# How To Beat Diabetes With Behavioral Health Design Transcript

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## Introduction and Background

Welcome to another episode of Reversing Type 2 Diabetes Summit 2.0. I'm your co-host, Dr. Will Hsu today I had the pleasure of inviting Dr. Bobinet into this conversation and Dr.

Bobinet, that you just have such a impressive medical pedigree, but more importantly, your you are a fresh thinker, you are an entrepreneur and love to hear about this concept of of design in for health and long term behavior change.

So without further ado, love to hear from your own mouth who you are. What brought you to where you are today. Yeah. Thank you so much. You know, I really got got the bug when I was doing clinical practice long time ago and found that for me I was more attracted to long term behavior change because there was so much in between visits that wasn't happening with my patients and, and also a lot of shame building up in them.

And so I went on this quest and about three decades later, I find that, you know, I'm in the brain. You know, neuroscience is kind of the whole point of this whole thing. And yeah, that that's what I would say is just kick it off is I'm really passionate about long term behavior change.

You're too humble to speak of your own background, you're a renown author. You're a speaker. You have your own company. Take us through the journey. How did somebody who started out as a medical physician and ended up doing so many other things?

Yeah.

## From Clinical Practice to Behavior Change

So the last patient that really changed my life in clinical practice was a man who came in for a gouty toe go into clinic, and I was writing a script for the toe and just said, you know, how did this happen?

And he said, Well, you know, Doc, like three days ago I did meth and I haven't been to sleep since. And so meth dehydration, you know, gouty toe I was at that.

And I just remember thinking like, I'm at the wrong end of this animal line. I'm more curious about why he did meth. And I it didn't draw me to the addiction medicine per se, but it really got me excited about how can we close the gap between what people know is good for their health and then actually what they do.

And so that's something in psychology called the know do Gap. And I think, you know, in a nutshell that has driven me to public health, you know, to, you know, looking at like population wide kind of things.

I was then recruited by my thesis advisor at Harvard into Aetna and did all kinds of health intervention design and looking at everything from birth to death and wellness to illness.

And so that was a really good general education in behavior change, if you will. And then when I left and I went to Stanford to study more with behavior design in B. J Fogg's lab, I moved over to the medical school at the AIM lab with Dr.

Chu, who was Larry Chu is a brilliant physician at Stanford. He's really about behavior change himself. And so he put together this panel of expert patients.

And in every case, what I noticed is that each of them were kind of designing and using design to optimize their health, whether they had liver cancer or whether they had arthritis, whether they had diabetes.

And so it's something that was like kind of a theme that was hiding in plain sight throughout my clinical and scientific and research career. But then I really came home because I started my company and about seven years ago was hired by Wal-Mart to really look into, you know, chronic conditions and why people do or don't manage them and who's doing good at it, that kind of thing.

And given that they have a pretty much a general population of the United States kind of sample in their associates, their employees, we did field research.

And what we found in in certain minor cases, the edge cases, is that there were these kind of MacGyver's these these people who were able to iterate and design their health in ways that other people wouldn't.

And it turned out that statistically they were the ones who were able to reverse their disease, get off their medicines, you know, lose the weight, keep it off long term.

So that was to me was kind of like the Holy Grail, the aha of what I'd been searching for for almost three decades. So I'm going to take us back to that.

The clinic that backed in in the one on one in the clinical room, I remember many of my patients that would say, Hey, Mr. or Mrs. So-and-so, you know, the diabetes is all about behavior change.

And you could see the eyes roll, right? They're like, I know what I should be doing. I just can I get to do it right? And so while this kind of designing for behavior change seems very like very public health kind of, you know, big population health intervention, speak to the hearts of our patients who say, well, what about me?

How can this help me? Where does it fit? How can I apply this principles of behavior change into my life? Yeah, exactly. So the know do gap is where everybody suffers from.

I know what to do. I just don't do it. And I didn't know there was an eight in for it. You know do gap like it makes sense, right? So what is sitting at the heart of the know do gap is some interesting new insights from neuroscience and this was never discovered before.

## The Know-Do Gap and the Habenula

So there's an area of our brain called the habanera which is basically two things. It is a failure alarm. So if you think you failed, like let's say you see your doctor and then you don't do the thing, you know, you don't take your medicine or you don't lose the weight or whatever, then basically this lights up.

And if it lights up, the most horrible thing happens, which is it shuts down or kills your motivation to keep trying to lose weight or to take your medicines.

And so from a physician perspective, we're looking at it as this person didn't do the thing that that they said they would do. The patient feels bad and then blames themselves.

But they don't know that this silent motivation and kill switch has gone off because there's no sensory, there's no cessation. They just see themselves not doing it the next day.

And then they blame themselves for being lazy or unmotivated or there I go again. Nothing works for me, you know, And they get to really discouraged and disappointed and ashamed.

And so that's something that I really want to free doctors and patients all over every industry for, you know, understand if we understand the brain and understand how we're tripping this kill switch off of motivation, then we can be smarter and we can keep going.

So is it a matter of skill, a technique? Is it a set of principles? And what is it? We're still try to get a cut. You know, imagine the listeners that try to get their arms around it is science promising and they're saying amen, amen.

Right. Their experience, what you're saying, help us out a little bit. Yeah. Yeah. And you know, every every patient or physician I've ever talked to is like, that's me.

Every human I've ever talked to is like, that's me. I have that problem, right? And so now that people know what it is, they want to know, how do I fix it?

How do how do I keep going when this kill switch goes off? Right. And so the number one thing is to neutralize every type of failure that you could possibly imagine.

So even little failure like, you know, I intend to eat, cook tonight, but then I end up going to a restaurant because my kid is sick or something like that, you know, And so those kinds of little tiny things can trigger off disappointment, failure, you know, feeling like I didn't do what I said.

I would do those kinds of things. And so really being serious about everybody, being serious about the toxicity of thinking that you've failed at something and going back to the Walmart associates, the one thing that those who kept going to who lost the weight got off the medications and stayed that way long term, the only thing you know, you look at their demographics, you look at their life circumstances, you look at the programs they tried.

But I found that the only thing they had in common was an iterative mindset, which is basically, instead of setting a goal, they would see it as like an experiment or a practice so that they didn't trigger off failure.

And then instead of failing, they would do something called iteration, not not their word, but mine. And iteration is a concept from design thinking where, you know, just like your phone, you've got version 13, 14, 15 on up, right?

You're changing things as you go. And going back to the Stanford expert patients, they were also iterating. They were they were tweaking and tinkering with their formulations, with their daily routines, with, you know, how they felt like all those kinds of things.

And so number one is failure, disease, making sure that you hunt up any failure that you think you might be harboring, and then to try to reframe it or try to let it go.

Right. And then there's many, many techniques for that. And then the second thing is iterate your way out of anything that is difficult, anything that is, you know, not favorable or that is bumming you out.

## Iteration Over Failure

And so with all these insights and that they came out of research, you inform that a company so down from the clinic into sort of the corporate world being an entrepreneur and tell us about that journey and and tell us about the company and what do you do for society through this very innovative enterprise.

Yeah, So the company was formed as a software response to see if we could mimic the benefits of iterative mindset and do that in a software supported environment.

So it's called fresh try, try. And basically what people do is they use this iterative mindset. They're kind of guided through both with trainings, video trainings, monitor mindset, as well as the way the software supports habit formation is to pick something, practice it, and then iterate along the way or change what you're doing because maybe you're not into it.

Maybe maybe you try, try, try, but it's too hard or you're not really loving it, you know? So not blaming yourself and really protecting people from that failure.

All along the way, we find that people stay longer. They stay in effort long time. And that's that's really it. You know, there's no magic pill. There's no magic program.

You know, everything in there we have culled from the literature so that everything that people are trying is

evidence based and actually proven to get the results they want.

But we've taken that from the science literature and and said, here, try this or hey, you try this, that kind of thing. And so people are losing weight.

They are, you know, improving their mental health, They are improving their exercise habits. I mean, what their thinking habits, all those kinds of things.

So is is this software platform available to general consumers or it has to be accessed through other pathways? Yeah. Right now we have a fully free platform and we also have a coaching program that is in beta and that's something that we will charge for in the future just because it costs a lot of money to have human coaches helping people in a more personalized way.

But you know, there's a community we just had, you know, crossed a million and a half, you know, hearts that people in our community send to each other.

It's anonymous and confidential, the community. And so you don't have trolling. You don't have kind of the toxicity of social media coming in, people opining about your your life or your your post during that kind of stuff.

It's just people coming from their heart touching and with what's true for them and then being honest with themselves. And, you know, it's working. So there I think this is maybe a rhetorical question.

Are there people with diabetes in your community? Absolutely. So we actually ask some of the chronic illnesses that people might have when they first join so that we can personalize the information and that the algorithm offers them, you know, everything from recipes to nutritional facts or different kinds of trainings and and those kinds of things so that it tailors it for if they have diabetes and diabetes with hypertension, those kinds of were common.

And are the all the interventions you have within that platform, are there ones that you think are particularly relevant to people living with diabetes or for family members who live with people with diabetes?

No. In fact, you know, when we did the research with Walmart, our Walmart partner was saying that there was one woman who lost all the weight in this very weird way.

She was addicted to Dorito chips. And so every day she would take a bag of Doritos, which her previous habit was to eat the whole bag every day. And she would leave one chip each day more in the bottom of the bag.

And, you know, I think physicians would just scream, you know, like this. This would my head would pop off. But she lost weight and she reversed your diabetes.

## Fresh Tri and the Software Approach

And at the end of her process, she was taking one chip out of a bag, licking off the flavoring, which is she decided like that's what she really cared about was the flavoring.

And then she threw away the chip. And so there really is to me that the thing that works is the thing that works for you right now, that the next thing you can get yourself to do.

So, you know, all of these tools are available to people. You know, there's so many good things out there that they can use. It's that they get mired in failure, like, Oh, that didn't work for me.

And then I failed that and it didn't fix me long term. Well, of course it did, because you need to iterate now. And so the focus is on the wrong thing.

The focus is on judging the program or judging the habit. And that didn't work. And so, you know, neutralizing that failure and just keeping going seems to be the key.

Yeah, it sounds like this more success each step of the way is focused on the positive rather than what's what's missing or what's not working. It's a great concept.

I have to bring this up because we've now entered I mean, 2023 is a year where the society is going nuts about these miracle drugs out there, Right? Their promises, weight loss with our efforts.

And in light of such a a sort of instantaneous results seeking kind of a mentality, what do you what do you say to the crowd, to the the listeners that there are on this on this summit about behavior change?

Where does behavioral change fit in in the context of a society where says give it gimme, gimme, you know, our weight loss tomorrow? I don't want any effort.

I don't want any changes in my behavior. Right. Exactly. You know, GOP ones to me are interesting because they are downstream molecule of something called oxytocin, which you probably really well know is a governor of all kinds of body processes, mood metabolism and like nothing is more ubiquitous, it's it's stronger and more ubiquitous as a receptor site than a dopamine even.

And so it's something that has, I think, societally dropped, you know, as we've gone more to technology, technology based relationships and all the kind of harms that that can do to us, we have separated ourselves.

And so no wonder there's a GOP one problem. There's there's a there's a deficit, you know, in that area. So, of course, people want to inject themselves.

What I would say is that it's a tool. You know, however, you know, if you if you inject this tool and it causes you to eat less, but the less is less junk, you're not eating healthy, then basically your tissues are still going to be starved.

They're still going to be malnourished. There's still going to be weak over time. And it's also turning out that that the GOP ones have about as much adherence as regular pharmaceuticals, you know, about 50% at a year out.

And so it's something that I think, you know, you're pointing to correctly, which is there's this big emotion like, oh, this is going to fix it. And ultimately we can't cheat biology.

We have to use that. Maybe as as a way, a bridge or something like that for some people. But I see it as an iteration. I see I see everything as an iteration of what works for you right now and what can help you get to the next thing.

But the only thing I care about is do you stay in effort and do you iterate? Because I know those are your life rafts long term. Mm hmm. And certainly we're seeing also that the dropout rate is quite high, as you mentioned earlier. Right.

And and when people stop using these this class of medications, their wake comes right back up. But one thing that's hard to be restored is actually muscle mass.

Once you root them, when you stop the medication, get all the facts back. You don't get your muscle back again. You got to use behavior to gain those muscle back.

And so it's the untold story of kind of the instantaneous gratification with these drugs.

## Behavior Change, GLP-1s, and Long-Term Health

Now. I mean, as physicians, I think we do feel that there is a place for medications and that I think I think you would certainly agree with that. But this whole summit is about challenging the concept that you have to be on these medications lifelong, right? Yes.

Certain industries will want us to all believe that all the chronic illnesses, the solution is a lifelong dependance on

drugs. And I come from the the the area or the perspective that we can use nutrition, use fasting, use technology in the nutrition space to help us change that, to reverse diseases.

You're coming from a behavioral aspect, designing your mindset and using your lifestyle to reverse diseases. I think our voices are kind of getting drowned out in this instantaneous gratification to a society where drugs become kind of the the only and the ultimate solution.

Do you agree with that? Yeah, absolutely. It was not lost on me from a public health perspective that about five or six years ago there was a tip in the percent of the dollar that was spent on pharma versus clinical care.

And so I agree with you that the that the the drumbeat of that ad is very strong and very well funded. And so but I also believe that, you know, things that are more natural rise to the to the occasion you're not everybody is going to McDonald's every day.

Why is that? Because there's so much, you know, effort to try to be healthy and that doesn't make you feel good. And so ultimately that the subconscious mind will catch up to that person and say, hey, you know, this was good for a little while, but now I'm disappointed again.

My worry is that they're going to feel like, Oh, I failed GLP 1s, Oh my gosh, I must be the worst person on the planet. You know, working for the celebrities, like what's wrong with me?

So, you know, every single one of these things can be a sharp object is thought of in a more performative sense, as opposed to an iterative sense. And so I really think that to me, focusing on iteration, like, yeah, you can try that it, it works for you for, for a small percentage of people.

I think that anything works, you know, like, like there's, there's the camp that works with bariatric surgery, there's a camp that works with, you know, running every day.

There's a there's just different camps that people find their thing. And that's really what I care about is them finding their thing and not getting mesmerized by high dollar marketing.

So for for those of our listeners who are not ready to give up medications, they're not ready to just throw away the needle and the injectables and they like to work together with it, right, So to speak, to our listeners who's always ambig.

And, you know, I hate to use all these names, but the GLP one class of drugs and says, Well, doubt about that, I'd like to learn something about behavior change.

I like to put some action into it. I don't want it to I don't see a sort of a lifelong dependance on drugs. What do you say to that person? How how can that person begin to implement some of these design change, a concept that that you were speaking about?

Yeah, I think that two things. One is, you know, practice or experiment. Instead of setting a goal, you know, like goals sometimes can be a, a signal of failure in people.

Like if I achieve one goal, you know, it's like this very narrow version of success and I fill in. And then the second thing is I fill in with iteration, you know?

So I experiment and I'm seeing what works, and then I'm keeping my options open. At the end of the day, if it doesn't work, I'm not going to blame myself and feel like a failure.

## Practical Takeaways and Resources

I'm going to iterate and I've got somewhere to go with it. And I find that we find that those people who do that have the highest level of confidence, have have the greatest clinical outcomes and are able to maintain them long term.

So to me what matters is just, you know, working with the brain instead of against the brain. Well, it's really interesting. And I can think of an example where in the diabetes area, a lot of the physicians and patients and like use the term tests, let's test your sugar.

You know, and as you know, that is a set up for failure, you know, because you either use you ace the test, you fail the test. Right. And that sets up like each time when the numbers are not good, it's like, oh my goodness, I'm such a failure.

Right. And so rewording, reframing, kind of your your conversation and speaking to your mind with it. Iterative messages. I think these are great, great principles to use.

Dr. Bobinet, thank you so much. This has been such a productive conversation. I'm sure the listener want to want to learn more about how they can learn about the things you've covered.

Where do they go to to find out this information? Yeah, so freshtri.com is where you can find your way to downloading the app and try it out. And I just invite everybody to, you know, try to integrate in that way.

And even if you don't like the app version of it but just keep them methodology in your mind of practice and iterate, practice and iterate and just go about your behavior.

Change that way. You'll get a lot more out of it. Now, you're also an author and tell us where can we if people want to read more about your work? Yeah, So I'm releasing a book called Unstoppable Brain, which is coming out in March, March 19th of 2024.

And of course, Amazon and all the regular outlets. You can get it there and it really covers in depth this issue of cellular disease, the habenula in your brain, you know, not triggering it.

And then also iteration. Well, thank you. I think our listeners will agree that this has been such a productive and helpful conversation. Thank you, Dr. Bobinet, Thank you, Dr. Hsu