

THE BITCOIN STANDARD RESEARCH BULLETIN

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Fiat Money and Fiat Food: When Ludwig von Mises met Weston Price

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Nutrition is a topic that has fascinated me for a while, especially its relationship with economics, and in particular the topic of time preference; it's something I plan to research and write about extensively. I believe that the modern health crises cannot be separated from the deeper economic forces that drive high time preference consumption and production decisions in the food industry. After many years of research, this was one of the main topics I wanted to include *The Bitcoin Standard*, but after beginning to write about it I realized it would require too much space and needed significantly more rigor to reach the level of quality I demanded from myself. This month's bulletin is the first time I'm writing in long-form on the subject, but it will by no means be the last; I consider this a starting point of my thoughts on the topic, and will use it as motivation to continue researching and finding data to test the various hypotheses presented here.

In his bulletin I will present a few theories I have for understanding the interplay between government control of money and nutritional and health trends across the twentieth century. The first section of the bulletin will present an understanding of nutrition based on the work of Weston Price, which is quite different from the prevalent views on this topic. The second section of the paper describes some of the main industrial foods that came into popular use in the twentieth century, and the economics behind their production. Building on this background, and on the chapters of *The Bitcoin Standard* discussing the relationship between the monetary medium and time preference (Chapter 5) and government influence over the economy and individuals' lives (Chapter 7), the next three sections present the main processes which I believe link the monetary system of government money to the current trends in food consumption and the resulting health problems.

I- Background

The most important and influential book to my understanding of nutrition is *Nutrition and Physical Degeneration* by Weston Price. The best way I can describe Weston Price is that he is the Ludwig von Mises of Nutrition: a complete outcast from mainstream academia whose work is nonetheless far more important and valuable than the reams of scholarships produced by today's academic journal article bots that call themselves academics. His conclusions fly against the politically correct dogma taught in Nutrition schools in modern universities because his work provides a rigorous and clean exploration of the horrible damages caused by modern industrial foods whose producers are the main benefactors of nutrition schools everywhere today.

Price is mainly known today as both a dentist and a pioneer in the discovery and analysis of several vitamins, but his magnum opus, *Nutrition and Physical Degeneration* is largely ignored by the mainstream of academia and nutrition science. On top of being methodologically thorough and well-documented, Price's research is unique, and will likely never be repeated. He spent many years traveling the world just as airplanes were invented and closely observed people from cultures across all continents, meticulously documenting their diets and their overall health, particularly their dental health. Since flight was so novel, he was able to visit many areas still largely isolated from world markets and thus reliant on their own local traditionally-prepared food items. Price took thousands of pictures of the people he studied as well as count-

less samples of their foods, which he then sent to his laboratories in Ohio for analysis. Such an experiment would be unrepeatable today, as modern industrial food has spread so far and wide across the planet that hardly any populations would be free from its effects.

Across the world, Price compared the diets of populations that were genetically similar but geographically separated, one of which would already be integrated into global trade markets with access to industrial food, while the other population would still be isolated and eating its traditionally-prepared foods. Price studied the Inuit in northern Canada and Alaska, Swiss villagers in isolated valleys, herds-men in central Africa, Pacific Islanders, Scottish farmers, and many more populations. No matter where in the world you come from, Price visited your ancestors, or people very close to them. The results were as stark as they are edifying and Price arrived at several important conclusions. While it is really impossible to do justice to this momentous work in a few paragraphs, I will try my best to synthesize some of the findings here; I strongly urge you to read the book, which is available for free online, complete with the shocking pictures of jaw development. The end of this report also contains a guide to related modern readings that might be more palatable for the modern reader.

The first conclusion I take from Price's work is that the diseases of civilization that we've accepted as a normal part of life only began to appear with the introduction of modern processed foods, in partic-

ular, grains, flours, and sugars. The book is full of stories and analysis that make this an inescapable conclusion. Here is but one of many examples to illustrate the point, drawn from Chapter 21:

“The responsibility of our modern processed foods of commerce as contributing factors in the cause of tooth decay is strikingly demonstrated by the rapid development of tooth decay among the growing children on the Pacific Islands during the time trader ships made calls for dried copra when its price was high for several months. This was paid for in 90 per cent white flour and refined sugar and not over 10 per cent in cloth and clothing. When the price of copra reduced from \$400 a ton to \$4 a ton, the trader ships stopped calling and tooth decay stopped when the people went back to their native diet. I saw many such individuals with teeth with open cavities in which the tooth decay had ceased to be active.”

The second conclusion from Price’s work concerns the quality of the soil in modern societies, which he found to be quickly degrading, causing severe nutrient deficiencies in food. Price published his book in the 1930’s, and he had pinpointed the few decades prior as a time of particular decline in the nutrient content of land.

The third conclusion is that, despite embarking on his trip expecting to find vegetarian diets, Price found that all healthy traditional populations relied

heavily on animal products. In fact, the healthiest and strongest populations he found were the Inuit and African herders who rely almost entirely on meat for their diet. The larger the amount of meat eaten by a population, the healthier and stronger it was. Price came to see the sacred importance of animal fats across all societies, and analyzed their nutrient content. Price found many nutrients that cannot be obtained from plants, and conclusively demonstrated that it is simply not possible to be healthy for any significant period of time without ingesting animal foods. To the extent that plant food was eaten, its role seemed primarily to be a vessel for ingesting precious fats.

The fourth broad category of Price’s conclusions is the least interesting to me but unfortunately is the one that receives the most attention; Price closely studied how various cultures prepared their plant foods and extensively documented the methods needed to make most grains and plants palatable and non-toxic. These heavily complex traditional rituals of soaking, sprouting, fermenting and so on are clearly superior to modern mass-processing, and yet nonetheless they remain impractical for most modern people.

Price contributed massively to our understanding of nutrition and health, but like Menger and Mises in Economics, his teachings are largely ignored by the paper-pushing government-employed bureaucrats pretending to be modern scientists. Not coincidentally, listening to these government employees and ignoring Weston Price has come at a highly devastating cost to our modern health.

The modern world suffers from a crisis of obesity that's unprecedented in human history. Never before have so many people been so overweight. Modernity's tragically self-flattering misunderstanding of this crisis is to cast it as a crisis of abundance: it is a result of our affluence that our biggest problem is obesity rather than starvation. The flawed paradigm of nutrition—another field of academic inquiry thoroughly disfigured by government funding and direction—emphasizes the importance of obtaining a necessary quantity of calories, and that the best way to secure the needed calories is by eating a diverse and “balanced” diet that includes hefty portions of grains. Animal meat and fat are viewed as harmful and best consumed in moderation, if at all. From this perspective, obesity occurs when too many calories are consumed, and malnourishment occurs when too few calories are consumed. This view is as overly simplistic as ridiculous Keynesian textbooks' insistence that the state of the economy is primarily determined by the level of aggregate spending, with too much spending the cause for inflation, and too little spend the cause for unemployment which was discussed and debunked thoroughly in *The Bitcoin Standard*.

In reality, nutrition is about far more than caloric intake, it's about securing sufficient quantities of essential nutrients for the body, which come in four categories: proteins, fats, vitamins, and minerals. The fats are primarily used for providing energy for the body, the proteins for building and rebuilding the human body and its tissues, and the vitamins and minerals are necessary for various vi-

tal processes that take place in the body. The other major food group, carbohydrates, is not essential to the human body but can be utilized to provide energy. In the absence of essential nutrients, the human body begins to suffer from deterioration and negative consequences manifesting in diseases. In particular, the absence of animal proteins and fatty acids causes the body to enter into starvation mode: energy expenditure is reduced, manifesting in physical and mental lethargy and inactivity, and the body begins to convert its intake of carbohydrates into fatty acid deposits for storage for future use (in other words, causing obesity). Rather than a sign of affluence and overfeeding, obesity is actually a sign of malnutrition. The ability to digest plants and convert them into stores of fatty acids is an extremely useful evolutionary strategy for dealing with hunger in the short-run, but when the deprivation of essential nutrients becomes a lifestyle, the fat storage turns into the debilitating sickness of obesity. Rather than being a sign of affluence and overfeeding, obesity is an unmistakable sign of malnourishment and nutritional poverty.

These few conclusions have been instrumental in shaping my understanding of diet and nutrition, leading me to remove from my diet all processed foods, grains, and sugars, while increasing my intake of fatty meat; The improvements in my mental and physical health are spectacular. Not only have I lost around 30 pounds, I have also become objectively stronger at 38 years of age than I was at 18 or 28. But for our purposes today, the more

significant impact is on my understanding of the relationship between money and health. What struck me most about Price's research is how the trends most responsible for malnutrition, obesity, and some diseases of modern civilization can be directly related to the economic realities of the

twentieth century. The nutritional decline Price documented happened around the turn of the twentieth century, which, coincidentally, was when the modern world economy moved away from the hard money of the gold standard and toward the easy money of government.

II- Fiat foods

These are either drugs or inedible industrial products which have been foisted upon the world through a century of heavy propaganda and government policy, financed by fiat money.

1- Refined flour and sugar

Historically, whole grain flour and natural sugars have been consumed for thousands of years. Whole grain flour, being produced from the whole grain, would contain the germ and bran, which contain all the nutrients in the wheat. As Weston Price documented, elaborate rituals existed for preparing whole wheat and it was eaten with ample animal fat. Industrialization changed things drastically for these two substances, effectively turning them into highly addictive drugs. **Wikipedia explains:**

An important problem of the industrial revolution was the preservation of flour. Transportation distances and a relatively slow distribution system collided with natural shelf life. The reason for the limited shelf life is

the fatty acids of the germ, which react from the moment they are exposed to oxygen. This occurs when grain is milled; the fatty acids oxidize and flour starts to become rancid. Depending on climate and grain quality, this process takes six to nine months. In the late 19th century, this process was too short for an industrial production and distribution cycle. As vitamins, micronutrients and amino acids were completely or relatively unknown in the late 19th century, removing the germ was an effective solution. Without the germ, flour cannot become rancid. Degermed flour became standard. Degermation started in densely populated areas and took approximately one generation to reach the countryside. Heat-processed flour is flour where the germ is first separated from the endosperm and bran, then processed with steam, dry heat or microwave and blended into flour again.

In other words, industrialization solved the problem of flour perishing and ruining by removing all

the nutrients from it, effectively turning it into a highly addictive drug.

Sugar, on the other hand, had existed naturally in many foods, but in its pure form was rare and expensive, since its processing required large amounts of energy, and its **production was almost universally done by slaves**, because few would choose to work that exhausting job of their own volition. As industrialization and capital accumulation allowed for the replacement of slave labor with heavy machinery, people were able to produce sugar in a pure white form, free of all the molasses and nutrients that accompany it, and at a much lower cost.

Refined sugar and flour can be better understood as drugs, not food. Sugar contains no essential nutrients, and flour only contains very little. The pleasure that people get from consuming them is not the pleasure one gets from being nourished, it is the pleasure you get from a hit of an addictive substance. In *Bright Line Eating*, Susan Thompson explains how the refining of sugar and flour is similar to the refining process that has made cocaine and heroin such highly addictive substances. Whereas chewing on coca leaves or eating poppy plants will give someone a small high and little energy kick, it is nowhere near addictive, as evidenced by the fact that many cultures had consumed these plants for thousands of years with little adverse effects. But the industrial processing of these plants into their modern highly potent drug form has made them extremely addictive, because it allows the person

consuming them to ingest large quantities of the pure essence of the plant without any of the rest of the plant matter that comes with it. The high is magnified as is the withdrawal that follows it and the desire for more. Thompson makes a compelling case that the processing of these drugs is very similar to the processing of sugar and flour in how addictive it makes them. She even cites studies that show that sugar is eight times more addictive than cocaine.

2- Polyunsaturated and hydrogenated “vegetable” and seed oils

A century ago, the majority of fats that were consumed consisted of healthy animal fats like butter, ghee, tallow, lard, and schmaltz, with smaller quantities of olive and coconut oils. Today, the majority of fat consumption comes in the form of toxic heavily-processed industrial chemicals which are misleadingly referred to as “vegetable oils”, mainly soy, rapeseed, sunflower, corn, and canola, as well as the abomination that is margarine. The diet change that would likely cause the largest improvement in a person’s health with the least effort is likely to be the substitution of these horrific industrial chemicals for healthy animal fats.

Most of these chemicals did not exist 100 years ago, and those that did were mainly used in industrial uses, such as lubricants. As industrialization spread and the government-stoked hysteria against animal fats increased, these toxic chemicals have been promoted worldwide by governments, doc-

tors, and nutritionists as the healthy alternative. The spread of this sludge across the world, replacing all the traditional fats used for millennia is an astounding testament to the power of government propaganda hiding under the veneer of science. The late Dr. Mary Enig of the Weston Price Foundation had spent her life warning of the dangers of these chemicals, with very little attention. Here **she lists the different kinds of fat** available, while **here she discusses their impact on health**. These are extremely valuable reads I highly recommend.

3- High fructose corn syrup

In the 1970's, and as government policy had pushed for the mass production of corn and made its price very cheap, there was a large surplus of corn crops looking for places to be used. This abundance of cheap corn led to the development of many creative ways to utilize it to benefit from its low price, and one of these was to use it to extract a sweetener, High Fructose Corn Syrup. In 1983 the FDA blessed this new substance with the classification of "Generally Recognized As Safe" and the floodgates to its utilization opened in a barely believable manner. Since the US has very high tariffs on sugar, the price of sugar in the US is usually double or triple the global price. While the US has very high subsidies to corn, the price of corn is generally lower in the US than the global average. Once a sweetener was made from corn, it became more profitable to use it for sweetening products than sugar, and since then, American candy, industrial food, and soft drinks has become almost universally

full of HFCS, which is arguably even more harmful than regular sugar, on top of being nowhere near as appetizing or desirable. If you've ever wondered why candy and soft drinks taste much better everywhere on the planet than in the US, now you know why: only the US sweetens its candies with HFCS while the rest of the world uses the more palatable sugar.

There are many problems with HFCS, but perhaps the most important is that it can only be metabolized in the liver, like toxic substances, and is responsible for causing a lot of liver damage worldwide.

4- Soy

Historically, soy was not an edible crop, used instead to fix nitrogen in the soil. The Chinese first figured out how to make it edible through extensive fermenting in products like tempeh, natto, and soy sauce. Famines and poverty later forced oriental populations to eat more of it, and it has arguably had a negative effect on the physical development of the populations that have depended on it for long.

Modern day soy products come from Soybean lecithin. The squeamish may want to skip this, but here is how the Weston Price Foundation described the process by which this is prepared:

Soybean lecithin comes from sludge left after crude soy oil goes through a "degumming" process. It is a waste product containing solvents and pesticides and has a consistency

ranging from a gummy fluid to a plastic solid. Before being bleached to a more appealing light yellow, the color of lecithin ranges from a dirty tan to reddish brown. The hexane extraction process commonly used in soybean oil manufacture today yields less lecithin than the older ethanol-benzol process, but produces a more marketable lecithin with better color, reduced odor and less bitter flavor.

Historian William Shurtleff reports that the expansion of the soybean crushing and soy oil refining industries in Europe after 1908 led to a problem disposing the increasing amounts of fermenting, foul-smelling sludge. German companies then decided to vacuum dry the sludge, patent the process and sell it as “soybean lecithin.” Scientists hired to find some use for the substance cooked up more than a thousand new uses by 1939.

While there are many great uses of soy in industry, its use in food has largely been an unmitigated disaster as [this extensive discussion by The Weston Price Foundation explains](#).

5- Low fat foods

The notion that animal fats are harmful has spurred the creation of many substitutes to fatty foods that contain low or no fat. Without delicious animal fat, these products all become tasteless and unpalatable, and the best way to make them palatable was to introduce sugars. As a result of trying to avoid fat

because of government hysteria discussed below, people have become very hungry and needing to binge on endless doses of sugary snacks all day, with lots of chemicals and artificial barely edible compounds thrown in.

All of the above-mentioned foods, and many more, can better be understood as industrial products that should be avoided for a human to thrive and be healthy. Yet even as technology and science continue to advance, we find people consuming ever-increasing barely believable quantities of them. Faster and more powerful machines can reduce the cost of producing these materials very significantly, and as industrial technology has advanced producing these foods has become less and less expensive.

There is very little that industrialization can do to improve the cost of producing meat which needs to grow by walking on large areas of land, graze and get sun. Food is one area where industrialization is not always useful, because it has allowed us to indulge in addiction to unhealthy foods in very concentrated doses. Substitution of capital and modern power for human time has come at the expense of nutrient content. Food prices are kept low by making people eat more industrial foods, which are based on heavy industrial processing rather than time spent in preparation.

The promotion of these foods works out very well for governments looking to feed their people on the cheap, for agribusiness looking to make large profits, and for the con artists who profit immensely from pretending to be scientists and doctors while promoting them, as we’ll see below.

III- Time preference, soil depletion, and individual food choices

As discussed extensively in Chapter 5 of *The Bitcoin Standard*, the facet of the shift to easy money that I find most significant and fascinating is the effect it has on people's time preference. As the purchasing power of fiat money is expected to decline over time, and as interest rates are artificially manipulated downward, individuals begin to favor spending and borrowing over saving. While my book discussed this tendency in terms of its impact on consumer decisions and capital markets, it is also worth considering the impact on people's use of their natural environment and its soil, and on their personal health decisions.

As individuals' time preference rises and they start to discount the future more heavily, they're less likely to value the maintenance of a healthy future state of their natural environment and soil. Consider the effect this would have on farmers: the higher a farmer's time preference, the less likely they are to care about the returns their land will be able to offer after ten years, and the more likely they are to care about maximizing their short-term profits. This would incentivise short-term focused management of soil, which would prioritize a quick return over long-term soil health. Indeed, this is exactly what we find with the depletion of the soil leading up to the 1930's, at the time of Price's writing.

The introduction of modern industrial production methods, thanks to the utilization of hydrocarbon energy discussed in detail in the last Bitcoin Standard Research Bulletin, has allowed humans to increase the intensity with which they utilize land,

and consequently the amount of crops they can get out of it. While the story of increasing agricultural productivity is often touted as one of the great successes of the modern world, the heavy cost it has imposed on the soil goes largely unmentioned. The vast majority of agricultural soil in the world today is largely unable to grow crops without the addition of artificial industrially-produced chemical fertilizers, steadily degrading the nutritional content of the food compared to food grown on rich soil.

In particular, industrialization allows for the extensive indulgence of people's high time preference in utilizing soils. With modern hydrocarbon-powered machinery and technology, nutrients can be extracted from the soil far more rapidly than before, allowing for quicker depletion of the soil and more short-term profits. Fertilizers allow this present-orientation to appear relatively costless in the future, since depleted soil can still be made fertile with industrial fertilizers. After a century of industrial farming, it is clear that this trade-off was very costly as the human toll of industrial farming grows larger and clearer.

It is quite astonishing to find that within the field of nutrition, without any reference to economic or monetary policy, Price had identified the first third of the twentieth century as having witnessed immense degradation of the soil, and a decline in the richness of nutrients in the food produced from it. In my book, I also mention how the great cultural critic Jacques Barzun (in his seminal history of the west, *From Dawn to Decadence*) had

precisely identified the year 1914 as the year in which the decadence and decline of the west had begun, when art began its shift toward the less sophisticated modern forms, and where political and social cultures went from liberalism to liberality. Like Price, Barzun makes no mention of the shift in monetary standards and the link it might have to the degradation he identifies. In the work of these two great men, prime experts in their respective fields, we find compelling evidence of a shift toward more present-orientation across the western world in the early twentieth century. Barzun's work illustrates this for culture and art, while Price illustrates it with the nutrient content of the soil, both of which are natural consequences of an upward shift in time preference.

The work of Alan Savory on the topic of soil depletion is very important here. **The Savory Institute** has been working on reforestation and soil regeneration across the world with spectacular success. Their secret? Unleashing large numbers of grazing animals on depleted soil to graze on whatever shrubs they can find, till the land with their hooves, and fertilize it with their manure. The results, **visible on their website**, speak for themselves and clearly illustrate a strong case for keeping soil healthy by holistically managing the grazing of large mammals on it. Agricultural crop production, on the other hand, quickly depletes the soil of its vital nutrients, making it fallow and requiring extensive fertilizer input to be productive. This explains why pre-industrial societies worldwide usually rotated their land from farming to grazing. After a few years of farming a plot whose out-

put had begun to decline, the land was abandoned to grazing animals, and farmers moved to another plot. After that one was exhausted, farmers moved on to another plot, or returned to the earlier one if it had recovered.

The implication here is very clear: a low time preference approach to managing land would prioritize the long-term health of the soil, and thus entail the management of cropping along with the grazing of animals. A high time preference approach, on the other hand, would prioritize an immediate gain and exploit the soil to its fullest with little regard for long-term consequences. The mass production of crops, and their increased availability in our diet in the twentieth century, can also be seen as a consequence of rising time preference. The low time preference approach involves the production of a lot of meat, which usually has small profit margins, while the high time preference would favor the mass production of plant crops which can be optimized and scaled drastically with the introduction of industrial methods, allowing for significant profit margins.

Another way of understanding the impact of rising time preference is in the decision-making of individuals when it comes to food choices. As depreciating money drives people to prioritize the present, they are more likely to indulge in foods that feel good in the moment at the expense of damage to their health in the future. The shift toward short-term orientation in decision-making would invariably favor more consumption of the junk foods mentioned above.

IV- Government diet guidelines

The second link between nutrition and monetary economics pertains to the role that governments play in the production of food and the impact of their influential dietary guidelines. As discussed extensively in Chapter 7 of *The Bitcoin Standard*, the move from the gold standard to government money was pivotal in ending the classical liberal era of government and initiating the move toward more powerful government control over ever-increasing facets of an individual's life. It is hard to believe it but in *la belle époque*, the most transformative period of human history, governments generally did not issue passports, interfere in food production, ban people from consuming specific substances, or engage in endless military conflict financed by currency debasement.

One of the many aspects of private individual life that governments have sought to manage for their citizens since the inception of government money is food. The rise of the modern nanny state, which role-plays as caretaker of its citizens and attempts to provide all the guidance they need to live their lives, could not have been possible under the gold standard simply because governments who start making centralized decisions for individual problems would quickly cause more economic harm than good (and run out of hard money to keep financing their operation). Easy government money, on the other hand, allows for government mistakes to accumulate and add up significantly before economic reality sets in through the destruction of the currency, which generally takes much longer. It is thus no coincidence that the US government

began to issue dietary guidelines shortly after the Federal Reserve's creation had begun turning it into the nation's iron-fisted nanny. The first such guideline, focused on children, **was issued in 1916, and the next year they issued a general guideline.**

As with all individual decisions enforced through central command by coercive governments, this one did not work out well at all. The history of the US government's meddling in its citizens' diet is extensive, and this bulletin cannot possibly do it justice. A few highlights will be mentioned along with some suggested reading for anyone who wants to go deeper down this depressing rabbit hole.

US government diet policy in the twentieth century has been driven by two main forces: a nineteenth century movement that sought to massively reduce meat consumption for religious reasons, and industrial agricultural interests trying to increase demand for the high-margin nutrient-lite industrial sludge they wanted to convince the world could pass for food.

For some strange theological reasons far above my paygrade, the Seventh Day Adventist church has for a century and a half been on a moral crusade against meat-eating. Ellen G White, one of the founders of the church, had "visions" of the evils of meat-eating, and preached endlessly against it (while still eating meat secretly, a very common phenomenon among anti-meat zealots until today). There is, of course, nothing ethically objec-

tionable about religious groups following whatever dietary visions they experience, but the problems arise when they seek to impose those visions on others. Seventh Day Adventists are generally influential members of American society with significant political clout and many successful individuals in positions of power and authority.

The Soy Information Center **proudly proclaims on its website:**

No single group in America has done more to pioneer the use of soyfoods than the Seventh-day Adventists, who advocate a healthful vegetarian diet. Their great contribution has been made both by individuals (such as Dr. J.H. Kellogg, Dr. Harry W. Miller, T.A. Van Gundy, Jethro Kloss, Dorothea Van Gundy Jones, Philip Chen) and by soyfoods-producing companies (including La Sierra Foods, Madison Foods, Loma Linda Foods, and Worthington Foods). All of their work can be traced back to the influence of one remarkable woman, Ellen G. White.

Another member of the Seventh Day Adventist Church, Lenna Cooper, went on to become one of the founders of the American Dietetics Association, an organization which to this day holds significant influence over government diet policy, and more importantly, is the body responsible for licensing practicing dietitians. In other words, anyone caught handing out dietary advice without a license from the ADA could find themselves thrown into jail

and/or financially ruined. One cannot overstate the influence that such a catastrophic policy has had: a government-enforced monopoly granted to a religiously motivated agenda (based on very little science) to determine what is permissible diet advice has completely distorted many generations' understanding of what healthy food is. What's even worse is that the ADA is responsible for formulating the dietary guidelines taught at nutrition and medical schools worldwide, meaning it has for a century shaped the way nutritionists and doctors (mis)understand nutrition. The astonishing consequence is that the vast majority of people, nutritionists, and doctors today think that animal fat is harmful, while grains are healthy, necessary, and safe!

The reader should not be surprised that the ADA, like all other main institutions of progressive government control of the economy and citizens, was established in 1917, around the same time as the Federal Reserve (along with many, many other central planning agencies whose catastrophic consequences we may hopefully discuss in future editions of this research bulletin). Another organization, The Adventist Health System, has been responsible for producing decades' worth of shoddy "research" used by advocates of industrial agriculture and meat reduction to push their religious visions on a species that demonstrably can only thrive by eating animal proteins and fatty acids.

The research that is used to tout the benefits of meat-avoidance has always been based on poor statistical techniques interpreted with cavalier moti-

vated reasoning which would be laughed out of any freshman statistics class. The main problem with these studies is that they are observational studies, and there are always many confounding factors to take into account. The most popular studies promoted by Seventh Day Adventists focus on comparing Seventh Day Adventists to the general population. They find that since Seventh Day Adventists are healthier, it must be the reduction in meat consumption that's responsible. But that ignores that Seventh Day Adventists also avoid smoking and drinking, are more affluent than the general population and thus able to live in cleaner and healthier environments, and usually have a stronger sense of community, all of which are factors that are very helpful for longevity. These studies also rely on self-reporting of food intake, and it is well-established that this is not an accurate way of assessing food intake, as people generally report what they would like to have eaten, not what they have actually eaten, particularly when the religious group to which you are reporting has strong stigma around the consumption of meats.

More general observational studies, such as the terrible ones relied upon by the bureaucrats at the World Health Organization, find that people who eat more meat suffer from more diseases than people who eat less meat, and therefore conclude that meat must be to blame. But on a population level, the consumption of meat is very strongly correlated with the consumption of all other kinds of foods. In other words, the same people who eat a lot of meat also eat a lot of sugars, grains, flour, and all manner of industrial sludge. A proper statistical observational study would try to control for these factors, but anti-meat studies

never do that, because they are based on trying to validate religious visions, and not the scientific method. Yet, even an observational study that controls for many factors cannot be viewed as definitive. The “gold standard” for establishing causality remains in making very well-specified randomized control trials. The most famous of these studies is The China Study, which has been **thoroughly and comprehensively debunked**.

The mention of laughably poor research techniques appropriately leads us to Ancel Keys, who in my mind is the John Maynard Keynes of nutrition: a man as politically skilled as he is intellectually vacuous, who knew how to play politics to serve the special interests that have popularized and mandated his juvenile and borderline criminal “research” as gospel in universities around the world. Making nutrition science a closed guild protected by the state, and tasked with peddling state propaganda, has allowed it to be easily captured by special interest industries who used it to promote their products unopposed, as all dissenting voices were silenced and marginalized by not having access to the government's printing presses.

The work of Ancel Keys and many generations of Harvard “scientists” was the Trojan horse with which agro-industrial businesses managed to inject their poisonous industrial sludge into the bodies of billions around the world, resulting in the disastrous consequence of the spread of diabetes, obesity, cancer, heart disease, and many other fatal ailments which most people accept as a normal part of life, completely oblivious to the fact that they are only a normal part of a life spent consuming industrial “food”. It is one

of the most shocking and discomfoting realizations of one's life to realize that, arguably, Keys and the scientists who peddled his ridiculous research have likely been responsible for more deaths around the world than anyone, even more than all Communist regimes combined.

Keys' ridiculous research was based on travels he did around Europe after World War II. He collected unreliable data on the consumption of meat across seven countries, and then plotted that against rates of heart disease. After inexplicably eliminating France from the data, Keys found a correlation between heart disease and meat consumption, which he interpreted as being evidence that meat causes heart disease, and from that was born the famous Seven Country Study, popularized to the heavens by mass media and mass education as the definitive and final word on nutrition. Conveniently enough, Keys had also ignored data from 15 countries that would have made his study lose its significance. That France has low rates of heart disease in spite of consuming large quantities of meat is still viewed as a paradox by modern nutritionists, when there is nothing paradoxical about it except if one buys Keys' unsubstantiated conclusions.

Keys also popularized the ridiculous idea that a Mediterranean diet is one low on animal fats and high on plant fats, which has been used to heavily market poisonous seed oils (like "heart-healthy" canola oil which no human would feed to their dog, let alone eat). Keys' travels came after the destruction of World War II, during a time in which people were severely impoverished and relied heavily on olive oil. But the people of the Mediterranean, like all homo sapiens,

rely on animal fats primarily for cooking, resorting only to plant-based fats after calamities like World War II or Harvard nutritional advice have befallen them.

The role of Harvard University in this debacle cannot be forgotten of course. **The New York Times reports:**

The documents show that in 1964, John Hickson, a top sugar industry executive, discussed a plan with others in the industry to shift public opinion "through our research and information and legislative programs."

At the time, studies had begun pointing to a relationship between high-sugar diets and the country's high rates of heart disease. At the same time, other scientists, including the prominent Minnesota physiologist Ancel Keys, were investigating a competing theory that it was saturated fat and dietary cholesterol that posed the biggest risk for heart disease.

Mr. Hickson proposed countering the alarming findings on sugar with industry-funded research. "Then we can publish the data and refute our detractors," he wrote.

In 1965, Mr. Hickson enlisted the Harvard researchers to write a review that would debunk the anti-sugar studies. He paid them a total of \$6,500, the equivalent of \$49,000 today. Mr. Hickson selected the papers for them to review and made it clear he wanted the result to favor sugar.

Harvard's Dr. Hegsted reassured the sugar executives. "We are well aware of your particular interest," he wrote, "and will cover this as well as we can."

As they worked on their review, the Harvard researchers shared and discussed early drafts with Mr. Hickson, who responded that he was pleased with what they were writing. The Harvard scientists had dismissed the data on sugar as weak and given far more credence to the data implicating saturated fat.

"Let me assure you this is quite what we had in mind, and we look forward to its appearance in print," Mr. Hickson wrote.

The role of Harvard in spreading this criminal mendacity cannot be chalked off as a private institution being corrupt. Harvard, like most American universities, is primarily funded from government research grants. It maintains its prestige and importance through the very heavy influence it exerts on public policy. The founder of Harvard's Fredrick Stare, was practically a living breathing advertisement for Coca-Cola and all the worst junk that American food producers have concocted in the twentieth century. **An article from 1978** on his school is absolutely mind-blowing in the level of downright shamelessness with which he enjoyed getting rich by using his name and his government connections to ram industrial junk down people's throats. Wikipedia summarizes some of the most shocking facts about this man:

As an adviser to the US government, Stare rejected the idea that 'the American diet' was

harmful; stating for example that Coca-Cola was "a healthy between-meals snack" and that eating even great amounts of sugar would not cause health problems.

In his autobiography, *Adventures in Nutrition*, Stare states that in 1960 he obtained a grant of \$1,026,000 from General Foods for the "expansion of the School's Nutrition Research Laboratories" and that in the 44-year period as a nutritionist he raised a total of \$29,630,347. For instance, Kellogg's funded \$2 million to set up the Nutrition Foundation at Harvard. The foundation was independent of the university and published a journal *Nutrition Reviews* that Stare edited for 25 years.

Stare also co-founded and served as chairman of the Board of Directors for the American Council on Science and Health. In 1980, during his tenure as Chairman, he sought funding from US tobacco giant Philip Morris USA for ACSH's activities.--

It's important to note that this new paradigm of nutrition science is based on popularizing the managerial state's attempts at economically and efficiently mass-feeding soldiers during the Second World War. After the success of British and American soldiers in defeating Nazism, the managerial state in both countries sought to apply the successes in managing the wartime effort to managing civilian life, and the result was the modern dietary guidelines. These are written with the aim of producing the cheapest way of feeding mass-

es of humans. Instead of allowing nutrition to be an individual choice and food production a free market process, modern governments have treated their societies as industrial lot-feeds, and tasked third rate scientists and terrible statisticians with devising the cheapest way of feeding them enough calories. Humans' natural instincts and delectation were to be overridden by government-employed charlatans profiting from telling them how much to eat of each kind of food, and whose prime directive (as in the war years) was economy. Consequently, the biggest beneficiary from government nutritional guidance were the producers of the cheapest sources of calories and proteins: grains and pulses. But the nutrition mandarins failed to notice, or mention, is that grains are essentially nutrient-free, while pulses contain inferior nutrients to those contained in animal meat.

A monetary system built on a pyramid of unsound debt money gave us a food system built on a pyramid of unsound grains and carbohydrates. In one of the most catastrophic scientific errors of all time, detailed thoroughly in the work of Nina Teicholz and Gary Taubes, carbohydrates were given a free pass and became the foundational basis for nutrition while animal meat and fat, the highest quality and most nutritious food available, were vilified as the cause of modern diseases and illnesses. Modern medicine took the word of slimy politicians pretending to be scientists like Ancel Keys and Fredrick Stare and spread the gospel worldwide. Astonishingly, to this day, even the least health-conscious people still worry about their consumption of animal fats, while finding nothing wrong with eating large quantities of 'healthy' grains, sugars, processed foods, and soft drinks.

The result of this catastrophic mistake has been that people the world over have massively increased their consumption of cheap, nutrient-deficient grains, and all manners of toxic industrial "foods" while drastically cutting down on meat and animal fats. Grains may be more abundant in our modern world but they are not more nutritious, and eating them does not satisfy people's nutritious requirement, but instead causes more hunger and cravings, motivating them to eat more and more. The obesity of the modern world has its root in a very real lack of necessary nutrients in favor of eating highly-addictive and non-nutritious junk, while the truly nutritious food, fatty meat, has been deemed dangerous by modern governments' diet dictators. The reason that the obese of today eat too much is not that they are affluent, rather, it is that they are utterly deprived of nutrients and are constantly hungry, and the grain and sugar which forms the vast majority of today's diet provides close to no nutrition.

The role of the government as the nanny responsible for dictating the diets of the entire population is a natural outgrowth of the totalitarianism that fiat money engenders. When government has the ability to generate any money it needs for whatever purposes it deems necessary, any nice-sounding ideal will eventually come to be viewed as a prerogative of the state. What started off as a well-meaning religious attempt to save people from the 'envisioned' damages of eating meat devolved into a government bureaucracy captured by large agro-industrial food interests motivated to sell food that can easily scale industrially and provide the highest margins.

V- Government farm policy

But the role of unsound money in nutritional deficiency does not stop with dietary advice. Perhaps more significantly, it extends to the realm of government interference in the food market. This process particularly intensified after 1971, and has arguably been instrumental to the degradation of the nutritional content of food for Americans.

After President Nixon closed the gold exchange window in 1971, which removed the last link between the US dollar and gold, there was no longer a hard constraint on the expansion of the money supply for the US government and Federal Reserve System. Runaway inflation ensued, and, as is the case with every inflationist government in history, it was blamed on a multitude of factors (the Arab oil embargo, evil speculators on the international capital markets, etc) none of which was the inflationary monetary policy of the government itself).

As inflationary monetary policy caused a rise in food prices, President Nixon appointed Earl Butz, an agronomist who sat on the boards of various agribusiness companies, as secretary of the US Department of Agriculture. Butz's stated goal was to bring food prices down, and his methods were brutally direct: "get big or get out" he told farmers, as low-interest rates flooded farmers with capital to intensify their productivity. This was a boon to large-scale producers, and the death-knell for small farmers. It killed small-scale agriculture and forced small farmers to sell their plots to large corporations, consolidating the growth of the bezzle in the food industry. While the increased production did lead to lower prices, they came at the expense of the nutritional content of the foods and the quality of the soil. The large application of industrial machinery can bring

down the price of industrial foods, and that was what Butz sought.

Mass production leads to an increase in the size and quantity of the food, but not in the nutrients; It also leads to the depletion of the soil, requiring ever-larger quantities of fertilizer to replenish it. It is possible to keep increasing the size of food and its sugar content, but it's much harder to increase its nutrient content. For instance, the mass production of corn leads to extremely cheap prices for High Fructose Corn Syrup (HFCS), a toxic and highly addictive form of sugar. Thanks to its abundance, high fructose corn syrup is now included in the vast majority of industrial foods in the US. In order to compensate for the loss of nutrients, food producers are introducing ever-larger quantities of HFCS into the food supply. This is highly addictive and very destructive, and HFCS is severely implicated in the crisis of malnutrition and obesity besetting the US.

This move towards substituting industrial sludge for food has helped the US government understate and downplay the extent of the destruction in the value of the US dollar in statistical accounts like the Consumer Price Index (CPI). By simply subsidizing the production of the cheapest foods and recommending them to Americans as the optimal components of their diet the extent of price rises, and currency debasement is reduced. A closer look at the historical trend of the US government's suggested dietary guidelines since the 1970s shows a continuous decline in the recommendation of meat, and an increase in the recommendations of grains, pulses, and various other nutritionally poor foods that benefit from industrial economies of scale.

Along with the degradation of the quality of foods recommended by the government has come the degradation of the quality of food included in government's measure of inflation, the Consumer Price Index, an invalid mathematical measure which governments nonetheless track meticulously. The CPI pretends to measure and track across time the price of the average basket of consumer goods purchased by the average household. By tracking the price changes of this basket, government statisticians believe they can get a good sense of inflation levels. The only way to agree is to have no understanding of how math works.

The first obvious problem with the CPI is that an "average" household or a representative consumer basket doesn't exist. The arbitrariness in defining the composition of the goods basket erodes the CPI to simply a measure of the goods chosen by the statisticians crunching these numbers, and allows them enormous leeway in tailoring it to produce the results they want. One could counter here that the statisticians do a good enough job of including most popular goods, and that what matters more is how the basket changes in price over time. This is likely to be reflected across all goods, making the selection of goods not that important. The fallacy here is that many goods behave very differently, particularly high-tech goods which are constantly declining in price due to the continuous efficiency gains technology produced by private enterprise. By weighing these goods heavily in the index and reducing the weights of essentials for survival (e.g. highly nutritious food that, despite tech advancements, still cannot be mass produced), the CPI would understate inflation.

Depending on your level of trust in government, you may or may not be surprised to learn that the number crunchers at the Bureau of Labor Statistics have decided to exclude food, housing, and energy costs entirely from their calculation of the CPI. The ostensible reason is that their prices are too volatile, but the reality is that these are the economic assets most closely tied to physical reality, and thus the least likely to experience the same cost reductions through technological advancements. Not only that, but the BLS actually treats improvements in the performance of electronic equipment as reductions in its costs. So, as your laptop's hard drive has been getting larger every year, the BLS does not just calculate the price of the laptop in the consumer basket, but it calculates the cost of storing a byte of data, which has been dropping very quickly for decades as explained by Moore's Law.

And that brings us to a bigger problem with the CPI. Technological advancement and capital accumulation are constantly increasing economic productivity and reducing the real cost of producing most goods and services; This translates to a lower price when measured against a hard money. Thus, even if one accepts that CPI numbers are accurate, they clearly understate the true extent of monetary inflation because they are revised downward by the increases in productivity.

Yet these are but small side problems with the way the CPI is constructed, and trying to resolve them leads us to the fundamental problem with the CPI: it is a completely invalid way of measuring a completely nonexistent metric, since purchasing decisions themselves are a result of prices and will be

adjusted to reflect changes in prices. To illustrate the point: imagine you earn \$10 a day and spend them all on eating a delicious ribeye steak that gives you all the nutrients you need for the day. In this simple (**and, many would argue, optimal**) consumer basket of goods, the CPI is \$10. Now imagine one day hyperinflation strikes the economy and the price of your ribeye increases to \$100 while your daily wage remains \$10. What happens to the price of your basket of goods? It cannot rise tenfold because you cannot afford the \$100 ribeye. Instead you make do with the chemical shitstorm that is a soy-burger for \$10. The CPI, magically, shows zero inflation. Granted, the real world has not witnessed an example this extreme, but the fundamental dynamic remains: the change in the cost of living cannot be reflected in the price of the average basket of goods because the goods comprising that basket are in turn determined by the change in the price. This is how we can understand that prices continue to rise while the CPI registers at the politically-optimal 2-3%/year level. If you are happy to substitute waste product sludge for ribeyes, you will not suffer from inflation!

This is also why there can be no such thing as the “price level” and no way of measuring it. Prices are ephemeral reflections of supply and demand realities at every given point in time. In a free market, as discussed in *The Bitcoin Standard*, the good that is the hardest to produce and the one with the highest stock-to-flow ratio is chosen on the market as money because it is the least likely to be devalued by overproduction. In such a world, the value of the monetary medium becomes a reflection of the time preference of individuals who

decide between holding it for the future or spending it in the present. Since time preference does not vary very quickly in the aggregate, you would expect the real value of money to remain relatively constant, which was what we saw in the era of gold as money. In such a world it’s nonsensical to talk about a price level, and that’s why no government under the gold standard ever thought of concocting such a ridiculous concept.

In fact, the definition of inflation as a rise in the price level is itself an absurd mistake that modern economics has committed with disastrous consequences. The correct meaning of the word ‘inflate’ is to increase the size of something. A balloon or tire is inflated by making it larger. The correct linguistic interpretation for inflation is that it is the increase of the money supply. An inevitable consequence of the increase of the money supply will be a rise in prices, but that cannot be mistaken for the inflation itself. The only meaningful way to measure inflation then is the way that classical and Austrian economists measure it, which is the increase in the money supply. One can identify rises in prices as a consequence of inflation, but measuring inflation by looking at prices themselves is mathematically absurd, linguistically invalid, and conflates the two concepts (money supply and price). Of course, in language, convention and use trump dictionaries and definitions, and that is why the term inflation is practically unusable today, since it means different things to different people. This is why I avoid using the ‘I’ word entirely and prefer to speak distinctly of price rises and money supply increases.

In conclusion one cannot find a more apt representation of the impact of inflation and unsound

money: the paper wealth of Americans is increasing, while the statistics show that their quality of life is going up. In reality however, the quality of their food is degrading because the quantity of nutrients they consume is declining, and their mental and physical health are deteriorating. Instead of nutrients, Americans are subsisting on an ever-increasing quantity of drugs: mainly sugar and high fructose corn syrup. The ever-growing variety and quantity of flavored industrial sludge filling Americans' refrigerators cannot be claimed to be real food, and it is no substitute for it. Americans' increasing obesity is not a sign of affluence, but a symptom of deprivation. The level of spending and income in America may be increasing according to

government statistics, but if Americans work longer hours than they ever did and their basic nutrition is still receding, there must be something seriously wrong with the money they are using, both as a store and measure of value. The Faustian bargain of fiat money did not deliver the free lunch its cheerleaders promised, but instead brought on industrial concoctions of soy and high fructose corn syrup, light on nutrients, high on empty calories, and extremely costly to the health and well-being of its poor victims. The ever-increasing cost of medication and healthcare cannot be understood without reference to the deterioration of health, diet, and soil, and the economic and nutritional system that have promoted this calamity.

Further reading

The most important book one could read on this topic, in my opinion, is **Price's Nutrition and Physical Degeneration, available in full online**. For a modern book that builds on these principles and communicates them in a manner more relatable to modern readers, I would highly recommend Cate Shanahan's Deep Nutrition. Shanahan has achieved some fame by working with sports stars like Dwight Howard, and her recommendations of bone broth and fatty meats have made waves across the sports world usually obsessed with the latest new superdrug for improving performance.

Gary Taubes' work has been instrumental in questioning the dogma of accepted wisdom in the United States, particularly his book Good Calories, Bad Calories. To learn more about the politics of food in the United States, and in particular the role that special interest groups have played in shaping the nonsense regurgitated by mass education institutions and mass media, I would recommend Nina Teicholz's Big Fat Surprise.

The Weston A Price Foundation is an organization dedicated to spreading the teachings of

Weston Price and providing people with knowledge to help them make healthy choices. While I am eternally grateful to them for what I have learned from them, and I highly appreciate their tireless work in raising awareness of Price's work, educating people about real food, and countering mainstream nutrition dogma, I have some misgivings about their approaches. In particular, the WAPF are fixated on emulating the traditional methods of preparing plants to an extent that is very impractical in the modern world. While it is clearly true that soaking and fermenting plants will reduce the toxins that exist

in them and increase the availability of nutrients, it nonetheless remains the case that plant foods are still massively inferior to animal foods for nutrition, and people would be far better off focusing on eating more meat instead of being distracted by elaborate and expensive traditional rituals of preparation.

To understand why and how animal grazing is beneficial to the soil, I highly recommend the work of Alan Savory and the Savory Institute. **This Ted talk by Alan Savory** is a good introduction to his work.

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All the best,
Saifedean Ammous

A handwritten signature in black ink, appearing to read 'Saifedean Ammous', with a stylized flourish at the end.

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