

**Interview with Paul Jaminet,
Author of the Perfect Health Diet**

In a nutshell, what is the core idea of “The Perfect Health Diet”?

The Perfect Health Diet isn't based on a single idea, but multiple insights. The core insights are:

- A natural whole foods diet, based on recently living plants and animals, will be more healthful than a diet based on “foods” concocted in a chemistry laboratory by processed food manufacturers. This is because all life shares a similar biology, so any living thing will contain many of the nutrients needed to sustain other living things, whereas there is no reason why a human concoction need be life sustaining, and given the lack of knowledge about how to construct a nourishing food and the high costs of doing so were it known, processed foods generally will not be healthful. This preference for natural whole foods is the core of the “Paleo” diet concept, that we ought to eat the types of things that our Pleistocene hunter-gatherer ancestors could have eaten.
- However, merely restricting one's diet to natural whole foods does not guarantee that it will be healthful. There are many nutrients, and a diet may be deficient in key nutrients or contain an excess of other nutrients. In order to achieve optimal health, our diet ought to optimize every nutrient simultaneously. We might call this a balanced diet, in that all the nutrients are in their correct proportions.
- Since there are many essential nutrients – at least 60 – and being deficient or obtaining an excess of any of those will be harmful, there are many ways for a diet to be faulty, but only one way for it to be optimal. Thus, one can say about diets what Tolstoi said about families: All healthful diets are alike, but every unhealthful diet is unhealthful in its own way. Therefore, if we want our diet to be healthful, we need to aim for perfection. That is why we named our diet the “Perfect Health Diet.” We aspire for perfection.

You are neither a certified nutrition specialist nor a medical professional. What brought you, apart from your own poor health, to so intensively occupy with nutrition?

As you mention, our own poor health was the major factor. We wanted to fix our health. Doctors had been useless, and some experiments with Chinese medicine had convinced us that the things we consume by mouth were a potent factor in health, but also that Chinese medicine was not the answer. The “Paleo” diet idea, that natural whole foods were superior to modern processed foods, was persuasive. So from that starting point, we felt we had identified a productive path forward to improving our health.

At the time, I was taking a break from full-time work to focus on certain personal projects, including writing a book. So I had time available to think about how to be healthy. It seemed to me that since poor health was impairing my ability to work productively, my best strategy would be to focus on becoming healthy first, and to complete my other projects afterward.

My wife Shou-Ching was a molecular biologist at Harvard Medical School at the time, and through her I had access to the resources of the Harvard libraries. So it was feasible for me to thoroughly investigate the research literature.

So, I happened to have a good set of ingredients for making progress: motivation, available time, a supportive wife, and access to academic resources. I think that in some ways it was easier for me, with Shou-Ching’s support, to make progress than it was for other researchers, including academic diet professionals. Academics are under many pressures from funding sources or peers, and most are not focused solely on what is right and true, but on what will build their careers.

I believe that in science, personal character matters. I have always been independent-minded, and willing to believe that there were truths that others were overlooking. I am a scientist by training and have always considered myself a scientist and searcher for truth. I was curious and willing to

risk years of my life in pursuit of discovery without a guarantee of success. Not everyone, indeed not many, are willing to do that. One could say that courage, or perhaps foolhardiness, is a prerequisite for this sort of work. Fortunately, in this case the effort paid off. I think one needs an element of faith. “Seek, and ye shall find; knock, and the door will be opened.” That faith is often absent, and without it discovery is impossible.

Many of the ideas you promote in “The perfect health diet” are not groundbreaking new. Today, midwives support breastfeeding, there is a movement that recommends paleo diet, and butter has already lost its bad reputation. What is it, that makes your approach unique?

If there is something unique in our approach, it is our aim to be optimized. We sought to search the scientific literature to find the best possible combination of advice – to bring every bite of human knowledge about nutrition and diet together to assemble the optimal diet.

It is not for us to judge whether we succeeded, but we surely came close because many people have cured diseases and greatly improved their health on our diet. We’ve also been gratified by how many others in the natural health movement and the medical community have taken up themes we pioneered in 2010.

I would say one thing that differentiates us from many others in the natural health movement is that many diet advocates recommend simple but extreme diets – such as vegetarianism, low-carb, or high-protein – whereas our scientific research led us to a moderate, balanced diet that is delicious. Indeed, it resembles the sort of food one commonly finds in gourmet restaurants.

I think the reason diet advocates put forth simple but extreme diets is that they are easier to sell. Simple recommendations are easy for people to remember and they can inspire people to think they have found a “magic bullet,” a single prescription that leads to health. It is less easy to

communicate how optimizing many small factors can be a much more effective way to improve health.

We realized, after we had finally completed our diet, that its deliciousness made sense. Our brain would have evolved to give us pleasure when we eat a diet that is healthful for us – because if we eat well, then we will be more likely to succeed and flourish and have more children, and so evolution will try to make us eat well. That means that if we, today, eat a natural whole foods diet, we can optimize it by following our tastes toward deliciousness, and we can expect to attain great pleasure from meals.

Once we discovered our diet, we were able to find a simple set of recommendations that enables people to make their diet balanced and nourishing by following a few simple prescriptions. Our advice is to combine roughly equal quantities (by weight or volume) of (1) meat, fish, or eggs, (2) starchy plants such as potatoes or rice, (3) sweet plants such as fruit, berries, beans, or carrots, and (4) low-calorie vegetables such as green leafy vegetables, mushrooms, onions, tomatoes, celery, and the like, plus (5) a mix of flavorings including something fermented (for umami flavor), something acidic (such as vinegar or lemon juice), and a healthy fat (like butter or olive oil or avocado or a tree nut butter). This simple combination of foods will almost always lead to a good balance of nutrition that is nearly optimal, plus a delicious meal that is highly satisfying.

So, yes, each element of our advice is not new, indeed many great-grandmothers may have cooked this way a hundred years ago, but overall the diet is unique in that no one else has tried to be so careful in providing a comprehensive dietary prescription that touches on every important factor that impacts our health.

When you and your wife started to amend your lives and nutrition due to health problems the starting point was the paleo diet: however, the effects were not all positive. What did this approach lack?

The basic concept behind the Paleo diet is to eat foods that our hunter-gatherer ancestors could have hunted or gathered. This advice is sound as far as it goes, but one can eat such foods and still be malnourished.

This is what happened to us when we tried the Paleo diet. We tried an extreme low-carb version of Paleo, and developed nutritional deficiencies including a vitamin C deficiency. It was that experience which led us to want to fix Paleo. We believed in the concept of eating natural whole foods, but we wanted to find the mix of natural whole foods which would deliver optimal nutrition. It took us 7 years to complete our research and write the edition of Perfect Health Diet which is being published today.

It is easier to be malnourished today than ever before. A century ago, the only foods available were natural whole foods, and nearly everyone cooked at home. It is natural for a cook to try to make food delicious, so people were led automatically to healthful diets. Today, on the other hand, we have so many unnatural processed foods made from macronutrients (starch, sugar, oil) without micronutrients, and cooking is done for us by restaurants or foodmakers who may prioritize ease or cost ahead of healthfulness.

In the past, people were malnourished due to poverty. Today, people are malnourished due to ignorance. We do not know how to select nourishing foods from among the many malnourishing options available to us. Paleo was a step forward, in the form of a step back in time to a natural whole foods diet. The Perfect Health Diet was a further step forward, to a knowledge of the best combination of foods for optimal nourishment.

Intermittent fasting is one crucial aspect in your book. In Germany, this is kind of a trend at the current moment. You propagate at least 12 hours in which one should not eat at all. You state, that you generally go 16 hours without food. I came across a so-called “golden rule” that

states there should be 14 hours in between. What is your opinion on that?

It is very important to health to have a 12 hour “night” in which we are relaxed and are not exposed to stimulants that, in our ancestral environment, were only present in the daytime, such as bright or blue light, physical activity, social stress, and food consumption.

Of those daytime stimulants, ideally bright light would be present throughout the 12 hours daytime. However, other stimulants do not need to be present throughout the 12 hours day – we don’t need to be eating for all 12 hours, or exercising for all 12 hours, or under social stress for all 12 hours. A certain amount of each of these stimulants is good for us, but we don’t need to overdo them.

A good rule of thumb is that eating should take place 12 hours opposite from sleep. So, if one sleeps from 10 pm to 6 am (22 hr to 6 hr), then one should eat between 10 am to 6 pm (10 hr to 18 hr). This naturally leads to an eight hours feeding window and a 16 hours fasting window.

It is generally a good practice to get as many calories as possible in the earlier part of that feeding window. Thus, the midday meal should be the largest. For optimal health, we should finish our digestion before sleeping, and have a quiet gut as we sleep. Immune activity is highest while we sleep, and peaks at 3 am – this is when people die of sepsis. If people eat too late in the day, their gut bacteria will be too active at night, and immunogenic molecules from dead gut bacteria will enter the body along with food molecules at the very time when our immune system is searching for bacteria and trying to destroy them. The result is an excess of inflammation and immune activity at night, which disturbs sleep and harms health.

An open question is exactly when one should start eating – either soon after first bright light exposure, or a few hours afterward to extend the overnight fast. But there is no question that one should complete eating before the onset of “night” and at least 3 hours before sleep.

You recommend that one should listen to their food desires and are convinced that our body craves for what it needs. Am I right in assuming that babies and infants do so as well, although, on a natural basis and that adults on the other hand are kind of spoiled, in the sense that due to the consumption of too much sugar and industrial food this innate ability has been lost?

Yes, babies and infants have a natural instinct to eat the right foods, and if allowed to select from a choice of foods, will focus on the foods that provide the nutrition they need. There was a famous study on this point by Dr. Clara Davis, conducted 1927-1931 and reported in 1939, in which she essentially created an orphanage for 15 children from homes of impoverished unwed mothers and controlled their food intake, giving the infants a choice of 33 foods with no influence whatever from any adult on which they should choose. Some children were maintained in this environment up to age 4½, so that up to that age they never had, apart from their mother's breast milk, any food selected for them by an adult.

According to a review of Dr. Davis's experiment, online here, "none of the infants had the same diet on any given day, week or month" but all ended up healthy: "15 uniformly well-nourished, healthy children." Dr. Davis concluded, "Such successful juggling and balancing of the more than 30 nutritional essentials that exist in mixed and different proportions in the foods from which they must be derived suggests at once the existence of some innate, automatic mechanism for its accomplishment."

As Dr. Davis acknowledged, an important factor in ensuring the health of these children was that all 33 foods were natural whole foods, and collectively they had all the nourishment needed for good health. Had the children been able to select processed foods, there is no guarantee they would have been healthy.

There is no reason to think that this innate ability has been lost, but food companies have learned how to design foods to appeal to our instincts, without providing all the nutrition that those instincts evolved to bring us. For example, in the Perfect Health Diet we estimate the optimal macronutrient proportions at 55% fat, 30% carb, 15% protein by calories, and these are exactly the macronutrient proportions found in treats like Doritos chips. Both the Perfect Health Diet and Doritos are delicious by virtue of appealing to our innate dietary instincts, but only one is nourishing.

So we have a problem. Humanity has become too clever for our own good. We have learned how to deceive our unconscious minds, how to trick ourselves into pursuing self-destructive and unhealthy foods. We therefore need to learn how to eat healthfully, and consciously control our diets and our food environment so that our evolved instincts will once again lead us toward health.

What can we do to regain this ability and – figuratively – to trust our guts?

A few principles are key:

- Eat natural whole foods only, not processed and manufactured foods. Our instincts evolved to select the best combination of natural whole foods, and rapidly become lost when navigating among industrially produced foods.
- Control your food environment. People are powerfully driven to eat whatever foods are nearby and easy to obtain. What you surround yourself with, you will eat. So, put foods you shouldn't eat out of sight and far away, and foods you should eat nearby and visible.
- Learn to cook, and cook most meals at home. Only by cooking can you control the ingredients in your food. You cannot count on restaurants using quality ingredients; the oils especially are generally poor.
- Learn the basic Perfect Health Diet food combinations, and experiment with them. At our health retreats, our very first class is a cooking class in which participants are given a

choice of 4 starches, 4 sweet plants, 4 vegetables, 4 animal foods, 3 healthy fats, 3 healthy acids, and 3 umami flavors, and asked to mix in a bowl one food from each category in PHD proportions. The point of this is that no matter what foods are mixed, the combination will always be delicious. Retreat participants are surprised that no matter how outlandish the combination may seem, it is delicious, and enjoy sampling not only their own but others' combinations. Knowing that a combination in the right proportions will always lead to a successful outcome, the home cook is liberated: it's easy to experiment and make something new, and easy to draw upon whatever leftovers are in the refrigerator to provide an ingredient. Liberate yourself as a cook by knowing how to vary a recipe without any risk of failure.

Most people find that after a few months of eating well, their tastes have changed. Foods that once seemed attractive or even addictive, such as sweets and cakes, now seem uninteresting. Bad oils that used to be eaten daily become distasteful. But healthy food becomes enlivened and rich in flavors.

All this happens naturally. It is a recovery of our sensory heritage.

If I wanted to immediately begin living according to your approach, what would be the first three steps that I should take?

I am going to cheat and recommend four steps. The most important changes which most people could make for better health are:

- Adopt a natural whole foods diet. Eat recently living plant and animal parts. Eliminate from your diet anything that lists macronutrients (starch, sugar, oil) as major ingredients.
- Eat three egg yolks per day, mixed with other foods. Egg yolks are what we call a “supplemental food”, meaning something people should obtain regularly like a nutritional

supplement. They are a nutritional powerhouse, and indeed contain within themselves enough nutrition to construct a chicken. Since humans have all the same body parts as a chicken – brain, heart, skin, bones, and so forth – egg yolks have the nutrition to repair a human. The simple step of including egg yolks in the diet will repair many common nutritional deficiencies.

- Rigorously minimize omega-6 fats. These fats are rare in the healthful natural foods which grow in the tropics or mid-latitudes where we evolved, but are common in seeds from northern-latitude plants which have now become major crops, such as soybeans and rapeseeds. These seeds are naturally toxic and could not be eaten until recently when chemists learned how to detoxify their oils. Unfortunately, it is optimal to get no more than 3% of our calories in the form of omega-6 fats, but most people get close to 10% of calories from them, and this has become a major factor in the obesity epidemic and in metabolic and inflammatory disorders. Avoiding high omega-6 oils and foods will improve anyone's health.
- Live a natural lifestyle which entrains circadian rhythms by addressing all five major zeitgebers – light exposure, meal timing, exercise, social interactions and stress, and ambient temperature. Create a personal schedule with a consistent 12 hours day and 12 hours night that you follow year-round. Select the timing of this “day” so that you can fit all bright and blue light exposure, all food consumption, all exercise, and all social interactions and stress into your 12 hours “day.” Get bright light throughout your day, preferably from bulbs with a 5000 Kelvin color temperature, and at night use orange or amber lighting that has light in the red, orange, and yellow parts of the spectrum, but no green, blue, violet, or ultraviolet. Get some exercise every day. Eat food after exercise, but early in the day; on most days, limit your feeding period to 8 hours, so that your overnight fast is 16 hours. Schedule all interactions with strangers and all stressful interactions for your “day”; at

night, have only calm, peaceful interactions with those you love. If you don't have anyone to keep you company at night, consider getting a dog. Finally, try to make your daytime environment warm until a few hours before bedtime, and then cool as you prepare for sleep. Consider a sauna or hot bath to elevate body temperature as you transition from daytime to night, followed by exposure to cold to help prepare you for sleep.

April 2018