

EPISODE 232

[INTRODUCTION]

[00:00:10] AVH: Welcome everyone to Paleo Magazine Radio. I am your overly enthusiastic host, Ashley Van Houten and before I tell you about today's guest and the way he is quite literally revolutionizing the way that we can grow and produce and eat vegetables, I want to tell you about a couple of cool things that are going on over at Paleo Magazine. You don't even have to skip through those part because I am not selling you anything.

Here it goes. Paleo Mag is now offering giveaways every week, from their website and we'll be posting about it on social media across all channels @paleomagazine and it's stuff like cookbook giveaways, partner giveaways, subscription giveaways, all that good stuff. You don't have to be a subscriber, you don't have to purchase anything to win. You just have to check out paleomagonline.com/giveaways.

You can go there and see what the latest thing is and with just a couple of clicks, you'll be entered to win. Lots of healthy, awesome stuff being given away for free so it's worth checking out the website from time to time to see what's going on there. And, you can now listen to the podcast directly from the website if you want. If you're just sitting at your laptop, working and you want it on the background, maybe while you're cooking, whatever you're doing and you don't feel like using iTunes or Spotify for whatever reason.

You can now visit paleomagonline.com/pmr. Super easy, you don't even have to subscribe, it's just all the episodes there, just sitting, ready for you just like magic. Just a few reasons why you should be visiting our website, paleomagonline.com on the reg. In addition of course to a bunch of online exclusive only articles and recipes that we are putting up every month. Longer form things like talking about what is CBD, what's that CBD thing everyone's talking about, to how to get better sleep and just tons of cool recipes. It's a treasure trove of free information and awesomeness. Get on it. That's that, that's my pitch.

My guest today is Jonathan Partlow. He is the founder of Aggressively Organic which – cool name by the way. He creates at home victory gardens where you can grow your own herbs and

vegetables with less space, less water and basically less work than ever before and these planner units have been developed using a range of scientific disciplines that is frankly way over my head but he can explain it to you.

That help you create your own, basically at home garden, indoors. You can have things like tomatoes, lettuce, basil, there's like some 80 plants that you can choose from. They're making it accessible to people who have never kept a living thing alive or who maybe live in tiny spaces, apartments or condos and I of course fit into both of those criteria, so I was especially interested.

They're really responding to the fact that while our global population is growing, our ability to provide healthy, locally grown vegetables is not keeping pace at all. But with these gardens, they're saying, you'll be able to provide more than enough vegetables for yourself, your family, maybe even your neighbors and your friends in a way that is easy and sustainable and even fun.

It's pretty mind-blowing stuff and Jonathan has convinced me to get a victory garden of my own and give it a try so please stay tuned for that. But yeah, have a listen, be inspired, maybe enjoy a delicious salad while you're learning and we'll make sure we provide you with all the information to reach out to Jonathan directly and learn more about his amazing company and the community that he's creating. I hope you enjoy it.

[INTERVIEW]

[0:03:37.7] AVH: All right Jonathan, welcome to the podcast. Thank you so much for taking the time today.

[0:03:42.4] JP: Absolutely, thank you for having me.

[0:03:44.3] AVH: I love — we were just talking about this offline, but I love that we're doing this on Skype and we're doing it with video, instead of just audio because it's nicer to talk to actual human than a disembodied voice when you can. Also, you get to like physically show me some stuff which is pretty cool, we'll just have to be very descriptive for our listeners.

[0:04:01.9] JP: Right. I love it, it's possibility is always existing conversations and you know, that's why I don't like text. Wish I could talk [inaudible]. I don't get to but I certainly try. Yeah.

[0:04:13.5] AVH: Yeah, cool. All right, first thing's first. Please give our listeners a little bit of background about who you are and what Aggressively Organic is which is a super cool name by the way and I need to know a little bit about that. Yeah, just give us the background first.

[0:04:29.2] JP: Okay. Yeah, my name is Jonathan Partlow, I'm the CEO, founder, inventor of our method processes on micro tint or pods in that method, that sounds real complicated but it's really not. Some of it is taken from – it's a combination of spaces, [inaudible] forward calls it synergy where the end result can't be predicted by the assemblage any of the parts or any sub assembly.

Lots and lots of words but all it means is, in this little box and why it's so dang'd efficient, why we're growing with 16 ounces of water instead of three and a half gallons that it requires in the ground. Why you can do it on your countertop, why we can get nine per square foot is some of its mechanical engineering, some of it is organic chemistry, some of it is biology, some of it is human neuroscience, some of it came from aviation. Some of it came from informatics and data science and by looking into those parts and pieces, none of them really indicate what would happen but when you combine them all together, they create this system that works efficiently.

What we do is we grow, we provide access, so everybody, anywhere can grow on their countertop and know what's on their food. Everything from leafy greens to herbs and spices to tomatoes, eggplant, I've grown trees in these things, obviously they're a little bigger system.

That's the whole thing is we just want to end food insecurity, we want to give access to everybody so we can do it. We're adding 83 million people a year to this planet, this space ship earth and I just saw the numbers yesterday from Bloomberg that only three, I think it's three and a half percent of the ground in the united states is allocated to growing vegetables.

Basically, if you take all of the food, all of the ground, the land allocated in the United States that's dedicated to growing what we eat, it would all fit in Indiana and Illinois or another study I saw followed that it would fit in New Hampshire Vermont and Delaware.

[0:06:29.1] AVH: Is this excluding corn I'm assuming?

[0:06:31.3] JP: Yeah, that's interesting. Our diets, on the flip side of that and here's where – I mean, it's a simple math problem, right? We can get the exact numbers but these are very close, is that 100% of us have to eat, that's a given, 100% of people have to eat but like only like 76% of our diet is actually vegetables, remaining about 24% is meat. You know, meat production.

But, if you look at the land usage in the United States, that's flipped on its head. 76% of the ground that you used for farming which is a very small amount, period. Like 15% of all the ground is used for corn, beans, grains, 15% is used for agricultural ground but of that, like 76 to 78%, some crazy number like that is used to feed meat, not to feed humans. Our diets, 100% of people have to eat, 76% of our diet is plant based but less than like three and a half percent is actually dedicated to growing that where 24% of our stuff is meat based. But we allocate 76% of the ground to feed meat.

[0:07:39.3] AVH: But isn't that necessary in a way because you know, the meat we're eating for example, beef, I mean, a cow is bigger than a head of lettuce and they have to graze and they have to move and they take up space so it wouldn't be like a perfect sort of reflection in terms of like ground space used anyway, right?

[0:07:58.4] JP: Right, it wouldn't seem to be that way but then you look at things like you know, if you're eating meat, buffalo is extremely efficient. You know, one buffalo I think takes – the number I saw was like in 10 to 1. They're just super-efficient. That's a different type of meat if you were to do it that way and they let them graze. But what's really weird is we're adding 83 million people a year to this planet.

When you take the fact that we have those resources and economies of scale, it's really interesting and it creates other problems. On this, I love that you brought that one up. For

example, the USDA last year said that 94% of all of the vegetables, greens, were grown in California and Arizona. 94%. That's a big number, this year, they said 100%. Now, we know that there are some lettuces and greens and herbs growing elsewhere but it's statistically insignificant.

When you think about that from a logistical, sustainability, not like just planet sustainability but we talk about it is just a sustainable for humankind, it's a math problem. If we were both playing a game of Risk and you and I teamed up and we were able to convince our opponent to put all of their food resources and two very small pockets of their land and then those two small pockets also happen to be the ones that one was a desert and the other one was the most susceptible to fires, floods, droughts, earthquakes and natural disasters.

We would win that game of strategy eventually, it's not a short win but it's a long win and we see it play out. For example, if that's true, which it is true per the USDA. In Indiana, I'll give you that because I'm in Indiana. We, per Purdue University, they said that we consume 180 million pounds of lettuce, just lettuce a year. We grow less than 500,000 in the state. Again, let's go back to that game of logistics and strategy and humankind.

This game we're playing, that means that really, to impact and stop that access to food, all we have to do is increase oil prices because all of that food has to be cut and killed, picked, packed, shipped, trucked, put in plastic, refrigerated, put in the warehouse to sit for a couple of weeks and that has consequences too. It means that people that are growing those big, giant commercial farms have to grow produce, not for the quality and not for the nutrients, they have to grow stuff that doesn't look dead after it's been killed three weeks before.

When you breed for higher shelf life, you breed out other characteristics. The consequences just go on and on, it comes down to the last numbers I saw is every head of lettuce, I'm in Indiana. If I go to the store and I get a piece of – I get a head of lettuce or kale or herbs, you know, pay five dollars for a sprig of basil, they say that, USC San Diego, so that over 90% of the nutrients are depleted after the first 24 hours of harvest.

That means you're paying 100%, you're getting 10% of it and then you follow up the back end of that and the stores themselves say that 40% of all food is wasted. If you're paying 100%, 90%

of the nutrient's already gone, you're getting 10% of the nutrients, you bring it home, how many bags of spinach have you thrown away? You're really getting like 4% of what you're paying for.

[0:11:37.1] AVH: Pretty crappy deal when you're talking number here, it's not great.

[0:11:41.0] JP: Right, it's math, I mean, my background is not plants by the way, I didn't start this because my background is plants, my background is data science and informatics.

[0:11:49.8] AVH: That makes a lot of sense.

[0:11:51.4] JP: And mechanical engineering. To me, the problem is a math problem, the fact that my daughter is vegetarian and has been, she's 10. Helped that because that meant that I had to go out and try to find food, right? Straight vegetables. It's interesting because at that point, I really started to look into this data.

I mean, this was seven years ago and I started looking at okay, if everything takes 30.5 gallons of water for every head of lettuce that I'm getting at the store by the time it's packed, processed, shipped, herbicides, pesticides, fungicides and all the poison that sprayed on it and then I saw that the vegetable wash that we all have, if we eat vegetables at all. I mean, there's 1% of the world that doesn't eat any vegetables, ever. The 99% of us that are still on the planet, if we use that vegetable wash, that's the billion dollar a year industry, how crazy is that?

That we spend a billion dollars a year for chemicals to wash off the poisons that we put on our food while it was growing. To be shipped and trucked from wherever. The further east you get from Arizona and California, there's trade deficits, it's a trade deficit, right? 1.8 million pounds versus 500 pounds grown, those get worse and worse. The real solution is always been there but it lies in history and you look at the history of the world, right? And the food. Food has always driven humanity.

The United States exists, not because they were trying to find new ground and call it land, it exist because they were just trying to make their food taste better, right? Columbus was looking for a quicker route to spices and that's how we ended up here in the first place, just to make it better, not even for sustenance.

[0:13:38.2] AVH: Yeah.

[0:13:39.9] JP: When we start to look at how food shapes the world, I do also, I have a background in HCID and computer and action design and what you understand is the designers that all design is political as well. We see that in the United States now with food insecurity and food deserts.

You know, I was one of those people, I also thought that food insecurity was just a new word for hunger but it's not. I had somebody very much smarter than I explain to me and there's actually a real definition, you can stall hunger with Doritos and make somebody not hungry. If you want to be really cool and you want to believe the hype, even solve hunger with organic Doritos and wash it down with an organic Powerade or Gatorade, right? Which I don't think too many of those believe that if you are eating those organic Doritos and chasing it down with an organic Gatorade that you're probably going to meal to live a healthy lifestyle. That would be implied by that.

What we realize is in history, we started out, every time there's been a crisis anywhere in the world, it always comes down to food and water. In 1911, the European - there was World War I and the USDA reached out to us and said hey, can you guys grow some food because all of the people that were tending the farms in Europe have to go to war.

We need food here in the US so we can take our food supply and ship it over to Europe to feed those soldiers during World War I. It repeated world war one faded away, people forgot. World War II happened and World War II was very interesting because they say that the victory gardens of world war two are a huge – they're attributed to actually helping us win that war.

There's never a winner in the war but to win that war. The reason why is they reached out to we, the people, again and said "Hey, we're at war and we don't have enough food supply and Johnny corporations can't do it," sounds familiar, "Will you help, will you grow in your back yard? Will you do victory gardens?" And we did as a population, we grew 46% of the food supply chain in our backyards, in our patios, on our porches in school yards, in parks, everywhere there was

ground, we were growing as a citizenry and had local food available to everybody, and that worked, and it worked and 46%.

They had to deal with outside, with weather and everything else. That's really kind of the motivation for this whole thing is help, we cannot, you know, it started out thinking I could move the needle on food insecurity and then we did our beta one test and our beta one users shaped not just the way that we redesigned our products but shaped our entire economy. They convinced us that we could end, not just move the needle on food security that we can make the needle irrelevant.

We can just end it. They were growing stuff we had never grown, it's the reason that we started out with beta one, we had 11 selections, we've got 81 now to choose from. Seed selections, they grew everywhere.

[0:16:46.2] AVH: Okay, we've already, we've talked a lot of numbers, we've gotten into –

[0:16:49.4] JP: I know.

[0:16:49.8] AVH: Food history, this has been very illuminating already but to bring it back to – I think this is a good place to segue into the next question, bring it back to like an ancestral paleo, sort of perspective which obviously our listeners are into. You know, we like to buy things close to home, we like to buy local, we like to not think about paying all of this money to have food shipped from across the world that you know, the quality is terrible by the time it gets to us but from a practical perspective, to tell somebody, well just, you can make all the food that you need to eat to a lot of people, especially those of us living in urban areas and you know, downtown and stuff.

We immediately are going to shut that down because, "I'm like look, I live in a condo, I'm not going to make all of my own vegetables, that's ridiculous, that's impossible." But what you're showing is that that's not impossible. I'd love for you to kind of really, like dig down into the specifics here of how your products works, how much space they take up, how much work they take, what the actual sort of science is behind how they grow. And why it's now possible for

someone like me who has never kept a plant alive and lives in 800 square feet can have a garden and have vegetables that is more than enough that I need to be healthy.

[0:18:06.1] JP: Right, I love that. I'm glad you brought that up. It is – it's a change, right? It's something that our grandparents got, it's something that our parents got. I think maybe – I'm 49 and my parents, my father was probably that last generation that really had, they dabbled in a garden, right? But before that, everyone else had a garden and it had to be local because the advent of the supermarket, it's a fairly new intervention.

Our systems, they're designed as a hexagon and we did that for multiple reasons. One reason is because we can get nine of them and that's actually 8,75 of them per square foot if we want to get numbers but nine per square foot. We can grow nine of them in one square foot horizontal which is very cool. If they're placed that way, we, I approach this, instead of trying to genetically modify plants to grow where they don't grow or genetically modify plants so they're resistant to herbicides and pesticides because you don't need herbicides in your house. I looked at what plants do and they've been doing.

What we do, you know, just natural, what do we naturally do? What do plants naturally do? What I did was I started with that, how do we design a system that works with the plant's natural biological intelligence? It's that simple. That's the core underlying science, what that means is, what do we have to do so if humans don't have to intervene?

Which is hard for us, it's insane for us because we always feel like we have to do something.

[0:19:35.4] AVH: We love intervening.

[0:19:37.3] JP: We do and that's the biggest challenge. I love that you said like first of all, we're just going to dismiss it because we won't believe that we can grow our own food on our countertop, we just don't. The second is, once it's there, it's fun. I mean, it really is, you start to see this thing grow and it's like, they become their babies, one of the hardest things that we learned from beta one is people like, now I don't want to eat it because I've grown it. You know. It's their baby.

But actually, there is some intervention that helps, we talked about the maintenance. You can put nine per square foot, all plants require light, they require love and they require air. Really, they require the CO2 from the air. The light, we provide, we include in aggressively efficient grow light. It's basically one square foot, 12 inches by 12 inches, it's super flat and the reason that it's super thin and I'm showing you this, it's less than an eighth of an inch thick and why it's this big is because it is the exact same depth or less than every standard upward cabinet in the world.

You can choose I take this and slap it underneath your kitchen upper cabinet or on a book case shelf which also is the same depth. You can two side tape it and stick it there and you don't even see the light and you can fit nine systems underneath this light.

[0:20:56.9] AVH: Okay, quick question for you. I'm going to have to send you pictures after this of my condo because I fully plan on setting up an Aggressively Organic indoor garden in my condo but I have – I'm very lucky, I have like floor to ceiling windows, west facing the sun comes in, it's like a literally a natural green house in my condo, all day every day. Would I need those extra lights? Would I – or can you do without them or I guess it's just more work because then I have to make sure that they're placed in the sunlight and that kind of thing.

[0:21:24.8] JP: That's a great question. What we learned from beta one, we had 10,000, over 10,000 of these systems out there. Think of all plants need light, love and air, the love part, I'll talk about that and then we'll talk about the light because the light is really the discussion, the variable. Love part means water and nutrients and we give you the nutrients to mix with the water, you know, some kindness, plants dig kindness and they also, as an optional dig, sitar music and slow jazz, that's optional love but –

[0:21:53.0] AVH: Any other because I'm not really into either of those. What about like some really positive upbeat, like Drake rap? How's that?

[0:22:00.0] JP: I don't know, I haven't tested –

[0:22:03.0] AVH: I'll try it.

[0:22:04.1] JP: What would be interesting to do would be to like put some which is Drake rap and put some with nothing and put some with sitar music. We have all kinds of – we have 46,000 square foot of growing facility here. I'll test some Drake rap for you.

[0:22:19.9] AVH: I don't want to go like off on a tangent here, but I thought I read some article about it was like a university students were doing this where they like said nice things to a plant and then they like said mean things to another plant and the one they said nice things to, grew better, is that for real?

[0:22:35.4] JP: There are all kinds of studies on that. There's studies and again, they want to go up on a tangent but understand, we're working with biological intelligence, right? Even that concept is hard for people to understand but the studies that we saw from, it was from Iowa and University of Illinois with marigolds, this is why I say that sitar music and they played sitar music to marigolds, they bloomed, they did the case study, right?

They did some with, I think it was like punk Sid Vicious, old-school punk. They did some with nothing and then they did some with the sitar music and slow jazz. The marigolds bloomed faster, they bloomed bigger and they held their flowers longer than the control group and then the other ones just died.

[0:23:18.5] AVH: Not punk fans? See, that's too bad, I'm going to have – that might be a bit tough for me in my condo because I don't think I'm listening to a lot of smooth jazz but maybe I'll have to expand my horizons, I guess.

[0:23:29.9] JP: Just do it for the plants, right? Anyhow. There are all kinds of studies on that. They're also, there's a lot of – on that, a horticultural therapy is a huge thing that's used for PTSD. Just having plants in your life lets you build that relationship and you do talk kind to them probably because a plant's not really going to do anything to make you mad but anyhow. That's the love part and then they air, the CO₂, we have plenty of CO₂.

Just saw the latest study is that plants, they predict by 2050, plants will have less nutrients because the amount of CO₂. And the reason that is, is CO₂, the more CO₂, the faster the plant grows but it doesn't grow - it grows faster but it has less nutrient density. Now let's go to the light

question. Yes, you can use sunlight, as a matter of fact, plants have been doing this for billions of years, right? Whatever number you want to set as the starting point.

Of course you can use sunlight. Our light spectrum and our lights are actually designed, we've spent a lot of time designing them and they mirror sunlight. The difference is this. In Indiana, on a test group, we grew some of systems with the light, with our light. Some in a greenhouse and the summer. The difference was is we were able to start off -to have lettuce a head of lettuce or kale to full market weight in 40 days, using our light.

It was that roughly what? 40 divided by seven is six weeks or four weeks, it's the 28th. It take eight to 10 weeks in a greenhouse in the summer, using sunlight only and then in the winter it can take 10 to 12 weeks. That matters a lot when you're trying to provide your own, right? It's just efficiency. The reason why is you can control with the light. My answer to you would be, I can see your windows.

Yeah, I would grow stuff on there and there's some stuff that's going to grow better and easier, right? I mean, herbs and lettuces at certain times of the year but I would also ask that you try some with the light as a comparison. We actually make that easy. Our victory gardens have nine systems is what's in the victory garden.

We actually send three extra for you to go rogue. We want you to plant something that you didn't get the seeds from us, this is how we got 81 selections, our beta users, we're growing like heirloom onions that were their great grandmas and she's like, I was growing these in the winter and I never get those, right? That's awesome. She doesn't have enough of those heirloom seeds but we know we can do it now.

So we'll send you extra so you can try them in a one day all if you have that. We want you to go rogue and test and share it because that's how we learn because it is about a community. This is not about us as a company. It is about us as a community and coming together as a people. The only way, I go back to that history of food thing, the only way that we can solve the problems that we have is for everybody to be growing local.

What is fascinating is at the very beginning you are going to have little tiny plants, right? They are not going to be huge. Your tomato may not be producing tomatoes for 60 days or 70 days but at some point, they hit their stride if you will. So we'll harvest off of lettuce for three months, we'll harvest off on a kale plant for well in perpetuity really, we'll show you ways to maximize that. So I guess to get back to your granular question, there's nine in the system.

There's a light over it, it is very sustainable when you grow it. We grow it in 16, it really only takes about 16 and a half ounces of water and so three and a half gallons. We actually send tall versions which are half gallon of water. That doesn't have any impact on how big the plate it is or any of that. It just simply means you have to add water and nutrients less often. That's why we send the big ones because again, if you want to leave for a week or 10 days, do that and don't worry about it.

[0:27:23.5] AVH: Okay that makes me feel better as someone who travels a lot and use that as an excuse that I can't grow anything. What are the nutrients that you provide? You said you provide them but isn't it also true that these systems don't require any soil it's just water?

[0:27:37.0] JP: Yeah, so actually we grow them in Coco Coir which is a waste byproduct of coconut water, coconut milk industry. It is what they throw away, the husk. It is a 100%, whatever ICO certified organic, [inaudible] listed organic but that really matters not to me. Everything that organic simply means bonded with carbon, that's all it means. That's all it's ever meant so it is impossible to grow plant that is not organic. All plants are organic, they're all bonded with carbon.

But the Coco Coir is what you plant the seed in. It is a very small disk, it's dry, you put it in water and it expands. You put the seed on top, you let it germinate. You put the light over it, we'll give you a little germination tray and you put the light over to germinate them about nine to 14 days, you put it in the system. In that system is a liner and you fill that with the water and the nutrient solution we provide. Now plants require 17 nutrients to be balanced for them to have everything they need.

And that is also part of the magic. We give them everything they need right in that one little container so they don't have to grow giant roots. They have everything they need. I mean if you

can imagine your entire life, where sitting on your couch and somebody coming and getting you bonbons and grapes and even changing the TV or whatever, working out for you but you don't have to spend a lot of energy, right? And that's why our plants grow so big.

They don't have to fight, they don't have to expend any energy looking for stuff. Our nutrients are the macronutrients, the KPN, the nitrogen, the potassium, the phosphate are all - that is what you'll see in every fertilizer has that, the KPN. That is what everybody looks at but we actually include the micronutrients too and that's the stuff in the magic of plants like the copper, the zinc, the Molybdenum and that, the way that we provide it exists exactly the same way it does in nature.

It exists in the soil in the form of mineral salts and our's are so pure that they are actually water soluble and I know that may or may not mean a lot to people but they are more pure than an organic nutrient solution or not even you can do it in organic nutrient solution. They're an organic fertilizer, it means something had to die because it was bonded with carbon. You put it in a compost heap, it breaks it down into those nutrients again and then you take and you put that and the plant has to find it and take it out.

It exists the same way. So we just mix it with water, naturally sourced. You put it in there and it gives the plant everything it needs and then I'll show you even though they can't see it on there but you can see it on our site. Each one of these has a little door that you can open up. This is why it works so well for kids and school programs are using it for STEM. You can see where the water level is and you can see the roots, there's the root. I don't know –

[0:30:25.9] AVH: Yep.

[0:30:26.9] JP: There's plenty of photos on our stuff. But then when it gets to here, I say a finger, you just fill it up to this halfway point and walk away. That's really the intervention except for harvesting. So like the lettuce and the kale and the reason why we are able to do that is sustainable harvesting. So the sustainable growing, we use less water, we use less energy, that's the sustainable growing but the back side of that is where it really matters.

That is the sustainable harvesting side. So lettuces, kales we harvest up to 80% of the head of lettuce and then you just let it continue to grow. So the science behind that is each leaf on a lettuce plant or a kale or whatever that you are harvesting the green or the herbs, think of it as it's a solar panel and the plant season as a solar panel and its collecting energy and all of these plants want to do is make babies is what they want to do.

So they need X amount of energy to make those babies. Once they get that energy they're kind of in balance and they're like, "Okay I've got everything I need," you cut off the lettuce or you cut off your basil leaves. By the way, citrus basil I highly recommend it's amazing. Arugula, you cut those leaves off and now what you've done is you remove the solar panel from the plant and the plant is like, "Oh no I need more energy," so it will give you two or three or four in return because it is trying to make more energy.

So the biggest part about the intervention with our stuff is harvesting. That is where you really start to see some magic happen because if you have two victory gardens for one person, at about that 65 day mark you're going to have more food than you can eat. You won't be able to keep up.

[0:32:04.4] AVH: I take that as a personal challenge.

[0:32:07.0] JP: Do, do because I haven't announced it. I mean I will announce it right here. Part of the thing is so we are going to start shipping these things here in the next four weeks but when that happens, I am not a vegetarian but I am going to transition to just eating off of victory gardens. I've got a plant with everyone that's the victory garden growers when they get them and I am going to transition to just eating off of victory gardens, that I've grown here in the office.

But what's interesting with that is at the best example is we had a 130 kids grow this as their STEM project and that is cool. The teacher had planted the garden outside, sunshine, the weather came in, killed it. She said all the kids learned was the food comes from a store, they can't do it themselves, which is what I think what we all learned right? We all have black thumbs and then she reached out and said, "I will forever be the teacher," she's a kindergarten teacher.

“I will forever be the teacher that teaches this kids that food doesn’t come from the store and they can do it themselves.” So they had a 130 of these kids. Several teachers got together, they grew them for their STEM project, planted them, germinated them, grew them, we watched the teacher say, “Hey you guys want some of this,” and they flocked like when you threw a candy out of the parade, they attack these plants. First of all that is mind blowing to see five year olds feeding frenzy over vegetables. It is an interesting dynamic but they then took those, we took them to a food bank.

That food bank harvested off of that lettuce for 10 weeks and they brought kids in from other schools to do it, to give to the people. So that is inspired by kindergarteners. It’s really cool because that is cool for us, that’s the whole reason that we grow, we plant, germinated and maintain one for a local food bank for every victory garden that’s bought. It was inspired by kindergarteners.

These are five year olds and they changed the world. They did it immediately with the food bank in a local community, three months’ worth of greens that were fresh and local, harvested the day that people got them by other kids and other schools but they changed our world. I mean our company now that is part of something we do because of them. Yeah so anybody can grow them. I know I am off on all kinds of tangents.

[0:34:18.1] AVH: That’s okay. I have another question though about harvesting. So say I’ve got my victory garden and I have lettuce and herbs and things like that and I have gotten it to the point where I am doing my first harvest and I am taking all of these vegetables and it’s great, how long can I expect to continue to benefit from my original victory garden? At some point is it going to deteriorate? At some point am I going to have to move it into new homes? How long can I keep feeding off this original garden?

[0:34:49.0] JP: So it depends on the plant, obviously. Some will - so lettuce, lettuce I would say you are going to tap out in about three months right? That one head of lettuce you’re going to done in about three months not because the lettuce won’t continue to grow but at some point, it really will get very – start to grow up and tall and truly like a Charlie Brown Christmas tree because it will just eventually try to make babies and make seeds.

So we teach people and show you how to do it. So depending on – we've got some great photos but I had 12 which would have been like basically what we're sending in a kit of just lettuce and I harvest – well there is a photo but I harvested three, you know what? I don't even know how cork size, I have to have somebody smarter than me but the big giant salad bowls, I harvested three of those, there is still enough lettuce on all 12 of those plants to do that at least twice. But within a week, they were giving that again.

And it is not the old bitter crappy lettuce leaves. I mean we know when you go buy baby greens, they're more expensive. Whole Foods average price right now is \$3.49 and that's fairly inexpensive. In Florida it's 5 bucks for a baby head of lettuce because they are young and sweet.

So lettuce for three months but basil, basil we have basil now that we've planted as early as June of last year still growing and still wonderful. And that actually is a very woody stem so it has become a basil tree. This tomato that I just had in front of me is over a year old now and it's determinant when we talk about determinant tomato plants, we expect that they give all their stuff at one time. So we planted that, let's say that was in August that's a late plant. We harvested it through the winter, we harvested through March. We have some photos that that plant was actually at an event.

So we've harvested it for maybe three or four months. It gave it all at once, these little cherry tomatoes which are like candy. If you pick them as soon as they're red, the same thing with we were talking about the leaves, the plant wants to give more. If you let them just sit on that thing and they stay red the other plants like, "Oh I made enough babies" but if you pick them – so we coach everyone through each of those plants that –

[0:36:54.8] AVH: Okay, I have a couple more logistics questions here just because yeah, I don't want to keep you too long but I have lots of questions. Okay, so this company obviously is very new. You said you haven't even actually started like selling them or shipping them out yet. That is going to happen in the next few weeks' right?

[0:37:10.1] JP: So we did our beta one of August of last year. So we had about roll over about 10,000 of them for beta one. We sold for a 100 days and stopped. And then we spent from

November 15th until June 8th of this year just learning and working with our beta users. In that time, we iterated, we made some changes, we did go to South by Southwest and won People's Choice Awards and all kinds of fun stuff there but we started doing pre-sales on June 8th.

We are still doing pre-sales, current orders will be shipping in four to six weeks and we do that because we know people will plant and they will have it and they will actually have a harvest by Thanksgiving. If you have a victory garden these days, first of all try to find sage on Thanksgiving Day. Our sage grows amazing. Your house will smell like a Grateful Dead show but –

[0:38:04.6] AVH: So practical, so good. Okay so when people are ordering from you, are there different kits or if you order a garden it comes with the same amount of the different plants or can you say I want these three or four plants or how does that work?

[0:38:21.6] JP: Right, so when they order victory garden, you get the light, you get the nine pods. We actually throw in three more. We are throwing in a lot of different bonuses like we have early access. So we have a hemp plastic version that is going to be launched here in the next month. So instead of the corrugated, it is even more durable, call it the Kardashian/Jerry Garcia version, so hemp plastic right? You know mix those two worlds.

But yeah, so they get the nine systems, 27 refills. So we ship enough that you can do three harvest off of each one even though you don't have to. For example, you plant a basil, you won't have to replant that system. You just have to water and nutrients for a year or more but you can then have additional. So you can choose nine types of plants with that victory garden. Nine different types, we give you plenty of seeds, plenty of refills as far as the Coco Coir disks and plenty of nutrient solution.

That you should be able to harvest off of that one for six months easily. We make sure, for us it is a carbon footprint issue. I know that the business model says, "Hey we should sell less and have people keep coming back sooner but you know what? I would rather have people buy another one and grow more and there may even be more in the kit than that. We look every day at how much can we fit in this one box because carbon footprint wise, it takes as much for me to ship one as it takes the ship nine, that's why we are at nine.

Because we know that these plants actually pull CO₂ out of the air. At some point, your victory garden will be carbon negative, not carbon neutral. It will have pulled more CO₂ out of the air than it took to manufacture it, ship it and the electricity used to grow it which by the way, these lights are 40 watt LED lights and they are comparable to \$900 grow lights that use 400 watts. They are amazing and we designed the lights even if you just kick the lights on and don't even grow a plant, you are going to be healthier.

Because we mirror the sun so we worked with neuroscientists to make sure that it wasn't just good for the plant, it is good for the human, because you will see grow lights all over there and they have this red and blue spectrums so much so that they have it in greenhouses that grow indoors. These people have to wear special sunglasses so it doesn't screw with their eyes or in the house if you have a red and blue light especially the blue light it will hurt your eyes.

So that is what you get and then right now we have free refills. What we are saying is a 45 pack refill that actually is two 30 packs that we just give you that and the code for that is victory. So if you order this and you add both the victory garden and the victory garden, what we're calling the 45 pack refill, you actually will get two 30 packs shipped later of refills, so you can select more seeds so you always get the freshest seeds. Add both of those and then add victory. One, if you are ordering one victory garden and one refill pack, victory two if it's two victory gardens and two refill packs.

So you can choose strawberries. Strawberries are a big favorite. They take a long time to grow and start producing strawberries but once they do, they're ever bearing. So strawberries on your countertop is cool especially in the winter, right?

[0:41:32.9] AVH: It's very cool and so you also talked a lot about how you are going to support people and walk people through and explain. For those of us who are very eager and are very interested but have absolutely no experience with this how does that work? Are all the resources available on the website? Do you send along some kind of brochure or something that explains like the steps of how to do everything? How does that work?

[0:41:53.9] JP: So we'll have a private group for our people for our growers. Everything will be available on the website. We are a small company, there is five of us right now that are really full time. We have an amazing support group of 36 and volunteers of people that have grown in schools. There are food banks that are like, "We just want this to be out in the world," right? But we are shooting videos. We have 81 plants. Our goal is to shoot 81 videos on each plant from start to finish and walk people through each one.

So we are building that library but we'll also have live Q&As. Very much like you and I are having now but it will be video webinars. Ask us questions, you're also welcome to come and visit us in Fishers, Indiana. We will be doing visits in – if I can get this Volkswagen van done, we'll be doing the US tour. So we will gladly stop off and visit people. Our guarantee by the way just to get rid of the whole "I can't do it. I have a black thumb."

Our guarantee is a no BS guarantee. It is an aggressive guarantee if you will. You can grow these. If you can't grow them, we will jump online with you individually. I have a chief science officer, plant physiologist that will walk you through and we will help you grow. And that maybe a webinar because we want to share it with everybody. If that doesn't work, we will reach out to one of the victory garden growers in your area and pay them for one of their systems to bring and deliver to you something that is growing and take your's away.

If that doesn't work and we are close enough one of us will personally come and deliver whatever you could not grow and if that doesn't work, we'll give you your money back too because the idea – it's just no BS. We're glad to do it because we want you to grow because once you have experienced it yourself, there is a freedom. We have people growing these things in RVs and boats. Tents so this Volkswagen van is going to be set up with solar so we can grow it in a Volkswagen van as we are traveling around.

Eating off of that across the US. The Volkswagen van is about the same ties as a Volkswagen Rabbit but it's –

[0:43:50.1] AVH: This is very, very cool. I mean listen I feel like we could go for another 45 minutes to an hour just on the science but I think what we should do, will stop it now and what I would like to do is maybe have you back on and this is an aggressive promise on my point, on

my side but I want to try this. I want to try it and prove that if it can be done by somebody who doesn't know what they're doing and maybe once I have it underway and I am making beautiful delicious plants at my home we can have you back on and talk about it.

And talk about it a little bit more from the perspective of somebody who's personally experienced it at that point. I think that what you're doing really, people say this all the time about their own companies that they're unique and that they're innovative and that they care about people and they are doing things differently but just from talking to you today I mean you guys are really doing things differently like how personal, the personal connection. The human connection, the lengths you are willing to go to, to make people feel empowered and they can do this is really incredible.

So I really appreciate you doing what you're doing and also taking the time to get that information out there because I think what you're doing is super important, so thank you for that.

[0:45:00.8] JP: You almost made me cry. I promised I wouldn't cry. You almost Barbara Walter-ed me and made me sob.

[0:45:04.7] AVH: I'll keep going if you want.

[0:45:06.8] JP: Okay, so we don't even outsource support. If you are on support, you're talking to me or you are talking to my chief science officer, our head of support is a pre-med background in biology and chemistry and has a law degree and manages our support. I mean you are talking to one of us that's actually have grown it and done it because it is personal. It does matter. I appreciate that you recognize that but I would love to have you on as well.

So when you get your stuff maybe you can do it and you can be part of the videos on our website and be like, "You got your stuff," this is crappy thing to say but my wife gets it and she laughs because it's true. Her big thing was if you can't design it so I can grow it, she is a serial plant murderer, so actually she wants to be in charge of the swag if you will. Our shirts by the way that we have coming out are on our site are 100% recycled PET bottles made in the USA by a disabled workers, hemp and bamboo.

I mean every dollar we spend goes for good but she actually wants to come out with a serial plant murderer shirt with a reformed stamped across it because she grows this stuff because she's just –

[0:46:15.2] AVH: I will definitely wear that shirt. That is a fantastic idea. Okay before we go can you remind folks where they can go now to learn more, check you guys out online if you have any kind of social media where people can go and connect with you guys?

[0:46:29.8] JP: Absolutely, so our website is crap guys. I am telling you because we launched it on June 8th and thought we're going to have time to revamp it and really since then, we just have been so busy because we don't outsource support we are sleeping in two hour shifts in the office by the way. Just our response time is like 17 minutes 24 hours a day which is pretty good, not good enough but pretty good but yeah, you can go to aggressivelyorganic.com.

But when you click that it's going to say, "Hey go to the shop," and it is going to look like some kind of crazy loop because the header on both pages is the same. It is going to take you to offers.aggressivelyorganically.com. If you do, make sure you use the coupon. It's victory and then just a number of whatever combination. You have to have both to your cart, the 45 pack refill and the victory garden but it will make the victory garden free or the refills free.

[0:47:21.9] AVH: And is that the best way to reach out to you guys or is there a social media or an email or wherever that we can reach you out?

[0:47:29.2] JP: Absolutely. So if you jump on the site, you will see a little box on the side which means you're talking to one of us. There is also our Facebook page, come join us on there. We have a lot of conversations on there. On Instagram, Aggressively Organic. Twitter my personal is @HCIDME but there's one that is Aggressively Org so hit us up on any of the social media, that's great. But if you just want to talk to us, there is a little box in the bottom right hand corner that you are talking to one of the five of us.

But yeah, I can't wait for you to get your's and especially the listeners to get those because that's what it takes. Because once you do it and people come to your house and they see these little hexagons on your counter and they try it. The example that I give is make sure you get

arugula and citrus basil. If you've ever had one of those arugula salads that's 10 bucks at I am going to say at the supermarket, man it's like a whole box of arugula, Rocket arugula and has very little flavor.

What we do with ours is we take one arugula leaf and cut it up into little pieces and put it in a salad and I promise you it will have more flavor than that entire box of arugula. It's mind blowing.

[0:48:33.0] AVH: I believe you. All right John but thank you so much for taking the time. Thank you for doing your part to change the world and this has been part one but we'll do this again. We'll do part two and see how much more information we can get out of you but thank you for your time. I appreciate it.

[0:48:49.1] JP: I love it, thank you and thank you guys for listening. I know I go on, so if you know me, you'll realize that shorter than normal.

[0:48:56.1] AVH: We're all about it in this podcast. All right, enjoy the rest of your day.

[0:48:59.4] JP: You too thanks.

[0:49:00.4] AVH: All right.

[END OF INTERVIEW]

[0:49:05.3] AVH: All right everybody that's it for Paleo Magazine Radio this week. If you have any more questions about Aggressively Organic, feel free to reach out to Jonathan. He seems like he's pretty on the ball with customer service or send us a note on social media at Paleo Magazine so we can start a conversation about it. I think this is really like I said, revolutionary stuff and I know I am very personally excited to see if I can actually grow something that I can then eat. I mean to some people that's normal. I would be super proud of I can pull that off. So here's hoping.

I'll keep you posted on how that goes but in the meantime, join me next week. I am talking to the founder of Perfect Keto about all of his incredibly fast growing and popular keto supplements. His podcast, as well as his pension for interesting self-experiments like really long fasts and the carnivore diet and all that crazy stuff. He's just basically an interesting dude and he's got lots to say.

So it will be a good chat but until then, I hope you have a great week and I hope you join me next week.

[OUTRO]

[1:22:32.8] AV: Paleo Magazine Radio is brought to you by the Paleo Media Group and is produced by We Edit Podcasts. Our show music features the song *Light It Up*, by Morgan Heritage and Jo Mersa Marley, and on behalf of everyone at Paleo Magazine, thank you for listening.

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