Growing Your Food As Designed by Nature:
A Special Interview with Paul Gautschi

By Dr. Joseph Mercola

DM: Dr. Joseph Mercola

PG: Paul Gautschi

DM: Are you interested in learning how to effortlessly raise your own food in the comfort and convenience of your backyard? Hi, this is Dr. Mercola, helping you take control of your health. Today we are joined by Paul Gautschi, who has been an incredible personal inspiration to me and a massive demonstration of what you can achieve in your own space to grow some of the healthiest, most nutritious, and – here’s the key – tastiest food that you can possibly grow. Welcome and thank you for joining us today, Paul.

PG: Thank you.

DM: We’ve had your video Back to Eden, which is my first exposure to your work. We’ve had that on the site and it was well-received. It’s an area that many people recognize sort of intuitively as important, but don’t understand the full depth of what is possible with this approach. Until I saw your video, I certainly never did. I mean, I just didn’t get it at all. Now, once you get the concept, you just… You’re almost like… It’s like fingernails on a chalkboard when you see bare soil.

PG: That’s right.

DM: Because you know it’s possible. For those of our viewers who haven’t heard you or watched the video Back to Eden, which we strongly recommend [them] to do, why don’t you share a bit about your personal journey, of how you grew up in L.A. California, made the transition up to Washington, and started your process of really converting soil into this magnificent, healthy, and microbiologically diverse cultures that can produce food that’s so incredible.

PG: I was blessed. I grew up in a family. I lived with my grandparents and my parents. We grew all of our food. It’s just great growing up as a kid. Whenever you’re hungry, you walk outside and you can be totally satisfied with the abundant delicious fruits and vegetables year round. I went all the way through high school, never missed a day of school because I never got sick. I’ve always told people that if we’re eating healthy live food, it’s impossible to get sick. The body knows how to work and if it’s supported, it doesn’t get sick. I just lived that way. It was just so convenient and so nice, and I wanted to continue.

I grew up in L.A. – L.A. changed. It was no longer a place fit to grow your own food. It became polluted. Land was limited. I put my life in the middle of three things basic to human life: clean air, clean water, and live food. None exists here. We needed to find a place we can do that for our family. We moved to Washington State. It’s a beautiful spot. Bought some land, built a house, and drilled a well, but faced a real challenge. Our well produces half a gallon a minute. At half a gallon a minute, you’re not going to do any irrigating.

It was August ‘79. It was a great year to build a house. It didn’t rain the whole summer. I’m looking at my driveway. Coming out, it’s totally dust. All my grass from that place is all brown. And I’m saying, “God,
how am I going to grow fruit trees for my family without water?” He said, “You’re looking at the wrong thing. Turn around and look at your woods.” I turned around, looked back at my woods – fir trees, hemlocks, and spruce – and they’re lush green. We’re talking beautiful green, new growth coming out bright.

And I said, “Okay, I get it. I pushed enough trees out when I built the house. I know they’re shallow rooted. If you can show me how you do these without irrigation, I can do more to it.” I went out in the woods with a fork and I started moving this incredible covering over the ground. I’m blown away at the depth of this moist, beautiful living entity. I’m realizing, you know, where I built my house with the ground that’s clear, this didn’t exist. It was hardpan, clay, and rock, and it’s not here. I said, “I get it. I can do this.” I started planting my trees and covering. At that time, I had straw and sheep manure; now I’m doing the wood chips.

My orchard has not been watered or fertilized for 35 years, and it’s produced abundantly beyond what people can imagine. If you look at the film, you’ll see that my trees looked different from any fruit trees you’ve ever seen in your life, because they’ve all bent over. Because the weight of the apples is so full of water and minerals, it bends all the branches down, which makes it quite convenient. I never use a ladder. You can reach everything. But it’s just so amazing for me how this thing works. What’s so incredible is how we miss them because it’s all around us in nature.

DM: Sure.
PG: The earth has a skin. It’s been in place forever. The thing that we do as human beings is we come and take the skin off, expose the ground, lose it all, and corrupt it – I don’t get it.

DM: Absolutely. I’m wondering, a few things: when you initially started your place up in Washington, was the intention just to grow an orchard or was it also to grow more food?

PG: What was so sad, Dr. Mercola, was that I was trained to till the ground; we all were. But I’m going to be really smart and resourceful here. What I’ll do is at night when we’re not using water, I’ll use a timer and water my garden. For 17 years, I’m tilling this garden and growing food. I’m killing myself, hauling out rocks, bringing in compost.

DM: Did you have the trees planted, too, in your orchard?
PG: These are plants that were doing fine on their own with no attention, and I’m…

DM: No. But this was when you were tilling the soil.

PG: Yeah. But my trees, I never tilled and all that was maintaining itself with no water and producing well, and in my face I’m not getting it. One day I was out there. It was a dramatic day. I was pushing the stick down my strings to make straight lines. I go down to fix it and it hit this like concrete hardpan. I said, “God, what’s up to it? I have been killing myself to get soft, beautiful soil in my garden. How come this hardpan is just not changing?” He was silent. I mean, no answer. I was going like, “What’s up with this? You’re not going to talk to me?”

I got up to my orchard that day and I started weeding. For some reason, I just had the thought to start moving this compost and see how deep it went. I’m down to my elbow in this beautiful black compost. I got up angry screaming. There’s something wrong with this picture. I have been killing myself to get this to my garden. I didn’t do anything here. I hear in the side, “I raised your garden, that way you didn’t have.” I was so angry. I threw that trowel away. I started covering my garden with wood chips. But it’s just amazing, you know. Because of our training, we don’t pay attention. We don’t observe what’s happening. We just do what’s wrong because we thought that’s how we’re supposed to do it.
DM: Sure. I couldn’t agree more. Now, I’m still a bit confused. Did you actually put the chips down in your orchard, or did this covering occurred just because of the normal fall of…

PG: No. I added it because you see, I didn’t have water. I knew the trees would not get watered.

DM: Oh.

PG: I initially started with sheep manure and straw, and then I’ve gone now to wood chips.

DM: Okay.

PG: The orchard always had the cover.

DM: Again, just seeking to understand the process that you went through and the journey that you went through: what was the motivation to add the straw and the cover at that point? Was it just because of the irrigation or was this something you learned from other books?

PG: That’s all I had available, see, where I lived. It’s all organic material to cover the ground with.

DM: Okay. And you just knew that was necessary for the orchard? If you didn’t do that…

PG: I had no option. Because I couldn’t water…

DM: Okay.

PG: I had to hold water. I observed in the woods how the covering – the needles and leaves falling off trees – held water.

DM: Okay. So, no one taught you this. This is still from your observations.

PG: No. It was an observation. I was directed to go out and look in the woods by God, and I did.

DM: This was for the orchard that you started?

PG: In the orchard, yeah.

DM: Okay. But it took you 17 years of hard labor to figure out that if it works in the orchard, it’s going to work in the garden.

PG: Yeah. I’m being honest. I was that brain dead.

DM: Yeah. I think most of us are – at least that’s my observation. As I mentioned earlier, you really inspired me and motivated me. Once you get it (and I think I did get it), the light bulbs go off and you realize this is the answer. This is clearly the answer. There are very few people. Most organic farmers don’t understand this.

PG: Yes, they don’t.

DM: Organic food grown without pesticide is great, but wouldn’t you want the highest-quality, nutrient-dense food you can [grow]? You can’t get that without high-quality soil. Compost alone doesn’t cut it. It won’t.

PG: People come on tours every week to my house. This happens every week. People tell me, “I buy organic food but nothing I’ve ever bought tastes like this.” And I say, “Organic food is mineral-deficient. They’re little bundles of [inaudible 9:49].
DM: Yes, it is. That’s one of the keys – getting this covering down to improve the quality of the soil. Now initially, you’ve kind of learned through trial and error I guess that the wood chips were the best. Maybe you can take us through that journey that you went on.

[----- 10:00 -----]

PG: Well, I think wherever you live, nature’s showing you what to use. Let’s say, I live in northwest. We have an abundance of evergreen coniferous trees. Because that’s where I live, that’s what is available, and that’s what’s happening, I merely connected. Now, you know, I’ve gotten an amazing response from all over the world. Wherever people are, there’s something growing that you have that will work as a cover, depending on your location.

Roosevelt back in the East Coast wrote books about covering with straw because that’s what they have. Wherever you live, there’s something in nature that you can use to cover the ground with. If you have nothing but rocks, they make a great cover. You can grow wonderful gardens in rocks because rocks are minerals and they hold moisture. There’s nothing, wherever you live, that you can’t find to cover the ground with.

DM: Great. When we first put your film Back to Eden and start encouraging people to consider the use of wood chips, some pretty bright people who have been doing organic gardening for a long time, their response is, “Oh, I use wood chips. I pour them in a compost.” They just don’t get it. Yeah, that’s certainly useful, but it’s not the same as laying the chips on the ground directly. Maybe you can address that because, from my observation, there’s a huge amount of confusion on this issue – the distinction between laying the chips on the soil directly and then putting them in a pile and composting them.

PG: Or also tilling them in.

DM: That’s even worse.

PG: That’s even worse.

DM: That’s the worst.

PG: That’s the worst. My stance – and again it’s a place to be humble – is that nature has been doing this for 6,000 years before human history. It’s really intelligent [inaudible 12:07], and I’m the learner. I’m the new guy on the block. I need to pay attention to what nature does and copy it. This whole idea of creating compost piles and mixing and turning is [inaudible 12:17] a waste of time. You lose all the compost in a place don’t want it. Put whatever you have where you want it. Get out of there. Leave it alone. It’s well without you. If you try to [inaudible 12:29].

DM: Yes. That’s the key. Now, let’s discuss some of the reasons why woodchips are so good. The encouragement is to do this. I mean, it’s… Just to give some personal history, after I saw your film, I was motivated or I was actually in the process already of converting a significant portion of my ornamental landscaping into edible landscaping and just yanking more than half of it out. But a big portion of ornamental landscaping that’s almost in everyone’s property is their lawn. I’m getting rid of about half of my lawn and converting it over.

The way to do that is you could put down lots of newspaper or cardboard. If you choose to use cardboard, you have to make sure that there’s no shiny print on it or shiny ink, because that’s not going to be good for the earthworms. You have to take the tape off, too, because they don’t like that. But you lay that down and it stops. You don’t have to do this labor-intensive thing of pulling up the grass. You just put the cardboard on and put the...
PG: The grass is an organic material. You want it to decompose and return to the soil.

DM: Yeah. The other key thing is that there are so many benefits with the chips. Let’s go into the benefits first and then we’ll go into some of the details. But the benefit from my perspective is that you are able to radically reduce your irrigation. Let’s review that first because you have a really good case history there where you are growing your food in Washington, where it’s only raining like 14 inches a year. I think for the last 14 years or so, you haven’t watered or irrigated your garden at all, yet you get this incredible food in your orchard.

PG: For 35 years, I haven’t irrigated the orchard.

DM: Fourteen inches of water a year and you never irrigate your orchard.

PG: Never. What’s even amazing to watch is when droughts come in. My neighbors’ trees, all the leaves fall off in August. They’re worrying like crazy trying to save it. And I’m looking at mine with new growth acting like, “Well, there’s no drought here. We’re fine.” I’m just telling you, man, it’s dramatic. It’s awesome.

DM: Yeah. Again, we’re trying to help people understand this. That’s a huge benefit. Many parts of the country, in the United States at least, are going through severe drought. Water’s at a premium. You’re just not going to be able to irrigate. You cannot irrigate. The water’s not there. That’s one. The other one is weeds. It’s my perception and observation that most people are challenged to commit to a gardening program because they do not like to weed. I think that’s a rational response. Why don’t we get some feedback on the weeds from your perspective of doing this for so long?

PG: First of all, weeds are nature’s way of covering the ground. If you expose the ground, nature’s in a way angry. They know that it’s not safe and they cover with weeds. If you don’t leave the [inaudible 15:23-24], there aren’t any weeds. [Inaudible 15:29-30] because you’re watering every day to keep things wet every time [inaudible 15:33]. With my wood chips, I never water it. All summer long I have no weeds. Because yeah, it’s dry on top but down below where the roots are, it’s fully damp.

DM: You reduce your weeding. I mean, there’s some weeding that occurs because plants will grow in the wood chips, but it’s radically reduced probably upwards of 90 percent. Would that be fair?

PG: Yeah, and they pull easy.

DM: Yeah, I was going to get to that. It’s really easy to pull them up. You don’t have to break your back with a shovel or spade and get into all of those sorts.

PG: All by hand, yeah.

DM: That’s just phenomenal. The irrigation and the weeding are two immediate magnificent benefits. But the far more important ones are what it does to the quality of the food that you produce in there, whether it is trees or plants that you’re going to harvest, and consume. How does it do that? Well, let’s go into some of the science. One of the primary, you know. It’s all about the microbiology of the soil. Paul Stamets (I don’t know, I haven’t been able to research to confirm it), he’s a pretty well-respected fungi researcher. He says that 70 percent of the microbes in soil are fungi. We’ll accept that as true. If that’s true, then wouldn’t it make sense to feed those fungi?

One of the best ways you can feed fungi is wood chips. There’s just no question about it. That is just a phenomenal component. You build up these mycorrhizal fungi, these filaments that go all underneath there and communicate with all the other trees and the plants. That’s one of the best things that you can do to improve the quality. Maybe you can comment on your experience on the fungi.
PG: This is what I’ve seen again. If you look at nature, every fall the Creator puts as covering of needles and leaves over the whole planet and everything goes great. I mean, it’s just so pathetic how we don’t pay attention. I’m looking at the speed of how things grow. I mean, I plant sequoia trees as a border here. People always ask me how fast they grow. I say, “That’s up to you.” Just to give a demonstration, I planted one in a wood chip covering – I mean, a whole bunch of covering – and the other I planted in dirt. The one I planted in dirt is one-third of the size of the other one. I mean, it’s dramatic.

My neighbors have a cherry tree that’s 20 years older than mine. It’s one-third the size, totally [inaudible 17:56]. I mean, it’s not slightly different; it’s dramatically different. It’s all about… I have dwarf trees. The dwarf trees are created by grafting of the [inaudible 18:08] and the roots stop. It doesn’t develop roots. If you have a small root system, you have a small tree, a dwarf. I have a 7-year-old dwarf plum that has roots that go up to 30-foot radius – not diameter, radius. We’re talking 8 years. I’m just [inaudible 18:26]. This is the beauty of it. When you have a root system that big, you don’t need a lot of water because it has the capacity to feed such a wide area. It can take up a lot. Again, it’s just so dramatic, the effects and power of the covering.

DM: Well, let’s just focus on the root system, a little tangent before we go back into the other reasons why the wood chips work. Most people – and I certainly was one of these people – were under the false impression that the roots of a tree typically only go out to the drip line, which might be 5 to 10 feet or so. But in your videos and the two video tours of your garden and your place, you’ve got clear evidence where it’s going out to 30 feet or more from the tree. That’s just in one direction. It’s obviously much bigger as a diameter.

PG: This is the beauty of it. What I think is so cool is that these are dwarf trees that aren’t supposed to develop roots. What I’m getting at is nature’s so powerful, it overrides all the boundaries. I’m not going to stop growing here. I’m not going to be a dwarf. I’m just going to live my life.

DM: Sure.

PG: It’s so beautiful.

DM: How many trees do you have in your orchard?

PG: Over 40.

DM: Okay. It looks like it’s about that many. I’m kind of envious of your sequoia. I was in Yosemite last year before they had a fire. It was really one of the most magnificent experiences. I mean, if anyone listening to this has not seen a sequoia, you just got to. It’s the largest living structure in the planet. I mean, it’s just… Your jaw will drop. You’ll just be in awe of what can grow. I tried to plant some down here in Florida but it didn’t work because we didn’t have the wood chips yet. I’m going to try again.

[----- 20:00 -----]

PG: Do it again. They’ll grow fine.

DM: Yeah. Now, one of the other benefits of wood chips and another benefit of the use of cardboard or newspaper to cover your lawn and develop a covering without wood chips is that you will attract earthworms. Earthworms are like one of the hidden mysteries of the soil. A lot of people are familiar with the vermicompost, which is sort of the side benefit of earthworms. But there are these tunnelers. It emphasizes the point, too, in your experience with your tilling that the land was never designed to be tilled. Part of the reason – and it’s a huge reason – is that it destroys these mycorrhizal filaments. This fungal communication just ceases once you till the soil. You just decimate the microbiology in the soil. That’s why you don’t want to do it.
But the natural way to do it is to let the earthworms till it. That’s what they are. When you’ve got the wood chips on, it’s food for the earthworms. They’re going to start doubling and tripling every year. That’s just massively huge. Why is that such a good thing? Because they make compost and they’ll convert that soil to healthy soil. You can literally… In some really dense areas I’ve read like in the Nile, they’re making per acre like 10,000, 20,000, to 30,000 tons of compost a year per acre. You don’t have to lug that. They’re making it in real time. It’s all free, which is so beautiful.

**PG:** See, these are the kinds of things that [show] we’re really blessed. When I look at nature, I see how incredibly it’s designed for the maintenance and support of the whole environment. Everything’s connected except that. Everything’s working really well in harmony, supportive of one another, except that we’re messing it up. It’s just like, “What’s up with this?”

**DM:** Yeah, I couldn’t agree more, especially now, now that we’re in the 21st century. Our culture and society have managed to mess things up largely through the result of some large corporations who are clearly more self-interested in their profits than in helping serve mankind. We’ve got this challenge with the genetically modified foods and this massive use of herbicides and pesticides. We’re actively involved in helping label that food. But that’s only one part of the equation. From my perspective, that’s a relatively negative sign. It’s kind of like after the fact. I think a far more useful strategy is to encourage, motivate, and inspire people to grow their own food.

Well, 70 percent of the food in the world is grown in backyard farms or small farms. In the US, it’s under two percent. It doesn’t mean it has to stay that way. If they can capture the techniques that you’re describing with these wood chips, we can get people to grow incredibly healthy food, healthier than they can purchase certainly at any grocery store and actually healthier than they can purchase in most of their local farmer’s markets and even from local organic producers [that] aren’t using wood chips.

**PG:** Here’s a detail: within 10 minutes the fruits and vegetables picked, they lose up to 80 percent of their metabolic properties. If I were to put a garden up front, you’re supposed to be eating your fruits fresh in season. Everything in nature except us – all the animals and all the birds – eat food fresh in season. They don’t have refrigerators. They don’t have stoves. Don’t go to docs and have health insurance. But we’re not getting it. You’re supposed to pick it and eat it, not put it in the refrigerator, let it die, and cook it. It’s so crazy how we live.

**DM:** Yeah, it is. Even if you’re buying it supposedly fresh and local, it’s going to have been picked at some point hopefully within 24 hours but frequently longer than that. The optimal best way to get your food is from your backyard or your front yard. Hopefully, it will inspire more people to do this because it doesn’t require a little time, effort, and energy. But the other beautiful thing about using wood chips is that it’s a waste material. Anyone who knows me personally knows I absolutely abhor waste.

Most of these wood chips that landscapers are cutting down from trees, right now or currently, they’re putting them in landfills, which goes to create methane, a far worse greenhouse gas (GHG) than carbon dioxide. You’re saving these chips from the dump and you’re putting them to good use the way they were designed to. Even if you’re going to have a small plot, you’re going to need a few of these. We don’t want to get people confused. It’s not like go into the store, get a bag of mulch, throw it on your plants, and that’s going to do it. You’re going to need quite a bit of these. Now, if we can go over that process and we can tell them how to do it.

Well, actually before we do that, I have a question about the… Because there are two ways to do this: from the perspective of people growing this themselves and there’s this other broader perspective. There’s the commercial application of this. I’m wondering if you thought about this or had any personal experiences of small farms actually adopting this technology of the wood chips. I mean, for the orchard
it’s a slam dunk. I just can’t imagine why any orchard wouldn’t be doing this. But for producing food, I’m wondering if you’re familiar with any small farming operations that are using the wood-chip method.

**PG:** All over the world… Again, I tell people, the Creator has been doing this on millions of acres all over the world. It’s not like limited space. Whatever you’re growing, put it back. It’s that simple. If you’re raising corn, chop the stalks and put them back. If you’re raising grain, put the straw back. Whatever you use, put it back. And it doesn’t have to be wood chip. Any organic material laying on the ground will decompose, return to the soil, and the plants work out. It’s so commonsense simple. My sense is you don’t do a million acres, you know. Start small and learn as you go. As you progress, you’ll be more efficient. You don’t take on the whole world at once – just little steps. I tell you, it’s so amazing and it’s so simple, you can’t fail.

**DM:** Yeah, and you don’t really need a lot of space. Most backyards, I don’t think people are going to run into problems with zoning restrictions. A lot of front yards they might, because your neighbors might be upset that you’re growing vegetables in your front yard or even homeowners’ associations. But in your backyard it’ll probably be okay. I’m actually helping convert a few of my friends’ backyards completely with wood chips. That’s going to grow incredible food for you. One of the reasons… You evolved using wood chips over the other alternatives for a number of reasons. One is that it’s so much better, especially if you get it with the leaves on them. A freshly cut tree is going to be your best strategy.

**PG:** The leaves and the needles.

**DM:** Yeah, the leaves and the needles. Right. You want to really apply it relatively quickly, ideally within the first 24 hours of the tree having been cut and certainly within the first 48 hours. The reason you want to do that is if you wait longer, that’s going to start to decompose. It’ll be a lot of dust, which can [cause] some health problems if you spread it around. If you do decide for whatever reason to spread around wood chips that are older than two days, I would strongly encourage you to wear a mask. You don’t want to breathe that stuff in because it can cause problems over time. That’s just a practical thing. But you need a wheelbarrow and just a little labor.

Most small properties are going to need a few truckloads of these. I’ve got probably a quarter acre that I’m converting. Probably I’m putting 20 to 30 truckloads. These truckloads are about 10 yards, which is about 2,000 pounds of wood chips. Nevertheless, it’s a one-time investment. They’re free. But it’s a one-time investment of labor, because once you put it there, you don’t have to keep on redoing it. Why don’t you tell us your experience with applying the chips – how many truckloads you put in and how frequently you have to reapply them?

**PG:** I put wood chips in my orchard 16 inches around my trees – 16 inches. It was 14 years ago. I’ve done nothing [since]. I’m starting to add now because it’s broken down. But that was 14 years of absolutely no work, no input, and abundant return. I mean, it’s awesome.

**DM:** That’s pretty interesting. Maybe an inch a year or so. But my guess is that’s partially related to your climate because you don’t get much rain. My guess is that if you’re in an area where it’s going to rain more, it might decompose more rapidly and you might have to put it on more frequently. But that’s actually not necessarily a bad thing because all that’s going into the soil. You’re just building a better soil. It’s all good.

It’s all about carbon. The reason the wood chips are so good is they’re carbon. Carbon is organic matter. It turns into humus. It holds the water so you don’t have to irrigate. It really provides structure and moisture and homes for the bacteria and the microbes. It’s a key issue.

**PG:** I just want to bring to your attention to this amazing article from *Mother Earth News* magazine August-September issue, “The Amazing Underground Secrets to a Better Garden.” They really explained
and talked about all the stuff that you’re addressing and happening in the soil under a wood-chip covering. It is an awesome article.

DM: What is the journal again?

PG: *Mother Earth News* magazine, the August-September issue.

DM: Okay.

[----- 30:00 -----]

PG: The title is “The Amazing Underground Secrets to a Better Garden.” It really addresses all these fungus and stuff that happen in a compost environment laying on top of the ground. They clearly state you never have to expose the ground from all these cover. It’s just… I’m telling you. I’m a little thankful that people are starting to get this. The revelation is starting to get out and people are, you know. It’s happening everywhere. I’m so grateful.

DM: Yeah. You really catalyzed a revolution. You certainly sparked my interest into it. The key thing, though, is that you… We said it before and I just want to reemphasize it: you don’t bury these chips. I mean, you’re going to ask for trouble. You will decimate the health of your plants because you’re going to suck up nitrogen from the soil.

PG: Yes. You see, it stresses the soil to kind of break down. The one thing I just want people to get is that the Creator, who can do anything, never disturbs the ground and He never mixes. All He does is layer. We need to pay attention. Observe the master. He’s the master gardener. Those are His doing. Just observe, copy. What’s so amazing is the easiest is the best. All those work we do is counterproductive.

DM: Yeah. It’s sort of a principle I learned in health. After three decades, I’ve really sort of mastered some of the principles of how to stay healthy. When you look back, you realize it’s all the basic simple things. There’s nothing complicated. It’s about as simple as it can be. But medicine wants to do the exact opposite. They want to make it complex. There’s certainly a need for that. Thankfully, we have that as a resource. If we get into trauma or a big accident, you’re going to need a really sophisticated surgery to help recover. But for the most part, 95 percent of the time, all you need are simple basics.

PG: Yeah.

DM: That covers it. That’s really a clue that your turned into something that’s right. It’s correct. It’s sort of an eternal truth if it’s simple, which is one of the things that resonated so well with me with this process that you have.

Now, just continuing on what those listening can do, you can get to 16 inches. That’s really great. You can even go higher. There are some people who go higher. For the orchard, we are not going to plant things in. It’s going to take some while to break it down. But if you’re going to plant food, you don’t really want to go more than 4 to 6 inches.

PG: That’s right.

DM: Because the plants have this pop-up side of that thing.

PG: You have to go back and kind of [inaudible 32:16] the soil initially. The wood chips are not [inaudible 31:18] immediately. They’re covering their support to the soil. When you’re planting small seeds, you got to pull them into the back and plant in the soil.
DM: Yeah. Now, as we’re recording this, it’s the middle of summer. It’ll be a perfect time for many to start their garden for next year. Because especially if you’re going to convert lawns, it’s going to take a while for those chips to break down and to create this miraculous growth, their medium to grow food.

PG: Right.

DM: If you put it down, 6 to 9 months, when you go planting in the spring, you’re just going to be shocked out of your shoes at what’s going to be growing because you’ve got the best soil around. That’s the other reason – aside from pulling weeds and irrigating – why people don’t want to garden: it’s that almost everyone’s soil is terrible. But it could be…

PG: Everyone should take it off.

DM: Yeah, they got terrible soils. All they have to do is convert it with the wood chips and you’ve got some of the best soil anywhere.

PG: Let me tell you an awesome experience. I guy came here on a tour a couple of weeks ago from Idaho. I took him back in my place, and I showed him where the ground exposed my hardpan clay and rock with a stick. He saw that. When he walked over my herb garden, he gets on his knees, and starts moving these wood chips. This guy went down to his elbows, poured this black stuff, and he says… He just flipped out and said, “I cannot believe this. I’m moving this with my fingers and I can’t…” I saw his soils. It’s just so dramatic how the covering changes that hardpan. It’s awesome.

DM: Yeah. It’s just incredible. You mentioned earlier, it’s all about the minerals. That’s one of the reasons why you use this organic material: it’s loaded with minerals it has acquired over many years and frequently decades of its growth, previous growth. It’s accumulated, concentrated, and it’s able to provide it back into the soil.

PG: Can I give you something about this that’s actually going to blow your mind?

DM: Sure.

PG: I got a thorough test from International Ag Labs, Inc.

DM: Oh, yeah. I heard this. This is great. We got to put this in.

PG: Listen to these numbers. On the test, you get two lines – the desired level that you want and your lab results. I’ll just give you the… The nitrates, the desired level was 40; my lab result’s 120. Phosphorous, the desired level is 174; mine is 2,345. Potassium, the desired level is 167; mine is 1,154. Coming down to the smaller numbers: zinc, the desired level is 1.6; mine 21.5. What I love about this is I didn’t do anything.

DM: Well, you put the chips down.

PG: As far as planning to create minerals, I didn’t put a covering down. Nature did this. I’m just… See, this is why my food tastes so good. With this high mineral content, the flavor is over the top.

DM: Yeah, that’s the other thing. People get intimidated with gardening. If you talk to really bright organic growers, they’ll say all you got to do is soil-test. You got to put back the minerals that aren’t there. You start this complex chemistry experiment that really doesn’t work. It’s just… You’ve just provided… It’s sort of a shotgun approach but that’s what’s worse. The minerals that it needs will use, if it doesn’t… Actually everything is used because it feeds the microbes ultimately. Plants may not need that specific mineral, but the microbes certainly will. They’ll ultimately feed the plants, and they’ll help the plants produce these incredible chemicals to ward off diseases.
Not only is the food that you’re producing incredibly nutrient-dense and tasty, but it doesn’t get sick. It’s healthy because it can fight off all the diseases. You never have to spray for any pest. Why don’t you tell us about that?

**PG:** When things are healthy in nature, no bug touches it. I have slugs, bugs, and everything here. When they bite my plants, they drown. Because of the water content, they can’t get the source of fiber. Bugs and insects only attack dehydrated, stressed, and unhealthy plants. That’s the design in nature. Everything in nature is so in line with this maintenance and support of the environment. It’s not negative. See, when an insect attacks your plant, it’s telling you that your plant’s not well; it’s dehydrated. Don’t go killing the insect. Correct the problem and the insect leaves.

My wife goes to the grocery, brings in a plant, and puts it on my property. It immediately gets covered with slugs and they take it out. I love it. They touch nothing here. But if something comes from outside that’s not well, they know and they take it out.

**DM:** Yeah, I love your perspective. I heard it once, where you’re saying that bugs aren’t the enemy; their God’s police keeper.

**PG:** Police force.

**DM:** Police force, yeah, that really patrols things and keeps things intact.

**PG:** You see, if unhealthy plants produce seed, they eventually become extinct. Insects take out the unhealthy, so that only the healthy produce seed and maintain healthy plants. The design is so perfect, so balanced, and so right. I love it.

**DM:** That’s great stuff. I think those are most of the big ones that we wanted to go over. It’s just to encourage people to try this. I think it’s a little bit late in the season to try it now. You could, especially if you live somewhere warmer, a tropical or subtropical environment. But most likely, it’s a matter of getting your ducks in a row, making the commitment to do it, and finding this local contractor. It’s not going to be in the book “free wood chips.” You’re not going to find an ad for it in the paper. You’re going to have to do it.

**PG:** Tree services.

**DM:** Tree services.

**PG:** “Tree services” is the ideal. And the power cutters, the crew of power lines, they have access to a lot of that stuff. You just pay attention to who’s doing the clearing of trees and use them.

**DM:** Yeah. Now, I’m actually talking to a very large organic blueberry grower, one of the largest in the country later today. He found through his research that for blueberries at least, the evergreens and the pines were particularly useful (at least I heard; I haven’t talked to him directly but someone told me) because they produce more of an acid from that. Has it been your experience that there are more benefits from different trees, one versus another for a specific…

**PG:** My experience is that they all work well because the Creator takes nothing off the planet and then goes back to dirt. What so blows me away is the perfect balance that it provides. You see, I’m growing blueberries as living plants. Right next to it I grow cucumbers. They’re both thriving because the pH in my soil is 7.0 – perfectly balanced.

This is what really gets my attention. It blows my mind and it gets my attention: the water requirements. I’m growing wasabi, which is impossible to grow at any place but standing water and shade. I’m growing
it in full sun and in wood chips right next to sage, side by side and I’m not irrigating. I am flipping out. Here I have the extremes of water requirement – one wants nothing as a plant and one that wants to be on standing water – and they’re thriving in the same place and I’m not watering. I’m just telling you, this system is so perfect it meets all the requirements of anything growing and there’s absolutely no adjustment anyone has to do.

DM: Yeah. It’s just magnificent. I so greatly appreciate your willingness to observe, learn from your own mistakes, develop a system, and be consistent with it and diligent. That provides us with a process, a method, that pretty much everyone listening to this can use and start growing their own food almost effortlessly after you’ve gone through the initial investment of time and labor to put the wood chips in.

[----- 40:00 -----]

PG: What I’m finding is that I’m doing all the things that they say you can’t. I’m intentionally doing things that aren’t supposed to work. I’m growing potatoes underneath my apple trees. I’m growing asparagus in the shade of my apple trees. I suddenly get that all these things they say you can’t do is because they’re coming from the broken side of things. And in nature, nothing’s broken.

DM: Yeah. That’s sort of the irony of it, because a lot of this supposed wisdom that says we can’t do this are from really intelligent, committed, organically oriented people who have been studying this their whole lives. They’re not seeing the full picture.

PG: Yeah. I always say the reason we have large farms in the United States is that they produce so little. You don’t need a lot of space if you have healthy ground. You don’t need a lot of space.

DM: Yeah. In fact, I think it’s probably the… I don’t think there’s almost ever a need for a farm more than 50 acres and even that is pushing it. For your personal use, a quarter acre. I mean, you can grow a lot of food for more than your family, probably a few families on a quarter acre.

PG: It’s incredible. Under my trees, what an asset the trees are. If the summer was hot, you can grow cilantro or arugula in the shade of the grape. In the winter, they try to protect it. The snow doesn’t go deep down my kale. I mean, you see in typical orchards, all they do is grow, on hardly compacted ground, weeds because there’s no covering. But in a covering, it’s unlimited potential. We can grow everywhere.

DM: Yeah. It’s just great stuff. I think we’ve covered most of points I wanted to. Do you have any other points you’d like to make?

PG: I think your question on this whole issue of how agriculture’s being really challenged of all these chemicals and stuff.

DM: Oh, gosh, yeah.

PG: If people became responsible to grow their own food, the chemical companies would become extinct because no one would buy their products, because you don’t need them. I have absolutely no need for any fertilizer, any pesticide, any herbicide, or any fungicide ever. I have no need. If you cover in that state, these companies will become extinct because no one’s buying their products.

DM: Well, these are large corporations with multibillion-dollar revenues. They typically tend to be like any… They’re almost like a living organism: they tend not to die. They want to be self-preserved. That’s their natural growth. But I agree with you. You’ve provided us with the example that it is possible. If you don’t know it’s possible, you wouldn’t even what to strive for it. It is possible. You’ve shown it. You can do it.
If we start doing this more, what we do is decreasing the need for those products. These companies aren’t going to go away and die. They won’t become extinct. What they’ll do is they’ll start serving us better. They’ll start supplying us with products that truly serve us and that we will buy. They’ll morph into something beneficial.

**PG:** Yes.

**DM:** That is a reasonable thing to expect. We can do it. That’s what I’m inspired to do. It’s pretty much where I’m shifting my mission to because ultimately with health, you’ve got to have good food. If you don’t have good food, you cannot be healthy. It’s to me the ultimate decision or endpoint that most people reach in health. They wind up gardening because it’s the conclusion.

That’s my new passion now: to inspire people to start growing their own food. And you’ve got the best system I’ve seen. There’s some finetuning and tweaks with it with the minerals because I think ultimately the wood chips will provide the minerals. But in the beginning phases, there are foliar mineral applications that can be done that would be really magnificently synergized with this process.

Again, I want to thank you from the bottom of my heart for being such a dedicated witness and observer and a diligent student of what God has shown you in how to grow really healthy food, doing it the right way with conserving these typically discarded resources.

**PG:** It’s beautiful. To me, it’s the design. The Creator is wise and He made things easy. I love George Washington Carver’s often comment. He says, “If the solution is simple, God is answering.” I love that. Simple is so convenient.

**DM:** Yes, it is.

**PG:** You won’t get lost there. It’s a very safe place.

**DM:** And it’s typically relatively inexpensive, too.

**PG:** Yeah. It’s very convenient.

**DM:** All right. Well, thanks for all you do. I’m sure we’ll be in touch again because I really want to work with you and help in spreading this message that you have. Thank you so much for creating that Back to Eden film. I think a few million people have seen it. It’s our goal to get it up to tens of millions of people because they need to see and hear this message. It’s a really powerful one. It’s going to be so useful for all of us.

**PG:** I want to thank you so much for all you do. I appreciate you, your heart, and what you’re doing. I just think if more of us do this kind of thing, we can change things for the better.

**DM:** Yeah. I couldn’t agree more. All right. Thanks so much, Paul. I appreciate it.

**PG:** You’re welcome. Have a wonderful day.

**DM:** All right. You, too.