

(Self-Administered, Participant)								
Study ID								

Diabetes Knowledge Survey

This form is looking at how much you know about diabetes and blood sugar control. Because there can be different ways that teens manage their diabetes (such as different types of insulin), you may not know the answers to all of these questions. Please just answer as best you can.

A. Today's date is					
	Month	Day	Year		

1. How much do you feel each of the following affects your blood sugars?

	1 (None)	2	3 (Some)	4	5 (A lot)
a. Exercise or activities you do					
b. The insulin you take					
c. How much food you eat					
d. Strong feelings (stress, anger, fear, etc.)					
e. The kinds of food you eat					
f. Sickness or illness					

2. How does each of the following affect blood sugar in a person with diabetes?

	Lowers Blood Sugars	Can Lower or Raise Blood Sugars	Raises Blood Sugars
a. Exercise and activity			
b. Insulin			
c. Carbohydrates: bread, pasta, fruit, etc.			
d. Strong feeling: stress, anger, fear, etc.			
e. Growth and puberty			
f. Illness and fever			

3. Peter is 12 years old. His usual insulin intake is about 12 units of fast acting insulin (i.e. Humalog, Novolog or Apidra) and 22 units of slow acting insulin (i.e. Levemir or Lantus) before breakfast, about 6 units of fast acting insulin before both lunch and dinner, and 10 units of long acting insulin before bed. Before dinner he felt sweaty, shaky and could not think straight. His blood sugar was 50 mg/dl. Usually at this time, it's between 100-200 mg/dl. Please check only one answer for each letter. a. There are many reasons blood sugar may get too low or too high. Of the reasons listed below, all could cause blood sugar to get too low—except for one. Mark the one that would most likely make blood sugar get too high?: ☐ He played basketball for an hour before dinner ☐ His bus was late so he couldn't get his afternoon snack ☐ He is feeling sick to his stomach today ☐ He found out that his friend accidentally gave him regular instead of diet soda at a party today b. Because Peter is low tonight before dinner, what kind of change should he make to his insulin dose? ☐ A permanent change ☐ A **temporary** change c. What dose and type of insulin is most likely affecting Peter before dinner (late afternoon)? ☐ The morning dose of fast acting insulin ☐ The morning dose slow acting insulin ☐ The dinner dose of fast acting insulin ☐ The **bedtime** dose of **slow** acting insulin. d. Which dose of insulin should he change? ☐ The morning dose of fast acting insulin ☐ The morning dose slow acting insulin ☐ The **dinner** dose of **fast** acting insulin ☐ The **bedtime** dose of **slow** acting insulin

Please check only one answer for each letter. a. What should Julie do to help prevent a low blood sugar during practice? □ Run extra hard ☐ Reduce her basal rate ☐ Give an extra bolus of insulin before practice ☐ Eat an extra-large breakfast b. Since practice is 1½ hours long, Julie needs to snack in order to help her prevent low blood sugars. What is the best snack choice during a long practice? ☐ Gatorade only ☐ Gatorade and orange wedges ■ No snacks
■ Water only c. Since Julie goes to soccer practice 3 times a week, what can Julie do to keep her blood sugar in range? ☐ Set up a different basal pattern (e.g., Basal A) for soccer practice days ☐ Since Julie is on a pump she does not need to do anything ☐ Take the pump off (disconnect) ☐ Sit on the bench and not run too much d. After especially hard soccer practices, Julie can be low before bed or wake up low in the middle of the night. What is something that Julie should **not** do to help prevent a low blood sugar in the middle of the night? ☐ Use a temporary basal rate throughout the night ☐ Make sure her blood sugar is above 130 mg/dl before bed ☐ Skip her bedtime snack ☐ Consider using a continuous glucose monitor

4. Julie is 14 years old. She is on an insulin pump. She is about to start a 1½ hour soccer practice at 4 pm. Her

blood sugar is 120 before practice.

5. Plea	se check only one answer for each letter.
a.	If you have taken intermediate-acting insulin (NPH), you are most likely to have a low blood sugar in: ☐ 1-3 hours ☐ 6-12 hours ☐ 12-15 hours ☐ More than 15 hours ☐ I don't know what NPH is
b.	You realize just before lunchtime that you forgot to take your insulin before breakfast. What should you do now? Skip lunch to lower your blood sugar Take the insulin that you usually take at breakfast Take twice as much insulin as you usually take at breakfast Check your blood sugar level to decide how much insulin to take
C.	If you are beginning to have a low blood sugar, you should: ☐ Exercise ☐ Lie down and rest ☐ Drink some juice ☐ Take regular insulin
d.	Low blood sugar may be caused by: Too much insulin Too little insulin Too much food Too little exercise
e.	If you take your morning insulin, but skip breakfast your blood sugar level will usually: ☐ Increase ☐ Decrease ☐ Remain the same
f.	High blood sugar may be caused by: ☐ Not enough insulin ☐ Skipping meals ☐ Delaying your snack ☐ Large ketones in your urine
g.	Which one of the following will most likely cause a low blood sugar: Heavy exercise Infection Overeating Not taking your insulin

6. Please read each question carefully and check the appropriate box.

		Agree	Unsure	Disagree
a.	If your A1c is higher than 10, your blood sugars are probably running low.			
b.	Even if your diabetes is in good control, you should expect some out of range blood sugars.			
C.	If you think you know what your blood sugar is, it is not important to check it when you normally would.			
d.	The lab test called the A1c gives the same information as the blood sugars you check at home.			
e.	15 grams of carbohydrate from a piece of bread will raise your blood sugar the same amount as 15 grams of carbohydrate from a package of Skittles.			٥
f.	Occasional high blood sugars do not lead to complications.			
g.	If your A1c is measured every three months it is not necessary to check blood sugars daily.			
h.	If your A1c is higher than 10, you may not be getting enough insulin.			
i.	If your blood sugar is high, it's definitely because you ate too much.			
j.	Growth and puberty do not affect how much insulin you need.			
k.	Stress does not affect blood sugars.			
I.	The effects of exercise can last a long time after stopping.			