

N U T R I T I O N FACT SHEET

□ GESTATIONAL DIABETES*

Gestational diabetes mellitus (GDM) is a type of diabetes that develops during pregnancy. It is usually diagnosed between the 24th and 28th week of pregnancy and doesn't go away until after the baby is born. GDM occurs when the mother is not producing enough insulin or her body is not properly using the insulin she is making. This results in high blood sugar, some of which crosses the placenta to the fetus. The fetus responds by producing additional insulin.

WHO IS AT RISK?

Anyone who is pregnant can develop gestational diabetes, but it is more likely to occur in women older than 30, the obese, or those with a family history of diabetes. In addition, it is more common among Hispanics, African-Americans and Native Americans. Women who have had gestational diabetes in one pregnancy are more likely to have it in a later pregnancy.

It is very important that women with gestational diabetes follow their doctors' instructions about diet and physical activity. Some women with GDM need to take insulin.

POSSIBLE DANGERS TO MOTHER AND BABY

A woman who has GDM can have a healthy baby if she keeps her blood sugar within normal range during pregnancy. Even if she doesn't control blood sugar, the baby will not have diabetes. Several dangers to the mother and baby can occur, however, if the mother's blood sugar is not controlled. Possible dangers include:

▣ **Having a very large baby**

Extra sugar in the mother's blood is transported across her placenta to the fetus. Because the fetus overproduces insulin in response to the extra sugar, the fetus is able to use the additional

calories from the sugar for growth. The result is a very large baby, frequently weighing more than 9 pounds. Large birth size can make delivery very difficult and a cesarean section is more likely.

▣ **Low blood sugar in the baby immediately after birth**

At birth the baby is suddenly cut off from the mom's blood sugar, but still is overproducing insulin. This causes hypoglycemia, or low blood sugar. This hypoglycemia can be very dangerous and the baby will need to be monitored carefully for a few days after birth.

□ **Severe jaundice**

□ **Prematurity and breathing problems**

SYMPTOMS

Be aware that pregnant women may be showing signs of gestational diabetes if they complain of excessive thirst, increased urination and huge appetite, even though these symptoms are normal to some extent during pregnancy. It is extremely important that these women go to their doctor as soon as possible. All women who are keeping their prenatal appointments are checked for GDM. Anyone not keeping doctor's appointments should be encouraged to do so.

RECOMMENDATIONS

WIC staff should make sure that women with GDM have received a diet prescription from their doctor and that the women have a good understanding of how to follow it. If they don't have a diet prescription and/or don't understand it, the participant should be referred to a registered or licensed dietitian for counseling.

Diet and meal-planning recommendations for GDM are different than for other kinds of diabetes, so the diet for one cannot be substituted for the other. Other recommendations for pregnant women remain the same for women with GDM, such as the avoidance of alcohol and the importance of taking prenatal vitamins.

Other guidelines include:

E Follow the meal plan prescribed by the doctor

This meal plan will probably include three moderately-sized meals and two to three snacks per day. It is important for women with GDM to eat regularly spaced meals and snacks throughout the day to keep blood sugar as stable as possible.

■ Avoid high-sugar foods

Regular soft drinks, sweetened tea, candy, cookies and cakes, regular gelatin, frozen pops and snow cones should not be eaten by women with GDM. (Note: Intake of high-sugar foods for Type I and II diabetes has been liberalized somewhat. This is not true for GDM.)

H Don't eat fruit or drink fruit juice at breakfast

The breakfast meal should be small because blood sugars are highest in the morning.

w Eat high-fiber foods

Fiber is found in fruits, vegetables, whole grains and legumes

□ Do moderate physical activity

Physical activity lowers blood sugar. A moderately-paced, 20- to 30-minute walk after meals is helpful to control blood-sugar levels. (Women with GDM should check with their health-care provider before starting any exercise program!)

•J Weight gain

Recommendations for prenatal weight gain are the same as for women without GDM.

□ Blood sugar testing and insulin

Most women with GDM must test their blood sugar throughout the day, and some will need daily insulin injections. If they have questions about either of these they should call their doctor.

POSTPARTUM

□ Breastfeeding

Breastfeeding is the best source of nutrition for all infants including those born to women who have had GDM. There is no reason why women with GDM should not breastfeed, even if a baby has jaundice.

■ Postpartum checkups

Postpartum checkups are very important. Blood sugar needs to be checked six weeks after delivery. Ninety percent of women with GDM will have normal blood sugars at their six-week checkup.

□ Higher risk of Type II diabetes

Once a woman has had GDM, her chance of developing Type II diabetes is very high. It is important for these women to have their blood sugar checked frequently and to be aware of the symptoms of Type II diabetes.

Six out of 10 (60%) overweight women who have had GDM will eventually develop Type II diabetes. For women who are not overweight, this number is one in four (25%). Being physically active and staying within a good weight range are the best insurances against Type II diabetes, especially for women who have had GDM.

References

Understanding Gestational Diabetes, National Institute of Health, NIH Publication No. 93-2788, February 1993.

Journal of the American Dietetic Association, Nutrition Management in Women with Gestational Diabetes Mellitus: A Review by ADA's Diabetes Care and Education Dietetic Practice Group, April 1995, Vol. 95, No. 4, pp. 460-467.