This book vilified carbohydrates so much, and then just said you need more protein without examining the potential benefits or risks of protein. That is not at all providing the full picture. This was similar to *The Big Fat Surprise* and to a lesser extent, *Deep Nutrition*.

They strongly recommend taking vitamins for certain situations, instead of thoroughly discussing how plants could provide any of the possible benefits. Who is influencing that?

In one of their more stupid segments, they suggest 30g of carbohydrates for Phase I of their plan. They mentioned that one patient enjoyed a piece of candy that was 17g and then spaced out the 13g throughout the rest of the day. They said that this was an okay way to do it. Universally from what I've read (and from my experience), candy is not good for you. Why would candy or Miller Lite be endorsed for what they referenced as "optimal health."

In the intro, they said you could contact their publishers for their extensive sources, but they were barely mentioned in the text. They hardly referenced large studies and provided little context for those that they did. Not an effective way to make an argument.

One thing I found especially comical was that *Protein Power* discussed the diet of Ancient Egyptians, which was largely plant/grain-based. Based on the mummified remains, they were largely unhealthy, out of shape and suffered from disease. According to *The Starch Solution*, which I of course *just* read, John McDougall talked about how most Egyptians did in fact eat a grain-based diet. However, the wealthier class, who actually ate a more animal-based diet, were the ones who were mummified.

I hated this book so much. I could go on endlessly about how many times I was baffled at their horrible, evidence-deficient arguments and possible corporate puppetry. It was soooooo bad and I'm bummed I wasted my life on it. The silver lining is that it made it necessary for me to look up who is funding these books before I continue.

Who Is Funding These Books?

Specifically, are there ties to food, pharmacy, or health companies? Unfortunately, I couldn't really find anything online about how to see where funding is coming from. It seems like publishing companies pay the author flat fees and/or royalties on book sales. But otherwise it's difficult to truly tell. The Weston Price Foundation had sponsorships from a pork company, a buffalo meat company as well as a gelatin company, which is clearly suspect. The authors that typically reference this promote eating meat. It seems like this information is just not readily accessible and I'll have to continue to decipher to the best of my ability. I will try to continue looking into it as well.

As far as the authors, I wanted to search Google images to see what type of shape the authors were in (diet recommendation below) and on a very basic scale here's what I found:

- *Grain Brain* - David Perlmutter - in great shape
 - Meat heavy, low carbs, high fat
- *Human Heart Cosmic Heart* - Thomas Cowan - in decent shape/hard to tell
 - Meat heavy, low carbs, high fat
- *Eat, Drink and Be Healthy* - in decent shape
 - WFPB leaning
- *Forks over Knives* – various contributors
 - WFPB
- *Smart Fat* - Steven Masley, good shape, Jonny Bowden - great shape
 - Whole Foods, plant heavy
- *Food Rules* - Michael Pollan in great shape
 - WFPB
- *The Food Revolution* - John Robbins - in *great* shape
 - WFPB
- *Food Matters* - Mark Bittman - slightly out of shape
 - WFPB
- *Paleo Diet* - slightly out of shape
 - Paleo
- *The End of Dieting* - Joel Fuhrman - in *great* shape
 - WFPB
- *The Big Fat Surprise* - decent shape
 - Low carb, high meat
- *Deep Nutrition* - Catherine Shanahan - in great shape
 - Paleo with lots of raw meats
- *China Study* - Colin Campbell - in great shape
 - WFPB
- *Starch Solution* – John McDougall - in good shape
 - WFPB, starch heavy
- *Protein Power* - Michael and Mary Dan Eades - both average/hard to tell shape
 - Paleo/meat heavy

Becoming Raw – Brenda Davis R.D., Vesanto Melina M.S., R.D. and Rynn Berry - Late February 2017

I was excited to read this book because it seemed like something new, which it definitely was. However, I found it extremely boring and poorly organized, affecting my ability to easily read it.

The book operates under the assumption that you will be eating vegan or near vegan and it examines the health benefits of “raw” or “living” food. There were only about 9 studies specifically focused on raw food and most of them were with hundreds or only 10s of participants. That makes it hard to draw conclusive evidence. There was of course some biological examination as well.

My overall feeling is that there are some benefits to eating food raw but not overwhelming so. This would inspire me to probably undercook my veggies or keep them raw if it makes sense.

One thing I really respected was the way this book didn’t set out to defend a specific point. It talked about the benefits and also possible drawbacks and wasn’t afraid to admit when it didn’t know.

I thought it was interesting that there wasn't necessarily conclusive evidence or support of enzymes having some "special sauce." Again, I really respected the way this book tried to view science objectively and not in a way to support its own view.

Core pillars: variety, greens, other vegetables, fruits, seeds and nuts, sprouted or cooked legumes, sprouted grains, vitamin B12, vitamin D, iodine. It does recommend cooking mushrooms and legumes but not convincingly so. Is pretty in line with where I'm currently at, which I expected. I will try to keep vegetables lightly cooked at most and make sure I am getting a solid mix of vegetables.

Keto Clarity – Jimmy Moore and Eric C. Westman M.D. - Late February/Early March 2018

The basic idea of a ketogenic diet or being in ketosis is that you get your body into fat burning mode. Your primary fuel source becomes fat as you limit your protein and keep your carbs to very low (typically 30g or less per day). Your body switches primary fuel sources from glucose (found mainly in carbs) to ketones (when fat is burned and used as fuel). It goes that ketones are a more desirable fuel for your gut, brain and other organs, and burning fat will keep you feeling more satiated, alert and healthy. I read about this a bit in *Grain Brain*.

I found this book horrible. It was a burden to get through, to take notes on and even to write this reflection. I have listed below several critiques. It is possible that a ketogenic diet is effective, but nothing written in this convinced me of that. Reading this pushed me even stronger towards a plant-based diet. The bottom line is that many of his arguments leapt to conclusions and there was not any strong, widespread evidence of ketogenic diets showing massive health success. Nothing has come remotely close to WFPB diets, especially not to *The China Study*. There were not many books about keto diets, and after reading this, I am not surprised. Here is just a sampling of things that bothered me about this book:

- He never truly explained what ketosis is and did not clearly outline the process. It came together over the course of the book, but it was either that Moore did not understand it well enough or it was simply not well written
- He dismissed several types of studies as not reliable. He even dismissed the validity of a study in the UK done on 65,000 people, however he was able to seriously consider trials of keto diets with small groups of people. Often times the data wouldn't even suggest that a keto diet yielded a positive result.
- Overall he provided horrible scientific evidence using very few subjects. Much of the science they cited was inconclusive. He even referenced several studies done testing keto diets where less than half the subjects saw benefit. Now, he doesn't claim this to be statistically significant, but uses it to bolster his argument and suggest that there may be some benefits.
- Generally very anecdotal evidence or stories used to make his arguments
- Zero discussion of factory farmed animal products and associated health risks
- No discussion of phytochemical benefits of plants. And followed that up by saying supplements could fill the missing gaps. Doesn't seem like such a great diet if you are needing to take multiple supplements
- Openly dissed the pharmaceutical industry but then recommended certain supplements to take if the basic idea of high fat, low carb and low protein doesn't work
- While he lost 180 pounds, frankly he is very overweight based on images online, including those on his website. He is also not a doctor, which isn't an end-all. But those two things don't help his case.

- It strikes me as an ineffective way to handle diet and health: having to measure the carbs and protein you are eating, and having to add certain supplements if you don't feel well on this diet. It doesn't follow that it's a common sense way to eat
- Moore references a podcast in which he hosted John McDougall, author of *The Starch Solution*. While I felt that McDougall was very rude, Moore had no answers for any of McDougall's questions. I found it especially interesting that when McDougall asked him for one large-scale population study of a low carb high fat/protein diet that had success he mentioned the Inuits. That population was only a few thousand and they ate that way 7 months of the year. It is a group that the Paleo group references often and the numbers behind it are not strong. It was a brutal dismantling and I'm not sure why he recommended readers to check it out
- Overall I felt there were a lot of weak arguments and he jumped to conclusions.
- Compared to the other books, few pages of references and many of the same authors were repeatedly cited
- While I don't deny his story being true, he has admitted that it has not been an easy past 8 years on his podcast.

I like hard, statistically significant evidence and there was none to be had here. I must sound that I am just looking for reasons to pick apart arguments that don't align with whole-food, plant-based diets, but the evidence just frankly doesn't measure up. It's hard to be convinced otherwise at this point. *Keto Clarity*: good riddance.

How Not to Die – Michael Greger M.D. and Gene Stone - Early March 2018

This book was so dense with knowledge around food that it's hard to imagine I can adequately reflect on it here while capturing the key elements. This book put the cherry on top of the (whole-foods, plant-based) sundae.

Michael Greger went through the leading causes of death and examined the best-known ways to prevent them and unsurprisingly a whole-foods, plant-based diet was the best. He used strong evidence, referencing multiple studies with 50K people or more. The second half of the book, he broke out his Daily Dozen – a list of foods you and the number of servings you should try to consume daily. It's not just about eating foods that are bad for you, but about maximizing your health by eating the best foods.

Dr. Greger's Daily Dozen (# of servings and serving size)

- | | |
|----------------------------------|------------------------------------------------|
| 3 Beans (Legumes) | ¼ cup of hummus, ½ cup of cooked beans, etc |
| 1 Berries (small edible berries) | ½ cup fresh or frozen, ¼ dried |
| 3 Other Fruits | Medium sized fruit or cup of cut up fruit |
| 1 Cruciferous Vegetables | ½ cup – broccoli, cabbage, collards, kale, etc |
| 2 Greens | Cup of leafy vegetables |
| 2 Other Vegetables | ½ cup or ¼ cup mushrooms |
| 1 Flaxseeds | 1 tbsp |

1	Nuts	Cup of nuts or 2 tbsp of nut or seed butters
1	Spices	¼ teaspoon of turmeric, along with other herbs and spices you would like
3	Whole Grains	½ cup hot cereal/cooked grain, cup cold cereal
5	Beverages	1 – 12 oz glass
1	Exercise	90 min of moderate-intensity activity (brisk walking) or 40 min of vigorous activity such as jogging or sports

I extremely respected the fact that his website, nutritionfacts.org, is a nonprofit in which he personally takes no money from. The website is run entirely by donation. He is not promoting any recipes, cookbooks or podcasts. Here are some interesting points that I found especially interesting from this book roughly summarized by me:

- Only ¼ of medical schools offer a single course on nutrition
- Nearly 70% of Americans take at least one prescription drug
- Genes account for 10-20% of risk at most
- Given the right condition, your body heals itself, i.e. a scrape. If you keep whacking yourself in the same time it will never heal.
- Smoking tobacco is 90% of lung cancer risk
- You can slow down this process by eating foods with a lot of antioxidants. The apple skin has a lot of antioxidants and it protects against oxidation.
- A team of scientists studied 3 thousand foods, beverages and herbs. On average, plant foods contain 64 times more antioxidants than animal foods. Iceberg lettuce, one of the lamest whole foods has 17 units (daumol using a modified FRAP assay) vs. 3 units in salmon vs. 1,000 in some berries.
- Herbs and Spices is the food category shown to average the most antioxidants
- Top 20 AGE contaminated foods are all animal foods (bbq chicken, bacon, broiled hot dog, chicken thigh, etc). Yes cooking matters, a baked apple has 3x more AGEs than a raw apple (45 vs. 13 units) but a broiled hot dog has 10,143 units vs. a boiled hot dog of 6,7436
- The bigger and more frequent your stool size, the healthier you may be
- People may be more constipated than realize. Food from plant-based diets goes through in a day or two while animal based diets takes as long as 5 or more days.
- *E. coli* doesn't originate in spinach, it comes from poop and comes into contact with it
- Eggs have to be completely cooked to be considered safe, according o the chairman of the United Egg producers. Salmonella may survive 8 minutes of boiling, hard to understand how they can legitimately be cooked completely.
- Fat is jamming the muscle cells that would allow insulin to enter, fat in the bloodstream
- EPIC-PANACEA that followed 100Ks of people for years found that controlling for calories those that ate meat would on average gain significantly more
- Appears to be a stepwise drop in hypertension rates with more plants in the diet (study of 89K Californians)
- Salt is detrimental to blood pressure
- 1 or 2 drinks a day was shown to have some benefits in sedentary people but in even moderately healthy people there is not seen to be benefits

- Animal protein causes kidney hyperfiltration, dramatic increase in workload; this is fine every once in a while for massive remote hunting. Animal protein is highly inflammatory. Humans traditionally ate a very plant heavy diet.
- Flaxseeds: one of the richest sources of omega-3 fatty acids, phytoestrogens that dampens estrogens effect. Shown to suppress cancer cell growth. Survivors who eat more lignans appear to survive longer
- Soy – women diagnosed with breast cancer who ate more soy lived longer and had less cancer recurrence than those who didn't due to the level of phytoestrogens
- High consumption of veggies may cut odds of developing depression by 62%
- Worst foods for prostate health? Eggs and poultry. Best? Broccoli
- Within a year of stopping eating fish, the body can detoxifying 99% of mercury
- Pollutants work their way up the food chain in increasing concentrations as chemicals get stored in animals fat from the plants they eat
- To avoid Parkinson's: wear seat belts, helmet, avoiding being overweight, eat peppers, berries, and green tea and minimize exposure to pesticides, heavy metals and dairy and other animal products.
- Hospital errors kill an estimated 106K people per year. So good to avoid being there in the first place! They will recommend certain treatments when they are shown to be just as effective as eating certain plants or other less expensive treatments.
- Cost: vegetables net you 48x more nutrition per dollar not to mention future healthcare costs you will save
- Olives and olive oil are yellow-light foods – olives are soaked in salty brine while olive oil is processed with most of its nutrition removed. Non-virgin olive oil is even worse and should be avoided. Oil is the table sugar of the fat kingdom. Cooking without oil is easy: sauté in wine, sherry, broth, vinegar or just plain water
- Life can be increased 2 years by eating a handful of nuts 5 days a week
- Global Burden of Disease Study said not eating enough nuts and seeds was 3rd leading dietary risk factor, more than processed meat consumption
- Walnuts are the healthiest nut – highest antioxidant and omega-3 levels and are best at fighting cancer growth
- “Why are beans, nuts, and whole grains so health promoting? Maybe it's because they are all seeds. Think about it: all it takes for an acorn to explode into an oak tree is water, air, and sunlight. Everything else is contained within the seed.” – pg 348
- Turmeric is a must – found in 5K articles about curcumin, cancer, inflammation, etc
- He can't speak more highly of turmeric and berries
- People who eat more whole grains live significantly longer than others, reduce the risk of heart disease, obesity, type 2 diabetes
- Whole grains are not inflammatory – each daily servings of whole grains is shown to reduce daily inflammation in any of the alphabet soups of inflammation markers
- For more than 99% of us, gluten is okay
- People sensitive to wheat are usually sensitive to cow's milk protein as well, followed by eggs
- More likely there is a wheat sensitivity than a gluten sensitivity
- There is enough evidence to suggest that there *might* be some non-celiac gluten sensitivity based on the positive way people feel
- For the 2% of people that don't have a sensitivity to wheat issues, there is no current data or evidence to suggest that following a gluten-free diet has any benefits
- Not drinking enough water is associated with a ton of problems from heart disease to cancer to breaking bones and everywhere in between

- Over 43 studies found sitting was associated with a shorter life span regardless of physical activity level
- Standing 3 hours a day at work equates to about 30K extra calories burned off per year – 10 marathons equivalent
- A variety of plants will provide you with all the nutrients you need with 2 exceptions, Vitamin D and B12.
- There is only one way of eating that's ever been proven to reverse heart disease in the majority of patients, a diet centered around whole plant foods.

First and foremost, I am doing this project for myself. I try not to impose my views on others, but if a discussion does come up I will give my opinion. A misconception that people have about vegans or whole-food, plant based proponents is they are just pushing their agenda on others. The way I feel is that I want my family and the people close to me to live the best and healthiest life possible. Encouragement of this way of eating is coming from a place of love.

I am also realizing that there is not a great way for me to realistically capture and convey to others what I've found. I know in my heart and for myself and I can only do the best that I can.

Edible – Daniella Martin - Mid March 2018

I quickly realized that this book would not be a thorough nutritional examination of eating insects. It was more of the author's personal experiences with eating bugs, paleontology, economic benefits, cultural biases and more. I think Martin's main goal was really to show that eating bugs was a nutritious option that could help supplement our diet. I did enjoy this book from the perspective of thinking outside of the box and trying a new approach to a problem.

From a nutritional standpoint, she failed to convince me. There are no major studies citing beneficial health effects with eating bugs. Several times she mentioned that a vegan diet cannot fulfill adequate nutrition needs and did some with a brief, poorly supported paragraph. She talked about how other primates eat instincts but at the same time their largely plant-based diet makes them have low levels of energy. She's also "inclined to agree with the *Paleo Diet*" but failed to go into detail as to why. She only said that the real Paleo Diet would have included bugs. To be fair to her, studies on bugs and nutrition are undoubtedly lacking, but her nutritional analysis (and my main goal of this project) leaves a lot to be desired. There were two pages of sources in this book whereas *How Not to Die* had 133 pages. It's possible that they could be linked to good health; I just don't see it from this book.

Other than that, from an environmental point of view, insects do seem like a good alternative to eating meat. They still can't beat plants, however. She does talk about how some insects are processed into our food and we end up consuming them anyways, and she also mentioned that we use to eat bugs that we collected accidentally when we collected crops. And I don't know about you, but if I'm chopping vegetables and I see a bug on it, I'm not just going to eat the bug. I also try to avoid processed food anyways, which would also make that point less relevant for me.

She did have a section about bugs being social animals and that eating them still may not be humane but admitted that she doesn't know what she can really do about it (other than eating vegan). Some cultures, like in Thailand and Mexico, do eat bugs, but that doesn't necessarily show that it is healthy.

The Final Book

On to my 20th and final book. I can't believe I'm already here; the last 8 books have really flown. Overall, I'm proud of myself for setting out to do something and see it through. I am no doubt excited to be done with this and to not take notes on every single book and get my time back. Even so, I view this project as a long-term investment for my life and I feel very fulfilled having gotten this far.

The last book, *Raw Foods Bible* is very special to me. It was the only book I couldn't find from the library but was able to buy it used. My mentor on the farm, who first introduced me to veganism, gave me this as the first book to read about food. It came at the end of an incredible 2-week experience working on the farm, where I first tried veganism. I only started the book and never got to finish it, but I feel a special connection as I read this as my final book. For the last 3 months, I have been eating freegan, but only if the food is vegan. It feels special, because as the picture and my understanding of food and health is becoming super clear, there could not be a more fitting way to end this project.

I am excited to learn more and get a better understanding for raw foods veganism and finish filling in this drawing of food and health.

Raw Foods Bible – Craig Sommers N.D., C.N. - Late March 2018

As I mentioned, I was very excited to read this, although I have to say that I was underwhelmed. More specifically, I don't feel that it provided me with anything new. He advocates for a raw food, plant-based diet in which food is not cooked over 118 degrees. The book "explores nutrition, lifestyle and the mind-body connection." It goes into depth about nutrients, vitamins and minerals in foods as well as things that should be included like relaxation, mental stimulation, sunshine and things that should be avoided like VOCs in new houses, microwaves, radiation, etc.

While much of what he was talking about I generally agreed with, I thought his evidence was often poorly backed using studies with few participants or his own personal experience. If *Edible* was bad with only 2 pages of notes, this book was worse with only 1 page. It's amazing how this food project has turned into more of a critical reading and credibility exercise. He did at times reference studies with tens of thousands of people, so there definitely were some credible moments. The book was really formatted more as a reference guide – as the name might suggest.

On that note, he did have a chapter on biblical and Jesus references. I am not overly religious so it personally didn't do much for me, but I did find it interesting. For those curious, he cited Deuteronomy 8:7-10, Genesis 1:29 as well as quotes Jesus said about eating living, plant foods that can be found in Essene Gospel of Peace.

Overall, I can't say I am overly convinced that eating an entirely raw or living food diet is significantly more optimal compared to a whole-foods plant based diet. I am inclined to believe that there are likely benefits, but the level of study on the topic is still not well enough understood. That would be consistent from all the books I've read, especially *Becoming Raw* and *How Not to Die*. *How Not to Die* seemed to have the best understanding for the effect cooking has on food. In it, Greger referenced some foods that would be better nutritiously when raw, like peppers, broccoli or cruciferous greens. And there were other foods like mushrooms that are better when cooked and other foods that don't lose too much nutrient content when cooked like artichokes, beets and onions are okay.

My personal feeling is that if foods can be cooked raw without tasting significantly worse, than may as well keep them raw. I can't say it with too much conviction as the scientific literature is still lacking.

For now, I'll stick with a whole-foods, plant-based diet, although I think that does it a slight injustice. The real optimal diet would be whole-foods, plant-only.

I'm looking forward to summarizing my thoughts and putting it all together...

Acknowledgements

Thank you for reading this. Thank you to PY and HE for the idea to write about this. Thank you to MCG for the gift of *Human Heart, Cosmic Heart* and to VG for the gift of *Edible*. Thank you to my family, friends, and everyone else who listened to me as I practiced explaining what I learned about food and asked me the right questions so I could learn more, be more confident in my explanations and refine my vision. Thank you *oh so much* to Uncle Tommy, who edited this and listened to me by far more than anyone else.

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