



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

Endocrine & Diabetes Program

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

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Pumps Available in Canada

Non-AID Pumps in Canada

Omnipod
DASH®

Ypsomed
YpsoPump®



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.**

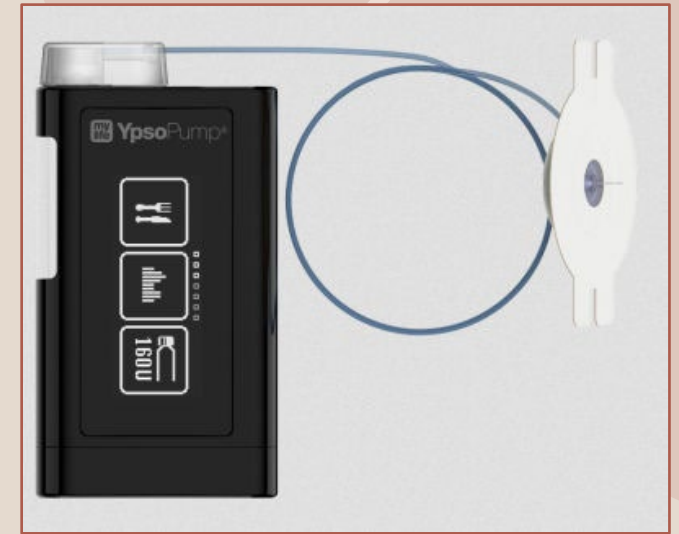


**my
life** Ypsopump

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

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).
 - Modulates basal – can increase or decrease every 5 minutes based on sensor glucose reading
 - Can do autocorrections every 5 minutes
- Works with MiniMed™ Guardian™ 4 sensor
 - Has mobile app to view sensor glucose and boluses
- Tier 1 pump – covered by BC PharmaCare depending on the type of plan, covered by most extended benefit companies
 - 70% coverage with Fair Pharmacare once deductible has been met
 - 100% coverage if on Plans B, C, F and W
- 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, a small black device with a color screen. The screen displays 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. Below the graph, it says 'INSULIN ON BOARD 1.1 u'. At the bottom, there are buttons for 'OPTIONS' and 'BOLUS'. A circular icon with a red maple leaf on a white background is positioned in front of the bottom left of the pump.

t:slim X2™ Insulin Pump

WITH **Control-IQ** TECHNOLOGY

How Control-IQ™ Technology Works

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

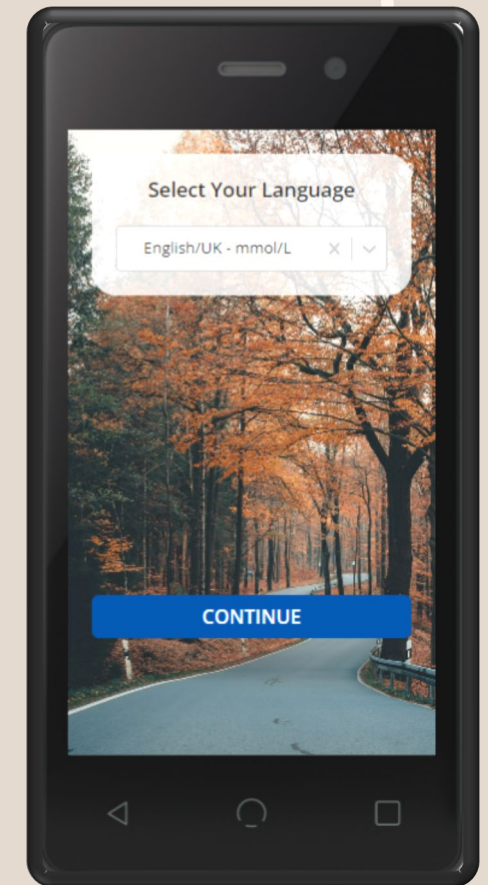


The background features a light gray base with large, overlapping organic shapes in muted olive green and dusty rose. Stylized, light gray foliage patterns are visible in the upper left corner. A thin, white, wavy line curves across the bottom right of the image.

Specific Pumps and How to Get More Information

Omnipod® DASH®

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



Medtronic MiniMed™ 780 G

- www.medtronicdiabetes.ca
- Canada: 1-800-284-4416
- Sherrice Kirby: sherrice.kirby@medtronic.com
 - 1-250-858-2329
- eu.medtronicvirtualpump.com/fxCuA839rYX97WZH/VirtualDemoPump/MiniMed_780G_OUS/gs3/mmol_l/



Tandem t:slim X2

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

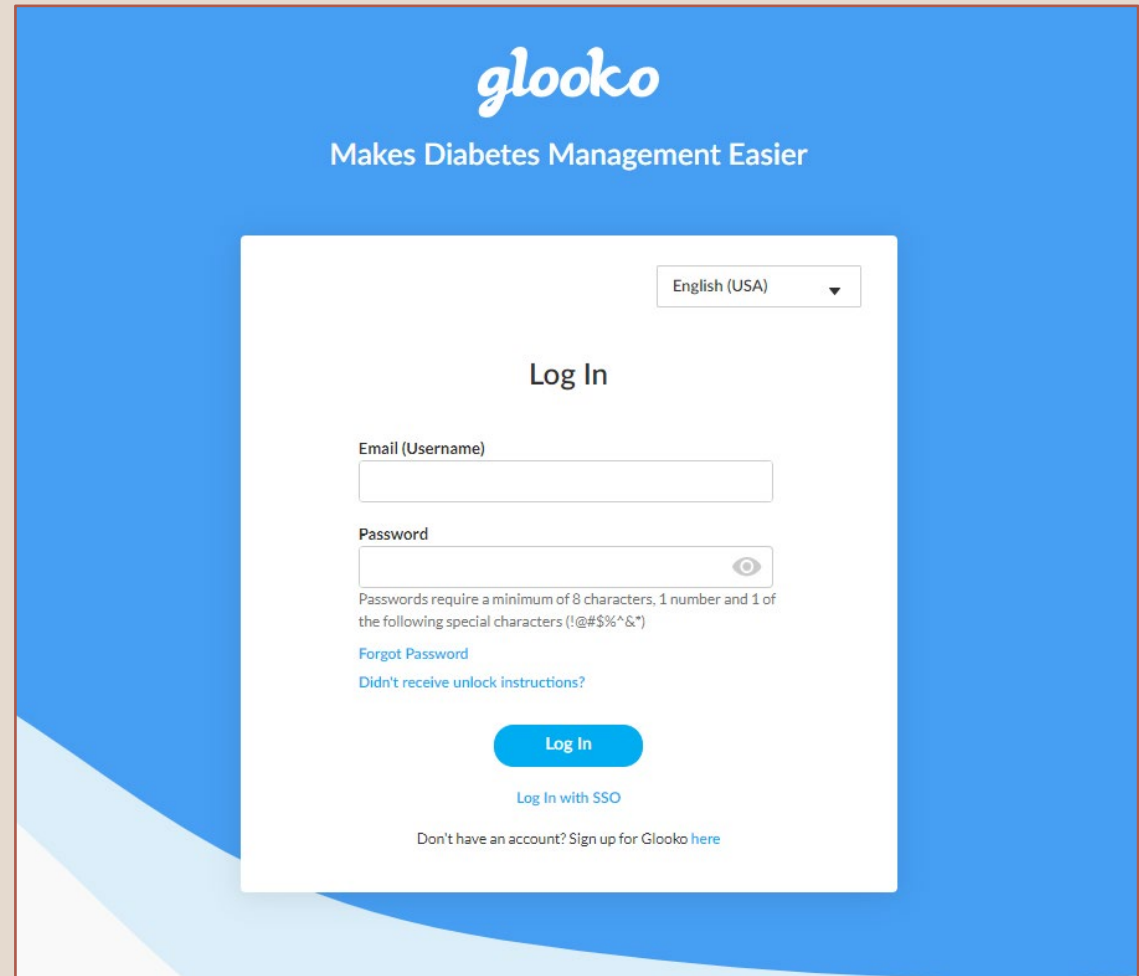


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Software/Apps and Connectivity

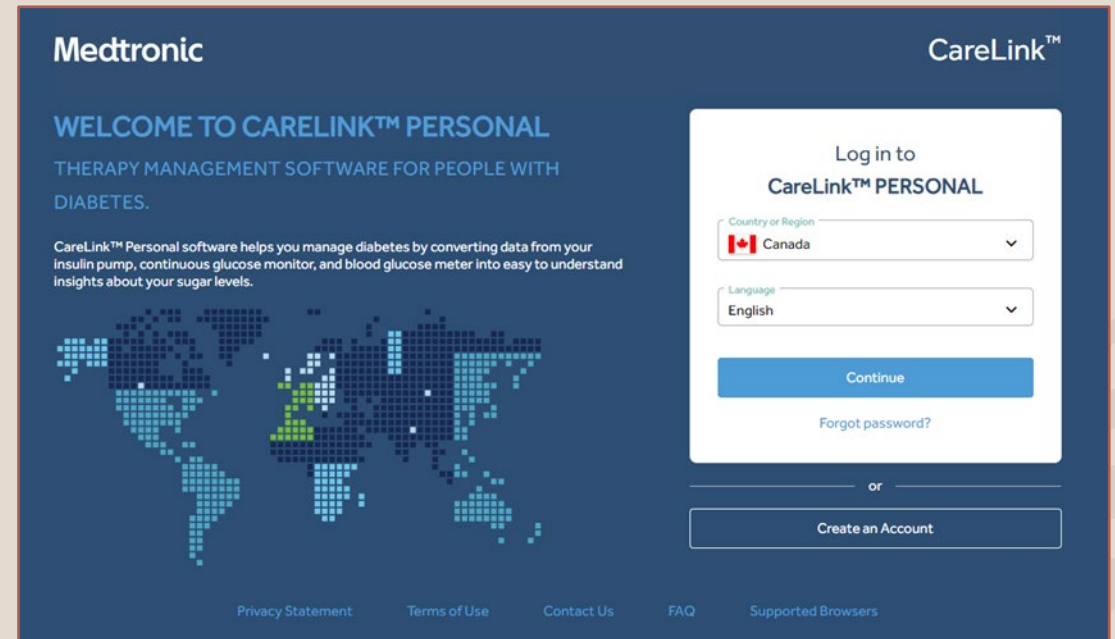
Glooko® for Omnipod®

- Create a Glooko® account
 - ca.my.glooko.com/users/sign_in

A screenshot of the Glooko login interface. The background is a solid blue color. At the top center, the 'glooko' logo is displayed in white, with the tagline 'Makes Diabetes Management Easier' below it. In the center, there is a white rectangular login form. Inside the form, at the top right, is a language dropdown menu set to 'English (USA)'. Below this is the title 'Log In'. The form contains 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 (!@#\$%^&*)'. Below this note are two links: 'Forgot Password' and 'Didn't receive unlock instructions?'. At the bottom of the form is a blue 'Log In' button. Below the button is a link 'Log In with SSO'. At the very bottom of the form is a link 'Don't have an account? Sign up for Glooko here'.

CareLink™ for Medtronic MiniMed™

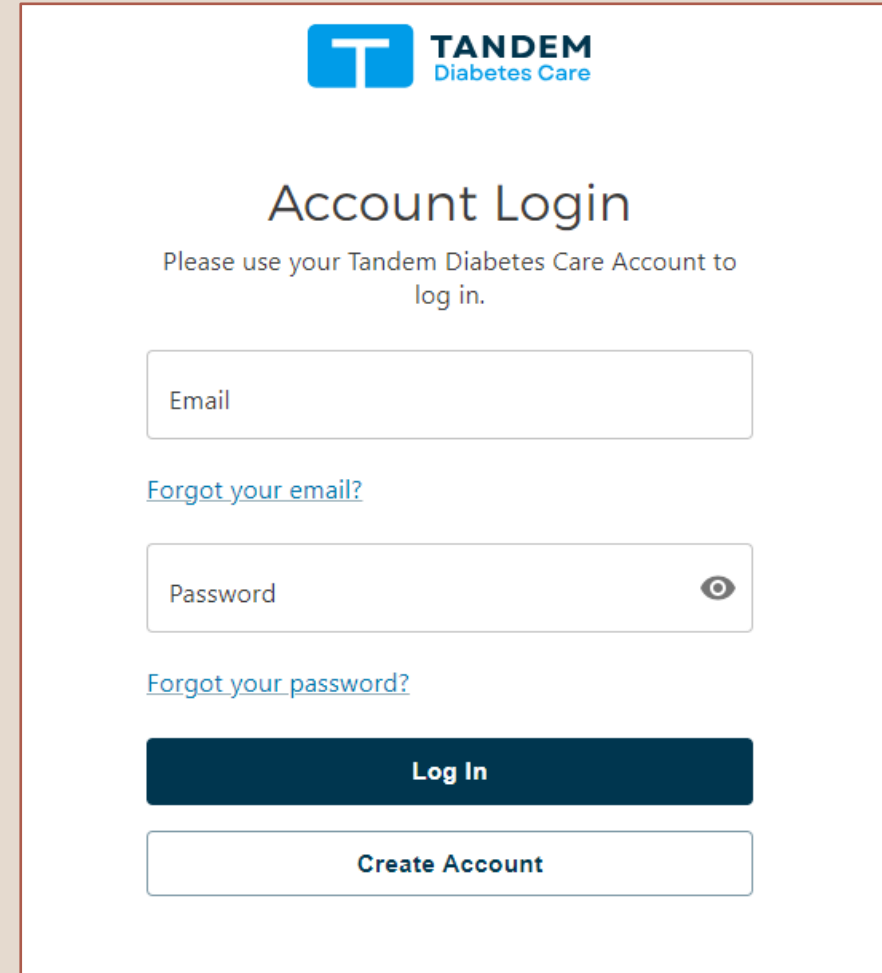
- Create a Medtronic CareLink™ account
 - carelink.minimed.eu/app/registration



The screenshot shows the Medtronic CareLink™ Personal login and registration interface. The page has a dark blue header with the Medtronic logo on the left and the CareLink™ logo on the right. Below the header, the text "WELCOME TO CARELINK™ PERSONAL" is displayed in blue, followed by "THERAPY MANAGEMENT SOFTWARE FOR PEOPLE WITH DIABETES." in white. A paragraph of text describes the software's functionality. Below this is a world map graphic. On the right side, there is a white login box with the text "Log in to CareLink™ PERSONAL". It contains two dropdown menus for "Country or Region" (showing Canada) and "Language" (showing English). Below these is a blue "Continue" button and a link for "Forgot password?". Below the login box is a white box with the text "or" and a "Create an Account" button. At the bottom of the page, there are links for "Privacy Statement", "Terms of Use", "Contact Us", "FAQ", and "Supported Browsers".

Tandem Source for Tandem

- Create a Tandem Source account
 - source.tandemdiabetes.com/registration



The screenshot shows the Tandem Diabetes Care Account Login page. At the top is the Tandem Diabetes Care logo. Below it is the title "Account Login" and a prompt: "Please use your Tandem Diabetes Care Account to log in." There are two input fields: "Email" and "Password". Below the "Email" field is a link "Forgot your email?". Below the "Password" field is a link "Forgot your password?". At the bottom are two buttons: "Log In" (dark blue) and "Create Account" (light blue).

TANDEM
Diabetes Care

Account Login

Please use your Tandem Diabetes Care Account to log in.

Email

[Forgot your email?](#)

Password

[Forgot your password?](#)

Log In

Create Account

The background features a light gray base with large, organic, overlapping shapes in muted olive green and dusty rose. In the top left corner, there are stylized, layered illustrations of foliage, including what appears to be a pine branch and some feathery leaves. A thin, white, wavy line curves across the bottom right portion of the image.

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>

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 Page 1 of 2

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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 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:

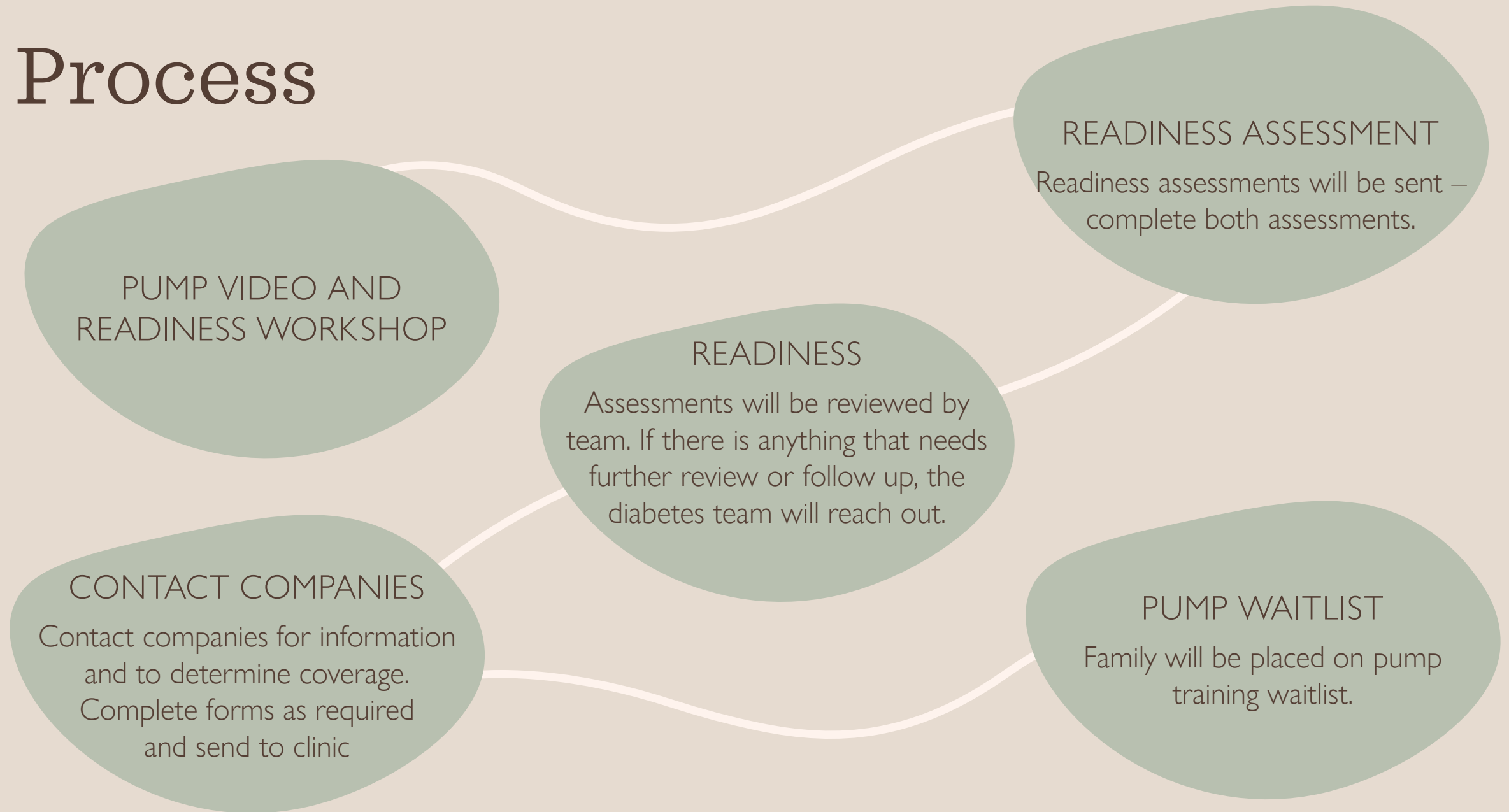
☐ A. 3-4 Dex4® glucose tablets
☐ B. A fun-sized bag of Skittles® (15 pieces)
☐ C. $\frac{1}{2}$ of a regular-sized chocolate bar
☐ D. $\frac{1}{2}$ cup (4 oz, 120 mL) of orange or apple juice
☐ E. 1 scoop of vanilla ice cream ($\frac{1}{2}$ cup, 135 mL)
☐ F. 1 tablespoon (15 mL) of honey

June 4, 2024 www.bcchildrens.ca/endocrinology-diabetes-site/documents/carbquizfill.pdf Page 1 of 4

www.bcchildrens.ca/endocrinology-diabetes-site/documents/pumpreadinessfill.pdf

www.bcchildrens.ca/endocrinology-diabetes-site/documents/carbquizfill.pdf

Process



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

The background features a light gray base with large, soft-edged organic shapes in muted red and olive green. A thin white line outlines a shape on the right. In the top left, there is a faint, light gray sketch of a leafy branch.

Thank You!