

Diabetes Care in Kentucky Schools Skills Competency Checklists

Developed by the Diabetes in the Kentucky School System Stakeholders Group
2020



Adapted from: *KBN Insulin Administration in School Settings Training Program Manual (2014)*.

Diabetes in the School System Stakeholders Group

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BLOOD GLUCOSE/BLOOD KETONE MONITORING SKILLS CHECKLIST

Unlicensed Assistive School Personnel (UAP): _____

RN School Nurse/RN Instructor: _____

	Training Date/Initials	Return Demonstrations			
		Date/Initial*	Date/Initial*	Date/Initial*	Date/Initial*
A. Identification					
1. States name and purpose of procedure.					
B. Preparation:					
1. Reviews Standard Precautions.					
2. Identifies site where procedure is done.					
C. Identifies supplies:					
1. Meter					
2. Test strips					
3. Lancing device					
4. Gloves					
D. Procedure:					
1. Washes hands.					
2. Assembles supplies.					
3. Puts gloves on.					
4. Prepares lancing device.					
5. Turns meter on, checks codes (if applicable).					
6. Places strip into meter or prepares otherwise.					
7. Cleans selected area, allows to dry.					
8. Lances area.					
9. Places blood onto test strip.					
10. Places cotton ball or tissue over lanced area.					
11. Reads result.					
12. Turns meter off, removes strip.					
13. Disposes of strip, gloves and other supplies appropriately.					
14. Cleans up the testing area.					
15. Washes hands.					
16. Documents per district policy.					

* Place appropriate code: (+) = task performed well; (–) = task not performed well

Licensed School Nurse Signature

Date

Unlicensed Assistive School Personnel Signature

Date

URINE KETONE MONITORING SKILLS CHECKLIST

Unlicensed Assistive School Personnel (UAP): _____

RN School Nurse/RN Instructor: _____

	Training Date/Initials	Return Demonstrations			
		Date/Initial*	Date/Initial*	Date/Initial*	Date/Initial*
A. Identification:					
1. States name & purpose of procedure					
B. Preparation:					
1. Reviews Standard Precautions.					
2. Identifies where procedure is done.					
C. Identifies supplies:					
1. Gloves					
2. Testing strips					
3. Cup of urine					
4. Protected testing area (waterproof disposable pad)					
5. Watch or clock with second hand					
D. Procedure:					
1. Washes hands.					
2. Assembles supplies.					
3. Puts on gloves.					
4. Places cup of urine on protected area (waterproof disposable pad).					
5. Dips ketone testing strip in urine taps off excess.					
6. Times appropriately.					
7. Compares strip to bottle, accurately reads results.					
8. Disposes of all supplies appropriately.					
9. Removes gloves and disposes.					
10. Washes hands.					
11. Documents per district policy.					

* Place appropriate code: (+) = task performed well; (-) = task not performed well

Licensed School Nurse Signature

Date

Unlicensed Assistive School Personnel Signature

Date

CALCULATING INSULIN BOLUS DOSE BASED ON CARBOHYDRATE INTAKE

Unlicensed Assistive School Personnel Signature/Initials & Date (UAP): _____

RN School Nurse/RN Instructor Signature/Initials & Date: _____

	Training Date/Initials	Return Demonstrations			
		Date/Initial*	Date/Initial*	Date/Initial*	Date/Initial*
A. Identification:					
1. States name & purpose of procedure.					
B. Preparation:					
1. Reviews student's DMMP for student specific instructions.					
2. Reviews standard precautions.					
3. Identifies student's ability to participate in calculations.					
C. Identifies supplies:					
1. Carbohydrate Table/ Nutrition Label (15 gm = 1 carb serving)					
2. Pencil/pen paper					
3. Calculator					
D. Procedure:					
1. Describes time when bolus insulin usually given.					
2. Verifies the student's insulin to carbohydrate ratio order.					
3. Correctly identifies the number of grams/servings of carbohydrate intake.					
4. Demonstrates correct calculation of bolus insulin dose for carbs.					
5. Verifies the student's correction factor insulin scale order.					
6. Demonstrates correct calculation of correction factor insulin dose.					
7. Correctly demonstrates the calculation of the total insulin dose.					
8. Documents per district policy.					

* Place appropriate code: (+) = task performed well; (-) = task not performed well

Licensed School Nurse Signature

Date

Unlicensed Assistive School Personnel Signature

Date

INSULIN ADMINISTRATION: SYRINGE SKILLS CHECKLIST

Unlicensed Assistive School Personnel (UAP): _____

RN School Nurse/RN Instructor: _____

	Training Date/Initial	Return Demonstrations			
		Date/Initial*	Date/Initial*	Date/Initial*	Date/Initial*
A. Identification:					
1. States name & purpose of procedure.					
B. Preparation:					
1. Reviews Standard Precautions.					
2. Identifies where procedure is done.					
3. Identifies insulin expiration date.					
C. Identifies supplies:					
1. Gloves					
2. Insulin bottle					
3. Syringe					
4. Alcohol wipe and cotton ball					
5. Sharps container					
D. Procedure:					
1. Washes hands.					
2. Gathers supplies (insulin bottle, syringe, alcohol wipe, cotton ball).					
3. Puts gloves on.					
4. Wipes top of bottle with alcohol wipe and lets dry for a few seconds.					
5. Pulls the plunger down to let units of air into the syringe.					
6. Pushes the needle through the center of the rubber top of the insulin bottle.					
7. Pushes air into the bottle and leaves the needle in the bottle.					
8. Turns the insulin bottle and syringe upside down.					

* Place appropriate code: (+) = task performed well; (-) = task not performed well

INSULIN ADMINISTRATION: SYRINGE SKILLS CHECKLIST (cont)

	Training Date/ Initial	Return Demonstrations			
		Date/Initial*	Date/Initial*	Date/Initial*	Date/Initial*
9. Pulls the plunger down slowly to the correct number of units.					
10. Looks for air bubbles, taps the syringe to raise air bubbles to the top. Pushes the air bubbles back in the bottle and repeats Step 8.					
11. Checks to make sure correct units of insulin are in the syringe and removes the syringe from the bottle.					
12. Assists the student in choosing the injection site.					
a. Pinches skin and inserts insulin syringe and needle.					
b. Pushes plunger in to deliver insulin and counts to five with skin pinched and needle in place.					
c. Let go of pinched skin but keeps needle in place in skin and counts to five.					
d. Removes insulin needle from skin. Gentle pressure with cotton ball as needed.					
13. Disposes of syringe in sharps container. Does not recap syringe.					
14. Documents per district policy.					

* Place appropriate code: (+) = task performed well; (-) = task not performed well

Licensed School Nurse Signature

Date

Unlicensed Assistive School Personnel Signature

Date

INSULIN ADMINISTRATION: PEN DEVICE SKILLS CHECKLIST

Unlicensed Assistive School Personnel (UAP): _____

RN School Nurse/RN Instructor: _____

	Training Date/Initial	Return Demonstrations			
		Date/Initial*	Date/Initial*	Date/Initial*	Date/Initial*
A. Identification:					
1. States name & purpose of procedure.					
B. Preparation:					
1. Reviews Standard Precautions.					
2. Identifies where procedure is done.					
3. Identifies insulin expiration date.					
C. Identifies supplies:					
1. Gloves					
2. Insulin pen					
3. Insulin cartridge					
4. Pen needle					
5. Alcohol wipe and cotton ball.					
D. Procedure:					
1. Washes hands.					
2. Gathers supplies (insulin pen or cartridge, pen needle, alcohol wipe, cotton ball).					
3. Puts gloves on.					
4. Load insulin cartridge, if needed and wipe insulin pen top with alcohol wipe.					
5. Screws the needle onto the end of the insulin pen. Removes caps and sets outer cap on flat surface.					
6. Primes the needle by dialing the pen to 2 units.					
7. Pushes the plunger until a small drop or stream of insulin is seen, and repeats as needed.					
8. Turns the dose knob to the dose ordered.					

* Place appropriate code: (+) = task performed well; (-) = task not performed well

INSULIN ADMINISTRATION: PEN DEVICE SKILLS CHECKLIST (cont)

Unlicensed Assistive School Personnel (UAP): _____

RN School Nurse/RN Instructor: _____

	Training Date/Initial	Return Demonstrations			
		Date/Initial*	Date/Initial*	Date/Initial*	Date/Initial*
9. Assists the student in choosing injection site (arm, abdomen, or thigh)					
a. Pinches skin and inserts insulin pen needle.					
b. Pushes injection button down completely to deliver insulin and counts to five with skin pinched and needle in place					
c. Let go of pinched skin but keeps needle in place in skin and counts to five.					
d. Removes insulin needle from skin. Dabs with cotton ball if needed.					
10. Carefully replaces the outer cap of the needle without touching the outer cap, unscrews the needle and disposes of properly in a sharps container.					
11. Documents per district policy					

* Place appropriate code: (+) = task performed well; (-) = task not performed well

Licensed School Nurse Signature

Date

Unlicensed Assistive School Personnel Signature

Date

GLUCAGON INJECTION SKILLS CHECKLIST

Unlicensed Assistive School Personnel (UAP): _____

RN School Nurse/RN Instructor: _____

	Training Date/Initial	Return Demonstrations			
		Date/Initial*	Date/Initial*	Date/Initial*	Date/Initial*
A. Identification:					
1. States name & purpose of procedure.					
B. PREPARATION:					
1. Reviews standard precautions					
2. Identifies procedure is done if student experiencing severe hypoglycemia.					
3. Identifies expiration date of glucagon					
4. Identifies accompanying steps:					
a. Send someone to call EMS/911, notify school nurse & parent/guardian					
b. Maintain open airway					
c. Give glucose gel in pouch of cheek or lower mouth between lip and gum (if ordered)					
d. Give glucose source when student is awake and able to swallow					
e. Remain with student until EMS arrives					
C. IDENTIFIES SUPPLIES:					
1. Glucagon kit					
2. Alcohol wipe & cotton ball					
3. Sharps container					
4. Gloves					
D. PROCEDURE					
1. Washes hands					
2. Gathers supplies (glucagon kit, alcohol wipe, cotton ball, gloves)					
3. Puts on gloves					
4. Removes flip-off seal from vial of glucagon powder, wipe with alcohol wipe					
5. Removes needle cover from syringe.					
6. Injects entire contents of syringe into vial of glucagon powder (held upright).					
7. Swirls vial gently until dissolved/clear.					

* Place appropriate code: (+) = task performed well; (-) = task not performed well

GLUCAGON INJECTION SKILLS CHECKLIST (cont)

Unlicensed Assistive School Personnel (UAP): _____

RN School Nurse/RN Instructor: _____

	Training Date/Initial	Return Demonstrations			
		Date/Initial*	Date/Initial*	Date/Initial*	Date/Initial*
8. Holds vial upside down and withdraws all solution from the vial into syringe.					
9. Withdraws needle from vial, holding syringe upright, and remove air/bubbles from syringe.					
10. Exposes injection site (upper, outer area of thigh, arm).					
11. Holds syringe safely; uses other hand to clean injection site with alcohol wipe.					
12. For subcutaneous injection only: "Pinches up skin/tissue (still holding alcohol wipe).					
13. For subcutaneous and intramuscular injection: Inserts needle straight into tissue of injection site and injects glucagon.					
14. Withdraws needle and presses gently with alcohol wipe or cotton ball at injection site.					
15. Turns child on side.					
16. Puts used syringe and vial in sharps container.					
17. Documents per district policy.					

* Place appropriate code: (+) = task performed well; (-) = task not performed well

Licensed School Nurse Signature

Date

Unlicensed Assistive School Personnel Signature

Date

Competency Examination for Unlicensed School Personnel to Administer Insulin in the School Setting

Name _____ Date _____

Instructions: Check only one answer for each question. A minimum score of 85% is required.

1. Type 1 diabetes is:

- _____ a) the inability of the body to produce adequate insulin
- _____ b) a contagious disease
- _____ c) is caused by eating too much sugar
- _____ d) causes obesity

2. Hypoglycemia is another term used for low blood glucose level.

- _____ a) True
- _____ b) False

3. Which phrase is true about hypoglycemia:

- _____ a) Is one of the most frequent complications of children with diabetes who receive insulin
- _____ b) Is a condition that involves the heart
- _____ c) Is a condition where there is swelling of the eyes, lips, or tongue
- _____ d) Is a condition where there is itching and/or blisters in the throat of mouth

4. Potential causes for a low blood glucose level may include which of the following:

- _____ a) Too much insulin
- _____ b) Delay in receiving snack/meal
- _____ c) Physical activity
- _____ d) All of the above

5. When is Glucagon usually given to treat hypoglycemia?

- _____ a) When the student's blood sugar is more than 150 md/dl
- _____ b) Before recess every afternoon
- _____ c) When the student is unable to take liquid or food by mouth
- _____ d) When the student is tired and sleepy

6. How is Glucagon administered?

- _____ a) Under the tongue
- _____ b) By mouth
- _____ c) By injection
- _____ d) Rectally

7. Students with diabetes must check their blood glucose:

- _____ a) three times a day
- _____ b) five times a day
- _____ c) four times at school and four times at home
- _____ d) as outlined in their diabetes medical management plan

8. Which of the following is not used to manage diabetes:

- _____ a) following a recommended eating plan
- _____ b) taking medication as prescribed
- _____ c) limiting physical activity
- _____ d) seeing a healthcare provider routinely

9. The goal of good diabetes management is to:

- ☐ a) be as healthy as possible
- ☐ b) avoid the complications associated with diabetes
- ☐ c) fully participate in all academic and extracurricular activities
- ☐ d) keep blood glucose levels within an acceptable range
- ☐ e) all of the above

10. Physical activity does not:

- ☐ a) control weight
- ☐ b) lower blood glucose levels
- ☐ c) increase insulin sensitivity
- ☐ d) decrease insulin sensitivity

11. Students with diabetes are required to have an individual health plan (IHP)/diabetes medical management plan.

☐ True ☐ False

12. The Individual Health Plan/Diabetes Medical Management Plan does not include:

- ☐ a) a list of all the medicines the student is to take while at school for diabetes
- ☐ b) a schedule of when blood glucose is to be checked and when medicines are to be administered
- ☐ c) the time of recess during the day
- ☐ d) ranges of glucose values and steps to take when the values are out of range

13. Insulin may not be administered by using:

- ☐ a) tablets
- ☐ b) an insulin pump
- ☐ c) insulin pens
- ☐ d) insulin syringes

14. Students with diabetes should not eat foods with sugar in them.

☐ True ☐ False

15. Students with diabetes may dispose of their blood testing equipment by any of these except:

- ☐ a) by taking lancets home, using safe needle disposal recommendations
- ☐ b) by taking lancets to the nurse's office, using safe needle disposal recommendations
- ☐ c) by adhering to the district policy related to safe needle disposal
- ☐ d) by throwing away in the regular trash in the first aid office

16. Symptoms of mild to moderate hypoglycemia (low blood glucose) may include all of these except:

- ☐ a) trembling
- ☐ b) passing out
- ☐ c) confusion
- ☐ d) inability to concentrate

17. The best way to determine mild to moderate hypoglycemia (low blood glucose) is determined by:

- ☐ a) checking the student's blood glucose
- ☐ b) looking at the child's skin color
- ☐ c) asking her/him how she/he feels
- ☐ d) watching for seizures

18. Which action is not associated with treatment of mild to moderate hypoglycemia (low blood glucose):

- ☐ a) eating a snack
- ☐ b) administering insulin
- ☐ c) following the IHP
- ☐ d) documenting the occurrence

19. Symptoms of severe hypoglycemia (low blood glucose) should be suspected if:

- ☐ a) the student collapses
- ☐ b) has a seizure
- ☐ c) the student is crying
- ☐ d) a and b
- ☐ e) b and c

20. Treating severe hypoglycemia (low blood glucose) should include:

- ☐ a) administering fast-acting glucose, if the student can swallow
- ☐ b) administering glucagon, if the student is unconscious
- ☐ c) administering insulin per the diabetes medical management plan
- ☐ d) a and b

21. When engaging in physical activity, a student with diabetes might need to do all these activities except:

- ☐ a) monitor blood glucose levels before, during and after the scheduled physical activity
- ☐ b) skip lunch and plan to eat extra after the activity
- ☐ c) have a snack available as well as a source of fast-acting glucose
- ☐ d) adjust his/her insulin dose according to the individual health plan

22. Symptoms of hyperglycemia (high blood glucose) include all except:

- ☐ a) pain in legs
- ☐ b) increased urination
- ☐ c) drowsiness
- ☐ d) irritability

23. Hyperglycemia (high blood glucose) is best determined by:

- ☐ a) the student's appearance
- ☐ b) the student's blood glucose value
- ☐ c) asking him/her how he is feeling
- ☐ d) the student's activity level

24. The treatment of hyperglycemia (high blood glucose) may include which of the following:

- ☐ a) administering insulin
- ☐ b) following the IHP
- ☐ c) administering glucagon
- ☐ d) a and b

25. The correct "rights" of medication administration include all except:

- ☐ a) right person
- ☐ b) right medication
- ☐ c) right temperature
- ☐ d) right dose
- ☐ e) right route
- ☐ f) right documentation
- ☐ g) right time

26. Carbohydrates are important to watch because they affect blood glucose levels more than any other nutrient.

☐ True ☐ False

27. Carbohydrates ("carbs") are found in which of the following:

- ☐ a) dairy products
- ☐ b) fruits
- ☐ c) ketchup and other toppings
- ☐ d) all of the above

28. A "carb choice" or serving is the amount of food that contains how many grams of carbohydrate:

- ☐ a) 15 grams
- ☐ b) 10 grams
- ☐ c) 1 gram
- ☐ d) 5 grams

29. Students with diabetes have an individualized meal plan because:

- ☐ a) they have to eat certain foods
- ☐ b) they can't have milk products in their foods
- ☐ c) they shouldn't have sugar containing foods
- ☐ d) they have to calculate the carbohydrate content of foods

30. The insulin to carb ratio (I:C) is the amount of insulin given to cover for a stated amount of carbs that are eaten.

☐ True ☐ False

31. Insulin to carb calculation (I:C) ratio is individualized for a student:

The student's lunchtime insulin to carb ratio is 1:15. The child ate 60 Grams of carbs. What is the amount of insulin needed to be given to cover the child's lunchtime intake? (Show calculations)

- ☐ a) 2 units of regular insulin
- ☐ b) 3 units of regular insulin
- ☐ c) 4 units of regular insulin
- ☐ d) 5 units of regular insulin

32. A child has 1% milk (12gm carbohydrate), a sandwich (30gm carbohydrate) and a cookie (18gm carbohydrate) for lunch. His insulin to carb ration is 1 unit for every 10gm carbohydrate. How much insulin should child receive for amount of carbohydrate? (Show calculations)

- ☐ a) 4
- ☐ b) 6
- ☐ c) 8
- ☐ d) 10

33. A child has a correction factor of 1 unit of insulin for every 50mg/dL above 120mg/dL blood sugar. Blood sugar result showed 220mg/dl. How much insulin should child receive for correction factor?

(Show calculations)

- ☐ a) 2
- ☐ b) 3
- ☐ c) 4
- ☐ d) 5

34. A child is having 75 grams of carbohydrate for lunch, blood sugar before lunch was 220. Insulin to carb ratio is 1 unit for every 15gm carbohydrate, and correction factor is 1 unit for every 50mg/dl above 120mg/dl. How much insulin should child receive? (Show calculations)

- ☐ a) 5
- ☐ b) 6
- ☐ c) 7
- ☐ d) 8

35. Supplies to check blood glucose or ketones for use at school are provided by the parent/guardian.

☐ True ☐ False

36. Following injection of insulin, the site should be vigorously rubbed for quick absorption.

☐ True ☐ False

37. The glucagon kit should be stored in the refrigerator.

☐ True ☐ False

38. The person who opens a bottle of insulin should double check the amount of insulin in the bottle and document the amount in the bottle and the expiration date of the bottle.

____ True ____ False

39. How do you prime an insulin pen?

- ____ a) Dial to 4 units and give an air shot
- ____ b) Rock the pen back and forth to remove the air
- ____ c) Dial to 2 units and give an air shot
- ____ d) An insulin pen doesn't require priming

40. Documentation of the insulin injection includes which of the following:

- ____ a) dose of insulin given
- ____ b) time insulin given
- ____ c) any reactions or problems noted
- ____ d) all of the above

41. Opened vials of insulin will stay fresh and usable for up to 6 months if temperature does not exceed 98 degrees.

____ True ____ False

42. Students who take rapid-acting insulin should eat within 15 minutes of receiving their injection.

____ True ____ False

43. Changes in insulin orders can be accepted:

- ____ a) from the health care provider
- ____ b) from the parent
- ____ c) from the student
- ____ d) from the school nurse

ANSWER KEY

Competency Examination for Unlicensed School Personnel to Administer Insulin in the School Setting

Name _____ Date _____

Instructions: check only one answer for each question. Thirty-six (36) correct questions provides 85 % score.

1. Type 1 diabetes is:

- ☒ **a) the inability of the body to produce adequate insulin**
- ☐ b) a contagious disease
- ☐ c) is caused by eating too much sugar
- ☐ d) causes obesity

2. Hypoglycemia is another term used for low blood glucose level.

- ☒ **a) True**
- ☐ b) False

3. Which phrase is true about hypoglycemia:

- ☒ **a) Is one of the most frequent complications of children with diabetes who receive insulin**
- ☐ b) Is a condition that involves the heart
- ☐ c) Is a condition where there is swelling of the eyes, lips, or tongue
- ☐ d) Is a condition where there is itching and/or blisters in the throat of mouth

4. Potential causes for a low blood glucose level may include which of the following:

- ☐ a) Too much insulin
- ☐ b) Delay in receiving snack/meal
- ☐ c) Physical activity
- ☒ **d) All of the above**

5. When is Glucagon usually given to treat hypoglycemia?

- ☐ a) When the student's blood sugar is more than 150 md/dl
- ☐ b) Before recess every afternoon
- ☒ **c) When the student is unable to take liquid or food by mouth**
- ☐ d) When the student is tired and sleepy

6. How is Glucagon administered?

- ☐ a) Under the tongue
- ☐ b) By mouth
- ☒ **c) By injection**
- ☐ d) Rectally

7. Students with diabetes must check their blood glucose:

- ☐ a) three times a day
- ☐ b) five times a day
- ☐ c) four times at school and four times at home
- ☒ **d) as outlined in their diabetes medical management plan**

8. Which of the following is not used to manage diabetes:

- ☐ a) following a recommended eating plan
- ☐ b) taking medication as prescribed
- ☒ **c) limiting physical activity**
- ☐ d) seeing a healthcare provider routinely

9. The goal of good diabetes management is to:

- ☐ a) be as healthy as possible
- ☐ b) avoid the complications associated with diabetes
- ☐ c) fully participate in all academic and extracurricular activities
- ☐ d) keep blood glucose levels within an acceptable range
- ☒ e) **all of the above**

10. Physical activity does not:

- ☐ a) control weight
- ☐ b) lower blood glucose levels
- ☐ c) increase insulin sensitivity
- ☒ d) **decrease insulin sensitivity**

11. Students with diabetes are required to have an individual health plan (IHP)/diabetes medical management plan.

- ☒ **True**
- ☐ False

12. The Individual Health Plan/Diabetes Medical Management Plan does not include:

- ☐ a) a list of all the medicines the student is to take while at school for diabetes
- ☐ b) a schedule of when blood glucose is to be checked and when medicines are to be administered
- ☒ c) **the time of recess during the day**
- ☐ d) ranges of glucose values and steps to take when the values are out of range

13. Insulin may not be administered by using:

- ☒ a) **tablets**
- ☐ b) an insulin pump
- ☐ c) insulin pens
- ☐ d) insulin syringes

14. Students with diabetes should not eat foods with sugar in them.

- ☐ True
- ☒ **False**

15. Students with diabetes may dispose of their blood testing equipment by any of these except:

- ☐ a) by taking lancets home, using safe needle disposal recommendations
- ☐ b) by taking lancets to the nurse's office, using safe needle disposal recommendations
- ☐ c) by adhering to the district policy related to safe needle disposal
- ☒ d) **by throwing away in the regular trash in the first aid office**

16. Symptoms of mild to moderate hypoglycemia (low blood glucose) may include all of these except:

- ☐ a) trembling
- ☒ b) **passing out**
- ☐ c) confusion
- ☐ d) inability to concentrate

17. The best way to determine mild to moderate hypoglycemia (low blood glucose) is determined by:

- ☒ a) **checking the student's blood glucose**
- ☐ b) looking at the child's skin color
- ☐ c) asking her/him how she/he feels
- ☐ d) watching for seizures

18. Which action is not associated with treatment of mild to moderate hypoglycemia (low blood glucose):

- ☐ a) eating a snack
- ☒ b) **administering insulin**
- ☐ c) following the IHP
- ☐ d) documenting the occurrence

19. Symptoms of severe hypoglycemia (low blood glucose) should be suspected if:

- ☐ a) the student collapses
- ☐ b) has a seizure
- ☐ c) the student is crying
- ☒ d) **a and b**
- ☐ e) b and c

20. Treating severe hypoglycemia (low blood glucose) should include:

- ☐ a) administering fast-acting glucose, if the student can swallow
- ☐ b) administering glucagon, if the student is unconscious
- ☐ c) administering insulin per the diabetes medical management plan
- ☒ d) **a and b**

21. When engaging in physical activity, a student with diabetes might need to do all these activities except:

- ☐ a) monitor blood glucose levels before, during and after the scheduled physical activity
- ☒ b) **skip lunch and plan to eat extra after the activity**
- ☐ c) have a snack available as well as a source of fast-acting glucose
- ☐ d) adjust his/her insulin dose according to the individual health plan

22. Symptoms of hyperglycemia (high blood glucose) include all except:

- ☒ a) **pain in legs**
- ☐ b) increased urination
- ☐ c) drowsiness
- ☐ d) irritability

23. Hyperglycemia (high blood glucose) is best determined by:

- ☐ a) the student's appearance
- ☒ b) **the student's blood glucose value**
- ☐ c) asking him/her how he is feeling
- ☐ d) the student's activity level

24. The treatment of hyperglycemia (high blood glucose) may include which of the following:

- ☐ a) administering insulin
- ☐ b) following the IHP
- ☐ c) administering glucagon
- ☒ d) **a and b**

25. The correct "rights" of medication administration include all except:

- ☐ a) right person
- ☐ b) right medication
- ☒ c) **right temperature**
- ☐ d) right dose
- ☐ e) right route
- ☐ f) right documentation
- ☐ g) right time

26. Carbohydrates are important to watch because they affect blood glucose levels more than any other nutrient.

- ☒ **True**
- ☐ False

27. Carbohydrates ("carbs") are found in which of the following:

- ☐ a) dairy products
- ☐ b) fruits
- ☐ c) ketchup and other toppings
- ☒ d) **all of the above**

28. A “carb choice” or serving is the amount of food that contains how many grams of carbohydrate:

- ☒ a) **15 grams**
- ☐ b) 10 grams
- ☐ c) 1 gram
- ☐ d) 5 grams

29. Students with diabetes have an individualized meal plan because:

- ☐ a) they have to eat certain foods
- ☐ b) they can't have milk products in their foods
- ☐ c) they shouldn't have sugar containing foods
- ☒ d) **they have to calculate the carbohydrate content of foods**

30. The insulin to carb (I:C) ratio is the amount of insulin given to cover for a stated amount of carbs that are eaten.

- ☒ **True**
- ☐ False

31. Insulin to carb calculation (I:C) ratio is individualized for a student:

The student's lunchtime insulin to carb ratio is 1:15. The child ate 60 Grams of carbs. What is the amount of insulin needed to be given to cover the child's lunchtime intake? (Show calculations)

- ☐ a) 2 units of regular insulin
- ☐ b) 3 units of regular insulin
- ☒ c) **4 units of regular insulin**
- ☐ d) 5 units of regular insulin

32. A child has 1% milk (12gm carbohydrate), a sandwich (30gm carbohydrate) and a cookie (18gm carbohydrate) for lunch. His insulin to carb ration is 1 unit for every 10gm carbohydrate. How much insulin should child receive for amount of carbohydrate? (Show calculations)

- ☐ a) 4
- ☒ b) **6**
- ☐ c) 8
- ☐ d) 10

33. A child has a correction factor of 1 unit of insulin for every 50mg/dl above 120mg/dl blood sugar. Blood sugar result showed 220mg/dl. How much insulin should child receive for correction factor? (Show calculations)

- ☒ a) **2**
- ☐ b) 3
- ☐ c) 4
- ☐ d) 5

34. A child is having 75 grams of carbohydrate for lunch, blood sugar before lunch was 220. Insulin to carb ratio is 1 unit for every 15gm carbohydrate, and correction factor is 1 unit for every 50mg/dl above 120mg/dl. How much insulin should child receive? (Show calculations)

- ☐ a) 5
- ☐ b) 6
- ☒ c) **7**
- ☐ d) 8

35. Supplies to check blood glucose or ketones for use at school are provided by the parent/guardian.

- ☒ **True**
- ☐ False

36. Following injection of insulin, the site should be vigorously rubbed for quick absorption.

- ☐ True
- ☒ **False**

37. The glucagon kit should be stored in the refrigerator.

- ☐ True
- ☒ **False**

38. The person who opens a bottle of insulin should double check the amount of insulin in the bottle and document the amount in the bottle and the expiration date of the bottle.

☒ **True**

☐ False

39. How do you prime an insulin pen?

☐ a) Dial to 4 units and give an air shot

☐ b) Rock the pen back and forth to remove the air

☒ **c) Dial to 2 units and give an air shot**

☐ d) An insulin pen doesn't require priming

40. Documentation of the insulin injection includes which of the following:

☐ a) dose of insulin given

☐ b) time insulin given

☐ c) any reactions or problems noted

☒ **d) all of the above**

41. Opened vials of insulin will stay fresh and usable for up to 6 months if temperature does not exceed 98 degrees.

☐ True

☒ **False**

42. Students who take rapid-acting insulin should eat within 15 minutes of receiving their injection.

☒ **True**

☐ False

43. Changes in insulin orders can be accepted:

☒ **a) from the health care provider**

☐ b) from the parent

☐ c) from the student

☐ d) from the school nurse