



# **SESSION**

# Blood Sugar Monitoring During Pregnancy

DMCPG-BGM Blood Sugar Monitoring During Pregnancy

# STATEMENT OF PURPOSE

This session provides information about the purpose of checking blood sugar and how to record and use the results.

# **PREREQUISITES**

It is helpful if blood sugar meter instruction is completed prior to this session. It is recommended that participants bring their meters and logbooks to this session.

# **LEARNING OBJECTIVES**

DMCPG-BGM-1 State target blood sugar goals to decrease the chance of problems for the mother and

baby.

DMCPG-BGM-2 State when to check blood sugar during pregnancy.

DMCPG-BGM-3 Demonstrate how to use a logbook during pregnancy.

DMCPG-BGM-GS State or write a personal plan to check blood sugar during pregnancy.



#### CONTENT

Monitoring blood sugar for pregnancy and diabetes.

#### **MATERIALS NEEDED**

#### **Visuals Provided**

- #1 Healthy Behaviors: Blood Sugar Monitoring During Pregnancy
- #2 Gestational Diabetes—How to Have a Healthy Baby
- #3 Target Blood Sugar Goals for Pregnancy
- #4 My Prenatal Record Book
- #5 Sample Diabetes Record for Pregnancy (blank)
- #6 Sample Diabetes Record for Pregnancy (with data)
- #7 Changes I Can Make

#### **Additional Resources**

Local *resource list*Samples of logbooks

#### METHOD OF PRESENTATION

Instructors need to review BYLD, Session #7: Home Blood Sugar Monitoring prior to presenting this session.

Start by introducing yourself. Use a creative icebreaker. (See *BYLD* Introduction on p. XIII for examples.) You may want to ask participants to share something about their experiences with pregnancy and diabetes. Explain that the purpose of this session is to provide information about checking blood sugar and keeping a logbook in order to reach and stay at target blood sugar goals during pregnancy.

Use facilitated group discussion to present material. Encourage participants to share stories and ask questions to facilitate the discussion. Have a variety of teaching tools available based on participants' learning needs. Be creative and encourage interaction. Use real life situations for discussion. A videotape or audiotape may be used to introduce content if available.

Conclude this session by presenting examples of logbooks. Discuss with participants ways they can use blood sugar numbers to balance food choices, physical activity and diabetes medicines to reach and stay at target blood sugar goals.

It is suggested that specific instructions for checking blood sugar (using particular meters/procedures) be taught on a one-on-one basis. It is important to assess participant's technique for checking blood sugar and verify their meter accuracy frequently during the pregnancy.

# **CONTENT OUTLINE**

Objective	Content	Instructor's Notes
DMCPG-BGM-1. State target blood sugar goals to decrease the chance of problems for the mother and baby.	Women with pregnancy and diabetes who keep their blood sugar at target goal have less chance of problems for themselves and their baby.	Ask, "Has anyone talked with their health care team about their blood sugar goals?  Does anyone want to share them?"  List/discuss responses.
and ode).		Visual #2: Gestational Diabetes— How to Have a Healthy Baby, pp. 8-9
		High blood sugar during pregnancy increases the chance of problems during the pregnancy and after delivery.
		Refer to <i>BB</i> , Session #6: <i>Staying Healthy During Pregnancy</i> for information on potential problems for mother and baby.
		Emphasize that women need to talk with their health care team often to review their logbook and make needed changes in food choices, physical activity and insulin (if needed) to stay at target blood sugar goals.
	Target blood sugar goals during pregnancy are:	Visual # 3: Target Blood Sugar Goals for Pregnancy
	• fasting blood sugar: 60-90 mg/dl	Assist participants in stating or writing their personal target blood sugar goals.
	<ul> <li>blood sugar 1 hour after meals: 100-140 mg/dl</li> <li>blood sugar 2 hours after meals: 100-120 mg/dl</li> </ul>	These goals are for whole blood glucose. Add 10-15% to convert these to plasma glucose. In these blood sugar ranges, however, there appears to be little difference between whole blood and plasma values with glucose meter testing and conversion is probably not necessary.
		Target goals may vary based on local facility standards and the individual needs of the woman with pregnancy and diabetes. Provide information appropriate for the participants and local facility.



Objective	Content	Instructor's Notes
DMCPG-BGM-2. State when to check blood sugar during pregnancy.	Women with pregnancy and diabetes need to check their blood sugar more often because:	Ask, "How often/what times do you check your blood sugar?" List/discuss responses.
		Review BYLD, Session #7: Home Blood Sugar Monitoring as needed.
	increased hormones and weight gain during pregnancy can raise blood sugar	As the pregnancy progresses, it may be harder for the woman to reach and stay at target blood sugar goals.
	meal plans and diabetes medicine may need to be changed more often during pregnancy	
		Visual #1: Healthy Behaviors: Blood Sugar Monitoring During Pregnancy
		Identify current blood sugar monitoring behaviors.
		Emphasize that many things may affect blood sugar, such as: <ul> <li>food choices</li> <li>physical activity</li> <li>medicine</li> <li>illness</li> <li>feelings and stress</li> </ul>
	Most women will need to check their blood sugar at least 4 times each day.	Assist participants in recognizing the need to check blood sugar at least four times each day throughout the pregnancy.
		Acknowledge that it may be hard to check blood sugar this often. Identify times when it is hard to check blood sugar and brainstorm ways to handle these times.
	The times to check blood sugar during pregnancy are:	Emphasize the importance of talking with their health care team about times to check their blood sugar.



Objective	Content	Instructor's Notes
DMCPG-BGM-2. (continued)		Recommended times to check blood sugar may vary depending on a woman's individual needs during the pregnancy. Provide information appropriate for the participants and local facility.
	• fasting	"Fasting" means a person has not had anything to eat or drink (except water) for at least 8 hours.
	• 2 hours after the start of each meal	Blood sugar is highest 1-2 hours after the start of a meal.
		It is especially important to check blood sugar after meals when:  • trying new foods  • eating larger than usual portions  • eating foods that usually raise blood sugar after the meal
		See BB, Session #2: Healthy Eating During Pregnancy for more information about healthy food choices.
	Other times women may need to check blood sugar include:	
	1 hour after the start of each meal	It may be easier for women to check their blood sugar at this time instead of 2 hours after the start of a meal. They need to write in their logbook that it is a 1-hour blood sugar.
	during the night	This will tell women if their blood sugar is low or high at night. The best time to check at night is between 2-3 am.
	before a meal	Some women may need to check blood sugar before a meal if:  • using very fast acting insulin  • using an insulin pump  Extra insulin may be needed to lower blood sugar.





Objective	Content	Instructor's Notes
DMCPG-BGM-2. (continued)	during stress or illness	Stress and illness may raise blood sugar. Women need to check blood sugar more often at these times.
	when having symptoms of high or low blood sugar	This will help women treat high or low blood sugar.
	during physical activity	Women need to check before and after physical activity, especially when they are on insulin and/or are starting a new activity.
		Emphasize the importance of talking with the health care team about:  • when to check  • how often to check  • ways to reach and stay at target blood sugar goals
DMCPG-BGM-3. Demonstrate how to use a logbook during pregnancy.	Women with pregnancy and diabetes need to write their blood sugar numbers in a logbook. Changes in food choices, physical activity and/or diabetes medicine are based on these blood sugar numbers.	Ask, "Has anyone used a logbook during pregnancy? What have you written in your logbook? How have you used this information?" List/discuss responses.  Visual #4: My Prenatal Record Book or
		Visual #5: Sample Diabetes Record for Pregnancy (blank)
		Show samples of logbooks.
		Review the recommended target blood sugar goals for pregnancy listed in logbooks and change to match local target blood sugar goals as needed.
	Women need to write these things in their logbook:	Assist participants in identifying information to write in a logbook. Visual #6: Sample Diabetes Record for
	• blood sugar	Pregnancy (with data) may be used as an example. Note: This visual has a column to record kick counts. These are discussed in BB, Session #6: Staying Healthy During Pregnancy.



Objective	Content	Instructor's Notes
DMCPG-BGM-3. (continued)	• ketones	See <i>BB</i> , Session #6: <i>Staying Healthy During Pregnancy</i> for information on ketones.
	food and drinks	See <i>BB</i> , Session #2: <i>Healthy Eating During Pregnancy</i> for information on healthy food choices.
	physical activity	See BB, Session #3: Moving to Stay Healthy During Pregnancy for information on physical activity.
	• feelings	See <i>BB</i> , Session #1: <i>Pregnancy</i> , <i>Diabetes and You</i> for information on feelings.
	This information helps women and their health care team learn:	Note: Some health care teams can download the information from a person's glucose meter and print a report of blood sugar numbers and patterns.
	<ul> <li>blood sugar patterns</li> <li>things that cause changes in blood sugar patterns</li> <li>if blood sugars are at target goal</li> <li>changes in food choices, physical activity, and/or diabetes medicine needed to reach target blood sugar goals</li> </ul>	Use the <i>Diabetes and Real Life Activity</i> at the end of this session, or participant logbooks, to discuss patterns and problem-solve changes needed.  Emphasize the participant's role and responsibility in providing information about blood sugar and other monitoring to the health care team. Emphasize the need to bring logbook and meter to visits with the health care team.
DMCPG-BGM-GS. State or write a personal plan to check blood sugar during pregnancy.	Making changes in health habits, such as checking blood sugar, is easier when plans are broken down into small, easy-to-do steps.	Visual #1: Healthy Behaviors: Blood Sugar Monitoring During Pregnancy Review blood sugar monitoring behaviors identified at the beginning of the session and reassess readiness for change.  Refer participant for individual blood sugar monitoring instruction as needed. Visual #7: Changes I Can Make

#### Page 8 of 8



Objective	Content	Instructor's Notes
DMCPG-BGM-GS. (continued)		Assist participants in stating or writing one thing they will do to improve their blood sugar monitoring behavior during pregnancy.
		See BYLD, Session #3: Making Healthy Changes.

#### SKILLS CHECKLIST

Each participant will be able to record blood sugar and use results to reach target blood sugar goals.

#### **EVALUATION PLAN**

Knowledge will be evaluated by achievement of learning objectives and by responses to questions during the session. The ability to apply knowledge will be evaluated by the development and implementation of their personal blood sugar monitoring plan. Application of knowledge can also be evaluated through *Diabetes and Real Life Activities*. Evaluation will also include program outcome measures.

# **DOCUMENTATION PLAN**

Record class attendance and objectives achieved. Document patient response on the PCC record using current *IHS Patient Education Protocols and Codes (PEPC)*.

