

What if we're wrong about type 2 diabetes treatment?

Narrator: Type 2 diabetes. Traditionally it's categorized as a chronic and progressive disease that's managed over a patient's lifetime through various treatments including prescription drugs like insulin.

Once you contract type 2 diabetes, it's a disease that stays with you for life. But what if we don't think traditionally? What if we wanted to eliminate this disease from a patient's life? What if we wanted to reverse the disease?

According to the US national Center for Health Statistics a chronic disease generally cannot be prevented by vaccines or cured by medication nor do they just disappear on their own. To treat these chronic diseases doctors refer to federal guidelines created by association like the USDA and NHS, which outline protocols for outpatient care and prescriptions. But how effective are these guidelines?

Dr. Jeffry Gerber: All these diseases in modern society that we treat today we refer to them as chronic diseases ultimately caused by these federal guidelines and unfortunately these guidelines are causing the diseases that we were trying to prevent in the first place.

Narrator: While some physicians like Dr. Gerber would like to think outside the box by viewing diabetes as a simply reversible disorder, major US media outlets reinforce the views of federal guidelines.

Joan Lunden: Diabetes is a growing epidemic.

Anchorwoman: And the condition is incredibly widespread.

Man (on TV): Diabetes can certainly shorten your life if we don't manage it well.

Dr. Bret Scher: Well, a big problem with how we see that type 2 diabetes both from a media perspective and from a physician and healthcare perspective is that a number of people still portray type 2 diabetes as a chronic progressive disease.

A New York Times article that came out saying exactly that talking about how we cannot treat this disease and we have to manage it and unfortunately the medications are becoming more expensive to manage type 2 diabetes.

Narrator: Federal guidelines aren't working and in the meantime diabetes is progressing in patients. Do we simply ignore the guidelines then?

Dr. Sarah Hallberg: Diabetes is a chronic disease and it's going to continue to get worse if you follow the guidelines, the guidelines sadly put out by associations that are supposed to be advocates for people with diabetes. So if we want to solve the problem, we have to take away the cause.

Narrator: But before we can determine the best treatment for diabetes we need to zero in on its core cause. How do we treat the disease instead of just the symptoms?

Dr. Jason Fung: If you're a type 2 diabetic, it's a dietary disease, it's a disease of essentially too much sugar. So if you understand it like that, then the answer is to get that sugar out, get it down.

Narrator: Imagine that your body is like a sugar bowl. Over the years consuming foods high in sugar, like sweets, soft drinks, carbohydrates and more, contribute to that bowl of sugar filling up. When you consume too much sugar in your diet for a consistent period, that bowl becomes completely full. There isn't any more room for additional sugar, so when you continue eating it, it spills out into the bloodstream.

Dr. Hallberg: So when diabetics remove at least a lot of the carbohydrates from their diet, their blood sugar goes down and then they are not diabetic any longer.

Narrator: One of the most popular ways to treat patients once their metaphorical sugar bowls spill over is for doctors to prescribe insulin. Unfortunately the body begins to develop a tolerance to the drug.

Dr. Fung: The drugs don't actually do anything for the disease. And this is also not controversial because the thing is that type 2 diabetes is a disease of too much insulin resistance. So the treatments that we give are all targeted at blood sugar.

Narrator: What Dr. Fung is saying is that we're currently too focused on treating symptoms. If we look back at our sugar bowl metaphor, we should be thinking about how we can reduce the overall level of sugar still in the bowl, so it doesn't keep spilling over. But how do we do that if traditional medical treatments like insulin aren't the complete answer?

According to Dr. Elliott Joslin one way could be a solution that has existed for nearly 100 years... fasting. His study on this subject was published in the Canadian Medical Journal where he was quoted as saying, "That temporary periods of under-nutrition are helpful in the treatment of diabetes will probably be acknowledged by all after these two years of experience with fasting." It seems patients are already acknowledging the effects of fasting.

Dr. Fung: They come back and they think, "I thought I'd be miserable during this whole thing." And they come back say, "I feel terrific. My weight is down, I am taking so much less insulin, I'm off of a lot of drugs and I have so much energy and my mind is more clear, I've lost that bloated feeling."

Narrator: Of course fasting isn't the solution for everyone. Instead of a complete abstinence from food some patients respond better to adopting a low-carb lifestyle. The positive effects of this new lifestyle change can even be felt by patients early on in the process.

Dr. Hallberg: Initially when patients are beginning a lifestyle change and shifting to low carbohydrate to help their diabetes, it is so fantastic that within the first few days to a couple of weeks we can entirely remove a medication.

Narrator: And it goes beyond de-prescribing medication. A low-carb lifestyle is a proven long-term treatment for type 2 diabetes.

Dr. Hallberg: There is quite a big evidence base for low carbohydrate even in type 2 diabetes. So yes, it's evidence-based.

Narrator: Dr. Hallberg has been observing the results of low-carb diets for patients with diabetes first-hand. For two years she led a study at Indiana University Health

that demonstrated a reversal in diabetes progression. The study showed a 62% reduction in patients insulin use and 100% reduction in the use of sulfonylureas.

Dr. Hallberg: What we were seeing in the patients with type 2 diabetes was nothing short of remarkable. I mean we were getting them off of medications, we were seeing normal A1c's... I just couldn't believe it.

Narrator: At the end of two years 53.5% of the participants who adopted a low-carb diet as part of the study maintained diabetes reversal. Meanwhile for those patients who undertook usual care, 0% maintained diabetes reversal, demonstrating that low-carb is an incredibly effective long-term treatment for type 2 diabetes.

Dr. Hallberg: This can't be good for people in the long-term. You know, what's happening long-term for patients? But again, in my clinic I have people who have been doing this for years and, you know, the complication is they have to get used to feeling better. People find that to be pretty easy. We don't see these big complications coming up. People do incredibly well eating this way.

Narrator: As our understanding of the disease of diabetes continues to improve and we focus on treating the core causes rather than the symptoms, our ability to improve patients lives increases drastically.

Dr. Scher: People with type 2 diabetes should have hope that this is absolutely a reversible condition. If you're following the right nutritional and lifestyle advice and you're getting appropriate support and guidance as you go, yes, you absolutely can reverse this disease.