



WEIGHT LOSS FOR BUSY PHYSICIANS

— with Katrina Ubell, MD —

Welcome to the Weight Loss for Busy Physicians podcast. I'm your host, master Certified Life and Weight loss coach, Katrina Ubell, M.D. This is the podcast where busy doctors like you come to learn how to lose weight for the last time by harnessing the power of your mind. If you're looking to overcome your stress, eating and exhaustion and move into freedom around food, you're in the right place. Well, hello there, my friend. Welcome to today's episode. I'm excited to talk to you about this one. I've been thinking about this one for a while. I have not been someone who has been an early adopter, let's just say, of a lot of the wearable devices out there.

So I took a good long time to come up with my thoughts and opinions about this before [00:01:00] sharing them with you. In fact, the wearable device that I use, I have had, I think next month it will be two years. So no, actually I think it's this month is two years now. So I guess I have had it like two years basically. So I feel like I am in a position to finally be able to tell you what I think the pros and cons are of wearable devices, and how they can be helpful and how they can not be helpful. I think that this is something that comes up a lot for people, particularly when they're trying to lose weight or make a change.

[00:01:35] You know, it's easy for people to be like, oh, you know what? You just got to get the Fitbit. And like, that's going to be the thing. You just got to get your 10,000 steps in. You don't remember, oh my gosh, way back in the day in residency I think I want to say I'm like trying to think of like what was the job of that one woman? Think it was like with the pain team or something like that, because she was responsible for the like basically rounding on the entire hospital every day. And I remember [00:02:00] right

when people started talking about the 10,000 steps thing, this is a person who worked at the hospital where I did my training.

She had a pedometer and she was like, oh yeah, I try to get my 10,000 steps in. I can usually get most of them in just from walking around at work. And I remember thinking like, oh, that's amazing, like, good for you. And it was one of those ones where you like, had it on your waist and it would just sort of like tick, tick, tick back and forth with every step or something like that. And, you know, I'm sure there are many things even before that, but I think it can get really a bit overwhelming with all the wearable technology, because it can be super helpful for some people and really, really useful and beneficial. And then those people are like shouting from the rooftops, oh my gosh, this thing changed my life.

[00:02:41] You have to get it. But then some of us then get one of those things and we're like, I kind of hate this. It's not helping me at all. It was pretty expensive. Like, I don't know how to actually fit this into my life, and it just ends up being more of that electronic trash that's waiting for the recycle option. You know, just [00:03:00] like laying around our homes and stuff. So I've definitely purchased some things in the past that were, you know, like duds for me. Not saying duds like for sure for everybody, but just wasn't the right thing for me.

But I did end up settling on something that's actually really, truly has changed my life and has been very, very helpful. And I just really haven't talked about it on this podcast too much. Sometimes in my program in weight loss for doctors only, sometimes we'll talk about it a little bit, or I've had a few clients notice that I'm wearing it and ask about it, but thought, hey, let's just talk about this a little bit because I was definitely, like I said, like a slow adopter and quite reluctant. And so I have some questions for you to ask yourself as you're thinking about maybe trying a new wearable device, or even if you have one now just to kind of re decide, like, do I even like this thing? Is this thing even, you know, good for me? Because sometimes I think we're like, well, in for a penny, in for a pound.

[00:03:54] Like, I paid so much money for this, even though I don't like it, I better wear it. And, you know, that's that's [00:04:00] not always a great way to be living life either. So just to kind of give you a just a brief background, you know, I think the Fitbit was like the

main first thing that people were super into many years ago. And I just was had like no interest. It just didn't look interesting to me at all. I didn't want to do that at all. It was just not something I wanted.

I really didn't have that initial kind of magnetism to it, like some people do, like, oh my gosh, this is the thing, you should totally do this. But I remember, gosh, I mean, this was probably like eight years ago, something like that. I was in a, some Facebook group back when I was on Facebook, and there was somebody who was talking about like, oh my gosh, so many of these wearables are awesome, but they're just really ugly. Here's a wearable, someone finally made one that is prettier. And I was like, oh, maybe that's why I don't like it because it's ugly. I should get this prettier one. I honestly can't even remember what the name was of it.

[00:04:54] And I tried it for like two weeks and ended up returning it. I did not like that thing at all. [00:05:00] I don't even remember the details about it, except I didn't like it at all. I didn't like how it felt on me. I think you could wear it as a necklace or as on your wrist. Like I don't even know. It was just not for me. I was like, this is a no. I'm going to actually go through the hassle of returning it. I'm going to return it. That's how much I know I'm not going to use this thing.

So after that, I kind of had the mindset, you know, I just don't think these wearables are for me, this is just not a thing that I'm going to take part in. And that's cool because I don't need to in order to, you know, have success or get the results that I want or anything like that. I know a lot of people are really loving their Apple Watch. Well, I had one of those also a long time ago, probably like seven years ago or something, and I wore it as a watch. And then I decided to get rid of it, because I really only literally used it as a watch. And I was like, this is huge and bulky. I could just wear a watch. But for years now I haven't even worn a watch.

[00:05:57] Like I don't even wear a watch. So if [00:06:00] you love your Apple Watch like for anything like you, do you? I think that's amazing. If it's totally great for you, that's fantastic. Go for it. I did not like it going off all the time. I didn't like it giving me the little buzzing when a text came through. And I know you can change all those notifications and stuff, but then it literally all I wanted it to be essentially was a watch. So it was just kind of like, this just doesn't really make sense. I found it to be much more distracting

than helpful at all. So before you're like, oh no, Katrina, you need an Apple Watch. Like, I don't want one, I will not be buying one. It's just don't wear a watch.

And I don't want to wear a watch. And I don't like things that are buzzing me. So some people I think like the little, like the little haptic or the little buzz or whatever vibration it's supposed to remind you, like, hey, you should get up, you should this and that. I personally find that really unappealing. It just is. Seems like nagging and annoying to me. Like it doesn't feel positive at all. So you can understand. I'm going into this [00:07:00] with a pretty decidedly negative mindset. Like I'm kind of like, yeah, I don't do these things. So what changed things for me was the aura ring.

[00:07:10] The aura ring aura is spelled o u r a. I had no intentions of buying one. Several years ago, a friend of mine got one and she loved it and I asked her about it. She told me all about it and I did think about it. I looked it up and stuff and I was like, yeah, I mean, I know myself I'm not going to use this thing. Like I'm not going to like, what are the chances I'm going to even go into the app regularly and look at the data, like, if you're not even going to look at the data, then what's the point of wearing this big ring on your finger?

So I just decided I'm not going to get it. And then what happened was probably two years ago last month, I was visiting a friend of mine in her family, and I think I knew she liked her aura ring, but I was like staying with them for several days. And so somehow the aura ring came up and they were talking about how much they loved it. Both my [00:08:00] friend and her husband, who's also my friend, they were just talking about how much they thought it was so great, but like their energy behind, it was very chill. It wasn't very fanatical. It wasn't like people who completely have drunk the Kool-Aid, like it wasn't that way. They were just like, you know, we just find it super helpful.

[00:08:17] And they're like, we've bought it for a ton of our clients, and our clients love it. And they also had a sizing kit. So with this ring you need a sizing kit. So you if you buy one you buy the proper size ring. So they actually had it. And I could see what it sort of felt like on the finger. So then I thought, well, while I'm here staying with them, how about I try one of these little fake rings on and wear it and see like what I think about it. So we were talking about it some more, just like on and off and everything, and they

were telling me about the different metrics and things and how much it's helped them with their sleep.

And the husband, he actually had decided to go vegan, so he went more plant based, I think, just to try it or something. [00:09:00] I don't remember exactly like what the details were of why he decided to try it, and he saw on the metrics, like with his trends, how much happier his body was when he was eating that way, and then he switched back off of plant based to see and like it all shifted again. And he went back on plant based and his body was so much happier. And so he took that. As you know what, I like both ways of eating doesn't really matter to me. I'm going to eat plant based like most of the time, because I see from this data how much happier my body is.

[00:09:33] And I was like, I mean, that's kind of cool. Like, I mean, I was a vegan for five years and like many years ago, so like, I'm not going to use it to do that. But I thought, huh, like, no, that's actually like real data that could potentially help you. So also, I can't even tell you I didn't look this up before I started recording this, but the cost of the aura ring was like a couple hundred dollars versus some of the things which are much more expensive. So I think that it was [00:10:00] a bit of an impulse purchase for myself. It was kind of like, okay, fine, I mean, whatever.

And I still did think like, you know, if I hate it, I'll just return it. It's fine. So I got this aura ring and within a couple of weeks, I was already asking my husband if he wanted one for Christmas. I was like, I think you need this. And then my mom, who has been a historically terrible sleeper for essentially like as long as I've known her, I thought, you know, I think this could actually really help her, and it's helped her a lot too. And so I have found that for me, this thing is like the cat's pajamas, as they say. It's been really, really great.

[00:10:40] So this is not an ad for Aura Ring. I have no affiliation with them. I don't have a coupon code for you. They don't know that I'm even talking about this at all, but I did just want to share it because I think it's helpful sometimes when we're looking at this sea of options, you know, how do we pick? So I have some general questions [00:11:00] and I'll tell you a little bit more about why I personally like the aura ring. But this is not a sales pitch for the aura ring. I have no skin in the game on whether you get one or you

don't or whatever, because some people will say like, oh, but you know, my Apple Watch does that or whatever. I'm like, cool.

I'm just I'm not going to wear an Apple Watch. So if you get it through your Apple Watch, then awesome. That's super good. So I have four questions to ask yourself when it comes to any kind of wearable device. And the first one is Will I like wearing this? And then have a sub question, which is what's the return policy if I don't? Because I think it's important to know that as well, because, you know, a lot of these things, like I said, are pretty significant investment. And so it's going to be important for you to know, like if you get this thing and you absolutely hate it because, you know, we can only guess, then you would want to make sure you're paying attention to what the try out period is, or if there is no return or like.

[00:11:55] Are there caveats to the return policy? I would just make sure that you really understand that. [00:12:00] So with the main question though, will I like wearing this? This is when you just have to be really honest with yourself. Like I knew I did not want anything that would buzz or move or vibrate or anything. And the aura ring does not do that. The aura ring is a ring. It's just like a normal ring. Like any ring you wear that doesn't move or buzz or vibrate or anything like that. It's just a ring. I also already wear rings, so I thought, well, I do like wearing rings and so wearing another ring. I'm pretty sure I could get used to that.

That probably will be fine too. Now, if you're someone who always wears a watch, then something that's more watch based is probably going to be a great option for you. Or like with the Apple Watch, if you're like, yeah, because I use it for phone calls and I use it for my calendar and I use it for all these other things, and then you're just adding in, you know, utilizing some of their trackable data. And I think it's the health app or something like amazing like that's, you know, then maybe what it is, is just deciding you're going to take advantage of that information [00:13:00] a little bit more.

[00:13:01] I think a big part of this, too, is, is looking at like, how do you get the information? So that kind of leads us into the second question, which is what is the information I will get from this thing? Because when people are like, it's amazing. It changed my life. You're like, in what way? Like that's I think the thing that we have to ask about and think about like, what is the information? How hard is it for me to get like,

am I literally going to be looking on my phone every day to look at this stuff? Or if the likelihood of that is low, then like, am I? I'm probably not really going to take advantage of it or won't be able to help me, right?

So you also need to understand like what your phone usage is and things like that. When I've got that very first wearable thing that I ended up returning, they didn't even have an app. I don't think they did. No, I think you had to like log in on the computer or something. I was like, I'm never going to do this. This is not going to work. So now with apps, you know, a lot of the apps are a lot better. It can make it a lot better. But I think also just even the way the information is conveyed to you can be [00:14:00] different.

[00:14:01] And how it's delivered to you, I think can be helpful. So I'm just going to share with you what I like about the aura app. So the very first thing I'm going to tell you that I really noticed about the aura app and that I consistently like, super appreciate and think is so great about it, is that I never feel judged by this app. Now you may be chuckling going like Trina, it's an app. What do you mean? You're judged when it interprets anything about what I'm doing, any commentary it ever gives me about anything wrong I have felt for two years, has always been supportive and helpful and just really good in comparison. I have a different.

I think I've mentioned this before. I have some something that is on my bed that helps to cool me at night. So in my menopause transition, I'm not drenching the bed and I actually don't really use the app so much with this [00:15:00] anymore because it is. It's like it just makes me feel bad. Like anything. If I have like one bad night of sleep, it's just the it feels very alarmist and it just doesn't feel supportive, like I feel judged by that thing. But I like the actual unit very, very, very much. So I just ignore that other stuff. I just use the aura app. I'm like, no, the aura app can tell me how my sleep was.

[00:15:22] I don't need this other thing telling me that. So how are you going to be getting that information? And you know, what is the information? So I feel like there have been times like there was, gosh, when was this? Almost two years ago now actually. So I guess it was a few months after I had this thing. We had a trip from hell, a family trip. Just everything went wrong. Like, I mean, not everything. We didn't have a plane crash, so that's good. But a lot of things went wrong on the way there while we

were there on the way back. Like it was just a rough, rough trip. My sleep was totally messed up, like it was just not good.

And I remember toward the end of that, [00:16:00] after I went into the app in the morning, the aura app, and it was it didn't say it like this, but it basically was like, you seem like you're really struggling. Are you okay? It was kind of like, you know, you're going to be okay. I remember just sort of feeling like scene. I'm like, you're right, or app, I am really struggling. Like, thanks for noticing. This is a really hard trip. I know that sounds so silly, but honestly, every message I've ever gotten from it is just so supportive and I think that makes a big. It's like we're already hard enough on ourselves.

[00:16:34] We do not need any kind of app or technology adding to that. Like we need solutions and help and support. And that's what I've always felt like I've gotten from aura. So what do I actually use it for? People have asked me for that. So the main thing, or kind of what it started off doing, was for giving you information on your sleep and the quality of your sleep, and they're at a point now where they say that the data from your sleep is as high [00:17:00] of quality as doing an actual sleep study. So I don't think it's like perfect, but I think it is quite accurate, which is really, really nice.

So I like to just immediately like, you know, in terms of like, do you actually use it? Yes. I get up and right away I'm like, okay, how is my sleep last night? So like as I'm, you know, getting up, I'm checking in what ended up happening. It gives you a sleep score and it gives you a readiness score for the day. And don't feel like I'm graded. There's no like it's just not like that. And you start to notice some patterns and things as well. So over the course of time you start noticing like heart rate variability and the lowest heart rate that you have while you're sleeping. And you know, different things like that. It's very person specific.

[00:17:43] Like my husband's numbers are completely different than mine. And I just find it to be very helpful for me to understand what's going on for my body. So I used to have days where I'm like, you know what, I don't know why I'm feeling so bad. Like I slept eight hours or probably not eight hours, seven hours or [00:18:00] something. You know, I should be feeling better. But with this app, like with the ring, it will show me like, yeah, you were in bed that long, but you know, the quality of your sleep was poor or whatever issue that you had. And so I'm able to adapt how much I push myself, how

much I allow myself to have some rest, like I'm not in my head going, like, do I really deserve to lay down?

I'll be like, yeah, you did not have a good sleep. You know, whether I was in bed a lot or not. Like, you should take a nap. And if you take a nap, it notes that too. And then it adjusts everything. I found it to be very helpful. Like that information has informed how I even choose how I'm going to exercise for the day. When my body is ready for me to do something a little harder, that maybe is going to improve my fitness level, or versus going, hey, not today. Like, I may even feel like I've got the energy to do that, but the data is showing me no, today should be a day for a walk or something like that.

[00:18:57] So I found that to be super, super helpful. [00:19:00] The other thing that it does that I'm so grateful for right now, I cannot even tell you just going through the menopause transition is that it will tell you what your temperature is overnight in comparison to your normal baseline. And so you start to notice, at least I have with my body, like in different phases of my cycle when my temperature does. And so in the menopause transition, when your cycles can start getting really wonky and unpredictable, I have found that I still am able to get a better sense of what's going on with period prediction through the information it gives me.

That's way more than I would know if I didn't have that information. I'm so grateful for it. So grateful for it. It also helps you to know, like if you're, you know, getting sick. Like a friend of mine just said that her husband just had Covid and the way he knew that maybe he should take a test was like he had a few symptoms. And then he noticed that his scores were, like all over the place. So he thought, I wonder if I should take a Covid test? And turns out he was positive. [00:20:00] I sound a little stuffy right now because I'm getting over Covid. I was actually just in France with my husband for an anniversary trip, just the two of us, which we were super excited about.

[00:20:10] The day before we were going to leave, he tested positive for Covid and then three days after that I tested positive for Covid. So we ended up having to stay. We were both pretty symptomatic and ended up staying several more days, but it was really interesting to see. Like, I didn't have a thermometer, but I could tell from my aura app and my husband could too. From his. Like I totally had a fever. I could just see, like, I

mean, the worst night that I had of sleep, I think, was I woke up 11 times or something and I was like, oh girl, okay, you're struggling.

All righty. We got a rest, you know? So it can be really, really helpful, especially when you're a very busy person just going, like, what do I actually need? Like if your numbers are kind of trending down, things aren't looking that great. Your body needs some extra additional support. What that looks like can vary [00:21:00] from person to person, but it'll even register like what they call restorative time. Like how many minutes you spent just kind of settled, relaxed with your heart rate coming down. If you have many days of no restorative time, it'll start letting you know, like, hey, even just taking a couple minutes to breathe, you know, in the middle of your day can be helpful.

[00:21:18] Like, that's good information. Thank you. Thank you for letting me know that ring. So there's actually tons more things people I'm not trying to get pregnant. So I don't know so much about this, but people are using it to I guess it pairs up with another app to be able to help get pregnant or prevent pregnancy. People have really enjoyed it for that. I have also found that the activity goals which you can set for yourself. I found it to be very, very helpful. So I think like in the Apple Watch you can set workouts and stuff, but you can totally do that with this as well.

So if I go for a walk, like if I have location services on it will tell me how far I went. It records my heart rate like it totally [00:22:00] records it as activity. The number of steps like all that stuff is recorded. You can record workouts after the fact. You can do many of them live. So I have found that to be helpful. I mentioned on this podcast before that I've been working on improving just my general physical fitness, and that's been very helpful for that as well. So just to go back to answer this question, like, what is the information that I will get from this, you know, potentially could be a lot of information or sometimes it's really quite simple and maybe that's all you need.

[00:22:28] And that is something that you want. I want to mention one other thing. I'm not saying you should do this. I've never done it. I am not recommending this, but I have had a few clients who have decided to get a continuous blood glucose monitor for a variety of reasons, and some of them have found that they've really, really struggled with their eating and just having a hard time with consistency of eating until they looked at the data from that continuous glucose monitor, because they could see what the

effects were of different foods on their blood glucose levels, [00:23:00] and they just could no longer convince themselves that it didn't make a difference when they ate this or ate that, or had this little snack or whatever.

I found that to be very informative and very helpful. Like I said, I haven't personally done it, but for a certain type of person who is looking for that information, I think like why not? I think as long as you're managing your mind around it and everything and using that information to help you, it's just kind of interesting. So I don't know that that counts as like a true wearable device, although I guess it is. I don't know, maybe that's the gray zone, but just want to let you know, like that's a way that you can get this information and then have it inform what you're doing in your life.

[00:23:39] So that is the third question. How will this info impact my life? What changes or adjustments will this information help me to make? And so I will tell you some. For me, I had zero idea that alcohol negatively impacted my sleep as much as it does. Again, I'm not sure that. I mean, I think it probably negatively affects everybody to a certain extent. [00:24:00] Maybe not for everybody as much as it does for me, but I mean, I have certainly not completely stopped drinking alcohol, but already wasn't drinking that much. But I started to notice such a consistent response in poor sleep after having even just one drink.

Even if I had that drink, like in the late afternoon, it's still negatively impacted my sleep and it was just kind of like undeniable. You see the pattern enough times like similar to the eating food at all different hours kind of thing. I'm like, I can no longer tell myself that having alcohol doesn't make a difference. It does make a difference. And I can totally have it if I'm open to having a. For a night of rest. If I'm not, then maybe today's a day to pass it up. So that's just another example where it actually has impact in my life and helped me to make better decisions for myself. Just because it's offering information. It's not judging me or telling me what to do. I mean, it does interpret it to a certain extent, but the overall [00:25:00] integration of that information in my life is up to me, and I've found that to be very helpful.

[00:25:04] So the potential problem that this is solving for me or just, you know what, what I like to improve in my life and how this information helped me with that. I mean, the same thing is like, if you're not checking the data, then the information will not

impact your life, right? So being honest with yourself, if you're not going to check it, then yeah, maybe wearables just not for you and that's fine too. Okay. And then the final question is just where will checking this information fit into my life. And I think that's important too.

If you have certain periods of your day where you are working on your screen time and not being on your phone and stuff, that would be a good time for you to be looking at that information. Then something has to get figured out there. Like I said, I check mine in the morning when I get up so that I can see what happened with my sleep. As I'm exercising, I will go in there to make some adjustments or tell it that I'm doing a workout or things like that, but I also use it for the step counting, and I started [00:26:00] using that part first. Well, before I actually was working on my fitness more, I was just trying to be just a bit more active rather than really trying to be more fit.

[00:26:11] And I thought, you know what? I think maybe I'll try to get closer to 10,000 steps every day. And that actually helped motivate me to walk my dog twice a day or before. I was only walking in once a day. So it's like little things like that where you can set little, little mini goals for yourself. It's not like I'm upset with myself if I don't get 10,000 steps, but I'll maybe look in there and see, okay, how many more steps do I need?

Okay, well are we going to take a real short walk or are we maybe going to go a little longer? You know, maybe we'll go a little longer so I can get more of those steps in. So I think it's those little, little bitty things that can really help to improve your overall well-being, which I think can be great, but you do need to check it, right? You need to be looking at it for sure, but not like constantly, you know, really, at least with the aura ring. I mean, once a day is probably what they would recommend. So [00:27:00] you can look at your sleep information, you know, figuring that out. So those are the four questions. Will I like wearing this and what's the return policy if I don't. What is the information I will get from this.

[00:27:10] How will this information impact my life and what changes or adjustments will it help me to make? And then where will checking this information fit into my life? So those are the questions like, you know, the pros and cons of wearables, right? Like they're going to be for some people and certain ones are going to be for some people,

and certain ones are not going to be for other people. I think some big cons of wearable devices is people can get too hung up on what that thing says. You know, when we are working with the coaching work that I do around losing weight permanently and creating peace and freedom around food, I mean, what we're trying to do is stop looking outside of ourselves for the answer and instead get connected with our bodies.

What is the signal that my body is sending me? How am I actually hungry or not? Like I don't need an expert, or an app, or a plan to tell me if I'm hungry. Like I [00:28:00] can figure that out from within my own body. When I get used to identifying those notifications, those internal notifications of hunger and satiety. And so I do think that we can over rely on these devices like these really are just a supplement to help us with our goals. They're not there to give us information that we rely on more than what our bodies are telling us.

[00:28:24] I don't care if the aura app tells me that I had the best sleep in my life. If I'm feeling crummy, then I'm feeling crummy. Of course, what you find is that it's, you know, they fall in line pretty well together, which which makes a lot of sense, but it still can be very helpful. It's just another piece of information that I can use to help support myself. So I think if you are using the information with that goal in mind to support yourself ultimately, and that you will always use how you feel and what's going on for you inside as the primary source of information, or the primary information you'll take into account as you're [00:29:00] making decisions, then you'll be in a good place.

We just got to make sure we're not like, no, but this is the thing, and I can't have success because I don't have the, you know, continuous blood glucose monitor. No, you don't need that. But if you have one or want to play around with it or something, it might be some good information for you, you know. All right, friend, those are the pros and cons of wearable devices. So like I said I like the aura ring aura. I'm a big fan. I didn't even mention how much it's helped my mom. She is you know, like I said, just has really struggled with her sleep and it has really helped her.

[00:29:36] She used to refuse to let herself have a nap, ever. And sometimes she will wake up in the morning and have had like nine minutes of deep sleep and so on. Days like that, when she's feeling tired, she takes a nap and she'll often get like all of the deep sleep that she needs in that nap, which is actually quite unusual. But because she

is understanding her needs and her body and also like as she ages, [00:30:00] you know just how patterns change. She's able to meet her body's needs more instead of just like, am I just tired because I stayed up too late? And of course, you know, for brain health and everything, we just know how important sleep is. It's been.

Yeah, been really great for her too. And she totally wears it and checks it. And it's pretty interesting. You know, for someone who's not the most technology, you know, technologically advanced person. And she likes it a lot. So I'm going to check out or consider or think about or, you know, as we head into the end of the year and some people will be giving gifts and receiving gifts, maybe it's something to ask for if something you're interested in.

All right. With that, I will let you go. And thank you so much for your attention today and for joining me, and I'll see you next time. Take care. Bye bye. Ready to start making progress on your weight loss goals? For lots of free help, go to katrinaubellmd.com and click on Free Resources.