

Episode 1 Transcript Patrick G.: Hello and welcome to GMOs Revealed. I'm your host, Dr. Patrick Gentempo. I have to tell you that over the next nine days we are going to be going on one heck of a journey. I've been a healthcare provider for many years and I've worked in many aspects of healthcare including healthcare activism. Why is that necessary? Because things like GMOs exist on the planet and the toxins that are sprayed on them are in our environment and it affects everybody and those effects are probably more serious than you understand.

> We traveled thousands of miles talking to the greatest experts on varying issues related to GMOs. What we found was literally jawdropping. So over the next nine days, this journey is going to take you to places and introduce you to people that's going to transform your life and help upgrade the health of the people that you care about.

> So let me share with you how this is going to work. Over the next nine days we will release a new episode each day. Those episodes will be released at 9 PM Eastern Time in the United States. They will play for a full 24 hours. So this way you can plan your days and determine at what point in that day works best for you to watch the episode. You are going to love this information. You will see that the information builds over the nine days, and we promise to deliver an extraordinary amount of value each and every episode day by day.

> Now to prove this point, let me tell you about episode one. Episode one starts with Dr. Zach Bush. I have to tell you that I have not been this impressed with a human being in a very long time. Dr. Zach Bush is a multi-board certified medical doctor who also has a background as a cancer researcher and now runs and directs his own lab, amongst other activities. His depth of knowledge and experience relative to GMOs and their effects on your health, is mind blowing. We actually have three different parts with Dr. Zach Bush throughout the series. Part one is in episode one, and we're leading off with that. You definitely want to watch that.

Next, we have a person who's got millions of followers on the internet, and she's known as the Food Babe, and her name is Vani Hari. Listen to what she has to say. I think you'll find it very intriguing, very inspiring, and something that will alert you to things that are necessary to understand.

Then, we close out episode one with my interview with Gunnar Lovelace, the CEO of Thrive Market. We did that interview at Thrive Market offices, and I have to tell you that the environment there was very upbeat and exciting. They have an incredible operation of positively minded and motivated people who have a purpose in the world. Gunnar is an extraordinary CEO. I would call him a visionary CEO who's doing something in the world that really matters.

When you listen to his intelligence and his focus and what he wants to bring to the world through Thrive Market, it's going to be inspirational for you. Because with all the challenges that GMOs present to you, Thrive Market is a solution. As a matter of fact, they are the largest retailer that has exclusively non-GMO products. So you can know that anything you'd get from Thrive Market doesn't contain GMOs. As you're watching our series, you're going to understand why that's important. So, please enjoy episode one.

Zach, thanks so much for coming and talking to us. Can you tell us your name and your background? Give us a bio sketch.

Zach Bush: My name's Zach Bush and I'm a medical doctor. I trained in Allopathic medicine with my M.D. I started at the University of Colorado. That journey started with a missions trip that I did to the Philippines. Was going to be an engineer, and had the opportunity to go over and work with an international group of midwives over in the Philippines. They had an extraordinary opportunity for me to really see a whole different side of Humanity than I'd ever experienced before, I was only 19. Went over there and started birthing babies, and the squads in the Philippines. It completely changed my entire worldview. I came back from that realizing that engineering suddenly seemed boring, and there was an opportunity to engage humans on a new level there.

> I decided to go in medicine. I didn't have a real aptitude for my studies or school before that. I was a mechanic and passionate about rebuilding cars and things like that. It was a big transition for me to slowly over the next few years, realize that I was capable and interested in going into medical school and taking that rigorous academic journey. Ultimately, got accepted into the University of Colorado, went through medical school there and really found my pace, intellectually, for the first time in my life.

Where I suddenly found school easy, everything started making sense, and I really excelled.

So, did very well there and then went on to the University of Virginia to a residency in Internal medicine, which was three years of the whole scope of General Adult medicine; from cardiology, to oncology, to renal and the whole spectrum. After that, I was promoted to chief resident and did a whole teaching year at the University of Virginia, teaching medical students, residents, and then went onto a fellowship in endocrinology and metabolism, which was three years of study in the areas of hormonal control of the body glands and metabolism, which is the mitochondria and how they control cellular function. During that time, I got into cancer research and I was doing team research under the microscope, and then managing diabetes, and autoimmune diseases, and that kind of stuff in the clinic.

Through that experience, I really started to transition my worldview to realize that the chemotherapy I was helping design and things like this were really chasing after the wind. It turns out the cancer is not caused by a lack of chemotherapy. That took a little bit of time, four years, of that journey to realize, "Wait a second. There's no way this is the solution." At the same time, I was seeing the insulin and all these diabetes medicines were making my patients more diabetic, not less diabetic. So it was a real deconstruction of the pharmaceutical model that I'd been 17 years in the training for.

I think, ultimately, our educational journeys are really dictated by our willingness to deconstruct what we've already learned. If we're willing to constantly question what we've learned so far, then we can guarantee the opportunity to continue to learn, and that's something that I got into in the mid-2000s there. Over the last 10 years I've had the journey of every day waking up realizing I know almost nothing, I didn't have the experience of discovery in my life.

I went on after that. From the University of Virginia I started a nutrition center in a nutrition clinic to manage and reverse chronic disease through food. Through that journey, I found myself back in research and development. Started my own Laboratories and have an incredible array of scientists behind me now, creating a whole new understanding of our relationship to the world and our biology to the ecosystem. That's a little bit of my journey.

- Patrick G.: That's great. You have two board certifications?
- Zach Bush: I finished internal medicine, and then endocrinology and metabolism, those two boards. Then after the University of Virginia, really feeling like I had not really found a niche that I felt like I had completed, I went onto a third specialty in hospice and palliative care. It was the one experience I had in the ICUs and the bone marrow transplant unit and all of this, realizing this is the one area that I think that we have the opportunity to not mess up human biology, is this transition from life to the rebirth of death. So I went on to do that hospice and palliative care. I was an associate medical director for a hospice service here in Virginia for four years or so, before things really took off with our research and development.
- Patrick G.: What got you interested in GMOs?
- Zach Bush: It was ... My career, again, if you're willing to deconstruct and believe you know nothing, then the universe will show you what it wants you to know each day. My journey into GMOs was really an accident, or with great purpose. It turned out that my discoveries around bacteria and their role of communication at the cell level led to the exploration of soil and how my nutrition was seeing at least 40% of my patients fail with the best food on earth. So I tried to start asking, how is this food not delivering the medicinal effects that we expected to do? That took my down the journey of what is the soil, what is the soil giving to the plant, what is the plant giving to the human? Then that was this huge avenue.

One of our chief science advisors is John Gildea, an incredibly brilliant Ph.D in genetics and microbiology. He really uncovered this story of glyphosate, which is the active ingredient Roundup, which was the impetus for genetically modified crops that would be Roundup ready. Through that backdoor avenue, found myself, and our science group really, being at the forefront of understanding how GMO and the chemical environment around that is effecting human biology.

Patrick G.: So let's go back then and give the historical context. How did this whole thing emerge, where we live in this culture today where we have GMOs, glyphosate, et cetera., ubiquitous? In North America, especially.

Zach Bush: Fantastic. I think that's such an important topic in the sense that there's a contentiousness in this field of GMO that's politically charged, social charged, almost religiously charged because it's the food. It's the food that we're feeding to our children, and there's an emotional intensity to this topic. One of the things that's weakened our position as consumers is the sound of ... This almost sounds like a conspiracy theory, right? But in fact it's not. This is just the march of human behavior and big business over a century.

If we dial back a hundred years ago, we were starting to destroy the topsoil of the planet, in the United States in particular. What we were doing is we were failing to do crop rotation, we were failing to respect the soil's need for feeding, composting, and these age-old farming practices. That led to the Dust Bowl. The Dust Bowl started in the 1920s, and then coincided with the financial collapse that was really programmed in, I think, there at the end of the '20s. With the Great Depression that unfolded, we had the Dust Bowl that wiped out the crops, and we had famine happening in the United States of America.

In this time of plenty that we have today, where we have the breadbasket of the world growing in our Midwest, it's very hard to imagine that that very same ground was dead and completely nonproductive and led to this huge famine event in our own country. The food camps that were set up in the 1930s to feed these starving families and everything else, that's just ... My grandmother was raised in West Virginia in that setting of starvation, and collapse of the coal mining industry, and all kinds of stuff going on.

That was really what led, in some ways, to today's GMO chemical farming event. The steps that happened, from my perspective, really started with this machine of the world. World War II. We pulled ourselves out of the depression, largely because of the windup for the petroleum industry and the big manufacturing industry that would create the biggest war machine ever seen on Earth. We were pumping so much petroleum into tanks, ships, planes. We had this massive demand. Then World War II ended and suddenly there was this glut of petroleum.

So the industry needed a new target. It didn't take long to realize that in petroleum is nitrogen, phosphorus, and potassium. Three of the most critical macronutrients, if you will, for crops. It was this sudden shift from, "Let's put it into our tanks and planes," "Let's start making chemical petroleum-based fertilizers and put that into our soils." We really reversed what was poor farming techniques and the collapse of what was going on with our soil management. Instead of really fixing that by going back to composting and all of these things, we instead just started dumping petroleum into our soils.

It led to something that would be termed The Green Revolution. Sounds great. Green Revolution sounds like, well, this must be the best thing that's ever happened to ecology. It looked like it, because suddenly we took dead crops and failing fields with no productivity to huge fields of green corn, and soy bean, and all the rest growing in abundance in the 1950s and '60s. It looked like a boom. But we've see this in human health, just like we do in plant health. If you use just a couple of nutrients, and you steal or move many of the others from the food chain, you end up with a weak immune system.

So our plants started to fail. So our crops started to be prone to insects, and fungi, and viruses. Instead of, again, asking the root cause question of, why is the health failing? We instead went to our chemical industries and said, "We've got viruses, we've got fungi, we've got pests. What can we do about it?" Of course, the chemical industry was eager to step up and put onto the table things like these chemical herbicides and pesticides to kill the weeds, to kill the bugs, and everything else.

That became this really big machine by the 1970s. Interestingly, there was still this interplay between the war machine and our food. Vietnam happened, and it really refined our ability to kill plants. Remember Agent Orange. The purpose of Agent Orange was to kill the jungle. To defoliate the trees so we could see the Viet Cong. That defoliation was a huge industry. So Monsanto and some of these big chemical companies got into that industry of killing plants, and then Vietnam was over and suddenly, "What are we going to do with these chemicals?"

One of the interesting things is that perhaps they found the perfect business model, which is the only unifying feature of all humans. Every race, creed, male, female, doesn't matter. The one thing that ties us all together is we don't like weed. It was a brilliant business plan to come up with the solution where you no longer have to bend over and pull a weed out of the ground, you just walk around and spray these plants and wipe these things out. That I think is the march of how we got to this convenience-based, chemical-based food chain that would really set the stage for the GMO era.

- Patrick G.: So, the companies that develop these solutions, at least in their minds, toward farming and having to create better yield, are the same companies that were involved in developing chemicals to support war efforts?
- Zach Bush: Yeah.
- Patrick G.: So basically, they refocused the lens from saying, "Hey, we have a war on human beings, now we have a war on plants and weeds, or bugs and weeds, that attack our crops, et cetera." So, there's still that war, it's just where they're focusing the lens. They're using foundational chemical elements and just repurposing them where it makes sense to do so, at least in their minds. So what are the consequences of all these actions? Now emerges this genetic idea of changing the genetics of certain crops, and then patenting that, if I understand, and then of course selling chemicals into that. What's the next step now? How did we get to where we are today?
- Zach Bush: It's definitely a refocusing, and it is an interesting culture that you point to there. We see this in my clinic, I see a lot of women who are struggling with obesity and weight issues, and collapsing metabolism. They feel a war against their food. You're pointing to the same relationship that we've been in a war battle mindset, in our own farming practices, that I think translate then into our own relationship to food.

It absolutely set this culture for this war on the outside world, or germs, which has a nice correlation of course to the way we practice allopathic medicine. We believe we have to kill all the germs, we have to ... Everything is anti-microbial, everything ... Anti-microbial hand wipes, and countertop wipes, and we're trying to kill germs all over the place. When, in fact, what we're really doing is creating monoculture and wiping out any biodiversity, which is threatening our health.

That mindset of war on plants was very literal. Just like we do with antibiotics, you always need something better. Because one of the truths about biology and nature is it always finds a loophole, right? So if you try to put up an unnatural blockade, an antibiotic, or an herbicide, or a pesticide, nature's going to find a way through there, because nature has purpose. That is perhaps seemingly contrary to maybe our purpose to grow one million acres of a single crop of corn. That's not nature's style. It's always going to find ways to infiltrate.

We started to see the emergence of weeds that were resistant to a lot of these chemicals that had been developed in the 1950s and '60s. So, 1970s comes around and you see Monsanto change course with the development of the organophosphates. This is a group of toxins that are very specific to their structure. The organophosphates is where you find that Agent Orange kind of family. This is the defoliating toxin that kills biology. They were turning their attention to find something that was less carcinogenic or less toxic to the human than Agent Orange. There was already very early dated ... Making it clear that as soon as Agent Orange touched the skin, it was causing horrible rashes and immune problems in our soldiers in Vietnam and everything else. There was realization that this was probably too potent of a toxin to be outside of the war context.

They found glyphosate, which is the active ingredient in what would become Roundup, which is probably the single most successful herbicide in the history of the industry. But that glyphosate is such an interesting molecule. That is, its backbone is glycine, which is an essential immuno acid for human and any biologic life. There's only 26 immuno acids, kind of like the letters of the alphabet to build a million words. You only need 26 building blocks to build a 70 trillion cell organism. One of those is glycine, and that's the backbone of glyphosate. We take this piece of nature, and then we adulterate it with a phosphate group on one end, and an ambien on the other. That creates the toxin quality to it. Organo, meaning built on an organic molecule, phosphate, is the family.

Terrifying thing about that toxin is that it is water soluble. Nature makes the vast majority of its toxins in the form of lipid or fat soluble toxin. That's important because those toxins can be sequestered away by mycelium in the soil by the fungi, or it can sequestered away by your fat cells so it's not in your blood stream to be exposed to your brain and other things. Fat soluble toxins are nature's approach. Water soluble toxins is man made approach. It's very frightening because it goes everywhere. Once you dump this into the environment, it's going to go into the water table. It actually evaporates and goes into our air, ends up in clouds, rains back on us. We create this whole ecosystem of toxin.

How we got there was this discovery of weeds, something that doesn't have a human biologic target that's obvious. So, glyphosate had actually been discovered in the 1950s, around '57, '58 by a Japanese researcher. He had put it on the shelf, I think, realizing that this toxin would be horrible in the environment. So he discovered this organophosphate and then patented it. Monsanto bought that patent for pittance, and then moved it into consumer use. It's first patents were really around its use as an antibiotic, not as a weed killer.

- Patrick G.: Really?
- Zach Bush: That is an interesting little tidbit, is that they understood what this toxin was doing to biology, even though they've claimed, continue to claim that this doesn't have any human biologic toxicity to it. They knew that it was killing life at a very basic level, at the microbial, antibiotic of effect of it. It's been re-patented over the years as antiparasite, as an antiviral, all these different things.

So, they have seen that everything this touches, whether a plant or a bug, it kills. The way in which it does that is interesting, that it actually blocks the ability of this enzyme pathway, which is called the shikimate pathway, these enzymes make the ringed aromatic immuno acids. We already took one immuno acid out of the equation with glycine, and then by this glycine toxin organophosphate we blocked the shikimate pathway, and we suddenly lose the ability to make our ringed aromatic immuno acids, which can include things like tryptophan.

- Patrick G.: So what's the significance of that pathway? Just to put it in more lay terms. A pathway is a blocked by the actions of this chemical, what does that mean?
- Zach Bush: Exactly. That's ... It's such a subtle marketing tool that the companies have used. Glyphosate's now made by every chemical company on Earth. The five big ones in the U.S. all make it. Most of it's actually made in China now, came off patent in 2007, so, everybody's making this chemical now.

What they continue to point out from a marketing standpoint is that, well, there is not human target because this enzyme pathway's just in bacteria and plants. So if we put it there, it kills them. But since humans don't have this enzymatic pathway, the shikimate pathway, there is no target for glyphosate in a human. That's what they've been claiming.

However, if you ask, "What is that enzyme pathway and what does it do?" What it makes are what we call the essential immuno acids. I.E., the immuno acids the human body can't manufacture. The vast majority of the immuno acids in those 26, we can make on our own.

- Patrick G.: So, what you're saying is that, the immuno acids are the basic building blocks. There's the majority of them that we can make on our own, we can just reconstitute from the foods we're eating, et cetera. However, there's some that we need to receive from our dietary intake, right? You're saying that glyphosate blocks the pathway to be able to create those, or what actually happens?
- Zach Bush: Exactly right. So four of those essential immuno acids, at least half of them are now taken out of the equation. So they say, "Well, this isn't important for humans because it just happens in plants." Well humans rely on that plant, or that bacteria to deliver those essential immuno acids that we can't manufacture. So we've literally robbed ourselves of a subset of the alphabet. Imagine if you woke up in the morning and had to go to work and be as productive as you are today, but you can only use 19 of the 26 letters. Would you even be able to communicate?
- Patrick G.: Right. So what happens is, you start to ... It's not like you have nothing to communicate with, but it's horribly compromised.
- Zach Bush: Horribly compromised.
- Patrick G.: Now, is there still some assertion that human beings don't have to worry about this, or has anybody woken up to this particular issue?
- Zach Bush: Certainly there's subsets of scientists that are super concerned. Are really screaming, "This is the end of human biology if we don't stop this pathway." I think, by and large, the consumer has been so confused and blinded by this constant marketing, constant messaging that genetically modified crops are a necessary thing to feed the world. We have seven billion people. We have to feed them. We would have starvation if didn't have GMO crops.

- Patrick G.: I've heard that before. So, what is your take on that? Is there validity to the assertion that without GMO crops, we're going to have worldwide starvation?
- Zach Bush: My take is no, not even close. If we took GMO off the market today, we would still be feeding the world with the same inefficacy that we are today. We have the biggest famine in human history happening over in Sub-Saharan Africa right now. There is zero news coverage. There is zero political interest in the fact that right now there's over a hundred million lives at risk of dying from starvation in the plains of Africa right now. We have thousands, tens of thousands of people dying daily over there right now from starvation.

So, number one, we're not feeding the world. Not because we're not growing food, but because we don't have the political infrastructure and the societal awareness to distribute food correctly. Starvation is never a growth or production problem, I think it's always a political problem.

Second piece of this is there was billions of people on the Earth in 1995. 1996 we [inaudible 00:25:41] in GMO. We weren't starving of lacking of production in 1995, so therefore we had to create GMO. It's such an artificial argument that we would starve with CMO crops. We couldn't feed the world. That's totally bogus, because we only have to back up 20 years to realize we were feeding the world then, we are feeding the world ineffectively even now, with all the GMO.

- Patrick G.: Aren't we currently paying farmers not to farm? So, like saying the yield is beyond what our needs are, and they're trying to manage the market politically by actually paying people to not produce crop?
- Zach Bush: Exactly. This is the farm bill, which is the most contentious, and frankly the most humanitarian corrupt piece of legislation that I believe that we continue to put into play. Every administration over the last 30 years continue to sign that darn farm bill. It's paying farmers to either grow the wrong crops, or grow nothing at all. We literally are paying farmers to keep their field fallow, as a reserve. We justify it through national security, that, well, we need this backup of farmland and so we don't want everything in 100% production. We have all these military, weird, geopolitical arguments as to why we should pay farmers not to grow food. Yet,

simultaneously, we have these big chemical companies arguing we have to have chemical farming to feed the world.

None of it is true. I think that, in fact, we can feed ourselves. We don't even need mega farming on the organic level. In 1945, Americans were growing 45% of their food chain in victory gardens. It wasn't just the U.S., all of the allied countries had put into play this public message of, "We need to grow our own food." It wasn't the chemical factory farming that rescued us from the Dust Bowl, it was the recognition that everybody needed to start growing their own food again. Because by the '20s and '30s, we were starting to really outsource what had been our backyard gardens to big farming. That big farming destroyed our soil by mis-tending the soil. But we regrew healthy food to the point of 45% of our food chain being produced in our backyard gardens by '45.

- Patrick G.: With developing urban areas, though, what is the implications of saying, "Hey, we've got not much land and a bunch of people stacked up on top of each other," so how is that handled in the way that you see things?
- Zach Bush: I think that was one of the impetus for this outsourcing of the food for sure. You look at something like New York City or L.A., that in the 1920s and '30s were starting to become these huge municipal centers and we were stacking more and more vertical ... All of those classic photographs of the first skyscrapers going up in New York, and everything else with the steel workers and everything else. We were at a moment of transition social, where we were building human civilization different than it had been built in many, many years.

But if we then go back further in time, and say, "Have we ever built like that?" The answer's actually yes. Maybe not on the scale of a New York City, but we've actually built civilizations with really dense populations. Rome, and lots of these high trajectory empires that have been around the world, have concentrated humans to a degree where they couldn't grow food in their backyard. They had no backyard. Yet, they maintain a relationship to the land.

So, there's two warnings there. Number one, they did still have farmers that were growing for small groups of people. We're now doing this. We're starting to do CSAs, these community supported agriculture projects where a local farmer says, "I will grow you healthy food, if you will commit to me as a consumer." That's all it takes, is a change in relationship, right? We need to stop this almost nebulous relationship to the food production and say, "I want to know my farmer." We're doing that now. We can do it faster and we can do it more completely. Frankly, the GMO world is feeling threatened. There's been some memos that have been leaked that say if we hit 16% of consumer behavior as fully organic food, the profitability for a Monsanto disappears.

- Patrick G.: Wow.
- Zach Bush: We are currently seeing the company that holds Monsanto selling that off to Bayer in Germany. I think largely because they see the writing on the world, and that the American consumer is only a few years away now from that 16% tipping point, where it becomes fiscally infeasible, or we steal away the fiscal drive for this chemical farming approach.
- Patrick G.: Now this is interesting, and we'll double click on the Monsanto transaction that's contemplated, because obviously Monsanto has been called out as a big culprit in this whole anti-GMO movement that's been expanding over time. I want to continue on the timeline for a minute, because now you're saying we're in the '70s, we're post-Vietnam, they're reconstituting Agent Orange and figuring out how to use that as a crop, product ... Would it be antiherbicide, I guess would be what that was. How to basically, maybe, dull it down so it's not as toxic to human beings, since we talked about that.

Now we're on this timeline, but we're still not into GMOs yet. We're still looking at ... and I like the characterization, chemical farming. It's interesting because as a healthcare provider when I've looked at this also, the idea of human beings trying to improve their health through better chemistry that's externally put into the body, as you kind of say it earlier, people don't get sick because there's a lack of drugs in their blood. There's something else going on. When you're chemically trying to manipulate the system, there's always unintended consequences, most of which can't be known until you have a big enough population actually utilizing these chemicals.

So I see the same principles apply to farming. Now we're dealing with a situation that, okay, these big, big chemical manufacturers, after the wars with people are over, their repurposing their product to say, "Let's go to war on weeds," and other things that might inhibit farm yield. But it's a while before GMOs are introduced, so what's the track now? You're in the '70s going to where GMOs are introduced. Do you have any of the background story as to what was going on there?

Zach Bush: Yeah, I think ... I run a number of small businesses, and I think it's just business. It's just good business. It's just necessary business practice. Every business will go through the curve of concept, to a product, to fast growth, to plateau, to needing to reinvent the marketplace or find a new niche in the market to get another steep climb.

In the 1970s, they got approval from the EPA to utilize this chemical for farming. They submitted all of their own science of safety, and said ... The EPA never asked for third-party safety analysis, and they've never, since then, had money to put forward to do their own safety analysis in the biology. So they accepted the companies safety documents, and said, "Well, it must only be the shikimate pathway, just plants."

So they started. They were able to start selling a new weed killer that was very effective. There was an initial growth, I'm sure, for their business. Where they were suddenly selling more and more glyphosate every year in the form of Roundup. But it started to plateau in the '80s, I'm sure. I don't have access to their books and their profit margins, but I can guarantee that was true because they then went after approval to go direct-to-consumer. So they went after that direct-to-consumer market, and in the 1980s we had some of the most successful commercials that I think have ever been debuted. They were the direct-to-consumer ads for Roundup. You maybe remember these.

It would be break time at the Super Bowl, and you'd be watching your Super Bowl commercials and suddenly there's this suburban home, and dramatic soundtrack starts, and the garage door opens, and this guy comes out. Little bit of a belly, looks like your classic mid-American homeowner, and he's got a backpack on. He's got two holsters, and he pulls out these sprayer and starts shooting down the seven dandelions in his driveway, which are actually anticancer foods that are super foods, but we'll come into that later. He kills the seven super-foods in his driveway, and re-holsters and turns around to the dramatic soundtrack, and blazing across the backpack is Roundup. With the message it's manly to not bend down and pull a weed. You should instead come out with guns and shoot them down. That's the manly approach to homeownership and gardening.

That was so effective because no man wants to go out on Saturday and weed instead of watch Football. So, it was the perfect mix of the Football commercial, the empowerment of the war battle, shoot them down ... It hit every male gene receptor out there, and suddenly it was like we had the perfect consumer product.

So, over the '80s they saw very steep takeoffs. Every Lowe's, and Home Depot, and all of these box stores started carrying a thousand versions of Roundup you could buy. Little spray bottles, or big spray bottles, or backpacks. It was just like a million things. To this day, you walk into any garage in suburban America, you're going to find Roundup in there. You can still go to any big box Home Depot, or any other store, and you're going to find these chemicals all over the place. If I go to my local agricultural co-op, they now sell it in 50 gallon barrels of glyphosate. Generic glyphosate. 45% glyphosate for sale now in 50 gallon barrel. It's so ubiquitous in this industry. So the behavior of the company was simply find that next trajectory.

By the 1990s, we were starting, I'm sure, to see that start to taper. Where they had saturated the consumer market, we were dumping tones of glyphosate into our water systems by this time. An incredible statistic is only 0.1%. One thousandth of a percent of the glyphosate, or Roundup, that's sprayed worldwide, actually hits its target.

- Patrick G.: Wow.
- Zach Bush: One thousandth of a percent. 99.9% of this chemical is going right into our water systems, it's wash off, and never reaches its therapeutic target of the weed, if you will.

So, the consumer, I think the homeowner was the first to really misuse this chemical. We were spraying down things we didn't understand, and it was washing into our gutter systems that then went to our municipal water processing plant. Organophosphates are super water soluble, very hard to pull out. So we started drinking Roundup by the 1990s.

That pattern happened, but we were starting to saturate the curve. 1992 came around and the company needed a new niche. It

said, "Okay, these farmers are not using enough Roundup." Why? Because every plant that stuff touches it kills. So they were having to spot-spray the borders of their farms and everything else. So Monsanto intellectually looked at the situation and was like there must be some crop that needs to be killed. There is, it's wheat. So 1992 they went to the industry and said, "We have an amazing new chemical for you that is a desiccate." Instead of calling it weed killer, they called it a desiccate, or drying agent.

This was a huge boom for wheat farmers, especially in Northern climates in the U.S. Wheat has to not only mature, grow, go to seed and dry, it needs to be dry for a period of time and then cut, and then lay dry for a couple days before it can be harvested effectively. If at any point in there it gets wet, you have to wait again for it to dry before you can cut it. So it's dangerous to be a wheat farmer in Northern climates, because if you get in early snow or you start to get weathers falling apart late, you can lose a whole crop. So you lose your crop. Monsanto came in a said, "Look, you can dry your wheat early. Why are you going to sit there and watch the paint dry? Go ahead and just shoot your crop with Roundup, the whole wheat crop, and then you can harvest it three days later. It'll be dead and dry and you can just harvest early.

This, of course, immediately led to not only the possibility of saving your one crop, it meant that in slightly further south you can grow two crops, not one in a single growing season. Instead of watching that wheat grow to maturity, dry, and die, and harvest, they were watching it mature, go to seed, they'd kill it, harvest it, put a second crop in the ground, let that come, kill it, harvest it before winter came.

- Patrick G.: This is still pre-GMO? In other words-
- Zach Bush: This is 1992 still.
- Patrick G.: Yeah, so GMOs aren't even introduced but they're still using the chemicals in a way now that increase more yield.
- Zach Bush: First time that we had used it to speed an actual crop to market. It was the first time we'd actually applied glyphosate directly to a food item right before it harvested.
- Patrick G.: Is there an absurdity, though, to saying, "Hey, take this crop and kill it?" Dry it. In other words, is that ... Didn't bring rise to

anybody saying, "Well, what is killing it?" And, "It's on the crop that we're going to eventually be eating."

- Zach Bush: Two incredible questions. Has a shortcut ever been the right decision? In nature.
- Patrick G.: In nature. Exactly.
- Zach Bush: Does it ever really work to outsmart nature? The answer is always no. This is an obvious one. We do this in all kinds of more subtle ways in our food industry. You think about, if you go to your grocery store right now, 365 days a year you can go buy a ripe avocado.
- Patrick G.: Right.
- Zach Bush: Or you can go buy an apple. 365 days a year, in any climate. All of these are symptoms of the fact that we're shortcutting nature. In the U.S. here, we eat an enormous amount of produce from South America during our winter months. To get a crop, like a piece of fruit, from Chile to a grocery store shelf in New York in December, you have to do some shortcuts. Because if you really picked it ripe from the field, it would be rotted by the time it got to New York. You have to pick it prematurely. Then it's ripened under ethylene gas that's in the transport cases. They are feeding ethylene gas into it on the way to ripen the fruit artificially, so by the time it gets to New York and on your shelf, it's ripe but it's not rotting.

If we take fruit that's been picked prematurely and then artificially ripened, or in the case of wheat, we kill it prematurely and we don't let the ripening process happen naturally, we obviously are going to lose nutrient quality to the food. Nature's so designed every berry, every piece of fruit, every vegetable to be at its perfect moment when it's at its full potential. That full potential is nutrient-wise, it's size-wise, it's ... Everything is perfect. So if we shortcut that and say, "We're not, let the wheat come ..." What's going to happen? We're going to change the carbohydrate to fiber ratios in that glutton. The glutton ratios to its fiber ratios and going to change. We suddenly started creating wheat that was abnormal for the body to handle.

Simultaneously to this then, we unknowingly as consumers and farmers perhaps, but what we were doing is adding glyphosate, which would become a chemical that actually has a very

synergistic effect with glutton, and so we actually created glutton sensitivity out of this one effect. Glutton sensitivities a reality of biology. Our biology is sensitive to glutton, but its never in excess of it. So we should always be able to keep up with glutton. Glutton's been in our diet for thousands of years without a problem.

Suddenly in the 1990s, there was this beginning phase of Celiac disease, which is the autoimmune condition to glutton, compounds, and then there was this huge new realization that, "Oh my gosh, so many of us are glutton-sensitive. We're having bloating, fatigue, brain fog, poor sex drive, infertility, insulin resistance, and all this." Then you take glutton out of the diet and people get better. That was really early in the 1990s. There was a few people, a few practitioners talking about it. But then you fastforward to 2008, 2010, 20 years now 2012, with that wheat being treated with glyphosate, suddenly we have somewhere around 18 million people in the United States alone that have been diagnosed with this, and probably 10 times that many that are glutton-sensitive and don't know it yet.

The biology of this is fascinating. Our research team will be publishing a paper in the next few months on this, of the science we've been doing over the last few years. But what we've shown is that glyphosate actually hits the cell membranes of the intestine, and when it does it upregulates the receptor for gliadin, which is the glutton breakdown product that causes the glutton sensitivity, leaky, gut effect. So, unknowingly, we've not only created an abnormal crop with desiccant approach or early drying, where we had high glutton to fiber ratios and all this abnormal nutrient quality of the food, we also simultaneously had a toxin that was synergistic with the glutton products itself, to cause this biologic damage.

- Patrick G.: Sort of a perfect storm that starts to form a-
- Zach Bush: Perfect storm.
- Vani Hari: My name is Vani Hari, and I'm the creator of foodbabe.com. I felt like it was an obligation on my behalf to educate the people around me. That's why I started my blog foodbabe.com, is to tell people what's really happening in the food supply. Really tell them the chemicals that they're eating, and also give them the strategies on how to rid themselves of all the chemicals that are being forced

upon them, and give them the strategies and the tips on how to live in this over-processed world.

Someone like me who loves to eat, and loves sweets, and loves really great food, I'm not eating kale for every meal. I'm eating real food. When you make sure it's organic and non-GMO, you're going to work wonders with your health and your body, and really could eliminate all of these hardships that might occur later on in life. It's not only about living longer, it's about living the best you can now and with as much energy as possible. Where you're climbing Mount Kilimanjaro at 60 and 70, and you're feeling like you've lived the life that you're supposed to live. That you haven't lived the life that you are sick, and unhappy, and no energy, and just getting day-by-day, wishing for the weekend. All of these habits that you see being instilled in so many people. Wishing their lives away. Wishing the time would pass. I wish there was more time with all the energy that I feel.

Several years ago, I was living the typical American lifestyle. Working crazy hours at a big consulting firm and traveling like crazy. I was just right out of school, got this amazing job, and I wanted to be like everybody else around me. My coworkers who were striving to become partner, and get to the next level, and get promoted. I saw this culture of work, work, work, and I quickly became a part of that. I started to feel really bad, because I was eating what everybody was eating. All of the catered meals, like Chicken Parmesan and barbecue, and all of this industrial chemical-filled food which I didn't know at the time. I was eating that day in and day out, trying to keep up and work through lunches, and breakfasts, and dinners, so that I could work and be side by side with my coworkers. You got there before your boss got there, and you left after your boss left.

This started to really catch up with me to the point where I gained over 30 pounds. I developed really low energy, and one day had a shocking pain in my right side to the point where I went to the emergency room. In there, the emergency room doctor told me nothing was wrong and sent me home. If it wasn't for my parents' six sense, which was to go see another doctor the next morning, I might not be here today because that morning I had emergency appendicitis surgery, an appendectomy. This was December of 2002, so a while back, and it was a time period where everyone has parties, and they're out shopping for the holidays, and enjoying life and family and friends, and I was in a hospital room recovering from appendicitis. I didn't feel like this was right for a 22 year old to endure.

I made a decision right then and there, in the hospital bed, that health would become my number one priority. I was going to investigate what I'd been eating, what I'd been doing to cause this reaction in my body. All the doctors around me were telling me appendicitis is random. It just happens to people. But what I found out was your appendix is actually in your digestive system. It's an organ in your digestive system, and if your digestive system's inflamed, to make your appendix inflamed, then something you're eating, something you're doing, is causing that reaction. It's not so random is what I found out.

I channeled all of this energy that I learned in high school. I was top, nationally ranked debater. Every summer I'd spend away at debate camp, researching the year's topic, and one year was healthcare. So I learned a lot as a high school student about healthcare. About what was really happening in the industry. This is before the internet, before you could Google something. I had to dig deep into law journals, and periodicals, and major huge big nutrition books to really find the truth.

I channeled all that energy after I left that hospital room and I started to determine what I needed to eat. What I needed to eat to heal my body, to heal myself, and what types of foods were causing all the issues that I'd been experiencing. The weight gain, the low energy. What I found out was so startling, and completely changed my life forever.

My whole life, I had been suffering from eczema, asthma, I had eczema all over my face growing up and into my early 20s. I was on three or four medications for asthma. Every major sinus season I'd have to be on steroids. One of the things I found out almost immediately is the way I'd been eating had been effecting these other things that I'd been living with my whole entire life, not even knowing.

Not only did I learn how to eat well and learn about what's really in my food, and starting to figure out that there were genetically engineered ingredients snuck into my food in 1996, right after I'd graduated high school. Finding out that the majority of our foods being grown here in the United States had been sprayed with toxic pesticides. That the chemicals that food companies were using here in America were not the chemicals that they were using in other countries, and determining what the heck was really going on with our food supply and really trying to understand why 90% of the foods at the grocery store are either corn or soy, and just thinking about how unhealthy that is just to eat those two things that aren't very nutritious. They're not major super foods or anything.

What I found out was that my diet was 100% related to how I was feeling, and how I was looking, and how many medications I was on. In my early 20s, I was on six to eight medications at a time. Whether it be for the asthma or the allergies I was having, or the eczema. [Costro 00:50:43] cortisone creams that I would put on my face and spend big money on, was all related to my diet that I changed, and I cleaned up, and I got rid of the chemicals and saw this dramatic improvement.

It'd be so nice to reach everyone before they get to the point where I was, in this crisis moment. It would be really great to reach out to children and take them through a grocery store and explain to them what's happening to our food. With little children, one of the best places to start teaching them about food is in the vegetable and fruit aisle. Ask them a simple question, "Would you eat this apple if it was sprayed with poison?" I would say probably 100% of those children would say no. They would understand what poison is. They've seen Snow White and the Seven Dwarfs. They know. But it's stuff that they can't see. You have to explain that to them. That this is stuff that you're not going to be able to see in the produce department, in the meat, in the chips. That you really have to make a decision based on the labeling of this food. That you have to choose organic if you want to avoid poison.

The scariest thing about GMOs that really got me was knowing that there is corn bean planted here in the United States that is injected with Bt toxin, which this is an insecticide that's inside the corn kernel, inside the seed, so when an insect tries to eat it, their stomach explodes. I was terrified when I learned this. That if an insect's stomach is exploding when they eat this type of seed, or when they try to eat it, what's really happening to our own bodies when we do eat it? That was really frightening. That is something that hasn't been tested long-term on humans, that in all laboratory studies of animals, it produces horrendous results and is something that should be completely outlawed. If not outlawed, we should definitely have labeling so we can make a decision whether we want to eat that type of corn or not.

Asking that question, and even asking parents that question, "Would you serve this to your children?" They will say no. But what they don't see is what's really killing them, and really killing us as a group. That's the reason why the president's cancer panel, who determines why Americans are getting cancer every year, have said 41% of us are destined to have cancer in our lifetime because of these toxic chemicals in our environment. If these type of situations are explained to children, and the truth is told to them, they're really going to make better informed decisions.

It's really hard for a child to look at something and not be able to see it. In the case of meat, how it's grown and produced in this country, whether it's the cows being fed genetically-engineered grain, or the chickens, or the pigs. Or it's the way we treat our animals really poorly by giving them antibiotics, giving healthy animals antibiotics before they even get unhealthy because we're putting them in such inhumane situations where they're not supposed to survive, normally. Explaining that to a child that this is what's really happening in the meat industry, and telling them it's not really something that you can see, it's something that your body will see when you eat it. When you're eating sick animals that are bred to be sick, you're also going to become sick. Because if they're toxins in their blood, and in their meat, and in their protein, and you're eating that, your body is also going to become toxic. It's going to start to cause diseases.

Once of the things that I think is really crucial is to explain mother nature to children. Of how animals are supposed to live, and what animals are supposed to eat. You need to make sure that you're eating meat that isn't fed poison. You need to choose organic, sustainable meat. With children, it's so important to really just lay out for them. Be really truthful. Because I think they really appreciate the truth, they're not scared of the truth. They don't have the biases of so many people. So you really can influence them very greatly. In the chip aisle, you need to explain to them that the food in there has been engineered to make them want it more, to make them addicted to that type of chip, and that's been engineered in such a way that profits the food industry and makes us sick. That they don't want to be duped.

Nobody likes to be fooled, including little children. They don't like to be fooled. If you explain to them that the food industry's really playing all these tricks on them, they start to realize that, "Hey. I'm not a fool. They're not going to play a trick on me. I'm going to choose a better, safer version of the chips." Imagine if the children of America started rejecting all the bad foods, and the bad chemicals in food, and started choosing non-GMO food. Food that isn't reddened with toxic pesticides, or engineered. Imagine if they start demanding that organic farming gets subsidies by the government. Imagine if we start to reject all of this corn and soy bean grown here, and we start to embrace community gardens. Embrace growing something yourself. Embrace planting sprouts, because they're so easy. Imagine if all of these kids started caring about what they ate, and so the connection of what they're eating to their health, and whether they wanted to spend that money now on food versus later on pharmaceutical drugs.

That awakening can occur. It is occurring, because when I was young, I didn't have access to this information. I had to find it out through a back way, and through my own self-experimentation. But now this information is there. It's just a Google away. We'll totally have the opportunity to change the world. Imagine a world where a child goes to lunch and talks about their lunch in a really positive way, and how their choices, them eating a non-GMO meal or an organic meal is changing the world. Them telling their friends about that. Imagine their friends telling other friends about it, and talking about what's really happening to our food supply, and what brands are doing the right things and what brands are doing the wrong things. Imagine a world where the children, really their purchasing decisions influence the entire market and change the market share from the bad toxic foods to the really great foods. The organic non-GMO foods. Could you imagine every single corner having a place that you could actually eat at that you wouldn't be exposed to GMOs?

One of the things that has made me successful, being able to share my investigations is other people who care about this information who share it. If I were to give one piece of advice for a child who understands what's happening in the food supply, and in our pharmaceuticals, and everywhere, I would tell them to tell another friend about it. That's how this information catches wildfire and to make their choices known. Not to be afraid to be the oddball out that's eating a certain way, because you really could be the frontrunner and you'll be the person who is healthy, when it comes down to it.

Growing up, I had all these ailments. I was on all these prescription drugs. To know that I could've spent all of that money, the 400 plus dollars I spent at the pharmacy, at the drugstore, every single month, to know that I could spend a portion of that money towards organic food, to even allow my body to feel better and heal naturally, but also to get off all of those pharmaceutical drugs, and to feel the best I've ever felt in my life, to be able to explain that to a little child, to explain it to someone that maybe they haven't experienced any heartache yet, any physical ailments or any health issues yet, to explain to them that if they were to be proactive and spend money where it really matters, on the food that they're putting in their body that that is their medicine, that food is their medicine, to prevent them from ever having to spend crazy amounts of money on medical bills and health issues, to be able to convince them that buying it now versus paying it later is better, would be the most amazing thing.

Because what they would realize is that they would prevent so many different diseases and different issues within their lives. What they would do is they would really shift the mindset of our entire health industry, from a very bandaid type focus mentality of covering up symptoms and treating symptoms, to going to a more preventative model. If kids can learn to do that with their food, teach them that ginger is anti-inflammatory, can help a headache, and can make your muscles heal faster versus going for Advil, the options are endless.

That's why I tell my story about how I was 22 on almost eight prescription drugs and feeling so bad about myself, my body, my health, I had no energy, suffering all these ailments. Not looking beautiful. Not feeling the best I've ever felt. Saying that I was 10 years younger feeling that way, and I feel better now than I did 10 years ago, and explaining to them that they can really feel amazing for their entire life. They have a choice. They can choose organic, non-GMO food.

They have a choice. Every single day you determine what you put in your body. Nobody else determines that. Yeah, when you're a baby it's important that mothers choose the right type of food. But once you're able to feed yourself, that decision's yours every single time. Imagine giving that power to a child. Saying, every single time you eat, you get to decide your fate. You get to decide whether you're going to become a statistic or you're going to live the life that you are meant to live on this Earth.

There's so many people covering up symptoms and not getting to the root cause. They're just treating an ailment, and not treating the thing that's really causing that ailment. If they even knew the power of food, and what it could do to your body, and how it can make you feel, I really feel like unlocking the power is so amazing. There's this cycle. This normal cycle that has become a normality that needs to stop. That you start eating the industrialized food. You get sick, you go into the healthcare system, you get prescribed drugs, you start spending money on drugs, start feeding the pockets of the pharmaceutical industry, and that in turn feeds the government. Because the big pharma, big food are all in the pockets of the government. The person leading the FDA was a former Monsanto. The people who are making the decisions are being lobbied by these big pharmaceutical and big food companies. Kraft spent millions of dollars lobbying the FDA. Big major corporations, food corporations spend millions of dollars every year lobbying the FDA for these decisions that are made about whether these chemicals are allowed in our food or not.

One of the things that I want to tell children is they don't have to be a part of that revolving system. They don't have to be part of that normality that has become a really toxic part of our environment. They can actually break free of that whole system. They don't have to eat the industrialized food that makes them sick, that makes them buy the pharmaceutical drugs. They can eat the good food. The organic non-GMO food, and they don't even have to be part of the healthcare system. They can take control of their own health. They can take back their health. They can be preventative and live a really super healthy life and not be part of the system. You don't have to be part of the system. You can opt out.

- Patrick G.: Gunnar, thanks for taking some time with us today.
- Gunnar L.: Great, great to be here.
- Patrick G.: Thank you. Can you tell us your name and give us a little bit of your background?

Gunnar L.: Yeah, so, my name's Gunnar Lovelace. I have been interested in farming and social enterprise my whole life. I grew up really poor with a single mom and saw how hard she worked to make healthy choices. When my mother remarried, my stepfather was running a food co-op out of a little hippie commune in Ojai, California. So I got to see firsthand the power of group buying is a way to make food more affordable and build a community. So many of the movements that came out of the organic and natural industry really started with the hippie movement, and I think what's been real exciting to see how that's going mainstream and that you've got consumers now that are voting with their dollars at scale.

As I went on in my own entrepreneurial career, I've always been interested in food and health. Started non-profits, and ended up dropping out of college and started an educational software company teaching children how to read. The whole time I was thinking about how do we create a 21st century food co-op that keeps the heart and soul of the hippie movement, but makes it more mainstream accessible to consumers everywhere.

Just philosophically, I've been looking for an organizing principle my whole life that brings people together at scale around the common good. I really believe that expanding access to healthy food is one of those organizing principles. It doesn't matter who you are, where you live, what you believe, what the color of your skin is. People want to feel good in their bodies and they want the same thing for their children. That's been a general organizing principle for decisions that I've made in my own life, and why we're here at Thrive Market today.

- Patrick G.: So you talked about Thrive Market, when did that idea occur to you?
- Gunnar L.: It happened very organically. I've always been interested in healthy brands, and so I just ... Because I have another socially conscious jewelry company, I had a retail store so I was able to set up wholesale buying accounts with a lot of my favorite brands.

Actually, just super organically, it was for Burning Man. After I came back from Burning Man, a lot of friends were interested in buying these brands at wholesale prices, and so I ended up running these shopping events on Facebook. The demand for accessing these products was so high, and the labor involved with filling peoples' orders. I wasn't trying to make money, I was just a service

to my friends. I felt like there's got to be a much simpler way to organize these types of processes at scale, and so that really got me thinking that there was a real opportunity to disrupt pricing in the health food industry.

Then I partnered up with one of my co-founders, Nick Green. He and I have self-funded the business very early on. He's the perfect counterpoint to college drop-out, from a hippie background, from a hippie commune. He's a Harvard grad, top-rated debater in the whole country and high school. His parents are still married, very suburban background. Just beautifully stable human being by comparison. We're great partners. As we went out to raise money, we were rejected by over 70 of the top New York, San Francisco, L.A., venture capital firms.

It was obviously a pain in the neck, but it was the best thing to ever happen to us because we ended up bringing our first 10 million dollars of capital. Came from this group of a 150 mega bloggers that are in the business are sharing health and wellness information with their audiences, and they hear from their communities, "Hey, want to live the lifestyle, but we can't afford to do it," or, "We're not near a health food store." They understood the problem in a different way than venture capitalists did who said, "Why don't you just go to Whole Foods?" They just didn't understand the problem.

That was a really interesting ... For us, it was ultimately the best thing to be rejected by all these venture capital firms because it allowed us to build a truly stakeholder driven business around solving this problem. How do we actually make organic groceries available at 25 to 50% off? That's really our mission, is to make healthy living accessible to everybody and democratize access.

We launched the business two and a half years ago. We've just exploded with our growth. There's 500 employees, where there was one employee out of my house little more than three years ago. We've been blessed to raise over a 160 million dollars from very value-aligned investors who really authentically care about what it is we're doing, and recognize how big the problem is. As you know, we spend 300 billion dollars a year on diabetes-related illnesses. It's just one of several major lifestyle diseases that are largelydriven by dietary habits. We're bankrupting ourselves with the way that we eat, and there's now seven billion of us on the planet and we're ... It's absolutely incumbent that we change the way we produce, distribute, market and consume food, if we're going to pass a healthy world off to our children.

Our business is really focused on really making that accessible in an aspirational way. The way that we think about our business is, can we sell organic and healthy alternatives at the same price as conventional equivalents and ship it to peoples' homes for free? The answer is yes. We sell a Kind bar with 5 grams of sugar for less than a candy bar. We sell 70 loads of non-toxic laundry detergent for less than 70 loads of laundry detergent with hormone and endocrine disrupters. We're in this really beautiful sweet spot historically, where a consumer is a member, who's part of Thrive, is able to access organic groceries at the same price as conventional equivalent for the first time in history, and have it delivered to their home nationally. That's been an incredibly gratifying experience. Obviously very humbling. We've made lots of mistakes along the way, but that's the core piece of what we do.

- Patrick G.: So, incidentally, we're sitting here in your offices. I just want to say that I visit a lot of businesses, and this is really an impressive place.
- Gunnar L.: Thank you.
- Patrick G.: I love the environment. You can hear the activity going on around us, open format, but the vibe that you're communicating, you feel it when you walk in and experience the employee culture, which is really wonderful. Was there a particular personal ... Like, when you were a consumer on the other side of this equation, some frustrations that you were having that somehow guided your actions in creating Thrive?
- Gunnar L.: Just really personal, at a very early age, lot of survival trauma. Wasn't clear where food was going to come from a lot of the time and seeing my mother struggle. That is just an incredibly powerful thing to go through. Just really seeing her struggle to make healthy choices. I was blessed in that even in the midst of our financial poverty, she still had the understanding that it was important to prioritize. We weren't eating processed food, and we would just be eating very simply. Might be rice and veggies for months on end, but at least she understood that it was really important to make those types of decisions.

Our model is that we literally cut out all the middlemen in the supply chain. Traditional grocery retail has manufacturers, brokers, distributors, retail markup, and then all the pay to play games that happen on the shelf space. That inflates the cost dramatically. We're able to drive prices down dramatically lower, because we buy from the brands. We put them into our warehouses where we have one of the east coast and one on the west coast, and then we ship to our members and we cut out all of that markup in the supply chain. Our members pay \$60 a year as our profit center, kind of like a big box shopping club. For five dollars a month, you get access to the platform and you get to buy your favorite highest quality organic and non-GMO groceries at wholesale prices.

But for us, we felt like if you couldn't afford the membership, we didn't want that to be a reason for you not to be able to have access. So for every paid membership, we give a membership away to a low-income family. That's something we believe in, and something that we know our members believe in.

- Patrick G.: Perfect segway about saying that you can access non-GMO foods. This is something that I think everybody that we've been talking about through this project, you'd have a real context for is the demand for non-GMO foods. Through Thrive and your large audience out there who are purchasing from you, what are you finding as far the demand for non-GMOs?
- Gunnar L.: Yeah, so, what's been really exciting to see is that this is a really bipartisan issue. You look at survey data, 85 plus percent of Americans want to be able to know if their food has GMOs in it. They want food to be labeled. This is known statistical data. This is an issue that really cuts to conservative and liberal demographics.

I think the flip side of that is that, as you know, 95% of Americans are now testing positive for glyphosate in their urine. The idea that we're going to be engineering food crops to withstand systemic poisoning is the definition of insanity. In less than three years that we've been live, publicly available to our members, we've become the largest retailer in the country that sells exclusively non-GMO groceries. In that two and a half years, we're the top 5 or top 10 sales channel of 90% of the brands in this space.

Patrick G.: Wow, so, I just want to make sure. So you're saying that everything that people buy from you is non-GMO?

- Gunnar L.: Yeah, yeah. We're-
- Patrick G.: It's exclusive?
- Gunnar L.: We are the largest retailer of exclusively non-GMO groceries in the country.
- Patrick G.: Wow. That's huge because it's ... The labeling issue is a big issue, and to me it's really a moral issue, as far as saying, is it not appropriate to label what's inside? And you're trying to hide that from people so they don't know what they're buying. That's like an oasis for, I think parents especially, especially moms who are trying to be healthy, responsible for the health of their household, to know that anything they're going to buy from Thrive is not going to have GMOs in it.
- Gunnar L.: That's right.
- Patrick G.: Is that a stand you took basically-
- Gunnar L.: Right from the beginning.
- Patrick G.: Yeah, right from the beginning. It's a part of your vetting processing. Anything that we're going to carry, that's one of the demands.
- Gunnar L.: Yeah, we've removed top-selling brands that bullshitted us, that said that they were non-GMO and we found that they were. They were top-selling brands and we were like, "Sorry, we cannot offer you to our community. Period. End of story." That's been an incredibly core part of what we do.

Now, I'm not against engineering food. We're not black or white about this. As a species, we have been genetically engineering food and animals for hundreds and thousands of years. That's the nature of selection, grafting. This is the nature of doing these things. But the idea that we're going to engineer food crops like corn, soy, wheat, cotton to withstand systemic poisoning and the destruction of topsoil, the infiltration into water systems, and 90 plus percent of Americans now testing positive for glyphosate through these Roundup ready crops that are now in all the big CPG, all the packaged goods companies are using Roundup ready crops as part of their supply chain, which is why glyphosate is entering into peoples' food and it's why it's showing up in their urine. That, to me, is the definition of insanity. As a business, what we wanted to be very clear on from day one is that we understand that there's a real concern about this, we understand that there's a real trust deficit gap in the market. People don't know who to trust. You get genetically engineered food at Whole Foods, you get genetically engineered food at Amazon, you get genetically engineered food at a lot of your favorite health food stores. We wanted to be absolutely clear that when you buy at Thrive Market, you don't have to think about it. We've done that work. We sort every single product in our catalog by over a 180 certifications and qualities. Non-GMO is one of those. That's just the baseline.

For us, though, what's also been cool is because the market has grown so guickly, we have become a top 5 or top 10 sales channel for 90% of the brands in the market. These are the biggest organic brands in the market. We're showing up in their boardroom conversations, we're a major sales channel. Which really gives us an opportunity to have a dialog with manufacturers out there. Like, "Hey, how do we make this better? How do we do things better? How do we clean up our supply chains?" These are brands that are already committed to non-GMO, but now we need to go beyond organic and non-GMO, and we need to talk about regenerative agriculture. We need to talk about building topsoil, and how do we clean up packaging, and how do we lower the amount of waste that we produce? This is really ... Because we're now such a major sales channel for most of these brands, we're able to have really great conversations with them, where they're willing to make investments in changes because they know that we can drive volume to them.

- Patrick G.: The code that you cracked basically is that typically, to try to take those type of positions from a ... Call it a conscious capitalism standpoint, simultaneously ... Costs are high, you have to, you're paying a burden cost to be able to have these types of foods, to work with a company that cares about regenerating topsoil, et cetera. But you found a way to make it affordable, as you're saying almost maybe even cheaper than conventional purchases at a grocery store, and still deliver that type of quality.
- Gunnar L.: Nationally.
- Patrick G.: On a national level.

Gunnar L.: A national scale. We shipped nationally from day one. The most basic way that we measure our success is, can we sell a healthy alternative at the same price as a conventional equivalent and ship it to peoples' homes for free? The end of the day, it's all about access. We see access as a function of price, geography, and education.

Price in that we're selling previously premium products for less, geography in that we ship nationally. If people are in food deserts, or they're in remote locations. Education in that we've invested millions of dollars in content that informs and inspires people. That's recipes, that's DIYs, that's courses. It's not only about the technical functional logistical aspect of actually getting the food, it's why does it matter? What's the truth about health, saturated fats? Why should I care about toxic ingredients in my cleaning supplies? How do carbs turn into sugar? What is glyphosate? What are these things?

- Patrick G.: Right. I was going to ask, is there an educational dimension to your activities? Because, in our project in GMOs Revealed, that's really what we're trying to do, is bring attention and saying this is a fairly serious matter. Very serious matter. Has significant consequences not just today, but well into the future when you look at how long glyphosate lives in the environment. It's in, as you said, tested in 90% of people are testing. It's in their bodies, this is a highly toxic substance. How are you finding that people are responding to the educational side? Are they engaging, are they getting it?
- Gunnar L.: Oh yeah. I think that there's ... First of all, there's just a lot of ... There's this really exciting millennial consumer trend that's happening, and we see millennial as a mindset, not as an age group. That means that people are voting with their dollars and they're voting with their values.

I think even just to kind of take a step back, I think it's really interesting to look at the historical perspective of where we are as a species. We've been on the planet for about 200,000 years. For the vast majority of that time, we've been hunter/gatherers with less than billion of us on the planet any given time. Only with the advent of agriculture, about 9,000 years ago, do you go from very, very small hunter/gatherer social frameworks to people concentrating in a geographic region, being able to produce more food, the construct and creation of a city, business, trade, commerce. Agriculture is at the center of that. When you look at our population boom, you go from 9,000 years ago to the birth of Jesus Christ, there's about a billion of us on the planet, you go to World War II, about 1,900 years later, 1945, you have about two and a half billion people on the planet.

You fast-forward another 70 years to present day, from World War II to today, 2017, there's more than seven billion of us on the planet. This is driven by the agricultural revolution. This is driven by our ability to produce a lot of food. This just really kind of gives it, for me, as somebody's interested in human evolution, I think it's a really valuable context for us to think about. What happens when we go to 10 billion people, or 13 billion people, and people continue to eat the way the way that we are, or there continuing to be a lot of factory farming of animals. What are the implications of that? What we do know is that there's all sorts of studies coming out now that we're doing topsoil at a historic rate. That there's studies coming out showing that we only have 60 harvests left on the planet.

The way that we are producing, distributing, and marketing, and consuming food is going to leave this planet completely unsustainable for us and for our children. So it's absolutely ... I think the GMO conversation around glyphosate, around Roundup, around other herbicides, around the engineering of food crops to withstand poisoning ... Because, I think Monsanto's going to lose the battle on Roundup. To me it's definitely clear. They are going to lose this battle, but the challenge is that there are other ingredients behind that, which we need to be out there publicly advocating and educating around.

As a brand, we're investing in these types of conversations with you, with our influencers, with our bloggers, with our doctors, with our membership community, with our brands, with our investors. How do we galvanize and synchronize conversation around these issues in a way that actually makes a real impact?

- Patrick G.: With the impact that you want to have, obviously you've laid out quite clearly, as far as getting healthy foods to people at prices that they're already spending or less and making it accessible which was an issue. I grew up in the '70s. My father was like the weird guy who owned a health food store in town.
- Gunnar L.: Awesome, so you understand.

Patrick G.: Oh, I totally get it. Yeah, it was like a weird thing that if I went to school with a Tiger's Milk bar type of thing. So you see the change in how things emerge. Trends will emerge culturally, but simultaneously you see these malevolent corporate interests that start to take control of literally our food supply.

It feels, at least to me, a little bit of a David and Goliath. Here you are saying ... You clearly understand the issues, you clearly understand the challenges for the typical consumer that's out there. I don't think anybody says, "I don't care about my health." I think they do care, but the question is, what is their access to be able to do something about it?

You said something interesting though. You said Monsanto loses. Do you feel that way because just of the truth and the trends are such that there's no way that they can sustain their particular position doing what they're continuing to do and poisoning people throughout the world? Why do you say that?

Gunnar L.: I think we're in this really exciting time where it's really hard to hide things. The internet is at the center of that. The ability to drive transparency into supply chains into real motives. It's just impossible to hide things at scale. I think consumers are becoming increasingly sophisticated. They want to vote with their dollars, with the companies that represent their values. They're also naturally cynical of greenwashing and bullshit. That's something that we think about a lot in terms of how we make our investments and communicate with our communities.

> But I think that the amount of news and information that's coming out around Roundup and Monsanto is just, it's such a critical inflection point. California has finally won its lawsuit with Monsanto, so it's going to be labeled under Prop 65. Back in February of 2017 of this year, Monsanto was caught with the EPA official that was writing papers around, certifying it as a safe ... This is safe, this Roundup and glyphosate is safe. This is the nail on the coffin. Now, I think it might take another two or three years for it to really unwind itself, or maybe even 10 years. But the truth is that they're going to lose this battle.

> Now, they're used to losing battles. These are the guys that did DDT. They understand that there's a cyclical nature to this, and it's incumbent upon us as people who care, people who have this incredible reach, and then just the power of our social networks

and being able to communicate. I think we're in a position as value aligned consumers, and I'm talking broadly, not just Thrive Market, but just the emerging consumer dynamic where people can use the internet to drive transparency and use social media to have things go viral.

We're in a position to hold businesses accountable, in a way that has never existed historically. You see this now with all the big CPG brands and the retailers, they're all in serious trouble. They are facing existential threats. You look at share price, and challenges that McDonald's and Coca-Cola face. They're buying companies up left and right. They don't know what to do. They know that there is a tectonic shift happening, and it's very hard for a big and tranche multi-billion dollar player to speak authentically to this emerging consumer dynamic without threatening their existing business.

This is a really, really interesting dynamic time where there's going to be a lot of carnage in the market, and I think that's great for consumers.

Patrick G.: It needs to be disrupted. Completely. Do you feel like with the activities that you are engaged in with your business and the philanthropic side, do you feel like you're basically giving confidence to more and more farmers to move in the direction saying, since you are a market-maker at this point, and you're getting the message out, you're creating an audience, you're finding business systems that will work from an economic standpoint, at scale. Now what happens is, if you're a farmer, saying, "I don't like living under the thumb of a Monsanto and paying patent fees for seed and spraying the hell out of this."

A farmer's got to understand the damage they're doing to the Earth more than anybody else, right? Because they live it every day. So, is it a part of, at least a part of your intention to say that, "We want to give confidence that the farmers can start making a switch to a healthier crop, a healthier way of farming, et cetera. Because we're building an audience to sell for them."

Gunnar L.: Yeah, I think that's a big part of it. You see other retailers also doing big forward buys now. Costco just did a big deal where they're providing, lending, instruments and making big forward buys to provide stability for farmers to really provide organic crops. That's a great thing. I think that's a really, really great thing. We're, to your point, it is David versus Goliath. Yeah, we've raised a lot of money, we've had a lot of success, but we're like a little gnat. We're in a 45 billion dollar market of just the categories we sell into on the organic side alone. Even at that size, it's less than 5% of conventional food sales. If conventional food sales sold online, half of 1%. This is a trillion dollar market. Our core thesis is that organic and healthy living is like lifestyle. Like fashion, it's a lifestyle trend, it's a secular movement. It's a mainstream event and a phenomena. If one believes that, we're in an increasingly powerful position to drive positive change all the way down into the farmers.

For example, we're trying to source a very specific type of regenerative hog jerky, bacon jerky product. We couldn't find a farmer that could provide the scale that we need for our community, so we've been helping the farmer put together a co-op of all of their other farmers that have the same practices, so that they can benefit by working together, and then we can have enough scale to supply our community.

In every particular supply chain, there's different types of issues. I think that the truth is that the farmers' actually the ones that are getting squeezed. They are being squeezed in this. The challenge is we still have to create more pathways for farmers to be able to earn comparable livings, than they are using Roundup ready crops. That's still a process that needs to be refined.

Patrick G.: What I love about this conversation is, we've done so many interviews for this project, and it's very polemic. People talking about all the challenges, the problems, the toxicities. There is a validity to the sky is falling, relative to the dynamics of what's going on.

But here you come, and you sit at the table and you're really creating momentum behind solutions to transcend the problem, bring Goliath down, if you will, and create a consumer force that allows an emergence of a transformation really, which is, I think, horribly needed right now in the world. I'm really glad that we have this dimension of the conversation coming in here, and I think it's just extraordinary, the work you're doing.

What is your vision now? Push it out maybe 10 or 15 years. How do you want to see things working, and what's the role that Thrive is playing?

Gunnar L.: I think the general trend of people voting with their dollars, and voting with their values, is just going to scale. I think any business that doesn't understand how to speak directly to consumers, how to use e-commerce, how ... That isn't investing in organic and healthy living alternatives. They're just going to be gone in 10 or 15 years. It's just literally that simple.

That's a great thing for people that are developing those competencies and are willing to really put their money where their mouth is and invest in it. There are CPG companies that actually really do get it. I'm not inherently against these companies buying small, emerging, progressive brands. There's a lot of concern, and it's understandable in the market. "Oh, you know, General Mills buys Annie's, and that's a bad thing for Annie's." I don't actually see it that way. I actually see that Annie's is infecting the mothership with its values, and I know that to be the case because we work with Annie's and we work with General Mills, and we see the values that are being reflected in General Mills as a result of their acquisition of Annie's. Yes, there's more discipline in process from a strictly capitalistic framework that's happening for some of these brands that are being acquired, but, the actually really exciting thing is the values of a lot of these brands are actually percolating in and affecting the mothership.

I think that's a really positive dynamic. A lot of times, these bigger companies are making these acquisitions because they recognize that they've got a problem. That they have to change their ways and they need to bring in new DNA, and new perspectives, and new understanding about how to communicate with this emerging consumer market. I think, in a perfect world if I were to wave my wand in 10 or 15 years from now, this general secular trend of consumers voting with their dollars and voting with their values will just continue to magnify such that no company, no consumer package good company, no retailer can get away with the same negative externalities that they get away with today.

The problem with our consumer economy today in capitalism 1.0, is the real cost of the products are not reflected in the price that we pay. This is because these costs are shouldered off. If I'm producing cattle and my corn is subsidized, and there's all sorts of other subsidies that are a part of the process, and I'm not paying for the downstream costs of the factory farming of the animal feces, and the dead zones, and the health concerns that are

coming up 10 to 20 years down the road, this is the challenge with the current capital framework. We have all these negative externalities where the attribution window for how the prices and the costs of those products aren't being properly reflected.

What's great about this massage, exponential movement of consumers voting with their dollars is that the companies that are going to succeed are naturally thinking about the real costs that they have. That's going to be really powerful for our economy, it's going to be really powerful for people's health, it's going to be really important for environmental issues. Conventional agriculture today is the second-largest contributor of greenhouse gases.

This shift to organic, non-GMO, regenerative supply chains will really strengthen our economy, will strengthen our health, and will strengthen the environmental position that we're in. My hope, what we're investing in, and what the hats that I wear both as a founder and stakeholder in Thrive Market, but also just as a human concerned about human consciousness and the success of our species, is that these movements become so strong so quickly, that it becomes so obvious to capital at scale, that we need to continue to invest in these things. I think that that's ... The good news is the market's going to win on that one.

Patrick G.: Yeah, it seems like there's a true free market that's emerging, as compared to the crony capitalism where you've got Monsanto buying off EPA officials, et cetera. I also will agree that I think consumer behavior will start to drive the outcomes moreso than a few people who control everything the way that they do, and the way that they want to, playing a master of the universe as opposed to serving people and letting that drive the whole economics of what's going on in the food markets and other markets.

> But it's interesting that ... I think you kind of said this, this is I think the interesting slant because again we've been very often having the big, bad wolf conversation around companies like Monsanto and Bayer's now looking to buy Monsanto, and what all those dynamics might mean. People are afraid of that, and rightfully so. It's fraught with all kinds of challenges-

Gunnar L.: Yeah. Real problems.

Patrick G.: Irreparable.

- Gunnar L.: That's an acquisition I'm not in favor of.
- Patrick G.: No, no. Exactly, me either. But what's interesting is also the recognition that some of these mega companies are sort of seeing that they could be pretty much destroyed pretty quickly over a consumer rebellion. That they can't just decide that they're going to dictate to their customers how it's going to be, but they're customers are going to push them into different directions.

As you said, I remember ... This started a while ago, there's a presentation I was giving in the '90s when I started looking at health clubs, health foods, drinking water changes. When I saw Pepsi and Coca-Cola starting to bottle water and sell it, I realized, wow. It's amazing that the consumers are driving their behavior, as compared to them saying, "Have a Coke and a smile." Now, I think there's big momentum behind that, and that's why I'm very bullish on Thrive as far as what you guys are going to be able to do, and the wind that's going to be in your sails because of ... I think that values true of it also, and I think you've mentioned it a few times.

The reason I'm even characterizing this because I have the scope of the whole project and listening to what you're saying is that ... I know that there's potential doom and gloom with what's gone on, but at the same time I think there's raised a great hope for how we can literally overcome these problems and have a better planet and a healthier planet as a consequence.

Gunnar L.: Yeah, like dark is dark, the light is light. These are these incredibly dynamic times. That great Chinese curse, "May he live in interesting times." I really think that we are the most fortunate generation of humans in the history of our species. We're so powerful, we have such incredible capabilities. The only thing that limits us is our ideas about ourselves, and the fears that we have, and the insecurities. I wrestle with that myself all the time. I'm forced to confront my own insecurities and inadequateness all the time. I think that as a species, we're so enormously powerful, individually and collectively, and I think as a society, we're being forced to think about ourselves as we instead of me.

That has so many different implications in terms of how we think about it. I think, just kind of an interesting change that's happened over the last 30-40 years, '60s, '70s, you had this whole spate of successful government regulation. EPA, Clean Water Act. These are things that just would never get done today. These were bipartisan, Republican/Democrat initiatives that were passed, and really created a circumstance where we have just a step level function improvement in the way we take care of our systems. Those are things that we were able to get done 30, 40 years ago as top down. Same thing with conventional package good companies and mega corporations were able to drive things top down.

The era of that is over. The downside of this intense political dysfunction is that things that we expect our politicians to be reasonable and get things done for us. They're not going to be able to do it. The end of the day, I think one thing that's really driving this massive movement towards voting with dollars and values is that people recognize that that's a place that they have power. They recognize that it doesn't actually take that many of them to create awareness around an issue.

You see that with petitions now. You have people like Food Babe, or other people that run petitions, and then the boards and directors of big CPG companies are being forced to respond or remove a product from their supply chain. They are terrified of consumer pressure. As there's intense gridlock and dysfunction at a national level, top down corporations, politicians, there's this incredible grassroots movement that I think is totally misunderstood, and that is going to be an incredibly powerful force to people who understand how to communicate and to tap into it, and are authentic and real.

Patrick G.: Something you said which is really interesting is that individual rights doesn't necessitate individual action. We can have individual rights, but there can be a we in the actions that we want to take, based on common values that people care about.

Because a lot of people think, "Well, somehow we have to surrender individuality, or individual rights," and the answer is no, we're free to act, but we're free to commune and act also which is what I think is really going on. It's exciting times, like you said, "May the interesting times-"

- Gunnar L.: A very old Chinese curse.
- Patrick G.: For sure. What is ... Anything that you can tell us that you guys are doing that is on your drawing board, that you're allowed to talk about publicly yet? That people who will watch this will be interested in?

Gunnar L.: Yeah, just a little bit more historical context in terms of the investments that we do as a business. Not only do we see ourselves as a e-commerce utility that drives incredible price on these previously premium products, we're constantly, as stewards of the brands and of the business, studying other businesses that we think have been really successful. Patagonia I think is one of the touchstones in terms of being a really authentic, iconic brand that has really made markets. They invented the organic cotton industry, is just one example.

I think that we constantly challenge ourselves to think about how can we build an iconic brand that speaks to the values of this emerging consumer dynamic, in a way that's true to us but also really meets the needs of the market and meets the needs of our members.

An example of that was 50% of the families in our giving program, that we give free membership for, are on SNAP, they're on food stamps. This is a classic example of the digital divide. Here you have a very ... You have 21st century economy where you can buy anything online, but you can't use your food stamps to get healthy food for less. We had been working with the USDA to say, this is crazy. Let's get ... We'll invest in it, we'll pay for it. Let's make this happen. As a result, because we couldn't get positive response from the USDA on this, we ran a big campaign to get food stamps online.

We were able to do something really unique where we were able to leverage this big influencer army of folks that had invested in the business, propelled the business, into the public mind at scale. We were able to take this community and really promote this issue in a way that drove a billion media impressions, we drove 300,000 petition signatures, we had op-eds from the Washington Post down writing about, "Hey, we need to end this digital divide." We need to be able to make sure people can get healthy food online. We worked with a bunch of our celebrity partners. They created funny, short PSAs highlighting all the crazy things you can buy online, but what can't you buy? Healthy food with food stamps.

But what was really interesting for us, as we've continued to educate ourselves, is that we were very careful about how we languaged the campaign. It wasn't a classic conservative or liberal campaign. We really framed it in a way that ... We wanted to bring everybody to the fold, on the table. Our framing was, "Hey, if we're going to have a federal program that gives people food, we need to make sure the food that they get doesn't cause them to get sick so taxpayers pay more money." This is a message that resonate to everybody. As a result of the campaign and the success of the campaign, we hosted a Congressional briefing with a hundred Republican and Democratic offices on Capital Hill. As a result of the campaign, within 90 days of our campaign, we had the USDA coming out committing to get food stamps online.

That was really exciting. We were a two year old startup that has positively effected an 86 billion dollar federal program that touches the lives of 46 million Americans. As a result of the success of the campaign, the Republican chairman of the House Ad Committee invited me to testify for three hours in front of congress last November. I was talking about genetic engineering and talking about food stamps. These are the types of issues that I was able to speak directly to members of the house in the agricultural committee, about 30 members.

That whole campaign was just an amazing educational experience for us as we think about what are additional ways that we can galvanize our network of members, influencers, bloggers, doctors, brands, non-profits. We worked with everybody on the non-profit side from the Organic Consumer Association, to Center for Food Safety, to Environmental Working Group. All the biggest food advocacy groups, to all the biggest brands in the space, to all the biggest bloggers. It was just an amazingly gratifying experience. For us as we think about what does it mean to demonstrate social enterprise at scale? What does it mean to show that we're a business with values? That was a really exciting learning experience for us. Now we're thinking about, what are the next campaigns that we're going to run? I think as a brand, that's a really positive story in the market in terms of here is a way that a business can have really positive impact.

- Patrick G.: It's extraordinary, and the results are really impressive that you can get that done. Because what gets done in Washington ever?
- Gunnar L.: Right.
- Patrick G.: The fact that you got that done. Because, like you said, it's so nonpartisan. Who cannot see the validity of letting people buy healthier food with food stamps?

Along those lines, maybe now speaking to this audience and the people who are responsible for kids, for households, et cetera. Are basically saying, "Oh my God," and they're drinking from a fire hose right now, right? All this data coming, all this information, have a significant desire to say that they want to do something to upgrade the health of their household within the budget they have. What is the low hanging fruit for the uninitiated? What's the first actions that mom can take who's new to this, to start down this path to upgrading the health of the food that they bring into the home?

Gunnar L.: Yeah, so I think there's a really basic thing, which is that it's all about habit formation. We have been bombarded, as consumers, with trillions of dollars of CPG advertising, conditioning us to eat processed food and processed carbs. This is the inherent place that we're at today.

> I think the thing that we need to understand is that we need to eat food with way fewer ingredients, so the fewer ingredients listed the better. We need to be eating whole grains, or no grains at all depending upon your dietary preferences. I think that's a really simple thing. Our diet today, like the breakfast of today, the American breakfast today is one of the most insidious meals that we have. It's not wonder that our kids have Attention Deficit Syndrome. They're being fed carbs, complex carbs and sugar, complex carbs turned into sugar. I know how I am when I eat too much sweet, I can't even concentrate. I'm bouncing off the walls and then I crash.

> So we have tens of millions of children that are being poisoned, effectively, with complex carbs and sugar as their first meal, their breakfast. They can't concentrate. Then they get spoonfed drugs that are supposed to help them for their attention deficits, and those foods are all made from Roundup ready crops that are pumping glyphosate into our children. So, very, very, very, very simple thing is, eat food with the fewest number of ingredients possible. There are plenty of ways to make food delicious and tasty without buying things with lots of ingredients. That is the most basic thing that anybody can do.

> I think another key factor is, to the extent that you can, buy truly nutrient dense food from a local farmer at a farmer's market. Then get everything else from Thrive Market, because you can get all the nonperishable goods from us at wholesale prices, and then support a local former getting truly dense food, organic and non

GMO food from a farmer's market. Now, there's a lot of places where you don't have farmer's markets. There are emerging services that are taking care of that. I think that's ... Each geographic region has slightly different solutions based upon, what are the resources available there to get those critical vegetables, and grains, and meats, and things like that.

But the good news is that there's a lot of solutions emerging very quickly, and consumers can very, very, very simply shift their diets and the diet of their families from processed carbs to simpler whole foods. Eat as many veggies as possible. Doesn't matter if you're paleo or vegan. We agree on that basic principle that we should be eating as many vegetables as possible, and we should be having as few complex carbs as possible. The diabetes epidemic is just an incredibly insidious destruction of human potential. We spend 300 billion dollars a year on diabetes-related illnesses. Just one of several major lifestyle diseases that are ravaging our communities and ravaging our economy. That slight switch of, "Hey, I'm going to eat food that has fewer ingredients, isn't as processed, that's not eating a lot of the complex carbs." That's the game changer right there. Those are just a few very simple things that can be done.

- Patrick G.: I think ... Awesome advice. I think what you're doing in all your work is to make that simple. Somebody might feel overwhelmed and make it simple for them to approach it and start engaging in it. That's terrific. Well, listen, after talking to you now, after many of these conversations, I got such hope and a positive outlook for what can be. I want to say that I know you're working passionately every day, so taking time out of your day to talk to us-
- Gunnar L.: It's an honor. I really appreciate what you guys are doing, and we're grateful to be part of the conversation. It's a learning process for all of us. Anybody who says they know what they're doing in the 21st century is BSing. Our motto is fail fast, succeed quickly. We encourage our team to be courageous, make lots of mistakes, and share the learnings of those mistakes with everybody around them. The only way that we are able to succeed is if we do this together.
- Patrick G.: Right. Listen, thank you so much again for sharing this wisdom and this vision, and keep doing what you're doing.
- Gunnar L.: Thank you. It's great to be here.

Patrick G.: I really hope you enjoyed episode one, and we're wowed by the information brought to you by these experts. This is just the first day. Tomorrow is another mind blowing day where we're going to escalate the information and the intensity of it because of the seriousness of the issue and what's at stake.

So tomorrow I have part two of my interview with Dr. Zach Bush, and if you thought part one was good, wait until you see part two. Also, I interviewed Jeffrey Smith. Jeffrey Smith is one of the most recognized figures in the world when it comes to the anti-GMO movement. He has entered debates on this issues, extremely articulate, and I love the way that he organized the information and presented it, so you want to catch that.

We also have Dr. Pompa. You need to look for solutions to the toxicity that GMOs present, and that's what Dr. Pompa is bringing to the table. His personal story related to this is very compelling. Tomorrow we have another spectacular day for you, and day by day, the momentum of GMOs revealed is going to continue to build. But now there's something you need to do. You need to share this with your family and friends. This information needs to get out in the world. We are streaming it for free, globally, but just because it's free doesn't mean that the information is not extraordinarily valuable.

As a matter of fact, based on my experience in this series, this information is life-changing and life-saving. There's a lot at stakes, folks. Your participation in making a small effort to share GMOs Revealed with your loved ones can make a big difference in their life. Just send them to gmosrevealed.com. It's free. But I can tell you that what we're going to deliver can make a huge difference in peoples' lives, and I will be there with you and them, step by step by step throughout this entire process.