



# BCCH Insulin Pump Readiness Workshop

BCCH Diabetes Team

# Pump Workshop Agenda

- BCCH Pump Workshop Video
- Deep Dive into Specifics of Health Canada–Approved Pumps
- Pump Side-by-Side Comparison
- Glooko®, CareLink™ and Tandem Source
- Pump Company Contact Information
- Pump Therapy Checklist
- Insulin Pump Readiness & Carb Counting Assessments
- Pump Process and Next Steps



# BCCH Insulin Pump Program Workshop

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Endocrine & Diabetes Program

[BCCH Diabetes Insulin Pump Program Workshop \(phsa.ca\)](https://phsa.ca)

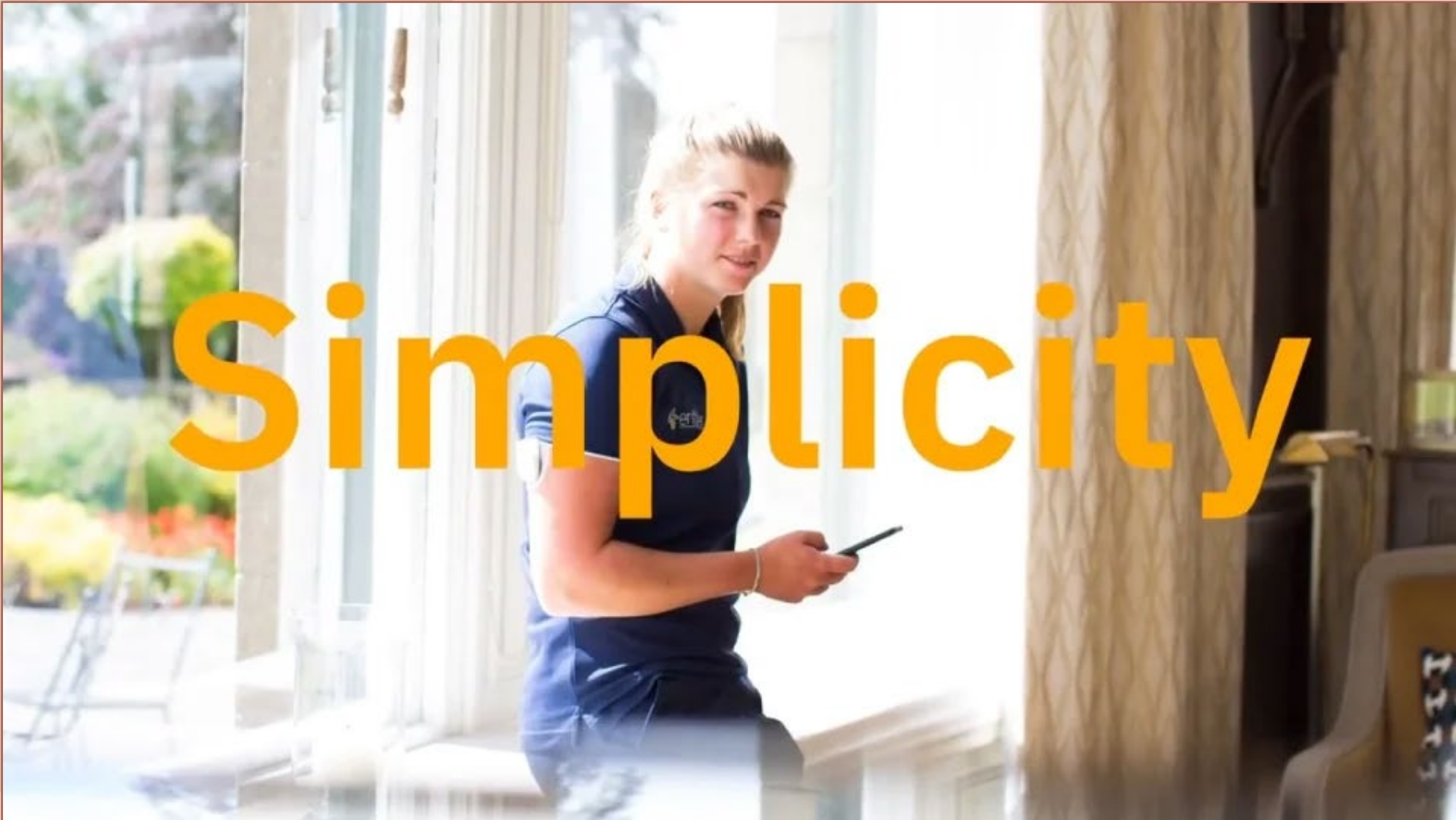
The background features a light grey base with large, overlapping organic shapes in muted green and brown. A white silhouette of a pine branch is visible in the upper left. A white wavy line curves across the bottom right.

# Pumps Available in Canada

# Non-AID Pumps in Canada

Omnipod  
DASH®

Ypsomed  
YpsoPump®



[youtu.be/Zz6SPm6plbo](https://youtu.be/Zz6SPm6plbo)

# Omnipod DASH®

- Only tubeless pump
- Need to be on 8–10 units a day minimum to use
- Currently does not pair with any CGM
- Tier 1 Pump – pods are covered by BC PharmaCare once deductible is met. Covered by many extended benefit companies
- Need to carry stand alone PDM, does not connect to phone. PDM is a deactivated android phone
- Minimum fill 85 units, maximum fill is 200 units
- Omnipod® 5 – AID system, recently Health Canada approved



**Enjoy  
simplicity.**



[youtu.be/uU9xTV5mu7o](https://youtu.be/uU9xTV5mu7o)



# Ypsomed YpsoPump®

- Can pre-fill insulin cartridges up to 30 days in advance
- Maximum fill is 160 units
- Tier 1 Pump – \$800 starter kit may be covered by extended benefits. Infusion sets are covered by BC PharmaCare once deductible is met
- Does not connect with any CGM yet
- Has phone app to calculate insulin doses
- Sales currently on hold pending release of new technology



# Automated Insulin Delivery (AID) Systems in Canada

MiniMed™  
770G/780G with  
SmartGuard™  
Technology

Tandem t:slim X2  
with Control-IQ  
Technology

Medtronic

# MiniMed™ 780G system with new Guardian™ 4 sensor

Designed for real life



[youtu.be/4n4u5PdxYfA](https://youtu.be/4n4u5PdxYfA)

# MiniMed™ 780G

- Approved for ages 7+, TDD 8 units
- AID System with SmartGuard™ Technology
  - Allows you to select your glucose target (5.5, 6.1, or 6.7 mmol/L).
  - Can do autocorrections every 5 minutes
  - Modulates basal – can increase or decrease every 5 minutes based on sensor glucose reading
- Works with MiniMed™ Guardian™ 4 sensor
  - Has mobile app to view sensor glucose and boluses
- Tier 2 pump – covered by BC PharmaCare once deductible has been met, covered by most extended benefit companies
- MiniMed™ CGM is not covered by BC PharmaCare. May be covered by extended benefits, company also has payment plan options
- Maximum fill is 300 units





The image shows a t:slim X2 Insulin Pump with its screen displaying the Control-IQ technology interface. The screen shows a battery level of 100%, the time 15:30 on 14 Nov, and a glucose level of 4.9 mmol/L. A graph shows a glucose trend over time, and the insulin on board is 1.1 u. The interface includes buttons for 'OPTIONS' and 'BOLUS', and a '3 HRS' indicator.

# t:slim X2™ Insulin Pump

WITH **Control-IQ** TECHNOLOGY

## How Control-IQ™ Technology Works



[youtu.be/tKvFGC7RRFI](https://youtu.be/tKvFGC7RRFI)

# Tandem t:slim X2™

- Approved for ages 6+, TDD 10 units, weight 25 kg\*
- AID System with Basal-IQ and Control-IQ Technology
  - Basal-IQ has Low Glucose Suspend vs Control-IQ with advanced hybrid closed loop technology
  - Can do autocorrections every once per hour
  - Modulates basal – can increase or decrease every 5 minutes based on sensor glucose reading
- Works with Dexcom G6 CGM
- Not covered by BC PharmaCare, may be covered by extended benefits. Tandem can contact extended benefits to determine eligibility coverage.
- Minimum fill is 95 units, maximum fill is 300 units
- \*Discuss with diabetes team







# Coming Soon

- Omnipod® 5
  - Recently approved by Health Canada
  - Automated insulin delivery
  - Works with Dexcom G7
  - Available ages 2+ years



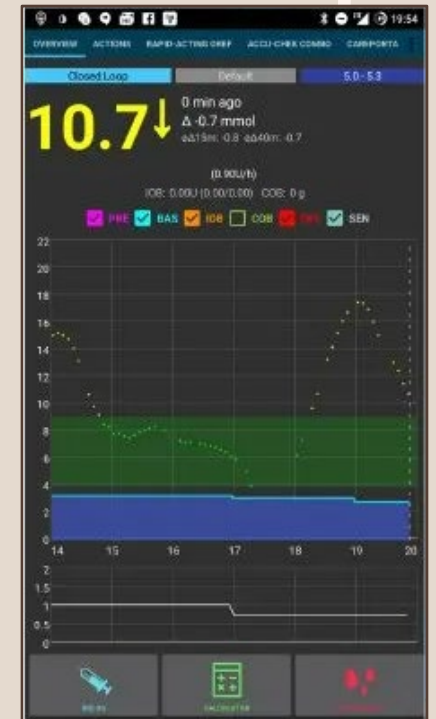
# Side-by-Side Comparison

	MiniMed™ 780G 	Omnipod® DASH® 	Tandem t:slim X2 	Ypsomed YpsoPump 
CGM connectivity	Yes – Medtronic Sensor	No – can use stand alone	Yes – Dexcom (G6)	No – can use stand alone
Basal increment	0.025 unit/hr	0.05 unit/hr	0.1 – can change to 0.001	0.05 – can adjust to 0.01
Auto basal adjustment	Yes	No	Yes	No
Reservoir size	300 units (3 ml)	200 units (2 ml)	300 units (3 ml)	160 units (1.6 ml)
Covered by BC PharmaCare	Yes	Yes	No	Yes
Tubing	Yes	No	Yes	Yes
Upgradeable	Yes – software update	No	Yes – software updates	No
Waterproof	Yes – IPX8 (3.6 m for 24h)	Yes – IPX8 (7.6m for 1h)	No – IPX7 (1 meter for 0.5h)	Yes – IPX8 (1m for 1h)
Good to know details	Approved for ages 7+ TDD 8 units	Approved for all ages, TDD 8-10 units	Approved for ages 6+ TDD 10 units, weight 25 kg	Need to use separate app on phone



# DIY Looping

- Involves using a pump, sensor with an app to loop
- Nightscout, OpenAPS or Android APS
- Predictive algorithm
- Not Health Canada–approved
- Limited clinical support
- No Nursing Support Services school support
- Requires referral to BC Diabetes from your BCCH Endocrinologist

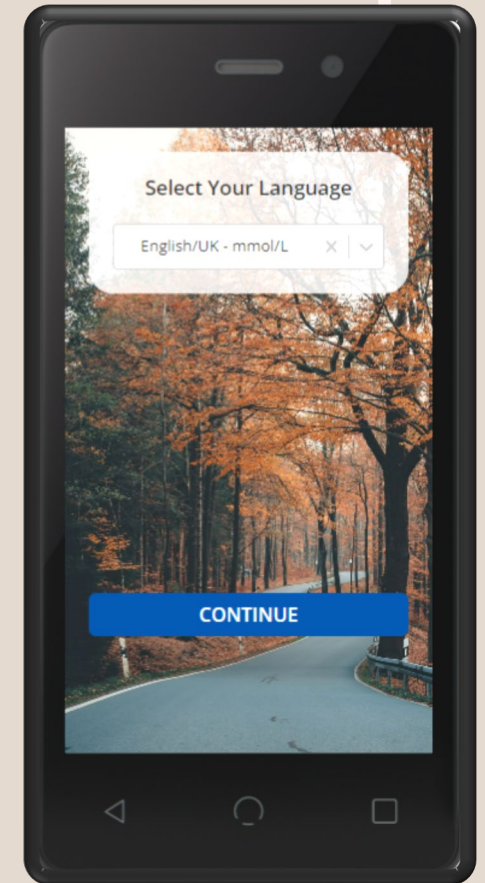


The background features a light grey base with a large, dark brown organic shape on the left and a large, olive green organic shape on the right. A white line pattern resembling a leaf or fern frond is visible in the top left corner. In the bottom right, there are several white, flowing, curved lines that overlap the other shapes.

# Specific Pumps and How to Get More Information

# Omnipod® DASH®

- [Omnipod DASH® Insulin Management System \(omnipod-staging.netlify.app\)](https://omnipod-staging.netlify.app)
- [www.omnipod.com/en-ca/home](https://www.omnipod.com/en-ca/home)
- Canada toll-free number: 1-855-763-4636
- Cyndi Lund: [clund@insulet.ca](mailto:clund@insulet.ca)
  - 1-250-938-5825



# Medtronic MiniMed™ 780 G

- [www.medtronicdiabetes.ca](http://www.medtronicdiabetes.ca)
- Canada: 1-800-284-4416
- Sherrice Kirby: [sherrice.kirby@medtronic.com](mailto:sherrice.kirby@medtronic.com)
  - 1-250-858-2329
- [eu.medtronicvirtualpump.com/fxCuA839rYX97WZH/VirtualDemoPump/MiniMed\\_780G\\_OUS/gs3/mmol\\_/](http://eu.medtronicvirtualpump.com/fxCuA839rYX97WZH/VirtualDemoPump/MiniMed_780G_OUS/gs3/mmol_/)



# Tandem t:slim X2

- [www.tandemdiabetes.com/](http://www.tandemdiabetes.com/)
- Canada: 1-833-509-3598
- Teri Currie: [tcurrie@tandemdiabetes.com](mailto:tcurrie@tandemdiabetes.com)
  - 778-995-1268
- t:simulator app available from the Apple Store and Android Play

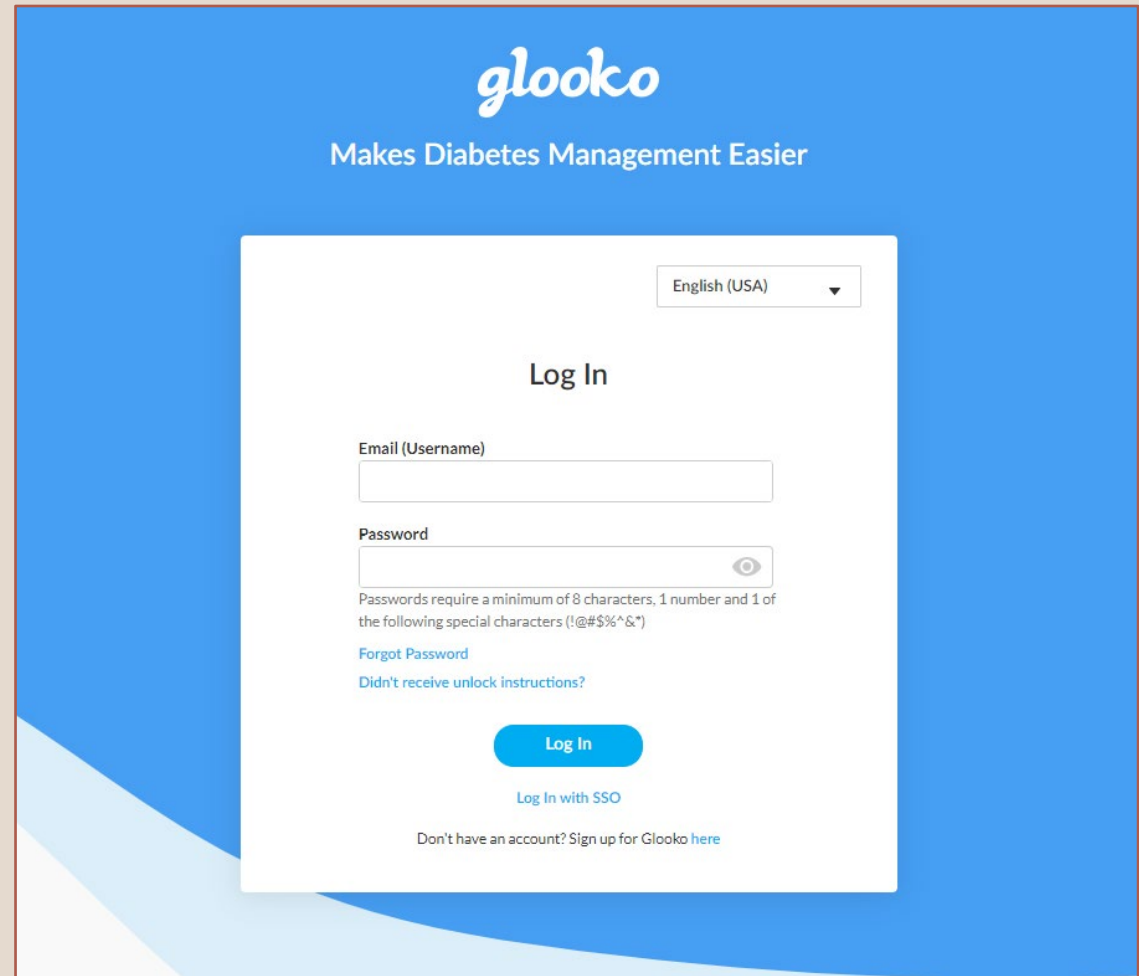


The background features a light grey base with several overlapping organic shapes: a large brown shape on the left, a green shape on the top right, and a light grey shape on the bottom right. A white line starts from the bottom left and curves across the bottom right. In the top left corner, there are faint, stylized leaf patterns in grey and brown.

# Software/Apps and Connectivity

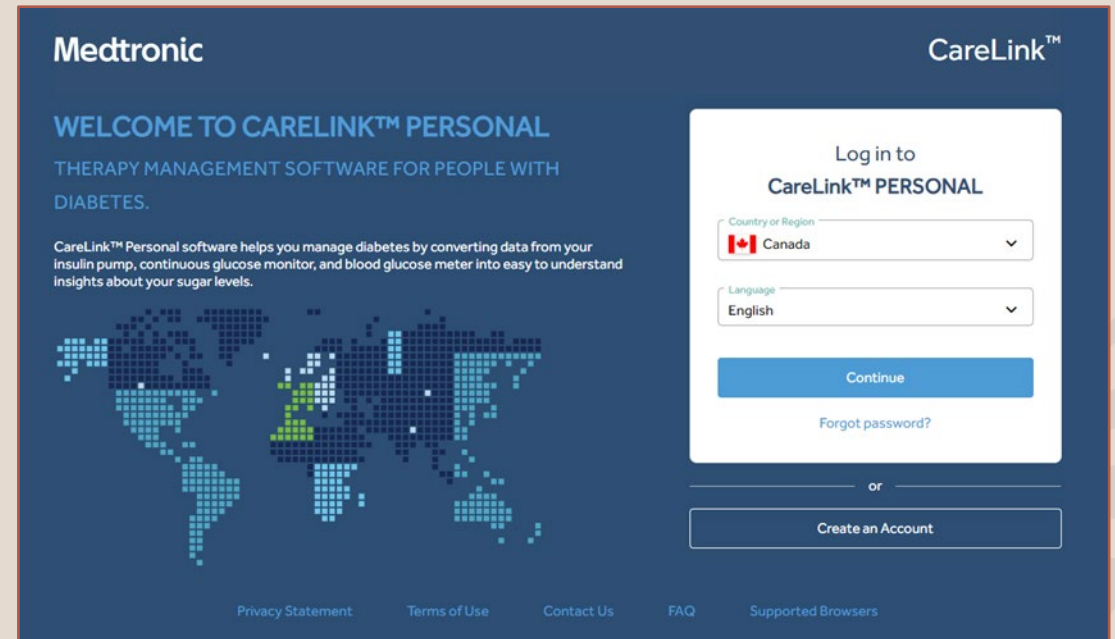
# Glooko® for Omnipod®

- Create a Glooko® account
  - [ca.my.glooko.com/users/sign\\_in](https://ca.my.glooko.com/users/sign_in)

A screenshot of the Glooko login page. The page has a blue background with the Glooko logo at the top center. Below the logo, it says "Makes Diabetes Management Easier". There is a language dropdown menu set to "English (USA)". The main heading is "Log In". Below this, there are two input fields: "Email (Username)" and "Password". The password field has a toggle icon for visibility. Below the password field, there is a note: "Passwords require a minimum of 8 characters, 1 number and 1 of the following special characters (!@#%&\*)". There are two links: "Forgot Password" and "Didn't receive unlock instructions?". At the bottom, there is a blue "Log In" button, a link for "Log In with SSO", and a link for "Don't have an account? Sign up for Glooko here".

# CareLink™ for Medtronic MiniMed™

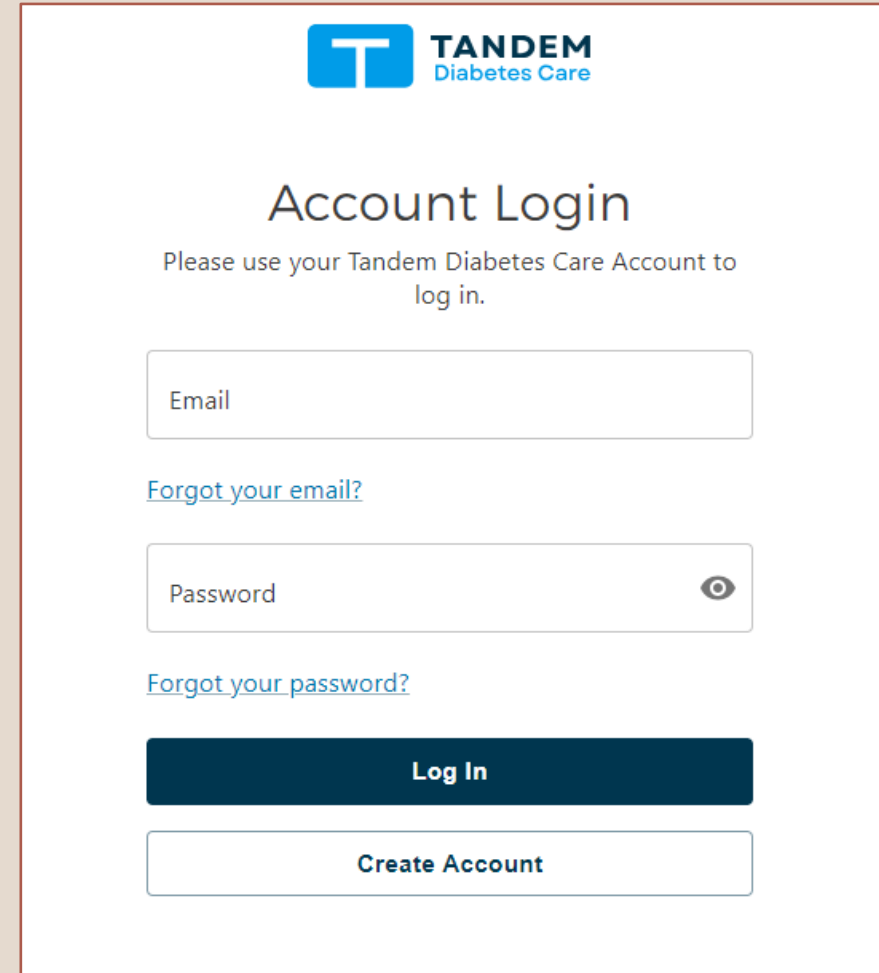
- Create a Medtronic CareLink™ account
  - [carelink.minimed.eu/app/registration](https://carelink.minimed.eu/app/registration)





# Tandem Source for Tandem

- Create a Tandem Source account
  - [source.tandemdiabetes.com/registration](https://source.tandemdiabetes.com/registration)



The screenshot shows the Tandem Diabetes Care Account Login page. At the top left is the Tandem Diabetes Care logo, consisting of a blue square with a white 'T' and the text 'TANDEM Diabetes Care' to its right. Below the logo is the title 'Account Login' in a large, dark font. Underneath the title is the instruction 'Please use your Tandem Diabetes Care Account to log in.' in a smaller, dark font. There are two input fields: the first is labeled 'Email' and the second is labeled 'Password'. To the right of the password field is an eye icon for toggling visibility. Below the email field is a blue link that says 'Forgot your email?'. Below the password field is a blue link that says 'Forgot your password?'. At the bottom of the form are two buttons: a dark blue button with the text 'Log In' and a white button with a dark border and the text 'Create Account'.

The background features a light grey base with large, overlapping organic shapes in muted green and brown. Stylized foliage patterns are visible in the top left and middle left areas. A white line with a wavy, organic path is on the right side.

# Next Steps

# Checklist for Pump Therapy

- Child and all caregivers are interested. This includes younger children who understand that they will be wearing the device on their body
- You have attended the *Pump Readiness Workshop* and completed the *Pump Readiness and Carb Counting Assessment*
- For younger children, parents are aware that daycare staff may not be able to operate the pump. This needs to be discussed directly with the school and daycare
- You are able to make insulin dose adjustments as needed
- You rotate injection sites to include a minimum of 2 different parts of your body

You have a computer (or access to one) to upload the pump at least 3 times a week when initially starting the pump

You agree to accept the BCCH clinic request to share your pump data so that we can safely manage your child's diabetes


Caregivers are required to attend the initial pump training session together. We are unable to offer separate training sessions

Continue to upload the pump regularly at home to review and make any dose adjustments as needed

Upload the pump at home **before** your diabetes clinic appointment

# Pump Readiness & Carb Counting Assessments

[PRINT FILE](#)   [E-MAIL TO BCCH](#)

 **ENDOCRINOLOGY & DIABETES UNIT**  
Diabetes Clinic: 604-875-2868  
Toll-free Phone: 1-888-300-3088, x2868  
Fax: 604-875-3231  
<http://endodiab.bcchildrens.ca>

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**INSULIN PUMP READINESS ASSESSMENT**

ASSESSMENT:

1) At present, how often do you review your blood sugar data (fingersticks or CGM)?

a) Only with my endocrinologist  
 b) At least once a week  
 c) At least every 2 weeks  
 d) At least once a month  
 e) At least once every 3 months

2) At present, how often do you make dose adjustments based on your blood sugar data (fingersticks or CGM)?

a) Only with my endocrinologist  
 b) At least once a week  
 c) At least every 2 weeks  
 d) At least once a month  
 e) At least once every 3 months

3) If you are wearing an insulin pump, you will need to bolus for all carbohydrate containing meals and snacks?

a) Yes  
 b) No  
 c) Sometimes  
 d) Unsure

See also our [BCCH Insulin Pump Program Workshop Video](#)


4) What is true about basal insulin on an insulin pump? *Select all that apply.*

a) Delivered with meals  
 b) Delivered 24 hours a day  
 c) Background insulin  
 d) Long acting insulin (e.g. Basaglar, Levemir, Lantus)  
 e) Can be temporarily increased or decreased for short periods of time

5) What is true about bolus insulin on an insulin pump? *Select all that apply.*


a) Given with carbohydrates  
 b) Given to correct high blood sugar levels  
 c) Delivered 24 hours a day  
 d) Can be automatically delivered by the pump

My child's name:



June 3, 2024   [www.bcchildrens.ca/endocrinology-diabetes-site/documents/pumpreadinessfill.pdf](http://www.bcchildrens.ca/endocrinology-diabetes-site/documents/pumpreadinessfill.pdf)   Page 1 of 2

[PRINT FILE](#)   [E-MAIL TO BCCH](#)

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**CARBOHYDRATE COUNTING ASSESSMENT**

Before you begin multiple daily injections (MDI) or insulin pump therapy, you need to become familiar with advanced carbohydrate counting. For MDI and pump therapy, you will be calculating an insulin dosage based on an insulin-to-carbohydrate ratio; therefore, you must have an accurate estimate of the "available carbohydrates" in the meal you will be eating.

Please email the completed assessment to [pumpeducation@cw.bc.ca](mailto:pumpeducation@cw.bc.ca) using the button above. To complete this assessment, you can use different tools:

- ✓ apps and/or websites, e.g. [Calorie King](#)®, [MyFitnessPal](#), or [Nutritionix](#)
- ✓ [BCCH Diabetes Clinic Food & Nutrition](#) handouts
- ✓ food labels
- ✓ Diabetes Canada's [Beyond the Basics](#) poster
- ✓ calculator

My child's name:

(1) Basal insulin is (choose all that apply):

A. Given with meals  
 B. Background insulin  
 C. Given to correct high glucose levels  
 D. Starts working within 10-15 minutes

(2) Bolus insulin is (choose all that apply):

A. Given with meals  
 B. Background insulin  
 C. Given to correct high glucose levels  
 D. Starts working within 10-15 minutes

(3) Which of the follow is an appropriate way to treat a low blood sugar (using a 15-gram treatment option)? Choose all that apply:

A. 3-4 Dex4® glucose tablets  
 B. A fun-sized bag of Skittles® (15 pieces)  
 C.  $\frac{1}{2}$  of a regular-sized chocolate bar  
 D.  $\frac{1}{2}$  cup (4 oz, 120 mL) of orange or apple juice  
 E. 1 scoop of vanilla ice cream ( $\frac{1}{2}$  cup, 135 mL)  
 F. 1 tablespoon (15 mL) of honey

June 4, 2024   [www.bcchildrens.ca/endocrinology-diabetes-site/documents/carbquizfill.pdf](http://www.bcchildrens.ca/endocrinology-diabetes-site/documents/carbquizfill.pdf)   Page 1 of 4

[www.bcchildrens.ca/endocrinology-diabetes-site/documents/pumpreadinessfill.pdf](http://www.bcchildrens.ca/endocrinology-diabetes-site/documents/pumpreadinessfill.pdf)

[www.bcchildrens.ca/endocrinology-diabetes-site/documents/carbquizfill.pdf](http://www.bcchildrens.ca/endocrinology-diabetes-site/documents/carbquizfill.pdf)

# Process

PUMP VIDEO AND  
READINESS WORKSHOP

CONTACT COMPANIES  
Contact companies for information  
and to determine coverage.  
Complete forms as required  
and send to clinic

READINESS

Assessments will be reviewed by  
team. If there is anything that needs  
further review or follow up, the  
diabetes team will reach out.

READINESS ASSESSMENT  
Readiness assessments will be sent –  
complete both assessments.

PUMP WAITLIST  
Family will be placed on pump  
training waitlist.

# Ready to Go?

- Scan this QR code to send the [BCCH Insulin Pump Nurses](#) an email to let them know that you have:
  - viewed this *Insulin Readiness Workshop* and videos
  - completed and returned the [Insulin Pump Readiness](#) and [Carb Counting](#) assessments
  - contacted the pump company rep
  - discussed insurance coverage with company
  - decided on a brand of pump
- ... and are ready to move forward with pump therapy for your child.



open using your email app



Thank You!