## Conquering diabetes

## gestational





The following is an article by Alana Cowan, my step-daughter. I was on the scene as she went through the trials and tribulations of her first pregnancy, and she has some amazing insights to offer that I asked her to share with my audience. I've also provided some additional related information for my readers at the end of her article.

If anyone had ever told me that a bowl of fresh bell peppers, cucumbers, carrots and avocado with olive oil and salt would be the UNHEALTHY choice for a meal, I'd have scoffed and told them they had no idea what they were talking about. And unless I'd seen firsthand that eating ice cream (albeit only two teaspoons) was less harmful than this seemingly harmless snack, I'd not have believed it myself.

But this is my new truth—well, not ice cream over vegetables, but protein and fat over everything else. Or at least, protein and fat first, before smaller amounts of vegetables and fruit in some form of fat. Yes, fat. And the more the better.

Five weeks ago, at 25 weeks pregnant, I was diagnosed (to my great horror) with gestational diabetes. Everyone was shocked, as I'm basically the poster child for healthy eating. Once or twice a year I do a Whole30, and even when I'm not on a Whole30, I don't indulge much in sugar—I don't have an affinity for it, and it can make me not feel so great or more prone to yeast infections.

So when I got this diagnosis, I felt so defeated. How could my body betray me like this? And it didn't really make me feel better that it was out of my control—that, apparently, the placenta and my hormones are to blame.

I was pissed. I was already limited in my pregnancy diet—no oysters and rosé, no charcuterie, no sushi, no caffeine, meat has to be sterilized till grey and rubbery, no sunny-side up eggs… and now this!?

In my first trimester I couldn't get enough fruit—I would down 4-5 clementines in one sitting, I HAD to have strawberries (no easy feat in November in December—and if easy, then VERY expensive). Meat was off the table as it made me want to retreat into the fresh air.

In my second trimester, I was able to eat more and did develop a surprising sweet tooth. But I was still being good—only apple cider doughnuts once every so often and shared desserts with friends on my birthday. But these felt okay, because I was pregnant and I'd never really had sugar cravings before. Everyone kept telling me to enjoy my pregnancy, so I was, in moderation. And I'd started exercising again!

So I was feeling feeling pretty good about everything, minus the horrific bouts of heart burn, when I got the diagnosis of the gestational diabetes. Oh, and I think around that same time we had a beautiful and warm day in NYC and my legs swelled to the tune of cankles—I couldn't see my ankle bones! And now I had to test my blood with finger pricks and blood sticks four times a day to see what my blood sugar levels were. And no more sugar, and probably no more fruits high in natural sugars.

Pregnancy is wonderful and amazing because your body takes over to create another human life and you see yourself change in ways you never imagined. It's cool to watch your body do its thing and to give over to nature in such a profoundly instinctual way...until it involves your ankles, your esophagus, and finally your pancreas... forbidding you even an apple with peanut butter. Who knew peanut butter would spike blood glucose!? It's full of fat, just like almond butter. Almond butter with an apple seemed to be okay, but an apple on its own...high in fiber and low on the glycemic index. Nope, can't even have an apple a day to keep the doctor away. If anything, that apple will give my doctor a reason to prescribe insulin shots. After 9 months (and I know that is short timing for most) of IVF, and the finger pricks, the last thing I want is another self-injection regimen.

After the initial shock of the diagnosis, the sugar withdrawal and the adjustments in lifestyle, I'm now seeing silver linings. Testing four times a day or more (you need a blood glucose monitor kit) isn't convenient, fun, or enjoyable, but

it is informative and interesting—that is, if you like to turn yourself into a science project and/or have compulsive/perfectionist tendencies. It can be VERY satisfying to see numbers under 120, or even in the 90s after eating a fantastic meal. But it takes discipline and curiosity.

I use the One Touch Ultra 2. It was prescribed by my doctor, but you can get this and other kits online for the same (or similar) price, post-insurance coverage. Especially the testing strips. In fact, I don't think my insurance covered the meter, just the strips, which can be expensive if bought through the pharmacy.

It's scary and annoying to use at first, but once you get the hang of it, it's easy and fast. And I HATE needles and blood.

I tested some individual foods to get a handle on, and to understand this Thing. In the beginning it really felt very science fiction to me—there was this thing in my body causing it to react in ways it felt like I couldn't control. Except that I've learned that I can, in fact, control it!

For me (and every individual will be different), grapefruit is borderline. I can eat a medium grapefruit one hour after a protein-heavy breakfast of two eggs and sausage. But a small plain white potato with no fat (ghee/butter/olive oil) on an empty stomach is a no-go, with a reading of 152 an hour and a half later. I might as well have eaten a handful of Halloween or Easter candies. However, ten French fries after a frittata was ok.

And fruit? Berries. I can do berries. But they need to be swimming in a bowl of coconut milk or coconut cream. And better to be eaten right after my meal of protein. I've become very particular about my coconut milks, which I use not only with berries, but also with fish and chicken. It's delicious. I just hope that I don't hate it after this is all over, along with avocados, which accompany almost every meal.

My only safe between-meal-snack is nuts, though I did recently buy unsweetened coconut flakes and those seem to be ok in small quantities.

I love to learn outside of the school setting, so I'm telling myself I have been given an opportunity in gestational diabetes. I'm learning more about food and my body than I ever imagined. Not to mention that in three weeks I've not gained extra weight, but the baby is still growing well and on par with weeks-to-pounds. As my mother said to me "your post-baby body is going to be fantastic and so much easier to get back to where you were pre-pregnancy."

I do look and feel pretty good as I approach 31 weeks this Saturday. But I'm also SO TIRED of protein ALL.THE.TIME. I'm dreaming of being able to eat a big fresh salad without the fear of a 155 glucose reading. Seriously, not even a salad doused in olive oil with chicken cuts it. I need to be eating serious amounts of protein and fat before I can even LOOK at a green bean. Ghee has become my best friend in all of that.

This whole thing has given me a few gifts—better overall pregnancy health, an empathy towards people with chronic illnesses that need to be managed, and creativity in the kitchen. For example, I now roughly chop walnuts and sprinkle them on top of my berries and coconut cream to add an additional crunch, which is a very satisfying mouth feel. It's like a cold berry crumble. And because I'm no longer allowed any added sweeteners (including honey, etc.), fruits and vegetables have become like candy—not only in taste, but in appearance as well.

I wouldn't ask for gestational diabetes, but I've certainly learned to embrace it (with the occasional complaint, of course). I can't wait for my friends to visit me in the maternity ward with all the delicious foods I can't eat right now!

Dr. HOFFMAN's COMMENT: Alana's pro-active response to a diagnosis of gestational diabetes offers a shining example to everyone struggling with blood sugar issues. Pregnancy is like a stress test for your metabolism. Gestational diabetes is often a predictor of blood sugar problems for women later in life; it should be considered a "warning shot" to encourage adoption of a healthy, low-carb diet, along with regular exercise.

Of interest are Alana's unique and quirky responses to various foods ordinarily thought to be "healthy" and even low-carb. The Glycemic Index, or GI, attempts to predict people's blood sugar reactions. Using white bread as a standard (100 points), it assigns a relative value to foods based on how readily their carb content can spike blood sugar. By contrast, white rice has a GI of 75 and spaghetti a GI of 54.

The problems with the GI are several-fold:

- The GI is based on the assumption that people will eat a standard serving size (50 grams) of each food. For some foods (spaghetti) that might be unrealistically low. Hence, a correction is applied with the Glycemic Load (GL) which adjusts for more normal serving sizes.
- 2. The GI and GL are predicated on an unrealistic premise: that foods are consumed alone, in isolation. They do not take into account the mitigating effects of consuming high GI foods with ample fat and protein that slow absorption and can level blood sugar spikes.
- 3. The GI and GL posit that individuals' blood sugar reactions to foods are pretty similar. In fact, nothing could be further from the truth, as Alana's experience illustrates. USDA researchers recently demonstrated that the GI is highly variable and is an unreliable guide to food choices. This was foreseen nearly half a century ago by nutrition pioneer William Philpott, MD: he

posited that people's blood sugar reactions are prompted, not so much by the carbohydrate content of the foods they ate, but rather, are mediated by what he termed idiosyncratic "allergic reactions" to foods. Thus, one person might eat whole wheat with impunity, while another might experience a blood sugar cascade. In Philpott's view, even low-carb protein foods or leafy salads could trigger dysglycemia on a highly individual basis. Philpott's advice to patients, proffered years before Alana was born: Get a glucometer, and check your personal blood sugar responses to foods—singly, and in combination!

4. Finally, the GI and GL bear little relevance to a person's actual risk of developing Metabolic Syndrome or diabetes because they account only for blood sugar elevations, but not propensity to insulin resistance. For example, fructose gets a relatively good GI score, but when consumed in soda over time is probably the single biggest dietary contributor to America's epidemic of obesity and diabetes.

Kudos to Alana for turning her pregnancy into a personal science fair project: She'll have a healthier baby (diabetic mothers give birth to heavier kids, resulting in more complications and higher likelihood of C-sections); She'll experience less excessive weight gain during her pregnancy, and recover her normal weight more quickly. And, finally, her "teachable moment" will prompt her to eat defensively in years to come to avert later-life blood sugar problems.

For additional resources on gestational diabetes see this personal account and this self-help book with recipes.