

## How GDM Effects Insulin - And Why This Is Important

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Whether you're pregnant or you're not pregnant, you always need insulin. Insulin is a magic hormone that lets glucose be used by the body to produce energy but it's also essential inside cells for making new proteins and for making everything run. As we go through pregnancy, because it's a state where were making a new baby, requirements for insulin go up progressively.

One of the reasons it goes up in the mom is because of the placenta. The placenta is not formed right away. It's really in the second trimester that starts to be happy with itself and then continues to grow all the way towards the end. The placenta puts out hormones that help with the healthy growth of the baby. But some of those hormones, one in particular, has an effect on mom to increase the resistance or requirements for insulin.

So as a mother goes through a pregnancy, whatever insulin she needed at the beginning she gradually increases her need to 2 to 3 times that amount. Most people are able to do that but there is a sub population of people somewhere between 5 and 15 percent that has trouble making enough insulin for the whole pregnancy. Those people that run into trouble making enough insulin and don't make an unlimited amount are the people we meet with gestational diabetes.

What happens when you get gestational diabetes is that your insulin requirements go up. So the first and probably primal thing you need to try and figure out how to do is how to make a healthy, good, nutritious diet but at the same time minimize the amount of insulin you're going to need to handle that food.

But that same elevated glucose when you're pregnant will happily go across the umbilical cord through the placenta and to the baby. Babies are smart they have figured out how to make insulin on their own and they do. They make insulin, their own insulin to deal with the high sugars that might be coming from mom. Insulin is one of the main growth hormones for babies. So the baby may end up getting bigger generally and if there's really a lot of food coming across then that extra insulin will store extra food and the baby might end up becoming somewhat fat. And these are the 2 things that we know interfere with how baby does in the long run, we're talking adulthood, in terms of managing its own future sugars. So what we try to do when you get gestational diabetes is make sure you have enough insulin for what you are eating.