Ivor Cummins	00:00	I'm here with Robert Cywes MD, who is an expert in metabolic issues with a particular focus on the addictive nature of modern refined foods. So great to meet you, Robert.
Robert Cywes	00:10	Ivor, thank you very much for having me here. You're absolutely right. I think I've been in the trenches treating people for about 19 years. And what's become obvious, even though it's not heavily written about, what's become obvious is the group of patients I treat, primarily type 2 diabetics and obese people, have a different use or almost abuse of a particular subset of what they eat than normal people.
	00:37	You know, you and I both enjoy an alcoholic beverage every now and then. We've probably even been drunk in our time. But we don't wake up the next morning with a hangover and start drinking right away. We've got control of that dynamic even though we've used it and abused it from time to time. And exactly the same way. A lot of people can eat certain food types and overdo it at a certain time. But back off, they can control that relationship.
	01:02	Then we get to people with type 2 diabetes and obesity. And when you interview them, and you spend enough time with them, particularly when they are under emotional duress, when they're stressed, when they're upset, when they're depressed, they really don't have effective mechanisms to handle those emotions. And they turn either to alcohol or in this case to something that they eat, to manage that emotion, to give them a sense of instant gratification, euphoria, tranquility, that just obliterates the emotion that they're feeling. And when you look at what people drink, nobody's idiotic enough in the modern world to say that it's all fluid. It's specifically alcohol. Nobody has a rough day and reaches out for the water. We reach out for the alcohol, whether it's whiskey, wine or beer. When it comes to food, we don't reach for broccoli or steak when we're upset, we reach for a sugar or starch. It's typically a carbohydrate. And everybody's got their own poison. My personal one was Coke and M&Ms. Some people have the starches, the rices and the potatoes and the breads. But it's always a carbohydrate. And the reason for that is that carbohydrates affect a particular part of the brain that other foods do not affect. So when you eat a steak, it makes you feel satisfied. But when you eat bread or sugar, (M&Ms for me) it gets you high. It affects a different part of the brain, the same part of the brain that alcohol, nicotine cocaine effects.

- 02:34 Now, some people can enjoy that high and maintain control of that. I smoke a cigar every now and then, I have a glass of wine every now and then. I can control that relationship. But once I start to use that substance more and more and more, it becomes so effective at immediately giving me that emotional gratification that I don't need other tools, I don't need other techniques of dealing with those emotions, and progressively, I develop an increased relationship with that substance. That's the first thing.
- 03:03 The second thing that happens is by frequent use. That high we used to get from a small amount becomes less important. So we start eating more and more and more. And it's the chronic excess, the causes of the problem. Carbohydrates aren't the problem. It's our relationship with him that is. So, we don't condemn alcohol. We don't condemn carbohydrates. We have to work with the relationship. And so, once people start developing harm from that relationship, let's say you've had five DUIs or you've got liver disease because of your alcoholism, now you're going to start looking at that relationship. If you ignore or distort the reality of the relationship. To continue the pleasure of drinking alcohol, you lose control of the relationship; you're an alcoholic. In exactly the same way, when you now start gaining not five or 10 pounds, but 50 to 100 pounds, or you start getting type 2 diabetes or you develop sleep apnea, you get polycystic ovarian syndrome, you may not directly correlate that with carbohydrates. But you're still eating more and more and doing less and less other things. You're not doing other things that manage your emotions because the carbohydrates are so ubiquitously available. And if you ignore/distort the reality of the harm to continue the relationship, you've lost control of the relationship. And therefore, to cut back is just not going to work. Because you may only drink two beers a day if you're an alcoholic, you may only eat a little bit of chocolate every day, if you're a fat person. But when life throws you an emotional curveball, something bad happens. The only resource that you've got to go to is to your drug of choice. And I use the word "drug" they're not food. And we overeat the carbohydrates, over drink again.

04:49 It's only when you remove that substance from your environment so that when you are stressed, when you are upset when you're bored, when you're depressed, you don't have access to your drug of choice, that you are forced to find an alternative. As long as you've got easy access to your drug of choice, you're always going to use it.

lvor	05:06	Yeah, exactly. In my memory, I used to smoke many, many years ago. And the alcohol, I'd agree, it's analogous. But smoking particularly, you can't have a few cigarettes a week. Now, some people, a doctor I once knew said, some people can flirt with Lady nicotine and not get married. But a very small percentage can do it overwhelmingly, you can't have them, it's all or nothing. You had to make the decision to get away from them and replace them with something else. Or you're just a smoker and you're just completely trapped. And if you don't have them for a couple of hours, you're almost panicky. And put carbohydrate, the orthodoxy would try and claim that are not addictive, like cigarettes. They have I think a list of criteria that the carbohydrates don't meet. But I believe absolutely what do you say. I know if I eat meat, it's self limiting, remarkably satiating. And if I used to have carbohydrates like toast, two slices meant six or seven or eight for me, and I mean six or seven or eight, even at night.
Robert	06:09	You're absolutely correct, Ivor. I think first of all, let me correct something you said. It isn't a belief that it's addictive. If you take the word carbohydrate, with sugar and starch, and you apply to exactly the same addictive criteria they use for alcohol and nicotine and just switch the word, it meets every single one of the criteria.
lvor	06:28	Great, because I had a vague memory that some people maintained it but I can't remember all the criteria. But it does actually meet all of the, you know, the actual orthodox criteria.
Robert	06:40	It meets every single one of the descriptive criteria. It also meets every one of the objective criteria. So when you feed somebody you do an MRI, a spectrum MRI, and you feed someone cocaine, a particular part of their brain lights up. You feed them nicotine, a particular part of the brain, the same part of the brain lights up. You feed them ice cream, the same part of the brain lights up.
	07:02	And there have been animal studies as well as human studies. And I think that the difference is this, you mentioned this with nicotine, there's both a psychological dependency, and also because the nicotine is a physiologic dependency and the two go hand in hand. If you're only smoking every now and then, you may get a lot of emotional reprieve from that. So your brain might have an abusive relationship with it, but because it's intermittent, your body isn't addicted yet. That's you're "flirting
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with" but not "married to". "Having an affair" with cigarettes but not "condemned to a relationship" with them.

07:35 When it comes to carbohydrates, that same thing may happen. But because they're so ubiquitously available, number one, and number two, we really haven't thought of them as addictive. When you're smoking you know at the back your mind that's a problem. But when the world tells us that carbohydrates are not only okay but they're healthy for us to eat. And I'm talking about some of the things like honey and apples and breads and whole grain breads, and quinoa. We actually think we're doing the right thing.

08:04 The other critical thing is that carbohydrates are so unique in that we start feeding carbohydrates to our children the day they're born. So you're breastfeeding a baby. You are feeding them formula. What's formula? It's a baby milkshake. Very low in fat, high in sugar. And then we wean them. We wean them on to fruits and vegetables. No meat. It's a very little saturated fat. And so we create this carbophilic, this person who loves carbohydrates. Whether they'll become addicted or not, that's a slightly different story to that. But you create this environment with these people where we know love carbohydrates. And then the question is, to what extent do we depend on them to manage our emotional needs?

Ivor08:49Yes, exactly. And you know what you said there is really<br/>important that people perceive them as actually good. Can you<br/>imagine a world where we all perceived and the experts in<br/>health said that cigarettes were good? It would be a disaster. It<br/>took enormous efforts for smoking cessation to become a<br/>reality or a reduction in smoking rates. But if everyone and all<br/>the doctors said the smoking was good and still said so, we'd<br/>obviously have a disaster with smoking.

Robert09:16Absolutely. Let me give an example. There's a real example. I<br/>was in Cuba a few weeks, gave a talk out there. And in Cuba,<br/>everybody smokes. Literally, the smoking rates are ridiculous.<br/>And what the government has said is that, "Our Cuban tobacco<br/>is very safe because we don't grow the tobacco with chemicals."<br/>So exactly what you've just said, they've created a cultural<br/>environment where they condone the use of an addictive<br/>substance. And if you fall victim to that propaganda, it's easy to<br/>understand that it's okay to smoke. And we've done exactly the<br/>same thing with carbohydrates. The food pyramid in this<br/>country, we've encouraged people to eat carbohydrates as part

of health. And that's v	vhere the error happened. We've
[Inaudible 00:09:56] it	ts propaganda.

lvor	09:58	And that's a killer, Robert. In Ireland actually, just last week, we had a senior dietitian on Ireland's main radio station RTE, and had an eight minute piece where not only vegetable carbs and non starchy vegetables were kind of exalted, but bread, pasta, white rice, and basically all the refined carbs were held up as good foods that we should be eating and that the low carb, a whole philosophy was damaging by not accessing these healthy foods. That's in 2019, you know, on the main radio channel. It is crazy!
Robert	10:35	Is it? Ivor, let's do a simple experiment right now. I'm a doctor, do you trust me?
lvor	10:39	In principle, yes.
Robert	10:40	Give me your wrist. You still have a pulse, but you don't eat carbohydrates. If that was true, how could you be alive? And the whole premise is that not only are we alive (I also try not to eat carbohydrates) we're actually thriving. We talked about that earlier on. So we're thriving mentally and we're thriving biologically. How can that be bad for us not to eat carbohydrates? And the reality is, we absolutely have to have carbohydrates. Without sugar in our bloodstream, we will die. But what most people don't understand is that's the job of the liver. The liver's job is to produce carbohydrates and release them into the bloodstream. That's where my blood sugar comes from. We don't have to put those carbohydrates into our face. Yes, there's an advantage to putting them in our face historically, because we could fatten up a little bit through winter and that kind of thing, but not with the current ubiquitous availability.
	11:30	Then there's something else we didn't talk about. So, carbohydrates can be seen both as a food with a survival advantage, as well as a highly endorphin activating drug. They fulfill both criteria, okay? Just like morphine, for example. I use it as a surgeon to alleviate pain. But you may use it recreationally to alleviate mental pain. So we've taken something that is a biologic medicine and we're using it as a drug as well. And that's where carbohydrates fit into a very

similar category.

11:58

lvor

The part with carbohydrates become a problem is more and more our society, and I'm talking about the international society, focuses more and more on people being productive and working hard, and [achieving?? 00:12:11] and success. That's the engine room. The byproduct of hard work, success, achievement, is emotional stress. We get anxious, we get stressed, we get depressed, angry, frustration, fear. We feel wounded all the time. And we need a cooling system just to dissipate those emotions. Well, we're so busy working hard. We don't have time to go for a walk or run. We don't have time to read a book. We don't have time to socialize and kick back. So what we find, particularly when we stressed out is something that gives us instant gratification, that instant emotion management, that obliteration of the emotions. And what happens when we have a diverse emotion management deficit, then we turn to one particular substance and we use it to excess.

13:01 Well, in the last hundred years, this country in America, we went through prohibition because people using alcohol. Then we went through Big Tobacco because tobacco was available everywhere. And it wasn't just nicotine. Smoking is a lifestyle. And now we're into the carbohydrate lifestyle club, Club Ophelia Bounce. The biggest difference is the majority of people still think it's healthy. Nobody these days can tell me that vaping or nicotine or even alcohol is healthy. And we still speak of carbohydrates as being healthy. And that's a problem. That's a dynamic that needs to change. It's fine to use them from time to time, but at least we have to have boundaries around them. And we don't have boundaries around them. And therein lies the problem.

13:43 Yeah. And to the earlier point as well, if they were saying that only non starchy vegetable carbohydrates were healthy, that would be kind of reasonable, you know, because by their nature, they're not really that addictive. Like I said earlier with the broccoli. I mean, if you're already eating non starchy, above ground veggie, you are not going to pig out and over the years of eating them become a big fat pig. But they also defend, and this is what really gets me, the rice, the pasta and the breads. I mean, bread, one thing that struck me the other day or actually it was this morning and I was thinking about your topic and your talk which was fantastic, and something occurred to me that we all vilify junk food, like burgers and fries. But fries are just refined carbohydrates with vegetable oils. And burgers, there's meat but there's the bone which is refined carbohydrates and

		vegetable oils. But bread, the pan of bread that you buy, the loaf of bread is refined carbohydrates and vegetable oils. It's essentially the same as the junk food that people like dieticians are happy to vilify, but bread is exalted, but they are essentially the same in terms of their junkiness.
Robert	14:49	And that's what people don't understand is that it doesn't matter how it goes in your face. What matters is what it is on your bloodstream. And the difference between human beings being more on the carnivorous side and herbivores in other animals is that we use enzymes in our intestines to process what we eat. Gorillas and cows and pigs, herbivores use fermentation. So they use bacteria to extract the food. When we use enzymes, it doesn't matter what goes in your mouth. Those enzymes will cleave that bread that you eat into glucose. So it's glucose that's entering your bloodstream. When you eat it as honey, as ice cream, as sugar, as Taco Bell, it doesn't matter.
	15:30	But the other part is this. You come from Ireland. Ireland has a strong history with potatoes. And potatoes are grown, they're healthy, and they were a large part of the Irish people survival during very lean times. However, we cannot take potatoes and turn them into French fries; we can turn them into mashed potatoes. They're ubiquitously available, we no longer have survival pressure. And that's part of the issue.
	15:57	There are a number of peasant communities. In fact, every peasant community uses carbohydrates as a staple. But it's an energy survival staple. And that's the difference. What they also still do is they eat their carbohydrates, because they're not fully available, they eat them intermittently. So what happens is they'll eat the carbohydrates, they'll store that energy as fat, little bit as glycogen is fat, and then between meals, they'll use that up. So there's this ebb and the flow. The harm only comes when you're eating frequently. I call it "intermittent eating" which is the frequent snacking. You know, they tell us now we should eat six to eight times a day, and then you're accumulating and accumulating and accumulating, and there's no ebb and flow. Your insulin levels stay up all the time where they mildly fluctuate. And therein lies the issue. It's not just as simple as carbohydrates. It's the whole pattern of eating. And remember, a snack is always an emotional event. It's never a nutritional event. So if we're snacking for our head, we're consuming beyond what we biologically need.

	17:00	One of the key things to understand about biology, there is no feedback control when it comes to carbohydrates or alcohol. So if I decide I'm going to drink 10 bottles of beer tonight, I can. There's no way on God's Earth I can drink 10 bottles of water, my body won't let me. If I decide I'm going to eat three tubs of ice cream (I think I should have done this experiment just for the show) I can. There's no way I can eat a 64 ounce steak. That's the caloric equivalent. I may eat 10, I may eat 20, I may get 30. My body is going to tell me in a feedback or homeostatic pattern, "Stop" and I can't eat more.
lvor	17:40	And even more to that point, your point you made in your talk earlier, if you ate a steak and became full at a certain number of ounces, and you said "I have enough" due to the satiety of the protein sensing systems, you still got afterwards eat a load of french fries or potato chips and chocolate easily after that steak, even though the steak you were finished, you were full. You're not full when it comes to these things. You could eat a load more - M&Ms. You could sit and watch television and eat 800 calories of M&Ms easily.
Robert	18:13	Absolutely. Well, let me put this out there. When you're at a restaurant and you're drinking water, and you start drinking water and they keep filling it up, are you okay leaving half a glass of water on the table?
lvor	18:24	Oh, for sure. Yeah.
Robert	18:25	Right. When you're in a pub drinking beer, are you okay leaving half a beer on the table? Hell no. And matter how much beer there is, we will finish that cup. Or if it's Coke. Now in this country, Coke is free. Not free but they keep refilling it. But it's very rare that I see people leave half a glass of Coke. Even if their third one. They'll leave half a glass of water very readily because your body said, "Stop."
	18:50	When we're eating primarily vegetables and meats, particularly high fat meat, we'll take the rest home as leftovers. When we're eating primarily carbohydrates, we typically finish the plate. And so we eat way more. When it comes to carbohydrates, we eat what's in front of us. When it's carbohydrates because there is no restriction. In fact, the whole stupidity of what I call the "calorie system" [Inaudible 00:19:14] loves this discussion is, it was created as a mathematical formula to try to regulate how much we eat because the body can't do that naturally. So we've decided that the human body burns 2000 calories, and that's

		how much is in our portion. But if you and I both go to a restaurant (I'm a little bit bigger than you, both sideways and lengthways) and we order the same thing, they put the same portion in front of us, and we're both finished the same if it's carbohydrates. But if it's a 64 ounce steak, we're going to eat what we need and it'll be different.
	19:47	And that's what the calorie formula was. And then we base everything on this thermodynamic nonsense about how many calories you burn and how much you it's a bizarre mathematical formula that doesn't work.
lvor	19:59	Yeah, that is for a steam engine. It's just an absurd if you use it for humans. I mean the complexity of the feedback control loops that work for millennia now have suddenly broken the last 40 years. Even exercise levels have not changed that much. They tried to blame exercise.
	20:15	One thing that fascinates me with my kids is even meats they like and they do genuinely like meats or burger meats. It's like you say, it's self limiting. But when you bring in takeout pizza occasionally as a treat, it is shocking what the same 12-year-old boy can eat. In fact, I'm actually amazed at how much kids can possible to eat. The control mechanism just isn't there.
Robert	20:41	There's no control (mechanism). And the control mechanism is not only there when you're sitting down and eating it. But if you eat a steak and you eat some of it and you put the rest in the fridge, an hour later, two hours later, you're not going back to the fridge and eating more. But you are when it comes to carbohydrate.
lvor	20:54	Yeah, "There's a pack of M&Ms in the fridge," going back.
Robert	20:58	Yeah.
lvor:	20:58	And cheating as well. I mean, I'll be honest, occasionally, especially combined, if you have a couple of glasses of wine, there's people around and someone has brought some chocolate as a gift when you're having dinner at home, there's an enormous drive to reach out. Because you are slightly, your inhibitions have been lowered by the wine. And once you touch him, even if you're a years on low carb, and you're good, and you're doing great, once you start with a chocolate, it's shocking how many can just drift into your mouth.

Robert 21:27 And I think that is the quintessential point, the difference between what I call "harm reduction models" and "addiction models." Harm reduction is eating less so that you don't cause harm. So if you've had five DUIs, if you came to me and said, "Look, I've been to jail. I've had five DUIs," and I tell them, "Look, if you only drank two beers a day, you'd be absolutely fine." Okay, and that's true. The problem is, by the time you've had five DUIs, you've lost control of the relationship. So in a free living person, to ask them to only drink two beers but they got that case of beer in the house, they may be fine for a while. Life throws an emotional curveball at them, they're drinking more. E

- 22:04 Exactly the same when it comes to carbohydrates. If you give someone an allowance, "You can have 50 grams," "You can have 60 grams," then they try to measure that allowance and they may be good for a few days. But then they're going to sneak away and do it. Or they're bored, or they're stressed and they're eating more. That's harm reduction. And harm reduction is unsustainable because there's no incentive to change the behavior. You may control your calories for a while, but there's no incentive to find other ways to deal with your boredom or your stress, your anxiety.
- 22:35 When it comes to addiction management, what you just said, the critical threshold for addiction is the word "permission." It doesn't matter how much alcohol the alcoholic drinks. AA will tell you, "Do not give yourself permission to have the first sip of beer," because you've distorted reality to grant yourself that permission knowing that you can't stop. When it comes to that first block of chocolate you were talking about, you have to distort a lot of reality to give yourself permission to do that first block, and then you screwed.
- 23:07 That's one of the reasons for example, even berries, I don't have them in my house, I'll eat blueberries in my salad at a restaurant. But I won't have them in my house, not because they're not okay to eat from a nutritional perspective. But I'm doing drive bys. If I know they're in my fridge, I'm going to keep going until they're gone, no matter how big that pan it is. And it's not just how much you eat at one meal. It's that perpetual snacking, because they're in your head. That's how I deal with my angst, with my emotions. And in fact, I didn't even feel the emotion. I couldn't even recognize that I'm anxious or I'm upset or I'm angry, or I'm frustrated. All I know is that right now I need my fix.

lvor	23:43	It's subconscious, yeah. I think Allen Carr with "Smoking" said there was a big monster and a little monster. And the big monster for him was the little psychological subconscious niggle telling you you wanted a cigarette. That was the big problem. The physiological addiction to the cigarette actually was smaller than you think. After three days off them it's faded. But the huge monster was the belief in your head that, "This will help," "This will make me feel better."
Robert	24:08	Well I think the other part also you're actually right. And the other part also is that that relationship is so effective, that you don't have anything else. So you slice away other ways of doing things. If I've got a tub of ice cream, why the hell should I go for a run or walk? If I've got dessert, why should I play a game of cards with my wife after (which relaxes me, especially if I win) after dinner? So what happens is, this becomes the singular way in which we deal with everything. And so that's the mental side, not just the physiologic side. So when you take it away, when you deprive yourself, now you left this with a huge deficit.
	24:44	What I tell people is when I opened an obese person's emotion management toolkit, there's carbohydrates and cobwebs. You take out the carbohydrates, you got nothing. So when you remove carbohydrates, you have to replace that with other forms of emotion management. A lot of people who successfully quit smoking, gain weight. Because they didn't quit smoking, they just went from nicotine to carbohydrates; a drug transfer.
	25:07	So we've got to make people cognizant of that. That's a critical part of our program. And remember, what we want to be able to do is create sustainability. It's very easy to go on a ketogenic diet and feel great for a while and use that great feeling for a while, "I'm losing a lot of weight," that if all you do is you feel great, and you're not working equally hard at developing other things. Again, when life throws something at you, you got nothing else. And so people will lose 89 pounds on a ketogenic diet and be great, and then they gain all the weight back. And they don't say, "I screwed up." What they do, "The diet didn't work." And then off they go and try something else.
lvor	25:45	But they did stop doing the diet effectively.
Robert	25:48	Exactly right.

lvor	25:51	There's a couple things. One is if you hit a pressure point or whatever, you might reach out weakness. Another thing is if you're doing really great, you start fooling yourself into thinking you can handle a little bit of carb.
Robert	26:01	Absolutely.
lvor	26:10	And then like the cigarettes, you can handle one in the pub on a Friday, you know, but then it becomes one on a Sunday because "I kind of had one on Friday anyway." So on Sunday you say, "Well, I'll just have one but I won't have anymore." Then in three weeks, you got a pack in your pocket.
Robert	26:15	The problem with addiction - and this is my personal experience as well as that with my patients - once you cross that threshold of permission, it's incredibly difficult to step back because we are experts at minimizing and trivializing and rationalizing and you know, one of the things about addiction, addicts are immune to risk. If I knew that by rolling up my sleeve and injecting some heroin I had the risk of turning blue and dying, I probably wouldn't do it. But we just stood - we ignore the reality of the harm because all I want is the hit right now. If I know that this ice cream is going to make me gain weight and become diabetic, I may not do it. But we're immune to that risk. It's like procrastination. Procrastination is about immediate gratification irrespective of the consequences down the road.
lvor	27:01	Exactly. Because each each time you reach out and have the ice cream, that moment in time when you eat the ice cream does not make you diabetic. It's only a sequence. So each one can be excused, and you make the excuse in your head. It's just this one, "I'll be better tomorrow." But of course, tomorrow comes, is just another one. "I'll be better the next day." And this is the killer with cigarettes, probably alcohol, and indeed with carbohydrates. Let's be honest, I think I recall now, Robert, when they said earlier, there's an argument against to being addictive. I remember what it was. It was the argument that nicotine is all natural or whatever. Smoking, alcohol is kind of a poison, but carbohydrates are a food so you can't call them addictive. I think I remember hearing that logic. I don't agree with that, but
Robert	27:47	Right. So you know, nicotine may be natural, but vaping a little vape machine is not. Okay? Even if you take that argument that fruit is not natural. "Oh, yes it is." "No, the apple that I grew up was a little something like this." "No, the apple is this big, it's Page <b>12</b> of <b>21</b>

been genetically engineered, and there's not more vitamins and minerals in there, there's more sugar in there." So we've created that perspective that sugar is now ubiquitously available. Sugar can be food, but it's also become a highly addictive drug.

- 28:20 So the other element to this is the way in which we raise our children more and more and more. We've gone away from raising our kids the way the original hunter-gatherer clans did, which was they began to raise the kids with a collective way of having fun, of relaxing, and of understanding play as a fundamental part of being a healthy human being.
- 28:44 Lovely, lovely article from the Eskimos. And it's an interesting article. 1971, a book was written about this - Never In Anger. It's a great book. It's a long time ago, but around the same time that we were writing books about the ketogenic diet and hunter-gatherer societies.
- 29:00 In that book, Eskimos raised their children without the concept of anger. It's not that they teach them how to handle anger. Anger doesn't exist. So, if I do something silly like I drop something in the ground and smashes and I get angry at myself, now I'm all caught up in the emotion. And I have to subside that emotion before I fix the problem. If I don't feel the anger, and I just pick up the broken thing and say, "Okay, how do I replace it?" I've dealt with the issue rather than emotion.
- 29:30 We're so often get trapped in the emotion. You know, when you're driving down the road and some idiot cuts you off, and you get all angry at him. Now you've taken his angst and made it yours and you have to go to McDonalds to get a McFlurry to deal with the emotions. If you just did, "I'm not going to let your life be my life," and you back off from him, you let him drive away, his emotion doesn't become yours.
- 29:53 So, a large part of this is how we parent our children. And we as parents, more and more are focusing on productivity and less on relaxation methodology. You know, if a young child says, "I want to play soccer," what do we do? We put them on the team. They win, they lose. It's all about the tension of success. [Inaudible 00:30:12] on math exam. Very rarely do we take them outside, go out in the street and kick a ball with them and have fun. You know? It's more important to read to a child and teach them how to read it first. Kid goes to pre-K at the age of three and they're teaching them A B, C, D. That's miserable. But

if they fall in love with stories, then they're going to want to read.

30:34 If I have a relationship with God or a spiritual relationship, and it's beneficial to me and I can share some of my deepest thoughts with that relationship, I bond with that, I can use spirituality. But if my mom drags me off to church and sits me in a pew for three hours, and I have to listen to some boring, I hate that and I lose spirituality as part of my emotion management system. So more and more we have reduced the diversity of emotion management things - things that we do for pleasure and fun.

31:06 You've not probably played some sport growing up, I played a lot of rugby growing up. I'm South African. But, when I hurt my cleats, what was left? Carbohydrates. So I had diversity and I gained my weight as an adult. Because I lost all the other things I was doing and was left behind with sugar and starch, and the relationship became excessive. So therein came the problem.

31:31 So, as we look at this, number one, we want to help, not normal people, not normal skinny people, but our obese and our type 2 diabetics. Those that have lost control their relationship, to understand the addictive nature of the relationship and use addiction methodology removal and replacement rather than diet methodology which is eat less and have permission to have some as we said.

- 31:53' The second part that we've got to understand is the physiology of satiety (feeling full). And satiety is primarily mediated by fat, (saturated fat) which gets into our fat cells. And there's a signal that comes back from those fat cells that says, "I'm full." And it's biochemical. It's not based on the load. It's based on that biochemistry that comes back. What did we do seven years ago, when we felt that fat was bad for us? We took fat out of our diet. We removed our satiety signal, and we replaced fat in our diet with sugar and starch. So not only did we remove the satiety signal, we added in something that has no satiety. How can we not be fat and go fat and sick?
- Ivor32:36Go figure. Exactly. And also, we've replaced natural fats with<br/>industrial seed oils, which have been proven in many animal<br/>experiments to be inherently obesogenic. So we kind of just<br/>double troubled. And the protein has dropped as well in the<br/>modern diet. I think America is down at 12 or 14% on average.

And there's an elements of satiety there with protein too. So everything has gone the wrong way.

33:02 Now, I suppose to close on this though, society at the moment in the "Orthodox expert" shall we say, the so called "experts," they will resist massively this narrative and they are resisting it, and they are in the vast majority. All the dietetic dietitians, everyone has the problematic view of things that you described. What do you think in the next few years of our chances of turning the ship around? It's a tough question, but...

- 33:30 Robert I think the reason why this has resonated so much with me is number one, I've been able to do this to the science. I've got a PhD, I've got my credentials. But what I realized very quickly as the medical school dogma that I was raised with, didn't compute with a patient that was sitting in front of me desperate for help. And when I spoke to and listen to my patient, what I've just said came from being in the trenches. There's not a lot of science about it as we said, but if you can resonate with your patients and stop using this bogus science, and really look at what you're seeing, because most doctors don't see what they see in front of them. And if you can treat the patient at the cause place, because they'll come in and they'll have this emotion management dysfunction. You just talk to them about what they're eating. Whether they agree with it or deny it, they'll reveal that it's all carbohydrates. That's the starting point.
  - 34:24 So, the part for me that's important is getting into the trenches and being able to treat individual patients rather than looking at peer review documents. Than look at large studies. And that's difficult to do because we've become an evidence based society.
- Ivor 34:38 Yeah. EBM has kind of become a problem. It has become a tool of the pharmaceutical medical complex really. But for you to do that with patients is what really helps patients, but I guess you do speak and travel as well. You You need to convert more doctors because they're in a very powerful influential position. And if you convert more, they convert more, the low carb movement converts more. Maybe the medical profession can start being the leadership to get these concepts across. I don't know but dietitians so much even though they currently technically own this space, they're going to be very hard to convert.

Robert	35:13	Well, I think the the dietitians have a specific role but a cog in the whole thing. They are not the whole thing. Because yes, you want to understand what a healthy diet constitutes, and how can I construct a carbohydrate free diet. But you also need the psychologist. You need the physician maybe to help you come off your diabetic medications when you don't need them anymore. So you need all of that care. You need the, "What should I be eating," and "How should I be behaving?" and you need the cheerleader. Our process is more like a "a" than it is like a "diet." And it resonates with our patients.
	35:49	There's also the capacity for relapse. Nobody quit smoking the first time. So you've got to be able to pick them up and move forward. When they screw up a diet, "This diet didn't work. I'm going to try a different one." But when you quit smoking, you got to go through crumpling them up and throwing them away each time. You got to help the patients with their success as well as their relapses.
	36:07	And I think you're absolutely right. I do a lot of speaking, this kind of thing that we're doing right now. I'm not here to convince people with science. All I'm asking people to do and and I say people, not even just doctors, anybody, lay people, dietitian, psychologist, doctors, open your eyes. Look at what sitting in front of you. And open your ears. Listen to what they're telling you. And when you listen, this becomes so obvious. And that for me is the key thing. You can ignore the science a little bit and just watch what's in front of you. And then even if you don't believe me, what I tell my patients is this, "Try it, try it for 21 days." Nothing bad is going to happen if you stop eating carbohydrates for 21 days. And most people can manage three weeks. "Try it for three weeks, let's reconvene." And almost always and nobody's going to get it right completely. But always a moderate reduction carbohydrates makes a massive difference. And they'll come back and say, "Wow, I love the way I feel. I'm a little unstressed. I'm feeling great." And then we can have the emotional talk.
lvor	37:14	Wow, the psychology.
Robert:	37:14	But you got to do it progressively. Exactly right. Because we're so busy eating, we're not even in contact with our emotions.
lvor	37:22	We're not connecting our emotions and our subconscious to what we're eating. They're almost separate like completely. Page 16 of 21

		The, "That's food I eat, and my other problems are my other problems."
Robert	37:31	Correct.
lvor	37:31	Most people are not connecting them into a kind of an integrated whole problem.
Robert	37:36	But once people see that they're actually self medicating with eating and drinking
IVor	37:40	the penny drops.
Robert	37:41	then the penny drops and then they start to see. Now the next question is, did they want to change?
lvor	37:47	Yeah.
Robert	37:48	So the way I look at carbohydrates, and it's nasty but I believe a very relevant way of talking about it. Let's say two people fall in love. And the one person is incredibly wealthy, incredibly good looking, great in bed, great conversationalist. And the other person, the other spouse says, "Well, this guy's providing everything for me. I don't need to work anymore. I love talking with him, so I'm not going to meet with my family anymore. Give up my job, I'm going to move into the house with him." This person represents everything wonderful to them. And they're in their great territory. They felt better than they've ever felt before. And then what comes along is one day, that guy comes along and hits them, gives them a black eye. "Well, it was my fault. I kind of you know, the food on the table is cold." Long story short, every couple of days, they're getting beaten up - a broken arm here, welts on their back [Inaudible 00:38:42] Eventually, they come to a point where they say, "You know what, I love this person terribly. I have nothing else in my life. All the other things are sliced away, because he represents so much but he's beating the crap out of me." "I've got a choice to make. I got nothing except this person, do I get a restraining order and move out?" "Am I going to be miserable and light because I got nothing." "What do I say?" "I don't care if he kills me, I love him so much I'm going to stay."
	39:15	And the patients I see in my office, the morbidly obese people, the diabetics, are in that relationship. They love carbohydrates, they're so ubiquitously available, plus they're not fat, there's so many things they can't do. So they're in this type little prison

with their obesity. They love their carbohydrates, but they're

		beating the crap out of them. And the question you have to ask is, "Am I willing to step out of that relationship? And when I do, I've got nothing." But slowly you can rebuild that relationship.
	39:44	Some people choose to, some people don't. And domestic violence often ends in death because somebody didn't choose to move away as your relationship with carbohydrates.
lvor	39:53	And you know what, it's going to be tough as well because someone carrying a couple of hundred pounds extra when they do give hope, which is their only hope. But when they do give up, they have such a long road ahead. And I don't mean to be negative to people who have to take that journey. I respect them so much for the ones who can go to the long journey of taking away all those pounds. Keep away from the thing that that was their primary soccer and help and comfort and keep with it until they get the benefits and then get traction and realize, "Wow, I'm free."
Robert	40:25	You're absolutely right. But the way I look at it and the way I explain it to my patients is when you look at how prevalent carbohydrates in your relationship with in your life, it's like an elephant. "Oh my God, it's an elephant." How do you eat an elephant? You can't eat in one bite, you break it up into little pieces. And if you focus on little thing, little changes that you make every day or every few days, you slowly advanced through this. Your obesity didn't come in a day. Let's give up the sodas, the sugary stuff. Then let's give up the breads and the pastas, then maybe let's work on some of the snacks and then let's work on the fruit. And if you do it sequentially like that and you bring in higher fat foods, you bring in some of the foods that give you that satiety and that satisfaction, its removal and replacement, but you can do it progressively. All too often the diet is, "Here's your start date, do it all." You can't eat the elephant in one day in one go.
Ivor	41:17	And replacement is so important. I mean, like with the cigarettes, replace it with something pleasurable. You don't usually do something that might be expensive, but you do it for the period to get you through the the initial stage of the war. Just back to the taking the chocolates, what I do to avoid that is I get a plate of cheese cubes. I always keep good cheeses in the fridge, which I liked. Like you know, Brie and Camembert, nice cheese I like. Or French sausage, the expensive stuff, the saucisson, the dried sausage, stuff that really is a treat. But it gives you something to have alternative to the temptation to Page <b>18</b> of <b>21</b>

take the bad thing. You've got something else. It's not just you or the chocolate or just you with nothing.

- Robert 42:00 You're absolutely.
- Ivor 42:01 There's something else.

Robert 42:02 Yeah. And I've coined a phrase for that. Because when you need that little snack, as I said, a snack is always an emotional event. But it's really, "Oh, I'm feeling something. I need something to alleviate this emotion." A snack gets you over that, but it causes [color 00:42:18] calm. A bridge, which is the word I've coined, a bridge helps you to cross that thing without causing harm. So your little thing, that piece of cheese. I have some sugar free jello in the fridge, I have my coffee. Those are the things I've developed a very close bond, a relationship with. So when I have that moment, I've got easy access to my coffee. I've got easy access to these things so I don't go foraging for something else. If instead of having cigarettes in your pocket, you're going to stick a gum in your pocket, you're going to reach for that when you have that moment. That's your bridge across the need to have a cigarette without causing harm.

> 42:52 One of the other interesting things if you've got a bit of time is that the human brain can focus for around 20 to 30 minutes at any one time. And then it will take a break. You're either in the driver's seat or the passenger seat of that break. When I go for my coffee at that break, I'm doing something that's helping me just have that mind cleansing moment that doesn't cause me harm. If I reach my coco, my M&M just like I used to, I'm having that mind cleansing moment but it's causing me harm. And a cigarette here, a cigarette there, by the end of the day it's 20. Couple of sips of coke here, a couple of sips of coke there, it's a case of coke at the end of the day. So it's the cumulative effect. Is my coffee perfect? No, but it's a hell of a lot better than the carbohydrates I was eating.

lvor	43:35	Bridges.
		2

Robert 43:36 Bridges.

43:37

lvor

Bridges are so important. Well, you know, I think not only have we gone through this whole topic pretty comprehensively within our limited time, but also there's quite a few tips in there towards the end, but you can't give a comprehensive kind of

		course for someone to bring them through. But that's what you do with your one on one patients in Florida, isn't it?
Robert	43:53	Yes. And it's sequential. So it's not just one visit. We introduce it and then we talk about different topics. So, there's information that we provide first and then we help the patients to manage their lives uniquely. And it's a team approach.
lvor	44:05	It's essentially a program, and of course that must because there's no one hit wonder, like the BS diets out there, "You just get the list and you do it." It's a fad. You have to carry people because these people are severely compromised, as you've described so they do need some support and a lot of pointers and feedback and kind of, you know, rounds of getting through it all.
Robert	44:28	Very few people quit drinking, very few alcoholics quit drinking on the internet. And a lot of people are doing what I call "internet keto." They're following somebody who's an evangelical keto person, but they don't understand what they're doing.
	44:39	My practice is not a weight loss practice. It's AA for fat people. And we follow that stepwise addiction methodology. And really what we help them is guide them and navigate them through the pitfalls. Keto evangelism, particularly when it happens on the internet. You're trying to learn by yourself, but there's no self recognition. You don't have that introspective ability, especially to understand your behavior when you're doing a keto diet on the internet. But when you approach it from a substance abuse perspective and you have that introspection, and connected to how you feel, and we can help you to connect that. That makes all the logical sense and creates not just weight loss, but sustainability, which is really what we're after.
lvor	45:23	Which is crucial because 95% of diets fail in the long term. Keto may be better of course than the stupid diets, the low fat diets, but the failure rate is still going to be substantial and the less people that's boarded. And the most vulnerable people, you know, we're talking about the people with a lot of weight, with diabetic issues, with psychological challenges, that they use to carb to compensate for. Those people more than anyone needs support and help which it sounds like you guys are absolutely doing for them.

Robert	45:48	Absolutely. And I think this type of discussion does that as well. It opens your eyes to other possibilities. And you think about things beyond just carbohydrates, calories and diet. I really appreciate this opportunity. Thank you very much.
lvor	46:02	Delighted, Robert. Your perspective is what it's all about. So, we got the message out there. Thank you.
Robert	46:07	Thank you.