Food History and Disease

(supplement to ES article – Crucify the Flesh)

Prior to the 1960's most folks didn't worry about becoming fat. There were not many really fat people, unless you saw them in the traveling circus, or in large groups where they stood out, and most were adults. Obesity was evident in less than 10 percent of the population, mostly attributed to overeating, and was not as serious a problem as it is today. A quick look at images of people in groups, made in the fifties, reflect little evidence of obesity or of being overweight. The general population mainly ate two or three meals a day, usually homemade. School lunches were made from scratch with natural ingredients. The American diet centered around fresh meat, fruits, vegetables, dairy, and breads and was in the form of whole foods from animals and plants.

In the 1940's with WW2 happening, foods were rationed, and included bacon, butter, sugar, meat, tea, cooking fat, jam, cheese, eggs and milk. These were the staple foods of the time, along with local fruits and vegetables that were in season. Local fish and game were often eaten. Gardens and the home canning of many foods was commonplace. The American diet had been stable for decades and was considered healthy. For generations, few were concerned with the foods they ate, other than shortages that occurred from time to time. Food was grown locally, often in personal gardens. In more rural areas, domesticated animals provided meat, eggs, and dairy for personal consumption. Many homes had root cellars where vegetables were stored for later consumption.

At that time grains had already been stripped of most nutrients by industrial milling techniques, but had not yet been damaged by genetic modifications that were to come. A large portion of the population made their own bread, or bought freshly baked bread from family bakeries. Processed foods were available but consisted mostly of natural ingredients. To sweeten cereal, table sugar was added. Soda pop, candy bars, potato chips, and cookies were available but were not an everyday thing for most people. Fast food and convenience stores were in their infancy. The grocery stores carried a variety of fresh natural food, often sourced locally.

There had been a significant change in the use of cooking oils in the early 20th century. What had been machine oils were labeled as vegetable oils and sold as food. This hidden dietary health danger in these oils, and their effect on heart health, would not be discovered until many years later. Then came the invention of the hydrogenation process, which converted these vegetable oils into solids. In June 1911, Procter & Gamble introduced Crisco to cook with. It was the first shortening to be made entirely of vegetable oil (cottonseed). With heavy advertising it replaced Lard and Tallow as the main cooking oil, those having been used for generations. This, and other hydrogenated products that followed, further added to the long-term rise in cardiac related issues. Food makers used artificial trans fats, labeled as partially hydrogenated oils, to enhance the flavor, texture, and shelf life of processed foods.

Since the 1950s many changes have occurred in our dietary consumption, as well as in the food itself. The average intake of meat was about 100 pounds per person per year. In 2018, the average has increased to 222 pounds pe person per year. It more than doubled. Processed sugar in 1913 was consumed at a rate of 40 pounds per person per year. In 1970, we ate 123 pounds of sugar per year. Today, the average American consumes almost 152 pounds of sugar in one year. The per capita consumption of dairy products in 1909 was 294 pounds annual. In 2006, it had trended drastically to 605 pounds per year. So, we are generally eating more food than ever before, and its more convenient. The drive-in burgers began in the fifties and today nearly every corner in populated areas has a fast-food outlet. Fast-paced living began its rise, and food

manufacturers began packaging instant meals, frozen meals, and easy to use foods. Then, when the government corn subsidies emerged in the 1970s, highly refined corn syrup became available and was put in processed food in larger and larger quantities. The low-fat products emergence only amplified their use.

A False Hypothesis Arises

In 1955, President Eisenhauer had a heart attack, and could not perform his presidential duties for ten days. This alarmed the powers in Washington so the search for the reason of increasing statistics of coronary heart disease became a priority. Eisenhauer's personal doctor was a follower of the leading nutrition scientist, Ancel Keys, whose philosophy was that saturated fat and cholesterol caused heart disease. Keys began a multiple countries study, which eventually showed a weak association between saturated fat, cholesterol and heart disease. There was no objective basis for the countries chosen by Keys, and it is hard to avoid the conclusion that he picked only those he suspected would support his hypothesis. There were 22 countries that had data, but he selected only 7. It was odd that he chose seven nations in Europe and left out France and what was then West Germany. Keys already knew that the French and Germans had relatively low rates of heart disease, despite living on a diet rich in saturated fats. It appears obvious that he didn't want his hypothesis tarnished by opposing facts.

The data in the 7-country study was observational and could only define correlations or associations. It could not define the cause, yet it was incorrectly used to do exactly that. There were other associations (such as smoking) but they were not factored into the published results. There were several facts already known about heart disease and this swayed the medical community to buy into the unproven saturated fat and cholesterol hypothesis. It had already been established that people with heart disease and those who had diabetes or kidney disease tended to have higher cholesterol. Atherosclerotic plaques did consist of cholesterol but also contained fat deposits and calcium. We now know that atherosclerosis is caused by many different factors that affect and inflame the inner lining of our arteries called the endothelial. These factors include high blood pressure, elevated lipids, obesity, physical inactivity, smoking, and <u>high blood glucose</u>. Some of these factors were known but were not used at the time of this study and the blame for heart disease was placed on the intake of saturated fat and cholesterol. This began the era of the low-fat trend which has led to the trends of rising obesity and diabetes.

This belief threaded its way into the mainstream population and beginning in 1961 has influenced the USDA guidelines for decades since. Procter & Gamble's advertising claims about Crisco touching the lives of every American proved eerily prophetic. The substance (like many of its imitators) was 50 percent trans-fat, and it wasn't until the 1990s that its health risks were understood. It is estimated that for every two percent increase in consumption of trans fat (still found in many processed and fast foods) the risk of heart disease increases by 23 percent. As of this writing (2019) the FDA no longer recognizes the trans-fat that comes from partially hydrogenated oils as safe and a ban on their use is in effect. Companies had until 2018 to phase out artificial trans fats from their products - a long-awaited step that capped years of effort by consumer groups and is expected to save thousands of lives a year. This major dietary food mistake, endorsed by the government, has affected untold lives over a century. As surprising as it might be to hear, natural trans-fats from animal products do not pose the same risk as partially hydrogenated products.

Another hidden food problem began in the 1960 timeframe with a movement called the "Green Revolution". It involved the development of high-yielding varieties of cereal grains, expansion of irrigation infrastructure, modernization of management techniques, distribution of hybridized seeds, synthetic fertilizers, and pesticides to farmers. with little or no regard to the effect on human nutrition. This amazing new yield increase farming technology was propagated around the world by companies like Dupont and Monsanto. While mid-20th-century humanity applauded the end of hunger very little regard was given to the effect on human nutrition. This Green Revolution was about solving world hunger, but we're now discovering some unintended consequences this technology has on our health. It always seems to take a lot of time to discover truth. The genetically modified food products used in processed foods is linked with the toxic weed spray "Roundup". Law suits against Monsanto are now in play.

Government Food Guidelines

In 1977, the U.S. Senate Select Committee on Nutrition and Human Needs, led by Senator George McGovern, recommended some basic "Dietary Goals" for the American people. The advice was to consume only as much energy as you expend, eat more naturally occurring sugars, consume more fruits and vegetables and go easy on eggs and butter (saturated fats). This later culminated in the creation of the 1980 Dietary Guidelines for Americans, which recommended seven ways to have a good diet. They recommended eating a variety of foods, maintaining an ideal weight, avoiding too much fat, saturated fat and cholesterol, eat food with adequate starch and fiber, avoid too much sugar and sodium, and drink alcohol only in moderation.

In 1992 the USDA introduced the food guide pyramid which pictorially expressed the recommended servings of each food group, which previous guidelines did not do. Six to elevens (6 to 11) servings of bread, cereal, rice and pasta occupied the large base of the pyramid; followed by three to five (3 to 5) servings of vegetables; then fruit servings of two to four (2 to 4); then milk, yogurt and cheese servings of two to three (2 to 3); followed by meat, poultry, fish, dry beans, eggs, and nuts servings of two to three (2 to 3); and finally fats, oils and sweets in the small apex (to be used sparingly). Inside each group were several images of representative foods, as well as symbols representing the fat and sugar contents of the foods.

The food guide pyramid is continually updated but overall the idea of low-fat has had a substantial impact on the diets of Americans. Processed foods evolved to fill the void due to declines in dairy, eggs, and saturated animal products that were once main staples. If we look back to the 1960s, the percentage of calories from fat in the American diet is quite a bit lower compared to earlier days. The food guide pyramid was largely governed by nutritional information and science at the time, which was, carbohydrates were good and fats were bad. The medical community was pretty much on line with that in the 1970s and 1980s.

There are also some important indirect impacts of the food guide pyramid. Tens of billions of dollars of federal food policies were implemented with compliance to the food guide pyramid. In civilized countries, including the USA, government programs such as school lunch programs, help for pregnant mothers, and food for low-income families had to be consistent with low-fat diets. The impact really has been, overall, substantial. Science finally now breaks down issues of carbohydrates and fats, particularly the fats, to show that some fats are good for you and some fats aren't good for you, and that refined carbohydrates are not necessarily good

for you, and complex carbohydrates from whole foods and whole grains are better for you than what's found in processed foods.

To repeat, the 1992 food guide pyramid was based on the idea that all fat is bad. Therefore, if fat is bad, and you have to eat something, carbohydrates must be wonderful. In effect, the base of the pyramid is really emphasizing large amounts of starch in the diet. Eleven servings a day and thirteen with potatoes is a huge amount of starch. In general, we were told to eat a greater percentage of foods with carbohydrates and to minimize fat and cholesterol. The lie was now fully mainstream and food manufactures took notice and began changing the country's supply of food to be low fat. Remove the fat and food doesn't taste good.

Food processors had to add sugar, salt, oil, and other ingredients so the food would appeal to the public. Saturated fats were discouraged and vegetable oils were praised. Vegetable oils are a relatively cheap fat source, and it has a relatively high smoke point so they had become a common cooking medium. Vegetable oils, and almost all plant foods, are low in saturated fat and cholesterol. There is ever increasing evidence they produce harmful, inflammation and contribute to heart disease. That belief and the highly processed foods to produce low-fat status has now been linked with the rising problems of obesity, diabetes, heart disease and other ailments.

Obesity and Diabetes Type 2

Obesity has been rare throughout most of human history. While the sharpest surge in obesity occurred during the latter part of the 20th century, researchers point out that as early as the 1930s, life insurance companies identified excess weight as a risk for premature death; as a result, they used weight as a factor in determining premiums. By the 1960s, evidence from national surveys showed a clear trend toward heavier weight. Industrialization may have facilitated the trend toward weight gain in developed countries. During this time, a shift occurred toward convenience and fast foods, which have a higher fat and sugar content; plus, Americans began to live more sedentary lifestyles -- a double whammy for weight gain.

Between 1960 and 1962, 13.4% of the USA population qualified as obese compared to the 34.3% of the American population between 2007 and 2008. This increase in obesity was not gradual, but rather a sharp ascension. Between 1960 and 1980, obesity only increased 1.6%, but between 1980 and 2000, obesity in the United States increased 15.9%. The prevalence of obesity in 2016 was 39.8% and affects about 93.3 million of US adults and an ever-increasing number of children. It leads to Type 2 diabetes which is a terrible disease. It is by far the leading cause of blindness, amputation, and kidney failure in North America. Diabetes is also a leading contributor to heart attacks, stroke, and other cardiovascular diseases. Type 2 diabetes is a dietary disease, and it requires a dietary solution. Most importantly and not communicated well by the medical and pharmaceutical communities, <u>it is a reversible if not curable disease</u>.

The USA led the charge in the obesity epidemic and the rest of the world has followed, leaving many to ponder, what is the cause for this relatively new obesity phenomenon and why has its ascension been so drastic? We now know it is primarily due to the food we eat. It is clear now that the diet we had in the sixties is not the same diet we consume now. For one thing the processed food then didn't have the sugar and high

fructose syrup content that it does now. Processed food was no longer based upon whole food ingredients. In addition, the fast-paced and fast-food environment we live in today is concerning as to its quality. Watch a YouTube video on how chicken is grown and processed and you will likely question whether chicken nuggets are healthy. Research how cud-chewing animals are fattened with processed grains instead of grass thereby eliminating the quality nutrients they used to provide.

To summarize, it is the amount, type, and frequency of processed carbohydrates we now consume, directly or indirectly, that is a large part of the problem. Other things that contribute to the problem are trans-fats and genetic modified foods. To understand how this contributes to the problem we need to understand the basics of the human metabolic process. It has to do with how our pancreas produces insulin with the types of food we eat, its effect on blood sugar, and the long-term effects of a low-fat high carbohydrate processed food diet. The general belief today (2019) is that obesity is caused by insulin-resistance, a metabolic dysfunction and its linked solidly to the food we consume.

How Food Affects Us

Blood sugar, also known as blood glucose, comes from the food we eat. Our body creates blood sugar by digesting some foods into a sugar that circulates in our bloodstream. Blood sugar is one form of energy our body uses. The sugar that isn't needed to fuel our body right away gets stored in cells for later use. Too much sugar in our blood can be harmful. Type 2 diabetes is a disease that is characterized by having higher levels of blood sugar than what is considered within normal limits. Unmanaged diabetes can lead to problems with our heart, kidneys, eyes, and blood vessels.

Our body breaks down everything we eat and absorbs the food in its different parts. These parts include: carbohydrates, proteins, fats, vitamins and other nutrients. The carbohydrates we consume turn into blood sugar. The more carbohydrates we eat, the higher the levels of sugar we will have released as we digest and absorb our food. Carbohydrates in liquid form consumed by themselves are absorbed more quickly than those in solid food. The metabolic response of our body will vary according to the source and type of carbohydrates we ingest. Drinking a soda will cause a faster rise in our blood sugar level than eating a slice of pizza. Fiber is one component of carbohydrates that isn't converted into sugar. This is because it can't be digested. Fiber is important for health, though. Protein, fat, water, vitamins, and minerals don't contain carbohydrates. These components have a minimal effect on our blood sugar levels. Fructose is similar to alcohol in that it has to be metabolized by the liver. That's another problem but contributes overall to insulin resistance.

Insulin is an important hormone that helps regulate our blood sugar levels. The pancreas makes insulin. It helps control our blood sugar levels by assisting the cells that absorb sugar from the bloodstream. Sugar is converted to energy by our cells. In a person with Diabetes type 1 their body doesn't make insulin. This means they have to inject insulin every day. In type 2 diabetes, our body produces insulin, but what we eat and when we eat can create a condition known as insulin resistance which means our cells don't respond properly to insulin, so more sugar keeps circulating in the blood. Insulin resistance leads to Diabetes type 2 diabetes. Exercise can help the cells respond better and be more sensitive to insulin. The proper diet can also help us

avoid spikes in blood sugar. This in turn can help keep our pancreas functioning well since high blood sugar levels decrease pancreatic function.

The insulin effect to our body can be likened to a light switch. When we produce insulin as a result of eating carbohydrates (turn the light on), it causes our metabolism to store excess sugar not needed for energy in our fat cells. When we stop eating the sugar dissipates and the insulin drops (light switch off), which then allows our body to access the fat cells in order to use the fat for energy. The amount of carbohydrates that we ingest that turns the switch on (store sugar as fat) is between 20 and 50 carbohydrates. The obesity problem is simple to understand. We eat too many refined carbohydrates too often which continually stores excess sugar as fat. If we also have fat in our blood at the same time and our metabolism is not using it for energy, it also gets stored. As fat accumulates, the body attempts to resist its storage and that combination of processes are responsible for insulin resistance.

A good metabolic process needs to reduce insulin at times to allow our bodies to burn fat. One way to do that is to stop ingesting refined carbohydrates. Another is Fasting. The truth is refined carbohydrates are not essential for our health. Our body produces the small amount of sugar we need through a process called gluconeogenesis. It makes its own glucose that it needs from other nutrients. It's a small amount. Most folks today may be consuming 200-400 grams of refined carbs per day, an amount that is killing us, one day at a time. Most of these would be in the form found in today's highly processed foods full of sugars (high fructose corn syrup), salt, and oil for taste. These would also be highly addictive. It all leads to fat, insulin resistance, metabolic syndrome, diabetes type 2, heart disease, cancer, Alzheimer's, other diseases, and early death.

A solution for Overweight and Obesity

The solution is to lose fat. If we remove the fat diabetes type 2 and associated problems will reverse itself. The question is: how do we get the fat to come off and stay off? Six common ways exist.

The one thing that doctors tell us to do is to exercise more and eat less. Exercise is a good thing but the idea that calories being expended will cancel calories in is a myth because the body's metabolism is not constant and it's difficult to exercise as much as would be required. One medium plain doughnut covered with sugar or glaze has about 192 calories. If you participate in moderate forms of exercise, you will likely need about 30 minutes to work off the doughnut. When we consider all of the food eaten in a day it's a losing battle for most of us. However, if one cuts the number of calories they eat on a daily basis, exercises regularly, removes processed food (including meats), bread, and high glycemic foods, weight can be lost and is healthier than not doing anything. Lowering calories often results in lower metabolism.

Of the other five ways, two are surgical, namely liposuction or gastric bypass, but both of these can have longterm **h**ealth risks or even cause death. The final three are recommended solutions and carry little risk to our health. They are: 1) to simply limit the effect of carbohydrates in the diet by eating fewer carbs (keto and carnivore diets 2) don't eat for extended periods (fasting), or 3) eating a whole foods plant-based diet. A whole food plant-based diet usually results in reduced caloric intake. These three options provide for metabolic changes where stored fat can be used for fuel. They all have in common the removal from the diet of highly processed foods that are full of high fructose corn syrup.

Why should we take these options and how do we do it? Research your answer. It's up to you to discover for yourself whether saturated fat makes us fat or is it the processed carbohydrates that make us fat. Perhaps if you see the truth about the food you may be eating it will move you enough to begin the natural process of losing the fat. The type of change to your diet is your choice but you need to understand that some work better at getting the fat off than others. Once the fat is gone you may change the approach. Furthermore, you cannot rely on the government, food industry, or even the majority of physicians to tell you the absolute truth. They don't know anything except what prescriptions are used to cover the real problem and not fix the cause of it. <u>You must take the initiative and find the truth for yourself.</u> That goal is made much easier because of the internet. Here are starting links.

Research Links

Dr. Jason Fung

Dr. Jason Fung is a Canadian nephrologist. He's a world-leading expert on intermittent fasting and low carb, especially for treating people with type 2 diabetes. He has written three best-selling health books and he co-founded the Intensive Dietary Management program. Dr. Fung has his own website at <u>IDMprogram.com</u>. There are many good YouTube videos on his You Tube channel which is <u>(31) Jason Fung - YouTube</u>.

Low Carb Down Under

This group hosts Low Carb seminars and features many experts in the field of low carb eating lifestyle. (KETO, CARNIVORE, and FASTING). Each of the presenters will also have their own channels for videos and websites. You need to explore. You will find all he main resources you need to understand the big fat lie. Most presenters you will find are supporters of Low Carb KETO diets.

https://www.youtube.com/user/lowcarbdownunder/videos

Cato Institute, Big Fat Nutrition Policy - Nina Teicholz

Investigative journalist **Nina Teicholz** reveals the unthinkable: that everything we thought we knew about dietary fats is wrong. She documents how the past sixty years of low-fat nutrition advice has amounted to a vast uncontrolled experiment on the entire population, with disastrous consequences for our health. Nina Teicholz is an investigative journalist who advocates for reducing restrictions on naturally occurring fats, including saturated fats, in the American diet. She is known for her work on fighting obesity, as well as for criticizing government reports and finding herself in conflict with government agencies. She is also criticized for being an ally of the meat (beef) and dairy industry. She founded The Nutrition Coalition. She is the author of the New York Times bestseller The Big Fat Surprise, the product of research into hundreds of published scientific studies on nutrition and human health.

You will find many You Tube videos on Nina with a simple You Tube search query. Here is the query (32) nina <u>teicholz - YouTube</u> This is also a great video where she was guest speaking at the CATO institute <u>https://youtu.be/hzQAHITIUhg</u>.

Article on Insulin Resistance

This is a very comprehensive article on insulin resistance, the precursor to Diabetes.

https://www.sott.net/article/416570-Its-the-Insulin-Resistance-Stupid

The Cholesterol Conundrum - and Root Cause Solution – Ivor Cummins

https://youtu.be/fuj6nxCDBZ0

A detailed analysis but understandable look at Cholesterol and how it works. Included is a clear explanation of the Cholesterol Metabolic Processes, related Diseases, and most importantly a clear summary of the key risk factors and how they can be influenced by your genetic type and your <u>dietary strategy</u>.

<u>Blog – Irish Heart Disease Awareness</u>

https://ihda.ie/blog/

An excellent information web site with videos to help understand the Calcium Score Test for indication of heart disease. This is recommended by Ivor Cummins and should be done before you take a statin. It is a test that is available in the United States.

Dr. David Diamond- Demonization and Deception in Cholesterol Research

For the past 60 years there has been a concerted effort to demonize saturated fats, found in animal products and tropical oils, and cholesterol, in our food and blood. Although his academic specialty is neuroscience, Dr. David Diamond has been closely examining the role of fat and cholesterol in heart disease. He began looking into lipids after test results showed his triglycerides were through the roof. He also launched a critical look into the effectiveness of statins, a class of drugs doctors frequently prescribe to help people lower cholesterol levels in their blood. His findings contradicted the low-fat, high-carb diet that he, as well as many Americans, had been advised to follow. This led him to explore ways for people to optimize their diet for cardiovascular health. Some starting links.

https://youtu.be/yX1vBA9bLNk

https://youtu.be/DpZIXWpN1og (great audio listening)

Diabetes Reversal and Weight-loss with Neal Barnard, M.D.

Dr. Barnard is the author of several best-selling books on nutrition. His keynote address focuses on how nutrition can lower the risk or reverse diabetes, and offers simple ways to give plant-based diets a try. Dr. Barnard is the Associate Professor of Medicine at the George Washington University School of Medicine & Health Sciences and founding president of the Physicians Committee for Responsible Medicine (PCRM). An overview of his approach is here. <u>https://youtu.be/ISwL73evUdA</u>

Dr. Robert Lustig - Sugar: The Bitter Truth, Type 2 Diabetes Is "Processed Food Disease", "The Skinny on

Obesity" Robert H. Lustig, MD, UCSF Professor of Pediatrics in the Division of Endocrinology, explores the damage caused by sugary foods. He argues that fructose (too much) and fiber (not enough) appear to be cornerstones of the obesity epidemic through their effects on insulin. In "The Skinny on Obesity", a 7-part series from UCTV Prime, Dr. Lustig and two of his UCSF colleagues tease out the science behind this alarming claim and the dire threat it poses to global public health. <u>http://www.uctv.tv/skinny-on-obesity</u>

Some additional links for Dr. Lustig.

https://youtu.be/dBnniua6-oM (The Bitter Truth)

https://youtu.be/f1oRIVKwrio (Type 2 Diabetes Is a "Processed Food Disease")

2020 Dietary Guidelines Advisory Committee Second Meeting

A look at 75+ presenters in front of the Dietary Guidelines Advisory Committee who are attempting to influence the 2020-2025 guidelines towards their particular interest. Very informative. <u>https://youtu.be/y25aGM547Wk</u>

NEW INFORMATION IN 2024

Now emerging is truth about how diet has an effect on mental health. Here are two excellent videos to watch, particularly if you or your loved ones are struggling with mental health issues.

Harvard Doctor: The HIDDEN Link Between Your Diet ADHD & Autism! (youtube.com)

(32) Jordan Peterson Was RIGHT About The Carnivore Diet - YouTube

There is now some emerging physician support for fighting Cancer through diet. Since there is new information emerging daily, search with Google the name Dr. Thomas Seyfried and search YouTube with a query like "Cancer and diet"

Note: The above links are a few of many available. A good understanding of the major dietary groups and their recommendations can easily be found by using a smart phone, tablet, or computer that has access to the internet. No personal recommendations are given here in this paper. The best thing you can do is research it for yourself.

It can be very important to your health.

Bon Apatite