Upgrade Spotlight: Cook Faster, Easier & Better With Light – Brava – #964

Dave Asprey:

You are listening to the Human Upgrade with Dave Asprey. Today is a special spotlight edition where we talk about something you probably haven't heard about, usually some kind of new tech or new something. And we're going to talk about a new way of cooking and it's cooking with light. And the idea here is you're going to learn how to save yourself time, perform better, or just do something better than you did before. And I'm shockingly impressed to put it real bluntly with what I'm seeing from cooking with light and a bunch of other cool tech.

Dave:

So, that's why I've asked the head executive from Brava, whose name is Travis Rhea to join us and talk about what cooking with light is this the next microwave? The answer is no, it's way better than microwave. He's got a degree in culinary arts from California Culinary Academy and he is a professional chef and he led the culinary team who developed this Pure Light Technology for cooking. So, this is a real chef who developed this really high tech digitally controlled, like as a fellow food hacker, I'm having a blast with my Brava. So, I wanted to talk with them about it. Travis, welcome.

Travis Rea:

Thanks for having me Dave. It's a pleasure to be here.

Dave:

All right. You're a chef. You've got like a white chef shirt and you probably have a chef hat somewhere in a drawer there that you're not wearing because it would look funny with headphones. But you're a well-trained chef. I have a fully disclosed fetish for molecular gastronomy or the idea of applying laboratory grade techniques to cooking, so that you can make food do very precise things. The former CTO of Microsoft popularize this almost 20 years ago, his name is Nathan Myhrvold. So, I've had laboratory grade temperature controllers and stuff in my kitchen and some of my own cookbook is based on precise temperature control, looking at how do I change the temperature of food, so that I feel amazing when I eat it and it tastes good instead of just taste good. So, you had all those tools available to you already before you went out to create a technology of cooking with light. It almost seems like we didn't need that. Why did you take your professional chef thing and go in this direction?

Travis:

It's funny, when I first heard about Brava back in 2017, it came to me from a friend of a friend who introduced me to the CEO of Brava. And what I had heard was that they have developed this technology that was cooking with light that could cook a steak in five minutes flat and it sounded way too good to be true.

Travis:

And what I had heard was that they had developed this technology that was cooking with light that could cook a steak in five minutes flat and it sounded way too good to be true. I mean, I live out in Silicon Valley and I think we've seen a lot of products out here that may be great products, but people don't necessarily need. And that's what I first thought about Brava because coming from a professional cooking background, I know how to cook, and really for me to cook good food at home, I just need a pan and a knife and some fire and I'm pretty good to go. And I couldn't wrap my head around this idea of

cooking with lamps. I kept thinking like that's what the Easy Bake Oven does and that thing's not very advanced.

Dave:

And wouldn't it ruin the food anyway. And that would be my thought, right? Like microwaving a steak, like who would ever do that, right? But there's no microwaves in this.

Travis:

Yeah. And they were telling me it could sear a stake. And I said, "No, it's impossible. You can't put a steak in a box and have it come out perfectly seared in minutes." These things don't add up to me. So, I went and checked it out. And at the time the company was in a house in the East Bay about 20 people all in standing desks. And when I walked through the house, they were building the prototypes in the garage with welding masks. And I thought, okay, that's kind of cool. But I still didn't believe it was going to work. And they cooked me a salmon and they cooked me a steak with potatoes and a steak and potatoes cooking at the same time too and we'll talk a little bit more about that later. But when they cooked the steak, it was done in about five minutes.

Travis:

And I could not believe my eyes with what I was seeing because it came out perfectly seared. There was no interaction required. All the person who cooked it had to do was season the steak with salt, put it on the tray with a little bit of butter, and push a button. And it came out perfectly seared and cooked to the perfect temp faster than I've ever seen a steak be cooked before. And so, I knew that they were onto something special here. And that was just the very early beginning days of Brava, right? When they were proving that the technology could work. And so, I wanted to be a part of the company and I was coming at it from the culinary angle. I joined Brava to help build the culinary team and learn how to cook with light. Had I known I think what we were getting into in the beginning, I probably would've run away because it sounded too complex once I got involved in it.

Travis:

But what was really amazing was the technology part of this. And that's really what's behind Brava is the Pure Light Technology that we developed and optimized. And what that really means is that we're cooking with infrared invisible light. But where I was talking about the Easy Bake Oven before, if you think of the Easy Bake Oven and cooking with light, it does. But the Easy Bake Oven I would equate to a golf cart and Brava is more like a Tesla in that it gets better over time. It's connected to the internet and we push new recipes to it every week. And we can also add new cooking functions to it over time. So, we've added functions like air fry or dehydrate or even rice cook to people when they first bought Brava, they didn't have those functions on there at all. So, it's a product that gets better with time, but back to the lamp technology, that's where the magic really happens and it allows us to do a couple of things.

Travis:

One, it allows us to cook really, really fast, two to four times faster than any other conventional oven. Another thing that allows us to do is do multi-zone cooking because Brava is powered by six lamps. These are lamps that were originally designed to anneal, which is to remove the particles from melting metal and this was for silicon wafers, so. Yeah. So, Brava's lamps are actually designed to be able to melt metal in five seconds. So, the key difference here between Brava and a regular oven or other cooking technology, I'll start with the other cooking technology. Regular ovens have not had much advancement

in decades. They all use heater coil technology, which is perfectly fine for cooking but it is not very precise and it's slow to heat up and slow to turn off.

Travis:

When we cook with Brava, we have six essentially spotlights, three of them on top and three of them on bottom. And those spotlights are instant on off. And the true power of that is because they can go up to full power instantly, but they shut off just as quickly. And so, the real trick to cooking so quickly is that we're able to bring the surface temperature of foods up very fast to start developing Maillard, the browning reaction in the 300s. Right when that starts though, we back off and move the lamp to a different section or we use a different lamp and hit a different section of the tray. And by pulsing those lights in increments, that is what actually accelerates the rate of thermal transfer through the food in a way that you cannot do in a regular oven or even on a stove top because we're hitting it with really powerful energy.

Travis:

It's actually 80 times the power of the sun. And really, if you think about Brava's lamps, what we're doing is concentrating the energy from those lamps and using optics like mirrors to bounce and reflect it around the oven chamber, and concentrating that light of the sun. If you think about like we can set a piece of paper on fire very quickly in Brava. And to illustrate this point, if you think about sticking a piece of paper out in the bright sun at noon, the hottest day you can imagine, it's not going to catch on fire. If you put that sunlight through a magnifying glass, you can start a fire pretty quickly. And even though we're not using magnifying glasses, we're using mirrors to concentrate that energy from those lamps, energy that's powerful enough to melt metal but delivering it onto food and doing it in a very precise and choreographed way.

Travis:

That's what the chefs at Brava do is choreograph each lamp. So, if we were to open the oven door in Brava, what you would see is kind of like a disco party light show going on there. We're usually only running one lamp at a time, but we're bringing surface temperatures up and then backing off and moving to a different section of the tray and synchronizing this whole thing, so that you can actually cook steak and potatoes and asparagus all at the same time and have it all come out together at the same time.

Dave:

How does the oven know like where the asparagus is versus where the steak is? Because the way it works, it kind of has the form factor of hermetically sealed toaster oven. And it's way better than air fryer, although it can air fry. It's not really from the same planet, but for someone who's never seen it, by the way, it's over my shoulder. I keep it next to my espresso machine now. But so, how does it know? Like there's a metal tray or a glass tray, I put it in there, and I can put veggies and meat and I can run a bunch of different programs, but I am the hacker. So, I'm like I'll just make my own, I want this temperature for this amount of time. Is this an AI vision thing? Because there's a camera and it's the coolest thing, you just look at the camera and you can watch the food brown right in front of you without opening the door. But what tells it that this is cabbage versus toast?

Travis:

So, Brava is we like to say it's as easy as 1, 2, 3. All you have to do is select what you want to cook, load the tray, and press the button, and then watch a cook on the cam. It knows what you're cooking because you've told it what you want to cook. So, let's say that you want to cook chicken legs and sweet potatoes and broccoli, you type those three things in there. We have over 7,000 combinations of ingredients and that's a growing list by the way. When we launched Brava, it was I think 200 recipe programs. Through AI and a few other developments over the years, we exponentially increased the number of combinations that we could do because we learned how ingredients perform under the lamps. So, it's not using the camera to visually recognize the specific food, though that is a possibility in the future. We may in the future have the ability to do browning detection via the camera and other things. But right now, you're telling Brava what you want to cook and it's simply telling you, here's where we want you to place it on the tray.

Dave:

Okay. And that's why it says, "Place it in the middle rack." But if it was steak and potatoes on the same rack, it's going to say, "Place the steak on the left."

Travis:

Yes.

Dave:

Got it.

Travis:

Yes.

Dave:

And I will admit that I have used fewer of the recipes. They're all loaded in there. And for listeners, I don't really think I need a Bluetooth toaster to be perfectly honest. In fact, I think it's probably the biggest waste of Bluetooth radios on the planet for something like that. So, this it connects via WIFI, and I wish you guys had an ethernet port because I really don't like WIFI it's turned off most of the time at my house. But it operates just fine, you can download the recipes and you don't have to have it connected. So, you can just disable the WIFI radio when you don't want to have it on, but you can download a ton of recipes and it has a bunch stored on it. So, I feel like it makes good use of the internet, but it doesn't have to have the internet working if you have the app and all that stuff, like it's better I think. But for me, I just go to the interface, which is a color interface.

Dave:

It has a camera on the inside and I tell it what I want to cook, and it tells me what to do. I put it in there and it comes out really good in way less time. And I only bring stuff on that I use than I like. It took me four months after you guys sent me one to be like, oh God, I got to plug in this fricking toaster oven. This is just like full honesty. How much better could it be? And oh, maybe a month ago I finally said "My countertop stove thing broke. I'm just going to try it." And I'm like, What have I been missing? It's so much better than anything I've cooked with. Even with recipe development things, which I haven't done much of lately, but that's what I do. I'm blown away because I can say exactly this temperature and I can make my own recipes and all that. What's your marketer? Is this professional chefs, home snobs, or is

this something that's meant to you don't need an oven if you have this, if you're in a small apartment. What's the point of the whole thing?

Travis:

That's a great question. And thank you for sharing that experience because yours pretty much mirrors mine. In fact, when I told you when I heard about Brava, I didn't believe it. I saw it work. And so, then I believed it obviously and I worked for Brava for 18 months, learning how to cook with light and developing the Pure Light Technology with the physicists and mathematicians that were all on staff here at Brava. I did not think I was going to use Brava at home. I didn't think it was for me because like I said, I didn't think I had a problem. I already know how to cook.

Dave:

You're trained, right?

Travis:

I know how to cook and I love cooking. And so, I believed in the product, but I didn't think it was really for me. Fast forward, 18 months after I started here and I got to take my first prototype home. And at the time my wife and I had three young kids, the twins were four months old and I took the toaster and I put it under the counter. And I said, "You can't use this anymore, we've got to work with this at home." And she looked at me like she wanted to kill me. Within a week, she was using it every day. What shocked me was I was using it every day. And I think I had to get outside of that test kitchen environment and bring it into my own home.

Travis:

And what I started realizing, I mean this was all pre COVID. So, I was still staying at work late and coming home and going to the gym before I came home. And my wife and I would spend four hours every Sunday trying to kind of prep everything out and get situated, so that cooking during the week wouldn't be as big of a chore. And we found very quickly that we got to get that four hours back and spend it with our kids instead of spending it in the kitchen. And instead of cooking six chicken breasts on Sunday and reheating them throughout the week, I was able to come home at 8:30 at night from the gym and just pop one and Brava and have it be done in 10 minutes. And so-

Dave:

And there's no turning, you just turn it on and it goes.

Travis:

For most things. There are some recipes that we call them multi-step recipes, where you can interact with it. And certain foods do better with some kind of interaction. For example, a thin hamburger, I think works a lot better when you hit it from the bottom and kind of think of our metal tray as a frying pan, because it is. The lamps are so powerful. You can put a cold piece of protein on there, turn it on full power, and within 20 seconds you start hearing sizzling, which is bananas too.

Dave:

I used the glass tray for the first time with some pork sausage from our own pigs on Asbury Farms here. And it took for fricking ever and that's because of the glass tray. You just explained it. I was thinking this is three times longer than I want to use the metal tray and that's why. Okay, thanks for-

Travis:

The metal tray conducts and the glass tray is really good at really differentiating those zones. So, when you have something like a salmon that you want to get super crispy skin, and that's going to take a lot of energy to get that. The cool thing about the glass tray is that you can put something next to it like cherry tomatoes, if you put those on a metal tray next to the salmon, they're going to fry. They're going to burst and everything's going to be a big mess. With that glass tray because it can uniquely separate out those zones, you can cook something that has a very aggressive, hard cooking time next to something that's very gentle.

Dave:

Oh, and you just turn up the lamp, you say and put the salmon on the left, so it's going to get a lot more heat from the lights on the left. And then the cherry tomatoes get gentle, warming, whatever you do to cherry tomatoes, nasty little red things. Gross.

Travis:

Exactly because they don't that glass tray doesn't conduct very well.

Dave:

How important are all the different metal accessories? I mean, you sent me one of everything because I kind of go all in or go home on stuff like that. Of course, I want all the accessories, let's give it a try. The egg pan, I mean, you do ridiculously good things for eggs. I feel like that one's super worth it. The metal trays and the glass tray, do they come with it? I think you get a metal tray and a glass tray, right? Aren't those default?

Travis:

Yes, there's three different sets. And so, the Brava, the unit itself is the same in all three different sets. The only differences is in the number of accessories you get. So, the starter set comes with a glass tray and a metal tray, and the temp sensor. When you do the bacon breakfast set, it adds the egg tray, a muffin tray, a square pan, and a loaf pan. And then the chef's choices, all of that plus the chef's pan, which is very similar to a Dutch oven or a Le Creuset style. It's a cast iron enabled cast iron braiser.

Dave:

I mentioned earlier modernist cuisine or what used to be a molecular gastronomy, but the idea of really looking at what's happening between fats and proteins and meats, so that we end up getting foods without too many advanced glycation end products or foods that have over denatured and basically destroyed proteins. So, technically if you eat raw liver it's better for you than deep fried liver, for instance. So, what do we know about the level of advanced glycation end products or AGEs or PAHs that are formed with lights versus grilling versus searing in a traditional oven?

Travis:

We haven't done a lot of deep studies on those two things that you mentioned exactly. However, what I can say is we're using a technology. That's really just a concentration of what people have been using to cook since caveman times. It's the same spectrum of light as the sun or as a campfire. However, what we're not introducing, where you see this a lot on particularly on grilling is the carcinogens and the carbons that are going to be created because of the smoke from the fat that drips down, and then comes back up and hits the protein. We don't have any of that because one, there's no smoke. We do smoke mitigation and that's part of the recipe design. So, there obviously will be some element of smoke anytime you're trying to sear a piece of meat, but what we do is right when it gets up to that point, we turn the lamp off and move it somewhere else. Or we stop and we put a pause step in there completely where we just shut the lamps off for 10 seconds-

Dave:

Just lets the heat kind of-

Travis:

Yeah, the food's still cooking. The heat, the energy is still working its way through the protein while we're doing that. All we're doing is shutting it off, so that we don't create that smoke and that we don't create those same kind of carcinogen that you would see coming off of a grill.

Dave:

The only smoke that I've seen is if I have like a particularly juicy piece of meat and some of it gets onto the metal tray when it's still hot and you open the door right after that, you see a little bit. But what a lot of people don't know is that indoor air pollution from cooking is the number two source of lung cancer after smoking. It is a really big deal. If you don't turn that hood on over your stove when you cook it, if you have an air quality monitor, it's going to go into the red zone within a few minutes. And if you use a traditional air fryer, you're also going to see massive, massive spikes in the small particles you're breathing. And funny enough, if you wear even like a hospital grade mask for those cooking particles, they're so small, they go right through it.

Dave:

Unlike other equally small particles that magically can't go through a mask. But from a protective perspective, I think you ought to not allow cooking fumes into your environment. I do not smell a lot, but I do smell some food cooking when I use my Brava. But it's way less, like 10% of what you smell from a typical air fryer, which I stopped using because it was polluting the air. You have to turn on like a huge vent hood if you're going to use an air fry. So, is it sealed? Is there an air filter in there? Like what are you doing other than just not making smoke because you have really smart LED lights that do infrared? Is there any other thing that's protecting me?

Travis:

Well, there's three fans in there. And in fact when we're doing most cooking outside of baking, we're actually trying to keep the chamber as cool as possible. That helps keep the outside cool and our Chief Technology Officer Thomas, the one who really invented this technology or figured out a way to apply it, he would tell you that you can cook with in the same amount of time with Brava's door open as you can with it closed.

Dave:

Oh wow.

Travis:

Yeah, that's to kind of help illustrate the power of the energy that's being delivered. So, we have the three fans that are constantly trying to keep everything cool inside and we're venting out as much hot air as possible through the back. But you're right, it is contained. And so, you can cook things like salmon and your whole house doesn't start smelling like fish because it really contains a lot of the... If it is a greasy cook for instance bacon, or if you're cooking chicken thighs, there's going to be some grease popping off. And if you're cooking that on the stove top, you're breathing that stuff. With Brava, it's going to all get trapped either in the fan or along the walls. And you can see that when you cook a fattier piece of meat that there will be some residue on the wall of Brava. The easiest thing that to deal with it though is you just wipe it down with a paper towel and it's gone.

Dave:

Yeah, I haven't had a hard time cleaning mine. I have cooked fatty sausage, ribeye. And from our cows on the farm here, we had some like Maui style ribs and those are definitely going to be fatty. And it came out really, really well. And I wiped it with a paper towel was done. So, the cleanup is a lot better than in a typical oven. Now, question from the upgrade collective on the line, it's an 1800 watt appliance but I'm just guessing there shouldn't be a power surge because LEDs don't have a power surge. In candescent lights and halogen lights have a power surge because when you turn them on, basically they have to heat up, so they suck as much power until they're at temperature. But LEDs just instantly flip on with an even thing or is there a spike?

Travis:

You're going to see some spike, but we equalize the spike. That's one of the coolest things about the technology and one of the hardest problems that we had to solve because when you create a precision cooking tool, people are going to expect that it's going to work the same anywhere. But power, the amount of power delivered to your house may be different than the power that's delivered to my house or the power from somebody in a New York City apartment might be very different from somebody in Ohio. If you're running a regular type oven, it's not really a big deal because you're just going to increase time.

Travis:

But a lot of our recipe programs are not based just on time. They're based on temperature and a bunch of other variables. So, what's cool about Brava and one of the hardest problems we solved was equalizing the current that was coming through the wall. And we equalize it thousands of times per second to make sure that power that's being sent to your Brava is the exact same in New York as it is in Ohio, as it is in Vancouver, so that the results are the same everywhere else.

Dave:

It's really interesting that you had to solve that. In the medical laser industry, there's low powered cold lasers that you use. And for them to be effective, same thing, you have to have a really high quality power supply that delivers exactly the right current because we're dealing with high end optics. And probably some of the most precise engineering on the planet is semiconductor wafer engineering because you have the tiniest little variance, it destroys a huge lot of really expensive silicon wafers. So, you had to sort of generalize that, so that you have power control in order to get the right temperatures

because you can't just put a dimmer switch on most LEDs unless they're special circuitry. So, it's very precise. And I just realized that you've just did a crossover thing from tech that no one would ever think to cook with that one crazy engineer said, "Let's take this thing that was never meant for cooking and let's see what can be done that's never been done before."

Dave:

I didn't really get that vibe when I first got my Brava. Like, oh great. I just another kind of toy that I'm going to try and probably put in the garage. But it is really rapidly just been, oh, can I cook it in there? Because it's faster, it's less work, it's less cleanup, and it comes out better. And it seems like you've done something that's actually transformational and it uses the same amount of power as heating up the main oven. But the whole meal is done. What's the downside? What do you worry about? What keeps you up at night?

Travis:

Honestly, I don't think there are downsides to it. I think what Brava does is give you options. And some people, like me originally, I thought I'm not going to need this thing, I'm not going to use it because I don't need it. I love cooking. What I found is that it gives me options in those times when I don't feel like cooking, which actually happens when I'm busy. I can do something and have it fully automated and not worry about it, so that I can do other things. It gives me time to either work on something else on the stove top or it gives me time to just relax and go hang out with my kids. So, I don't think there's a lot of downsides. I mean, I guess one of the downsides you could say about Brava is if you don't have an oven, Thanksgiving might be difficult because you can't fit a whole Turkey in Brava. So, maybe that's one downside.

Dave:

You could feed probably four people with a Brava, would you say?

Travis:

At least. And it depends on if you get accessories, like the chefs pan where you can do big braises and stews that can feed up to eight people. So, but yeah, I think in most applications, anywhere from one to four people and it's really cool because a lot of the recipes give you the option of choosing how many servings you want to cook.

Dave:

Yeah, even there's rice cooking and things like that. You just throw it in I think the chef's pan and then it magically cooks your rice.

Travis:

It does. I use that one every week.

Dave:

I haven't tried that part yet, but I'm interested because again, it's just a major time saver. And guys, anytime there's an upgrade spotlight or just anytime that someone has something cool that they're selling, I always ask for a discount. So, there you go brava.com, B-R-A-V-A. Use code "Dave" save 200 bucks before the end of the year. And I got to say I never would've thought in a thousand years that I

would do an upgrade spotlight on a new way of cooking. Because the last new way of cooking was pretty much microwaves and maybe a little bit air fryers, which are just convection ovens in a small form factor. Let's put it that way. This is something different and it works and it works way faster than before/ you do get your time back. The one downside I could say is now they're still relatively expensive, especially compared to a cheaper toaster oven or something. They do a lot more, but they buy you time back.

Dave:

So, you might not buy this if it's your first oven in college. But if you don't have an oven in the place where you live, this is the only thing you're ever going to buy because it's cheaper than buying an oven. And it's going to do remarkable things that an oven can't do other than a whole Turkey. In which case, screw the noise, it's all hollow in the middle anyway. Just get the breasts, you'll be fine. So, that's my take on it. And thanks for your own skepticism before you joined the company, just saying, "Look, I'm a trained chef. I don't need this." And realizing actually I did. And I'm rapidly becoming someone where I put it next to my espresso machine, which I wouldn't have thought I would do. But I do not see myself cooking without that most of the time because it just works better. And it's a big time savings for anyone who listens. Its code "Dave," brava.com. So, what's the deal with kids and Brava? Is it easy?

Travis:

I'm really glad that you asked. My seven year old uses it to make grilled cheeses. We have so many stories from our community. One about kids, one of our customers sent in a photo of her grandson. She takes care of her husband at home who has Parkinson's. And so, it already helped her to help prepare food, she was busy taking care of her husband. Her grandson has autism. And she said, "It's been one of the best things for him because it actually enables him to cook and he's able to do it safely and he is able to just push the button." We've had stories from other people that have diabetes that have said that they've lost an amazing amount of weight in a short period of time and it's helped them take control over their diet. Even other people that are visually impaired that are not able to cook with a pan and fire are now able to cook a full meal in 10 or 15 minutes just by pressing a butt.

Travis:

And there's a story after story from our community. Other people, one gentleman named Christopher said "in the brief time I've owned Brava have cooked more vegetables than my prior 38 years on this planet." And we've heard about kids eating Brussels sprout that always hated Brussels sprout because they get involved and it's so easy. All you do is toss the Brussels sprouts with a little bit of olive oil and some salt and put it in there and press a button. And so, it's a really easy way and a fun way of getting kids excited and interested in cooking, and in a way that's safe, so that you can feel confident that they're not going to get burned and that they're going enjoy watching cook on a camera. And they feel like they've had this agency because at the end of the day, if you don't season your food properly, like Brava's going to cook it perfectly, but it's still not going to taste great if you don't season it right.

Travis:

And so, it's still gives you that sense of agency and control over your meal and that's what I like about it. It puts you in the driver's seat. And I think I've heard so many people say that they think it's worth so much more money than it is that we sell it for because they end up saving money in the long run because they cook at home more often, they take control of their health and their nutrition, and they order takeout and eat out way less.

Dave:

I actually believe what you're saying, which is some pretty big claims just because of what I've seen. I already would cook at home anyway because I live in the middle of nowhere and I know how I feel when I cook the right stuff. For most people the reason you go out is because of less mess, less time, it's just less work. This does reduce the time, so that the equation, the amount of friction in your life to eat in versus going out, it shifts the amount of friction and we are animals wired to do the lowest friction thing all the time. So, that was what got me really interested in it. Two other questions here, one is about fan noise.

Dave:

The fans are very quiet compared to an air fryer and I have a relatively high end air fryer, that's not doing the same universe. I probably could have it on right now and it would be the same sound as the remote air conditioner thing. You probably wouldn't pick it up on the mic. And so, I got to say that it does it. And there's a question about EMFs. I'm guessing it's much lower EMFs than a microwave, but that's kind of a poor standard. Do you guys ever measure EMFs coming off of it? LEDs don't make a lot of EMFs compared to microwaves.

Travis:

I am not, but I'll talk to our CTO about it and they can get back to you on that.

Dave:

It'd be interesting. If you turn off the WIFI, it shouldn't be terribly high. It's a large metal grounded device, which helps. So, you shouldn't be getting much coming off of it. Just as an engineer, you might see some weird spike on your power when you turn it on. But that's unlikely because of the power conditioning that they had to do there. And final question from the upgrade collective on the website, it says "That you can't do a wall mount or a built in because of ventilation off the back." Are you guys looking at plumbing it in the way you would a normal oven, so that there's some kind of ventilation? Because some people really interested in just having this tech in a normal oven. [inaudible 00:34:41]

Travis:

We're working on a few things. Yeah, I don't want to pull the curtain back too much, but I think something like that in the works.

Dave:

I think I heard the answer there, the answer was yes.

Travis:

Yes.

Dave:

All right. Cool. So, something will happen there. And guys, look, you may not need one of these. But if you want to save time on cooking, you want to simplify cooking, and I love to cook. I'm not always going to use it, but this will do that. And it'll buy you some time back every day with less mess and better food, unless you really are good at cooking and then it's on par and we have a certified trained chef here who says that. And I'm not certified, but I'm pretty knowledgeable to the point I could write a cookbook and

this does an admirable job on par with what I could do, but I don't have to think about it. So, there you go. Brava.com code "Dave," save a couple hundred bucks. Worth considering. See you all later.

Travis:

Thank you so much.