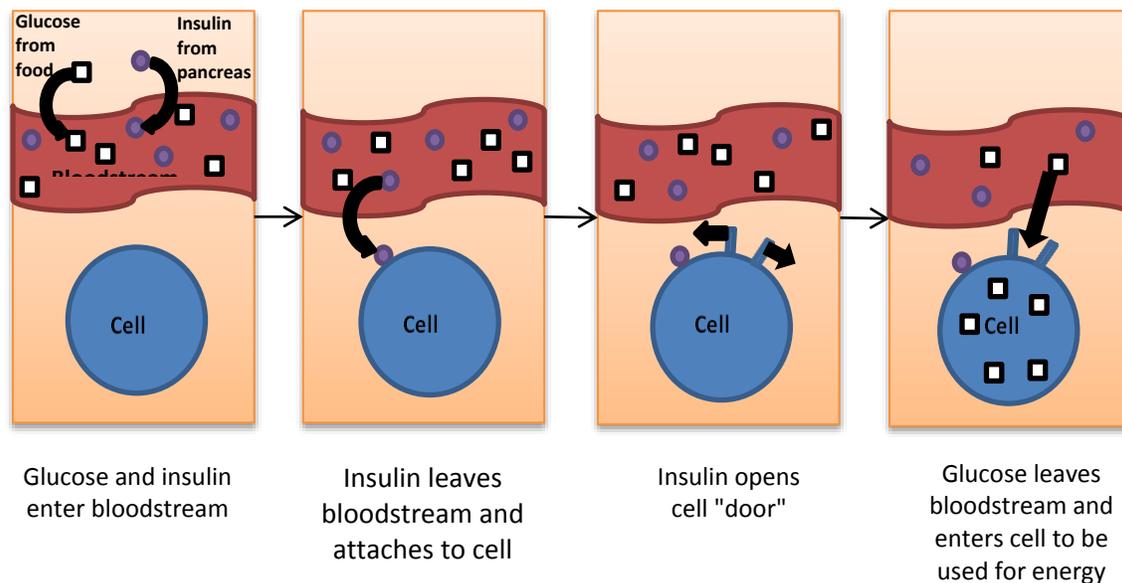


UNDERSTANDING GESTATIONAL DIABETES

Gestational Diabetes is a type of diabetes that occurs during pregnancy. It is one of the most common complications of pregnancy. Gestational Diabetes basically means that blood glucose levels are higher than normal during pregnancy.

Overview

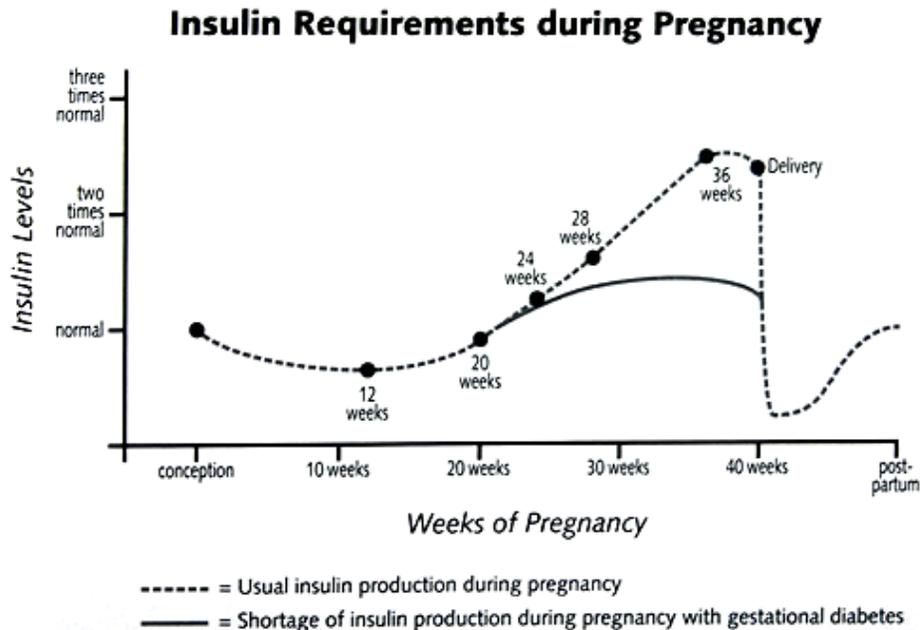
Carbohydrates are consumed and broken down into glucose. Glucose enters the bloodstream and, with the help of insulin (a hormone produced by the pancreas) unlocking the cells, glucose can then enter the cells to be used for energy.



Pregnancy causes hormonal changes in the body that increases the demand for insulin. In some women, the pancreas cannot adjust to the increased demand for insulin during pregnancy or the cells become resistant to insulin. This results in high blood glucose levels due to Gestational Diabetes.

The glucose that stays in the bloodstream crosses into the placenta and is given to the baby. The extra glucose the baby receives may cause the baby to grow too big. This makes delivery difficult for both the mother and baby, and creates a greater risk for a cesarean section and an earlier delivery. After delivery, the baby's glucose also may drop too low. This is due to the baby's body growing accustomed to making extra insulin to cope with the extra glucose it was receiving before birth. A baby that grows too large during pregnancy may also struggle with weight problems throughout their life.

The graph below shows the difference between usual insulin production during pregnancy, and insulin production in a woman with Gestational Diabetes.



Reader D., Davidson J., S. Larson. *Gestational Diabetes: Caring for You and Your Baby*.
4th Edition, 2008. International Diabetes Center, Park Nicollet, Minneapolis, MN

As a part of prenatal care, each mother takes an oral glucose tolerance test (OGTT), usually in the second trimester of pregnancy. A diagnosis of Gestational Diabetes is concluded when one test result is higher than normal with two hour OGTT or two test results are higher with three hour OGTT test.

75g, 2 Hour OGTT		
Time of Test	Above Normal Test Results	My Test Results
Fasting	92 mg/dL or higher	___ mg/dL
1 hour	180 mg/dL or higher	___ mg/dL
2 hours	153 mg/dL or higher	___ mg/dL

International Association of Diabetes in Pregnancy Study Group

100g, 3 Hour OGTT			
Time of Test	Normal (no diabetes)	Gestational Diabetes	My Values
Fasting	94 mg/dL or lower	95 mg/dL or higher	___ mg/dL
1 hour	179 or lower	180 mg/dL or higher	___ mg/dL
2 hours	154 or lower	155 mg/dL or higher	___ mg/dL
3 hours	139 or lower	140 mg/dL or higher	___ mg/dL

ACOG American Congress of Obstetricians and Gynecologists

Risk Factors

Risk factors for developing Gestational Diabetes are similar to risk factors for Type 2 Diabetes.

- Obesity (BMI > 30)
- Prior history of Gestational Diabetes or delivery of a baby greater than 9 pounds
- Advanced maternal age (>35 years)
- Higher number of previous pregnancies
- History of glucose intolerance
- Strong family history of type 2 diabetes
- Diagnosis of polycystic ovary disease (PCOS)
- Native American, Asian, Hispanic, and African American women are at higher risk

Management of Gestational Diabetes

It is important to learn how to manage Gestational Diabetes through lifestyle changes, diet, and exercise. Through working with a Registered Dietitian to learn more about consistent carbohydrate meal planning and monitoring BG levels, normal BG can often be achieved. Patterns of what raises and lowers BG can also be identified. While diet alone may manage Gestational Diabetes for some women, sometimes medication is needed to achieve adequate BG control.

After the Baby is Born

Post-delivery, the baby's blood glucose level will be monitored to make sure it doesn't drop too low. The mother's BG levels typically will return to normal post-delivery. Your provider should perform a 2 hour 75g oral glucose tolerance test at your 6 week post-partum follow visit to confirm that your blood glucose levels have returned to normal.

Fifty percent of all women with Gestational Diabetes will develop Type 2 Diabetes within 10 years. For this reason, it is important to try and continue good nutrition and exercise habits to help maintain good BG control in the future for as long as possible.