

## INSULIN PUMP THERAPY ELIGIBILITY CRITERIA

You are receiving this because you expressed interest in Insulin Pump Therapy (IPT). Please complete the following tasks as part of your assessment process for the IPT Program.

### **TASKS:**

1. View the on-line Insulin Pump Therapy Learning Module at [Insulin Pump Therapy Learning Module \(alberta.ca\)](https://myhealth.ca/learning/insulin-pump-therapy) <https://myhealth.ca/learning/insulin-pump-therapy>
2. Complete the **Introduction to Pump Therapy Questionnaire**. [IPTP questionnaire \(alberta.ca\)](https://myhealth.alberta.ca/Learning/insulin-pump-therapy/IPTP-questionnaire). <https://myhealth.alberta.ca/Learning/insulin-pump-therapy/IPTP-questionnaire>
  - Print your results.
  - Parents and children older than 13 years should each complete a separate Questionnaire.
3. Complete the **Carbohydrate Counting Quiz**.
  - Parents and children older than 13 years should each complete a separate quiz.
4. Review and sign the **Patient Responsibility Agreement** form.

**COMPLETE THESE FORMS** and hand them in at your clinic appointment or send them by email to [achdiabetesnurse@ahs.ca](mailto:achdiabetesnurse@ahs.ca)

- Completed Introduction to Pump Therapy Questionnaire
- Completed Carbohydrate Counting Quiz
- Signed Patient Responsibility Agreement form

# Carbohydrate Counting Assessment

Carbohydrate counting can help you manage your blood sugars.  
This tool can help you and your health care team assess your skills counting carbohydrates.

Name: \_\_\_\_\_

Date completed: \_\_\_\_\_

Score

Please answer all the questions below.

Who completed this assessment?  Myself  Myself and a parent  Other: \_\_\_\_\_

## Carbohydrate Food Recognition

Does this food have enough carbohydrate to raise your blood sugar (or take insulin)?		Please <b>circle</b> one answer for each food item. If you don't know if the food contains carbohydrate, you can circle "Don't know."		
1	Bread	Yes	No	Don't know
2	Cucumber	Yes	No	Don't know
3	Baked potato	Yes	No	Don't know
4	Regular table syrup	Yes	No	Don't know
5	Cheese	Yes	No	Don't know
6	Milk	Yes	No	Don't know
7	Orange juice	Yes	No	Don't know
8	Pop (not diet)	Yes	No	Don't know
9	Chili with kidney beans	Yes	No	Don't know
10	Apple	Yes	No	Don't know
11	Sugar	Yes	No	Don't know
12	Butter	Yes	No	Don't know
13	Plain grilled chicken	Yes	No	Don't know
14	Strawberry jam	Yes	No	Don't know
15	Canned spaghetti sauce (tomato)	Yes	No	Don't know
16	Ground beef	Yes	No	Don't know
17	Honey	Yes	No	Don't know
18	Corn	Yes	No	Don't know

## Carbohydrate Food Counting

Please **circle** the best answer only

How many grams of carbohydrates are in this portion of food?

Circle the grams of carbohydrate in this column

Please circle this column if you don't know

19	1 cup (250 mL) milk	0	15	30	45	60	75	Don't know
20	1 cup (250 mL) cooked pasta	0	15	30	45	60	75	Don't know
21	1 cup (250 mL) cooked rice	0	15	30	45	60	75	Don't know
22	1 cup (250 mL) unsweetened apple juice	0	15	30	45	60	75	Don't know
23	1 cup (250 mL) mashed potatoes	0	15	30	45	60	75	Don't know

## Food Labels

For 1 package (456 g)

Nutrition Facts	
Per 1 cup (228g)	
<b>Calories</b> 260	% Daily Value*
<b>Fat</b> 13 g	20 %
Saturated 5 g	25 %
+Trans 0 g	
<b>Carbohydrate</b> 31 g	
Fibre 2 g	8 %
Sugars 8 g	8 %
<b>Protein</b> 5 g	
<b>Cholesterol</b> 10 mg	
<b>Sodium</b> 660 mg	28 %
Potassium 300 mg	6 %
Calcium 300 mg	23 %
Iron 1 mg	6 %
*5% or less is a little, 15% or more is a lot	

Use the Nutrition Facts table above to answer the questions below.

Please **circle** the best answer.

Please circle this column if you don't know

24	How much available carbohydrate (in grams) would be in 1 cup?	228 g	41 g	31 g	29 g	Don't know
25	If you ate the whole package, how many cups would you eat?	1 cup	2 cups	4 cups	Don't know	
26	If you ate the whole package, how much available carbohydrate would you eat?	456 g	82 g	62 g	58 g	Don't know

## Insight

Please check <input checked="" type="checkbox"/> the best answer for each question.		Please check this column if you don't know
27	Which of these will raise your blood sugars the fastest?	<input type="checkbox"/> Watermelon <input type="checkbox"/> Ice cream <input type="checkbox"/> Whole wheat bread <input type="checkbox"/> Don't know
28	Which of these will raise your blood sugars the slowest?	<input type="checkbox"/> Plain 2% yogurt <input type="checkbox"/> Plain 2% yogurt with cherries <input type="checkbox"/> Plain 2% yogurt with nuts <input type="checkbox"/> Don't know
29	Which of these will raise your blood sugars the fastest?	<input type="checkbox"/> Mini Wheats <sup>®</sup> cereal <input type="checkbox"/> Rice Krispies <sup>®</sup> cereal <input type="checkbox"/> All-bran <sup>™</sup> breakfast cereal <input type="checkbox"/> Don't know
30	Which of these will raise your blood sugar the fastest when you have a low blood sugar?	<input type="checkbox"/> Chocolate bar <input type="checkbox"/> Regular (not diet) pop <input type="checkbox"/> Peanut butter <input type="checkbox"/> Don't know
31	If you ate only white bread at a meal, how long would it take for your blood sugars to peak?	<input type="checkbox"/> 30 minutes to 1 hour <input type="checkbox"/> 2 to 3 hours <input type="checkbox"/> 4 to 5 hours <input type="checkbox"/> Don't know

## Carbohydrate Counting in Meals

You can use the information below to help you answer questions 32 – 35.

### Yogurt

Nutrition Facts	
Per 1 container (100g)	
<b>Calories 90</b>	<b>% Daily Value*</b>
<b>Fat 3 g</b>	4 %
Saturated 1.5 g	8 %
+Trans 0 g	
<b>Carbohydrate 12 g</b>	
Fibre 0 g	0 %
Sugars 9 g	9 %
<b>Protein 4 g</b>	
<b>Cholesterol 10 mg</b>	
<b>Sodium 40 mg</b>	2 %
Potassium 200 mg	4 %
Calcium 150 mg	12 %
Iron 0.1 mg	1 %
*5% or less is a little, 15% or more is a lot	

### Salad dressing

Nutrition Facts	
Per 2 tbsp (30 mL)	
<b>Calories 120</b>	<b>% Daily Value*</b>
<b>Fat 12 g</b>	16 %
Saturated 1.5 g	8 %
+Trans 0 g	
<b>Carbohydrate 1 g</b>	
Fibre 0 g	0 %
Sugars 1 g	1 %
<b>Protein 0 g</b>	
<b>Cholesterol 5 mg</b>	
<b>Sodium 250 mg</b>	11 %
Potassium 10 mg	1 %
Calcium 10 mg	1 %
Iron 0 mg	0 %
*5% or less is a little, 15% or more is a lot	

### Hamburger bun

Nutrition Facts	
Per 1 bun (65 g)	
<b>Calories 170</b>	<b>% Daily Value*</b>
<b>Fat 2.5 g</b>	3 %
Saturated 0 g	0 %
+Trans 0 g	
<b>Carbohydrate 34 g</b>	
Fibre 6 g	20 %
Sugars 2 g	2 %
<b>Protein 5 g</b>	
<b>Cholesterol 0 mg</b>	
<b>Sodium 340 mg</b>	15 %
Potassium 225 mg	5 %
Calcium 0 mg	0 %
Iron 1.5 mg	11 %
*5% or less is a little, 15% or more is a lot	

How many grams of carbohydrate does this meal or snack contain?	Please <b>circle</b> the best answer (grams)	Please circle this column if you don't know
<b>32</b> <b>Breakfast:</b> 2 eggs 2 toast 2 tbsp (30 mL) peanut butter 1 cup (250 mL) 1% milk	0 15 30 45 60 75 90 105	Don't know
<b>33</b> <b>Lunch:</b> 2 slices bread with 2 slices turkey 1 dill pickle 1/3 cup (75 mL or 100 g) yogurt flavoured with added sugar 1/2 cup apple juice	0 15 30 45 60 75 90 105	Don't know
<b>34</b> <b>Snack:</b> 1 large banana	0 15 30 45 60 75 90 105	Don't know
<b>35</b> <b>Dinner:</b> 1 cheeseburger with bun 1 cup (250 mL) green salad 1 tbsp (15 mL) regular ranch dressing 1 can (355 mL) diet pop	0 15 30 45 60 75 90 105	Don't know

## Insulin Pump Therapy Participant Responsibility Agreement

The role of your diabetes education team is to provide you with the necessary information/teaching to ensure your safety and success as you start insulin pump therapy. For this reason, it is important that you understand your responsibilities in this process as well. Below you will find the expectations set upon you in this process to ensure that we work successfully as a team.

If you have any difficulty understanding the commitments outlined below, or if you have any misgivings regarding insulin pump therapy, now is the time to discuss them. If not, please proceed with completing this form.

I, \_\_\_\_\_ [participant name], have met the provincial criteria and have chosen to use an insulin pump for the management of diabetes.

OR

I, \_\_\_\_\_ [Alternate Decision Maker name], understand that \_\_\_\_\_ [participant's name] meets the provincial criteria and has chosen to use an insulin pump for the management of diabetes.

In order to continue to be enrolled in the Alberta Health funded Insulin Pump Therapy program, I understand that I must fulfill the following requirements:

- Regular follow-up with a doctor or other health care professional for routine diabetes care (regular A1C, surveillance for complications).
- Demonstration of active involvement in diabetes self-management.  
This will normally be demonstrated by ability and willingness to participate in a number of self-care behaviours including (but not limited to):
  - counting carbohydrate or other recommended meal plan
  - monitoring blood glucose frequently and consistently prior to meals and at bedtime (using BGM and/or CGM/flash glucose monitoring)
  - consistently using boluses of insulin for meals and snacks
  - performing regular infusion set/site changes
  - appropriately using advanced pump features
  - safely managing their pump to minimize risks of hypoglycemia or Diabetic Ketoacidosis (DKA)
  - monitoring for ketones during illness or unexplained hyperglycemia
  - adherent with follow up – which would include attending clinic visits, completing A1c tests, completing required documentation (e.g., blood glucose logs, food records, pump or meter uploads)
- Participate in an annual review process with the IPTP Clinic.

I have read the above conditions and agree with the terms. I acknowledge that if I do not comply with these terms, I will no longer be eligible for the Alberta Health funded Provincial Insulin Pump Therapy Program and may have to discontinue the insulin pump and manage my diabetes with insulin injections.

**Signed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ in the city of \_\_\_\_\_, Province of Alberta.**

**Participant signature:** \_\_\_\_\_

**Printed name of participant:** \_\_\_\_\_

**Alternate Decision Maker signature:** \_\_\_\_\_

**Printed name of Alternate Decision Maker:** \_\_\_\_\_ **Relationship to participant:** \_\_\_\_\_

**Signature of witness:** \_\_\_\_\_

**Printed name of witness:** \_\_\_\_\_

**Date:** \_\_\_\_\_

NOTE: If it is recommended to discontinue the insulin and pump and manage your diabetes with injections, your diabetes team will offer education and support to help improve your diabetes self-management skills. By improving diabetes routines, knowledge and motivation it is possible to re-start the insulin pump under the Provincial Insulin Pump Therapy Program.

**CC: Participant (original), Physician (copy), IPTP Clinic (copy)**

## Introduction to Insulin Pump Therapy Questionnaire

Please fill out this questionnaire and review it with your diabetes educator from an approved diabetes centre. This is needed if you are applying for funding through the Alberta Insulin Pump Therapy Program.

Name of patient: \_\_\_\_\_

Date of birth: \_\_\_\_\_

Name of guardian if patient less than 18 yrs \_\_\_\_\_

Alberta Health Care Number: \_\_\_\_\_

Date: \_\_\_\_\_

1. The insulin pump will deliver meal insulin without the user knowing or doing any work.

- True
- False

2. Choose all the correct answers. Basal insulin delivered from the pump:

- is delivered with meals
- is background insulin
- is delivered 24 hours a day
- if stopped and not replaced, can result in diabetic ketoacidosis (DKA) in as few as 2 hours

3. Choose all the correct answers. Bolus insulin is:

- given with meals
- given for high blood sugar readings
- delivered 24 hours a day

4. People on insulin pumps who use a continuous blood glucose monitor don't have to take finger blood glucose readings.

- True
- False

5. Explain why the risk of DKA is high when using an insulin pump.

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6. Explain what someone using an insulin pump must do to prevent DKA:

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7. A lot of problem solving is needed when on an insulin pump. Suppose the infusion set comes out when you arrive for supper at a friend's house. Suppose you don't have your (or your child's) safety kit with you. This means there would be no way to deliver insulin.

Would it be fairly safe to eat a meal with no carbohydrates and put a new infusion set in when you get home in 3 hours?

Yes

No

Please explain your answer: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8. How committed are you to carrying a safety kit at all times? This kit must have insulin, syringe or insulin pen, infusion set, glucose and ketone testing supplies, extra batteries and a source of glucose.

I'm confident I will

I need more information before I can commit to doing this all the time

I can't see myself doing this most of the time

I'm not sure

9. We want to learn why you want pump therapy. Please finish this sentence below. Please speak with your diabetes educator if you have trouble finishing this sentence.

Insulin pump therapy will be a success for me or my child if . . .

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**10.** Blood sugar levels may rise quickly when using an insulin pump. Many people say it is like nothing they've experienced before. How important to you is testing ketones if blood sugars are over 14 mmol/L? Choose the answer that is closest to your thoughts.

- Very important—I know I will do this if blood sugars are over 14 mmol/L.
- Very important—a few things may get in the way of me doing this.
- Important — but if I test my blood sugar often, I don't think I'll need to test for ketones.
- I'm not sure why I'd need to do this. I have never, or rarely, had a problem with ketones.
- I need more information before I can answer this question.

**11.** Starting insulin pump therapy can be frustrating. Some reasons for this are below. Check off the ones that you and your family are prepared to accept and manage.

- Blood sugars may be high or unstable until basal and bolus settings are figured out. This can take up to 3 to 6 months.
- Sleep is interrupted many nights to test blood sugars.
- High and low blood sugars still happen even after basal and bolus settings are figured out.
- Unexpected infusion set changes and ketone testing is needed at the most inconvenient times (for example: during a meal out at a restaurant or at 1 a.m. with an occlusion alarm). In these cases, timers may have to be set often to retest ketones and blood sugars.

**12.** Starting insulin pump therapy takes a lot of time and effort. Some reasons for this are below. Check off the ones that you and your family are prepared to accept and manage.

- A lot of contact with the diabetes centre:** You need time off work, school, or both before and after starting a pump. You can expect a lot of contact and appointments for months after starting the pump.
- Detailed food and exercise records,** and perhaps other worksheets.
- Frequent blood sugar checking:** It can be 7 to 10 times a day to start, and often at unusual or inconvenient times. You will need to test your blood sugar often, even after you're established on pump therapy.
- Frequent downloading, printing and/or emailing pump records** to the diabetes team. You will need to learn the software for downloading pump information.
- Pump programming:** You will need to program new settings into your pump, especially during the first few months. This may mean reading the instruction manuals several times, calling the 1-800 number for your pump, or calling your healthcare team.
- Problem solving:** Managing diabetes on a pump is different. You need more time to review and make decisions. You need to re-think common scenarios and learn new ones. Some examples include having to:
  - relearn how to manage exercise
  - learn how and when to replace basal insulin with injections (rapid, intermediate, or long-acting insulin)
  - set temporary basal rates
  - understand insulin on board
  - problem-solve infusion sites (unexplained high blood sugars, bent cannulas, accidental rip outs, site irritation)

**13.** It is important that you are sure insulin pump therapy is right for you or your child.  
What questions would you like answered to help you decide?

My questions are:

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_