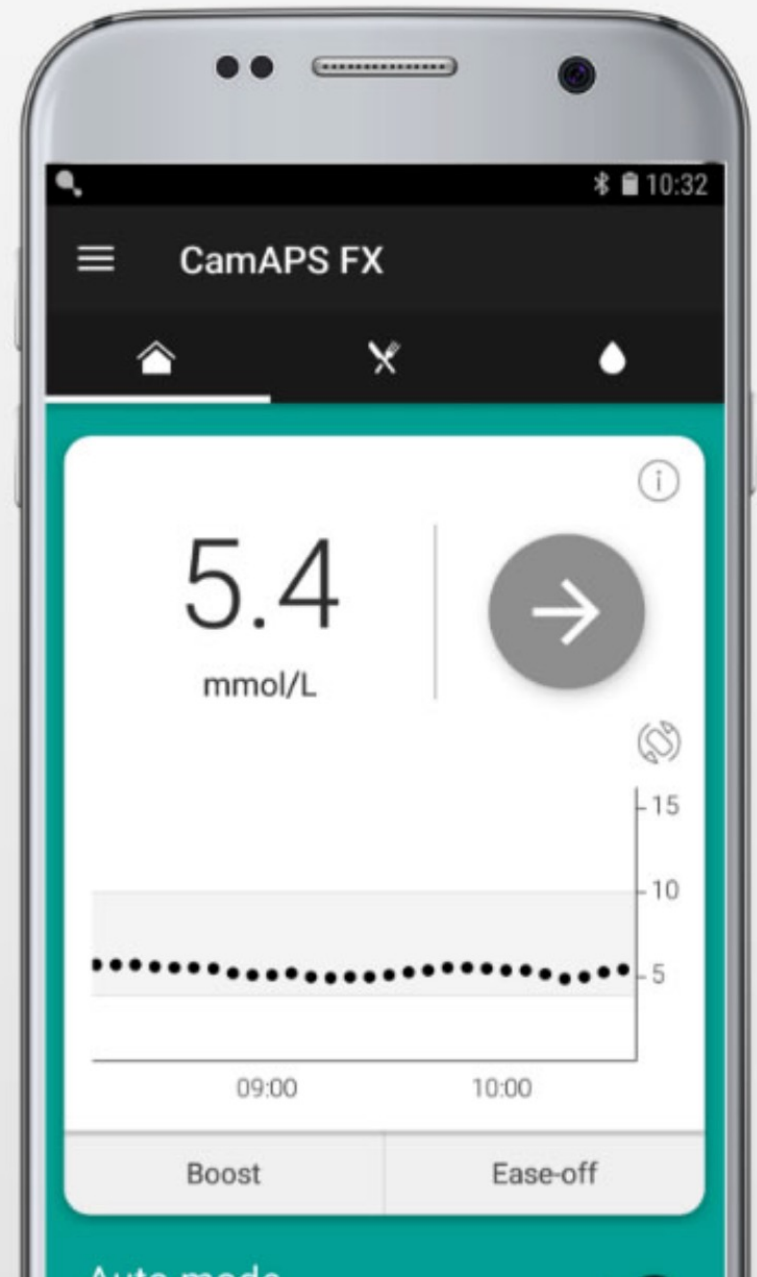


CamAPS FX App Training for use with the Dana Insulin Pump

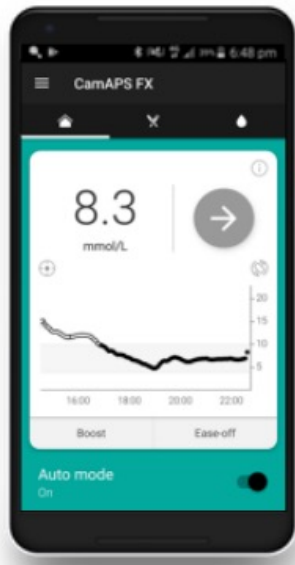


This slide deck is a training resource to be used after completing the online CamAPS FX training in conjunction with your diabetes healthcare team





CGM transmitter



Android smartphone
hosting CamAPS FX

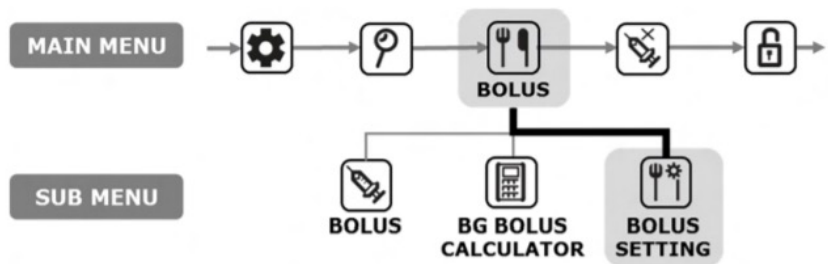


Insulin pump

Preparing the Dana RS or Dana-i insulin pump

Set the pump with current pump settings with special attention to the following:

- ✓ Extended bolus should be switched **“ON”**



BOLUS SETTING
9.EXIT
▶1.CIR/CF SETTING
2.EXTENDED BOLUS:OFF

CIR/CF SET
1.MORNING CIR:25
2.MORNING CF:50
3.AFTERNOON CIR:25
4.AFTERNOON CF:50
5.EVENING CIR:25
6.EVENING CF:50
7.NIGHT CIR:25
8.NIGHT CF:50



Preparing the Dana RS or Dana-i Insulin pump

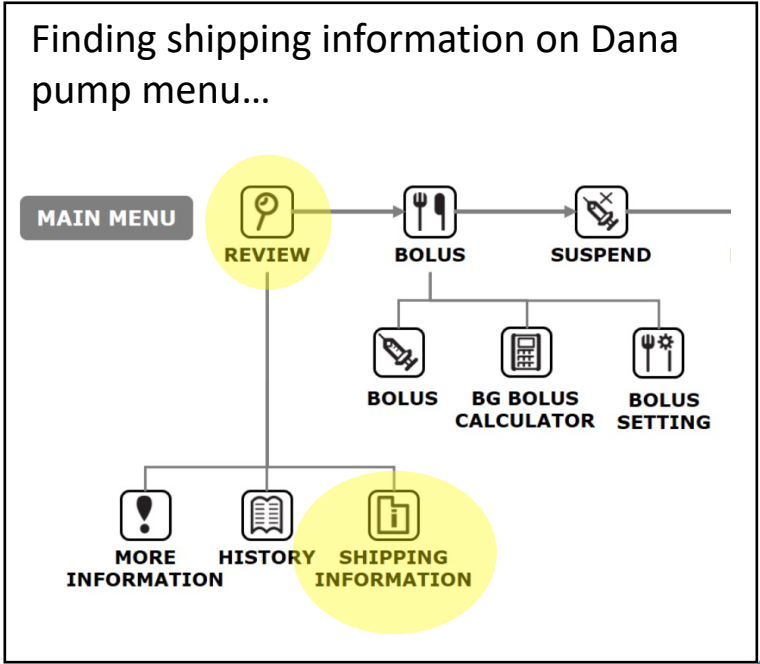
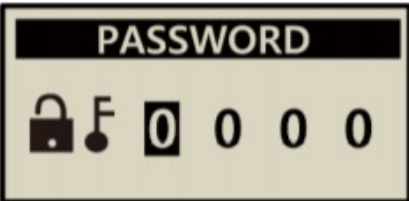
Accessing the Doctor's Mode...



1) Within **MAIN MENU**, press and hold **+**, **▶**, **-** three buttons at the same time.

2) The pump will request a **PASSWORD**, - enter **30XY** and press (OK).

Notice THE **XY** of **30XY** is derived from the manufacturing day of the pumps. You can see the manufacturing date in the shipping Information menu on the pumps.



Suggested Dr's Mode settings:

1. Pre-set bolus : 0 (off)
2. Melody : 0
3. Bolus block : 0
4. Bolus increment : **0.05**
5. Basal increment : 0.01
6. Ideal target BG : **?? mmol/L** – match with app's glucose target
7. Active insulin :
8. Dec ratio: e.g. 25% for 4h active insulin time, 30% = 3h or 50% = 2h
9. Basal max : **Double highest hourly basal**
10. Bolus max : **0.5 x total daily dose (TDD)**
11. Daily maximum : **3 x total daily dose (TDD)**
12. Safety Ratio : Off
13. Blockage sensitivity : **L** – to avoid false occlusion alarms
14. UTC setting (time)



DOCTOR MODE	
1.PRESET BOLUS:	ON
2.MELODY(M):	120
3.BOLUS BLOCK(M):	0
4.BOLUS INC.:	1.00
5.BASAL INC.:	0.10
6.IDEAL BG:	100
7.ACTIVE INSULIN:	0.0
8. DEC.RATIO(%):	20
9.BASAL MAX(U/H):	3.3
10.BOLUS MAX(U):	40
11.DAILY MAX(U):	80
12.SAFETY RATIO:	100
13.BLOCK SENSITIVE:	M
14.UTC SETTING	
15.EXIT	

Before pairing to CamAPS FX app... Please remove Any-Dana & Dexcom G6 App

In **Bluetooth menu** of **phone**

- Unpair (forget) pump and G6 transmitter

In **App menu** on **phone**

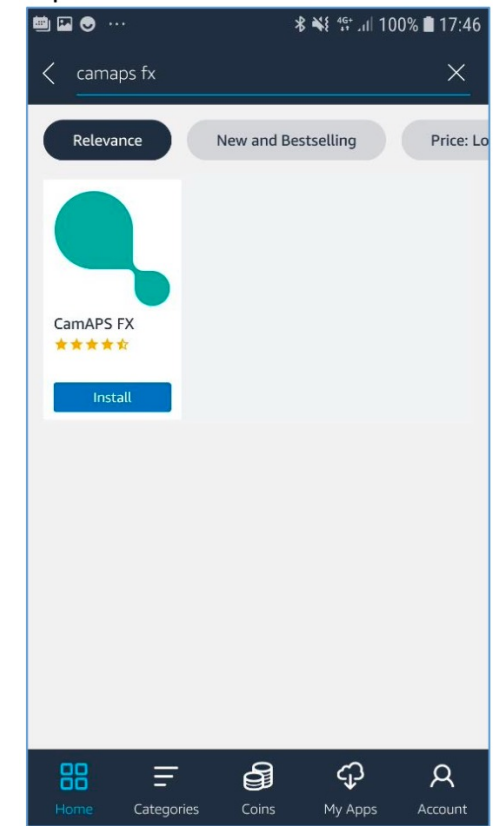
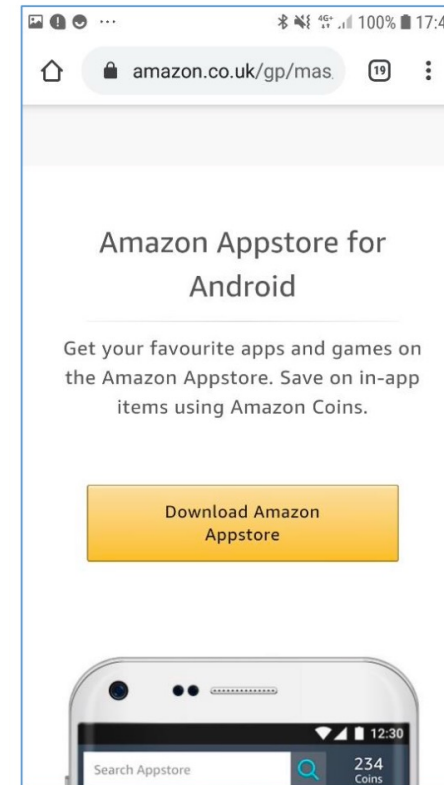
- Delete (uninstall) both apps
- Please have **record** of **Dexcom transmitter serial number**



Download from Amazon Appstore

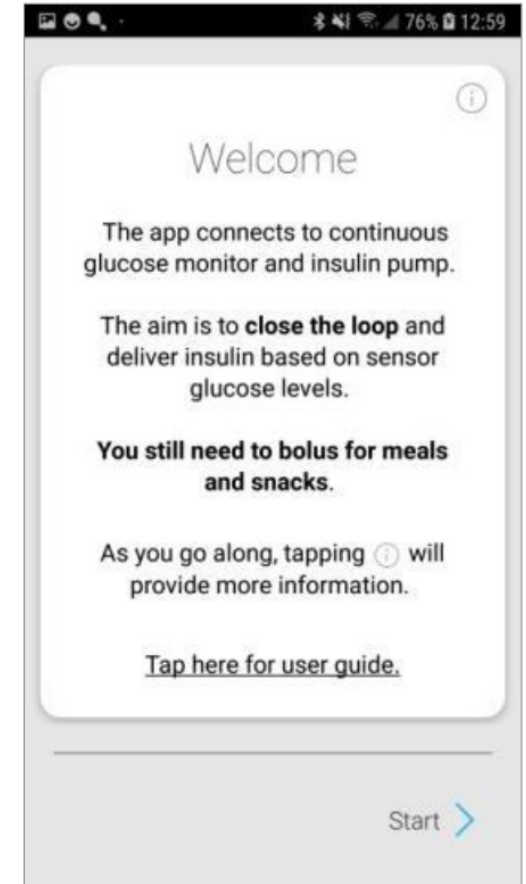
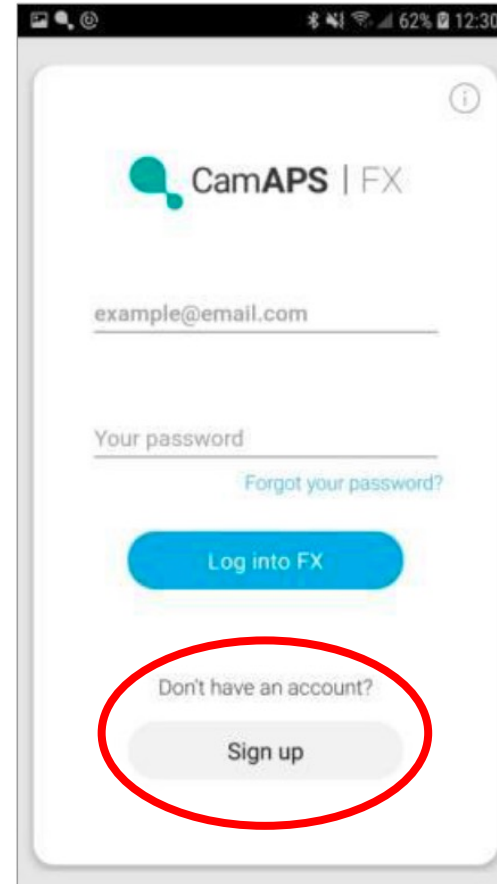
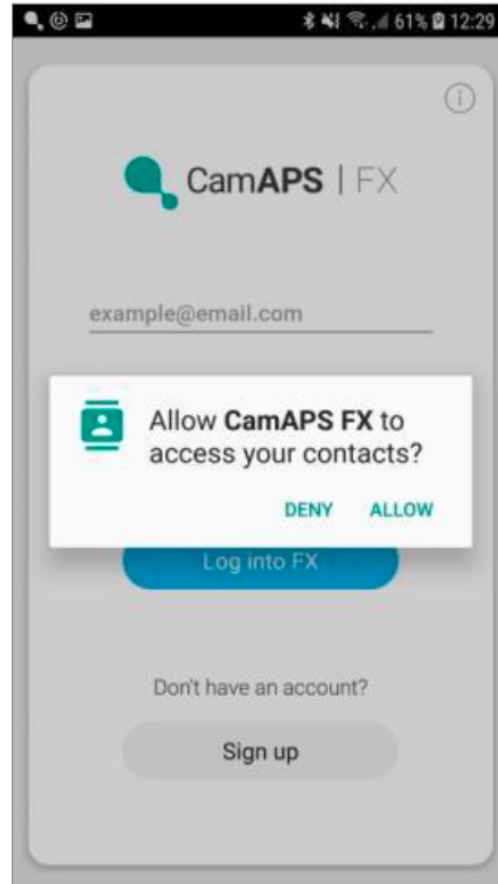


- ✓ Visit <https://www.amazon.co.uk/androidapp> on the android smartphone to be used
- ✓ Tap on the link “Download Amazon Appstore”
- ✓ Once downloaded, search for **CamAPS FX** and install



Create an account on the CamAPS FX app

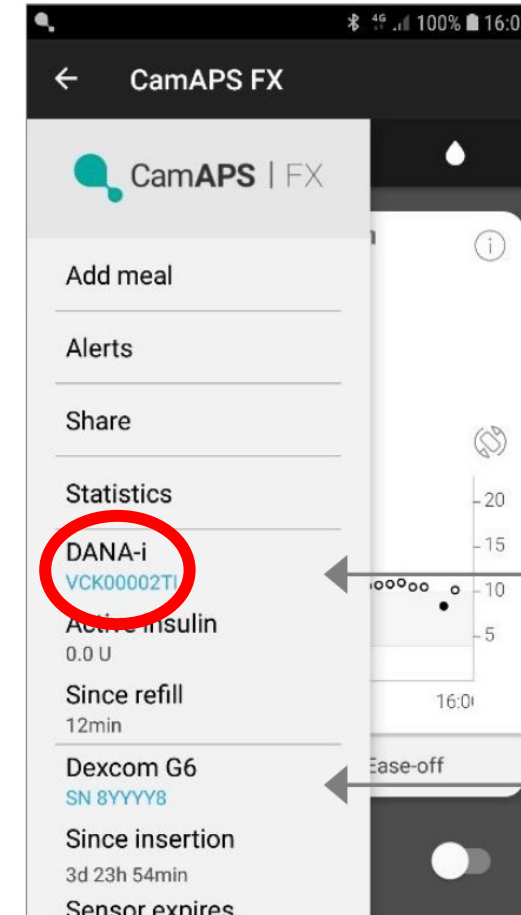
- ✓ Please allow “Everything”
- ✓ Password:
 - 12 characters
 - Letters, numbers and special characters



If already paired with virtual pump and CGM....

Please go to...

- ✓ Main menu
- ✓ Pump section
- ✓ Tap on the **blue virtual pump** to start pairing process



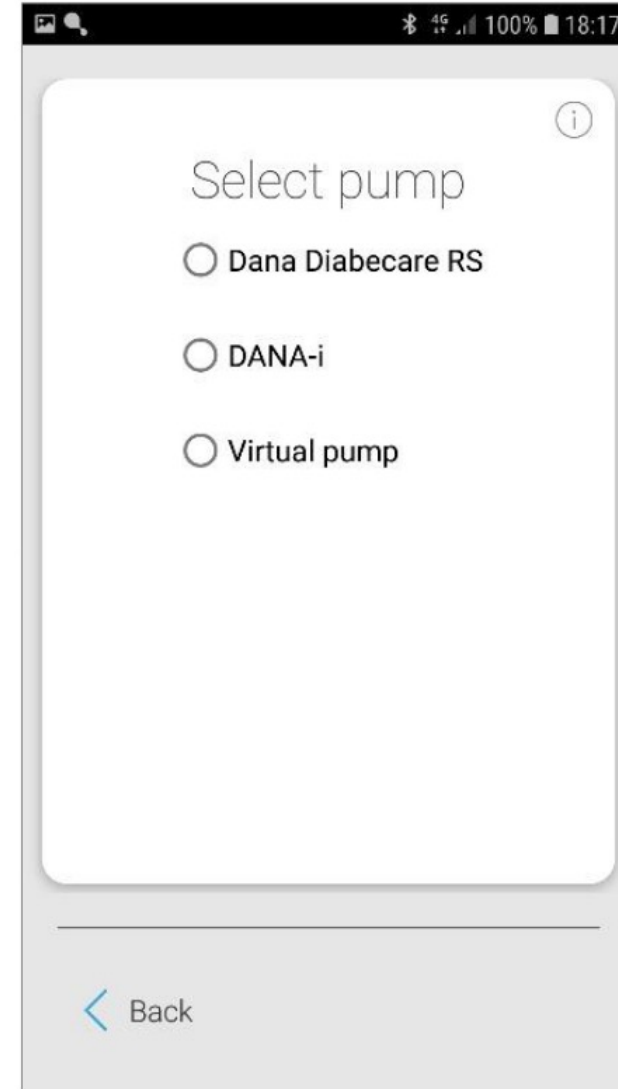
Pump related section

CGM related section

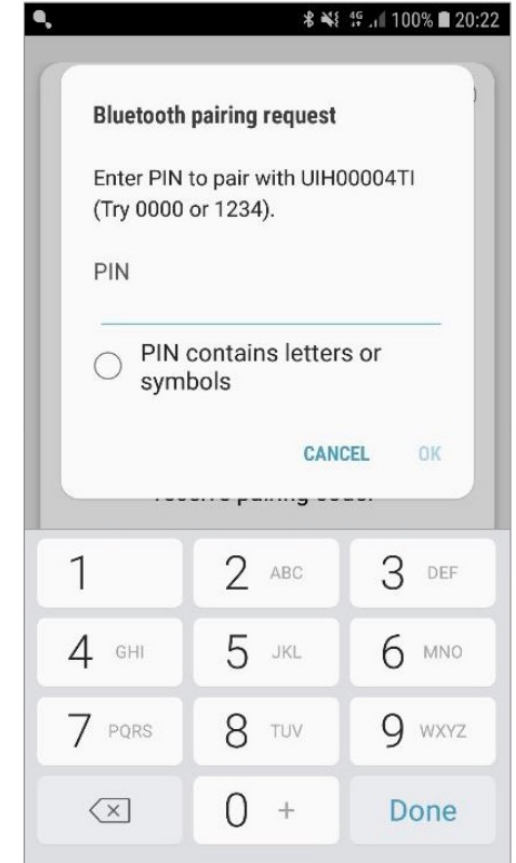
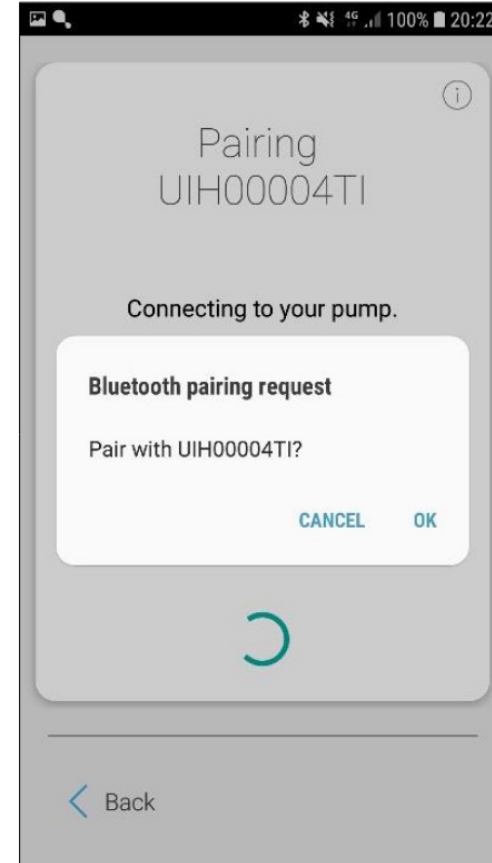
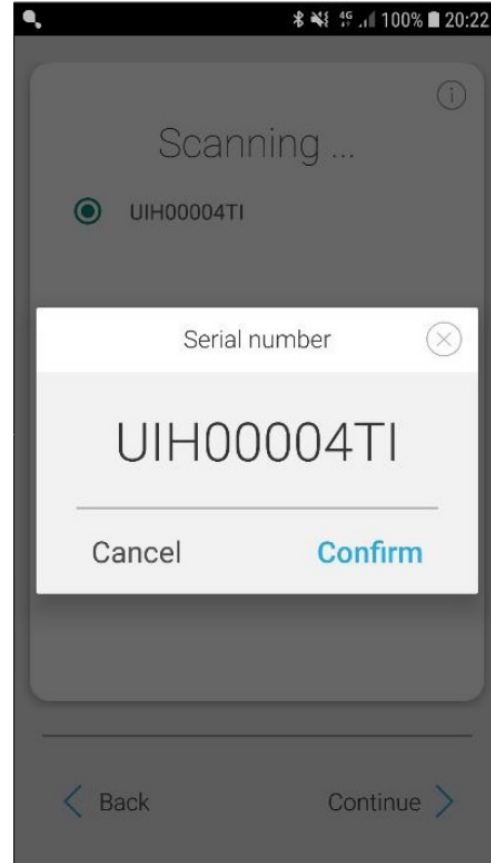
Pair the Dana insulin pump

Before pairing the pump:

1. **Unpair pump** from AnyDana App in **Bluetooth settings on the phone**
2. **Delete (uninstall) AnyDana app** from phone

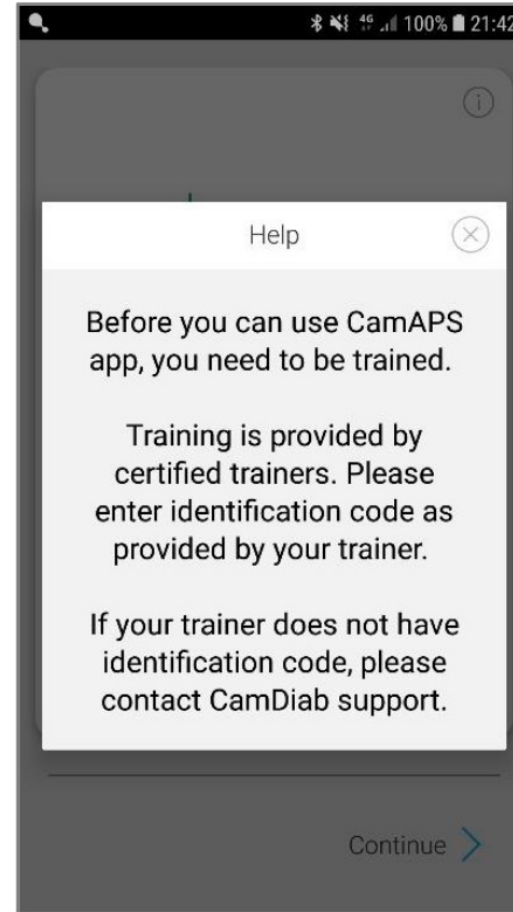


Dana-i



- Pop-up window appears: confirm the pump serial number
- When prompted, start pairing by pressing 'OK' on your smartphone and then **on your pump**
- You are requested to enter pairing PIN shown on the pump

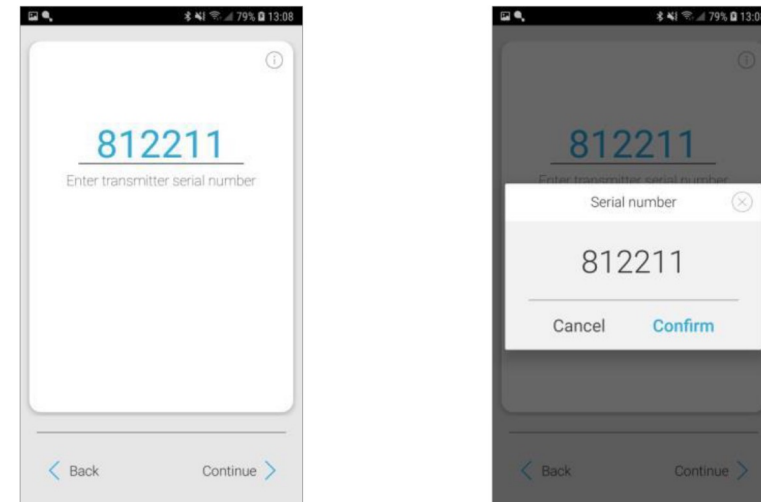
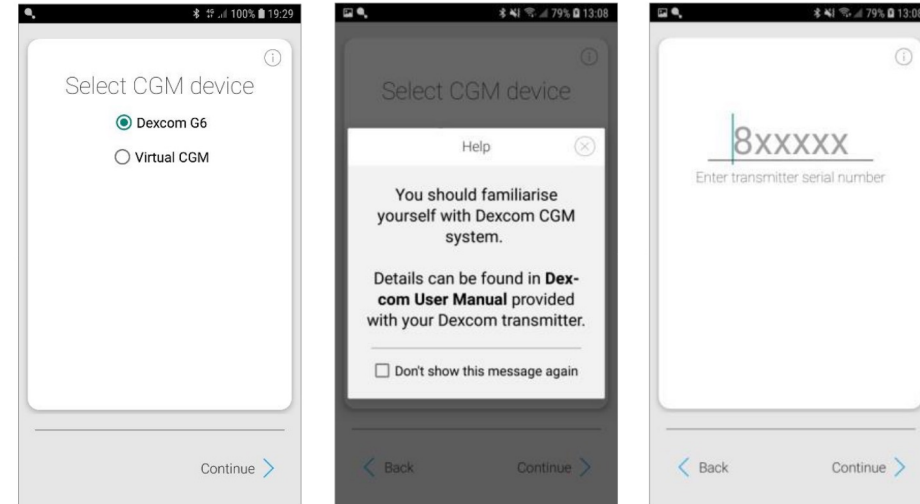
Enter the online training code to unlock the app



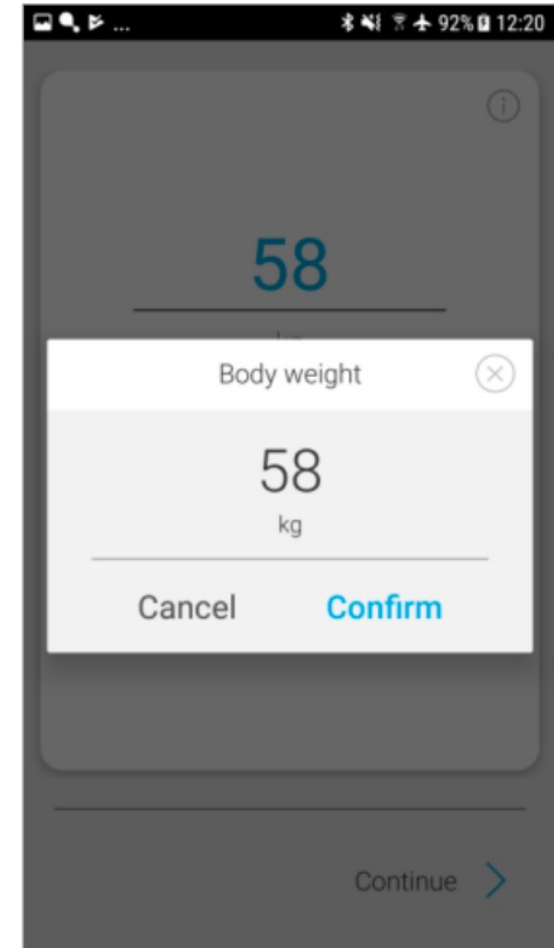
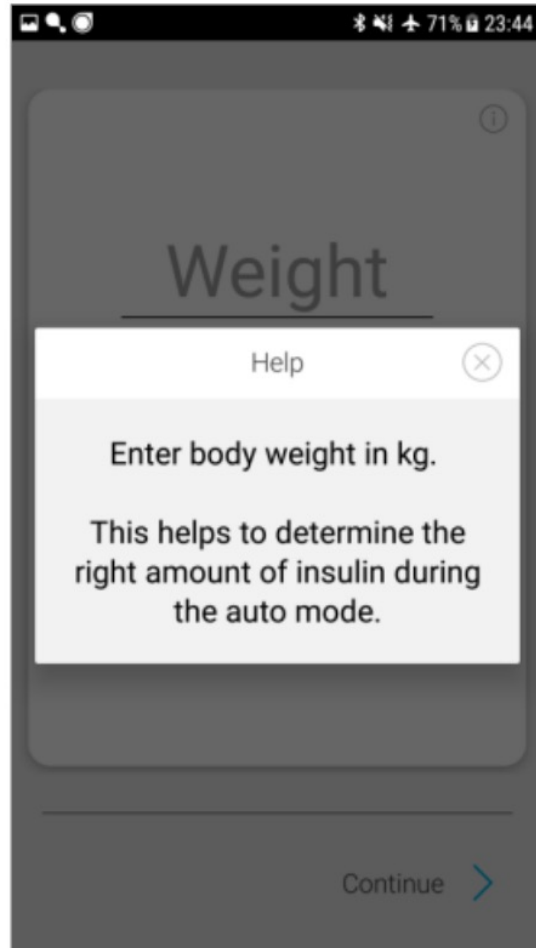
Pair the Dexcom G6 transmitter

Before pairing the Dexcom transmitter

1. Make note of transmitter serial number
2. Unpair transmitter from Dexcom app in Bluetooth settings on the phone
3. Delete Dexcom G6 app from phone



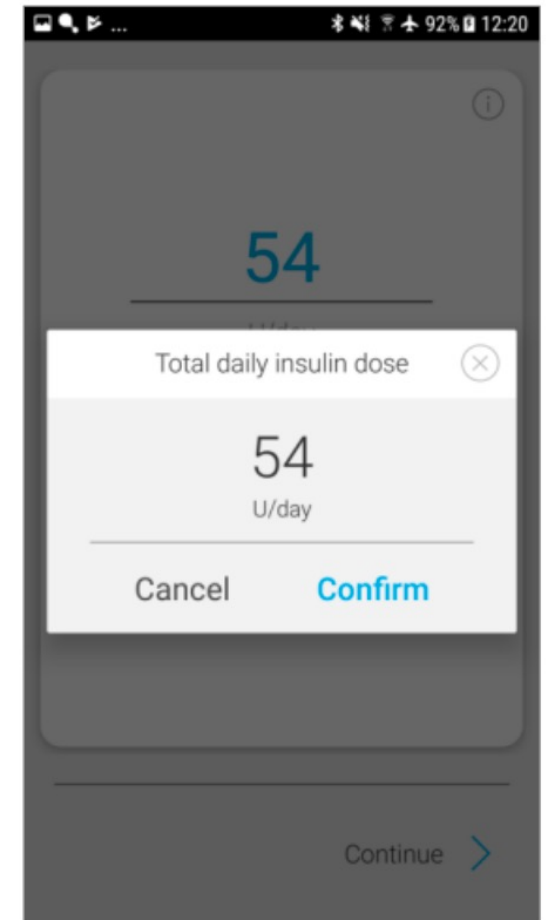
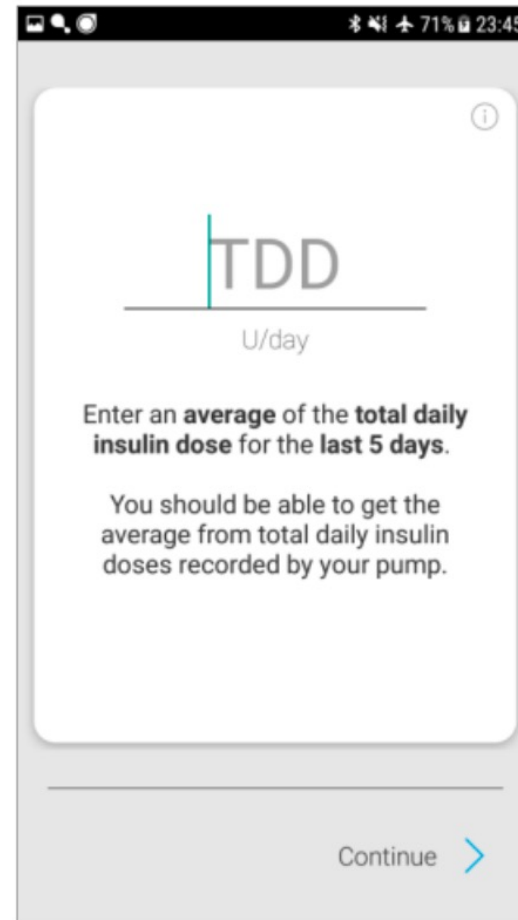
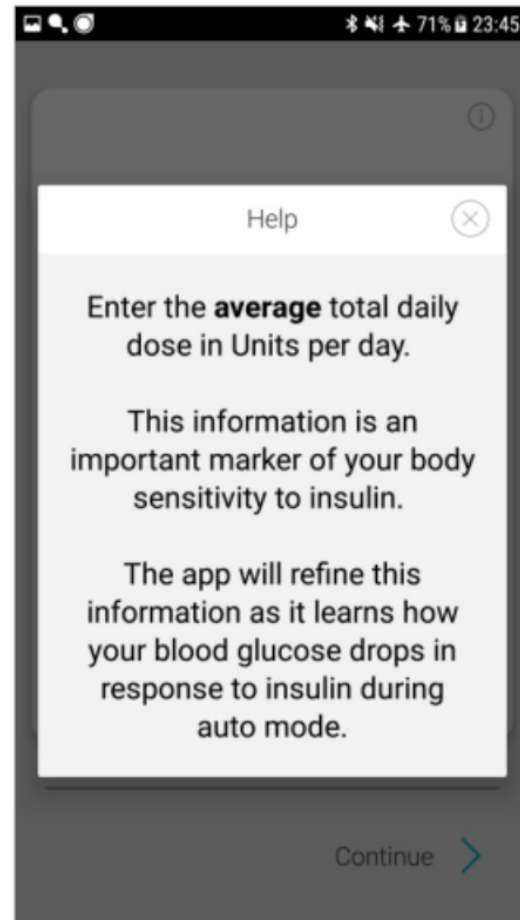
Enter body weight (kg)



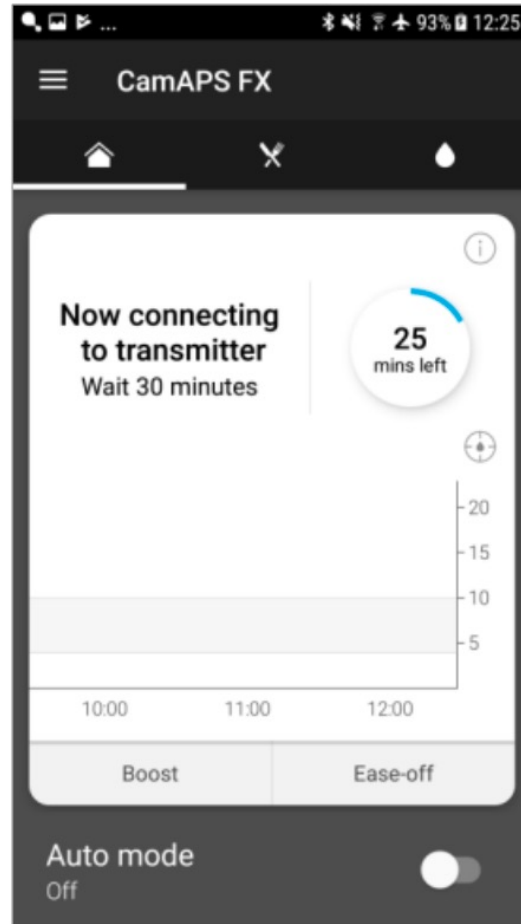
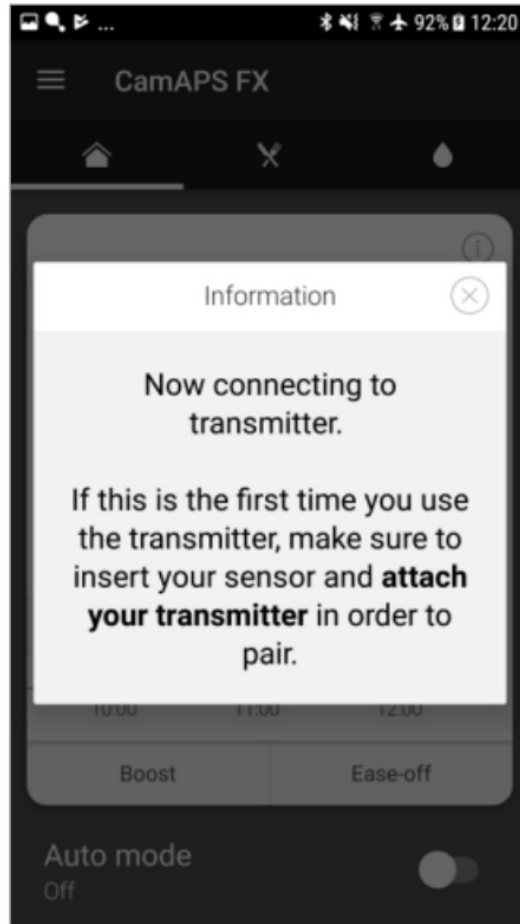
Enter average Total Daily Insulin Dose (TDD)

TDD =

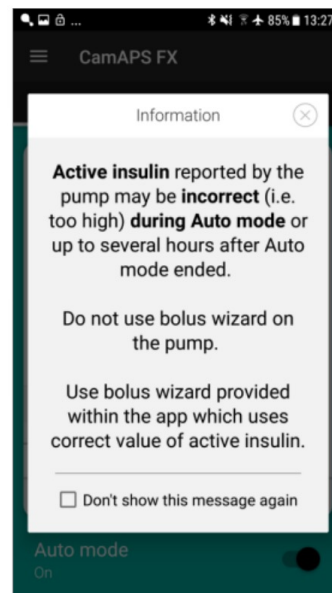
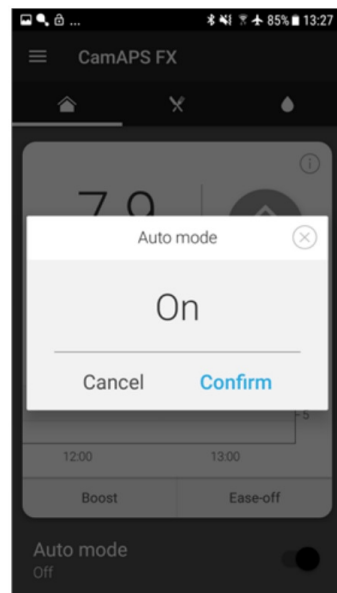
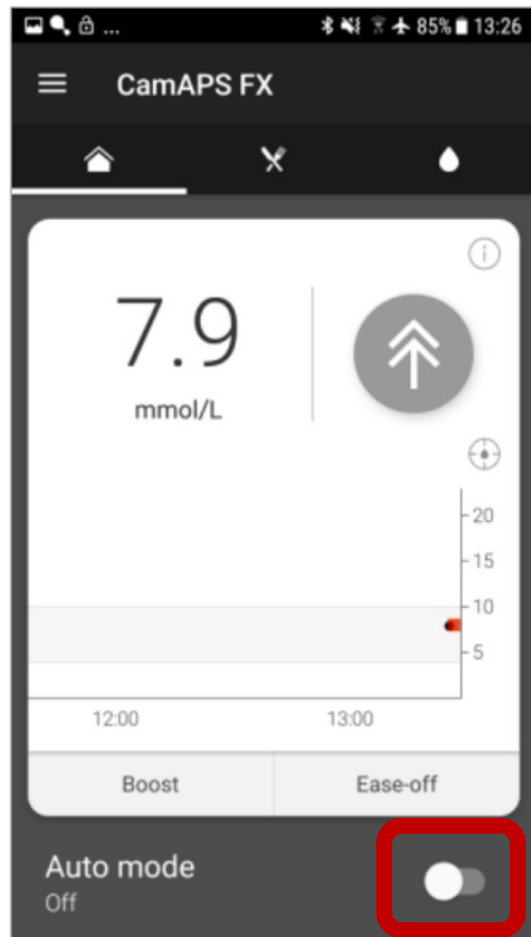
1. All bolus AND
2. All basal insulin used
3. Average last 5-7 days



It will now connect...

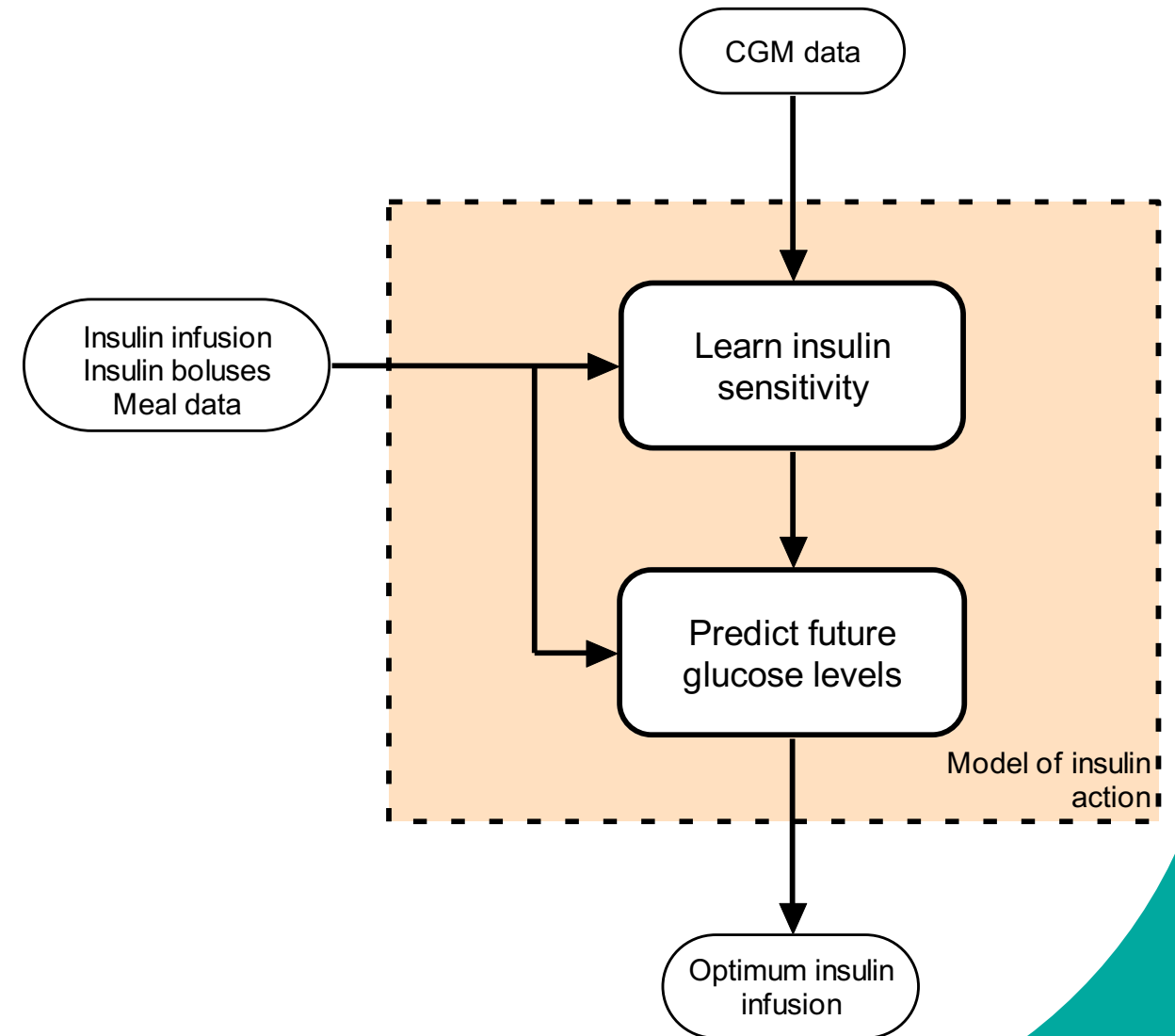


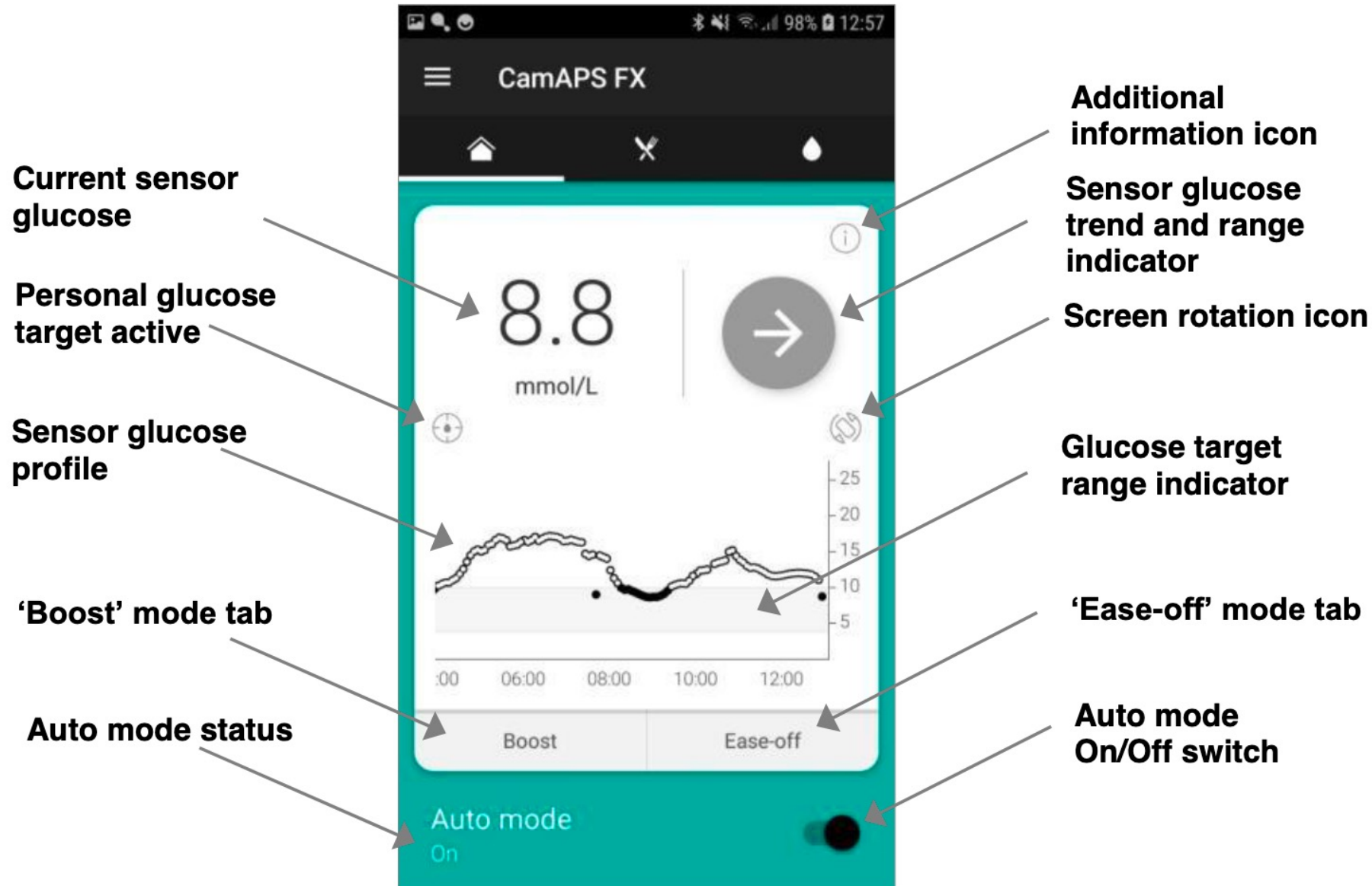
Turn Auto mode “ON”



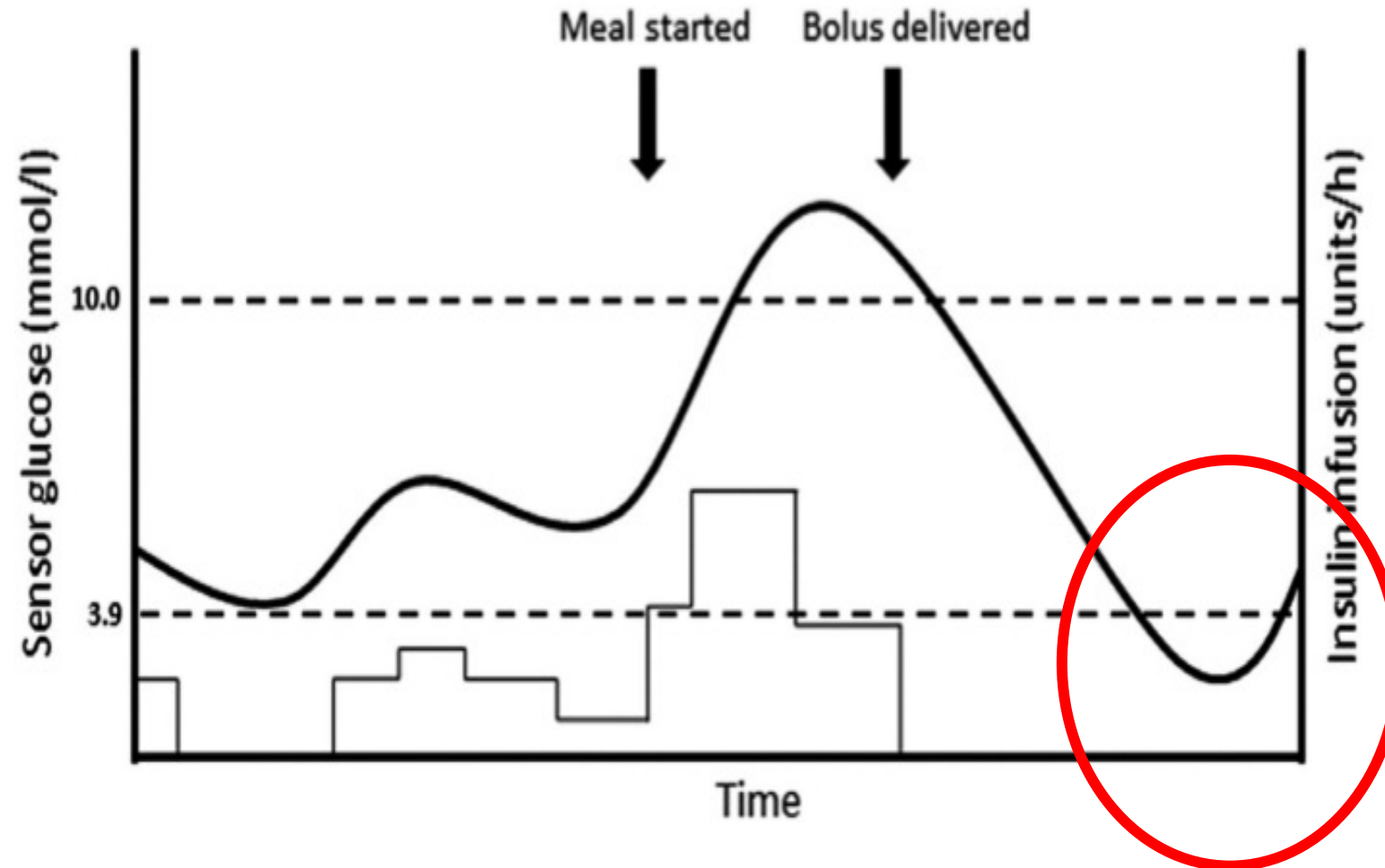
How does the algorithm learn?

- ✓ Continually adjusts based on previous learning
- ✓ Learns more without “Ease-off” & “Boost”
- ✓ Learns from bolus calculator
- ✓ Takes on average 1-3 weeks to optimize
- ✓ In first few weeks, most people need to review
 - insulin to carb ratios and
 - personal glucose target.





The dangers of late bolusing on closed-loop...

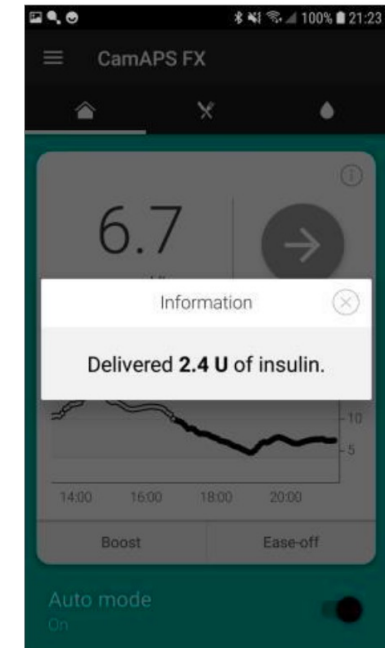
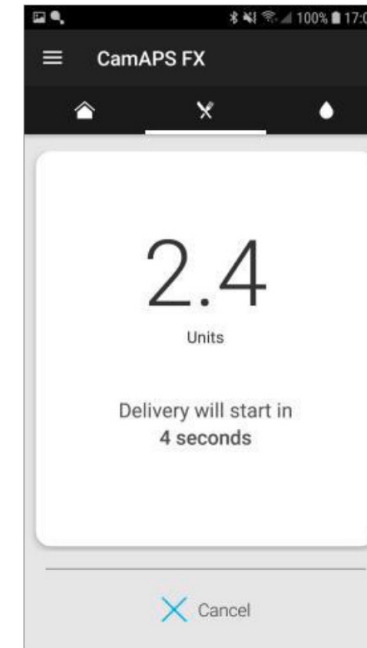
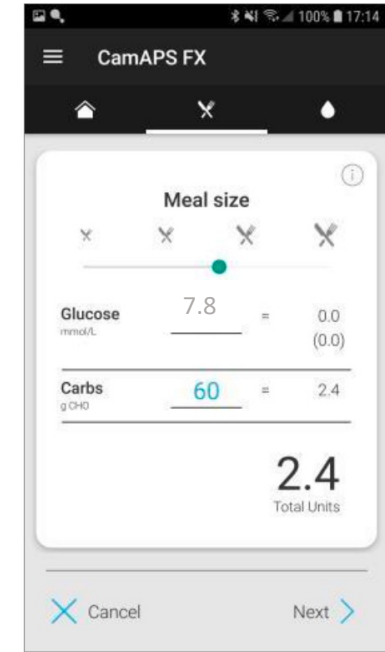
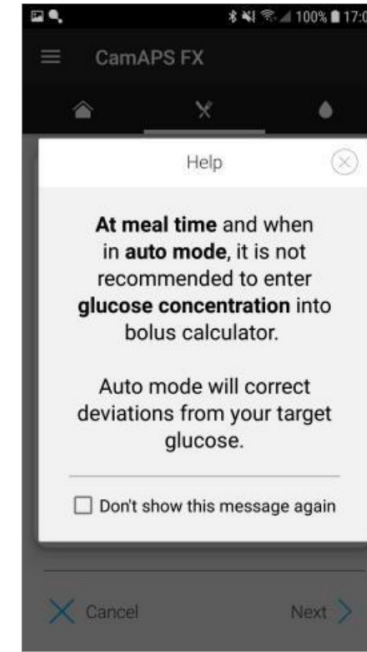
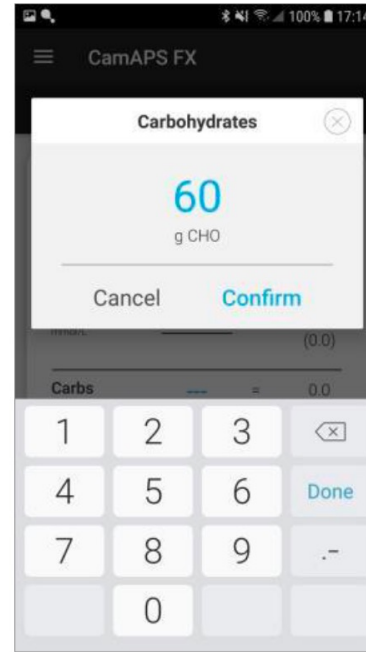
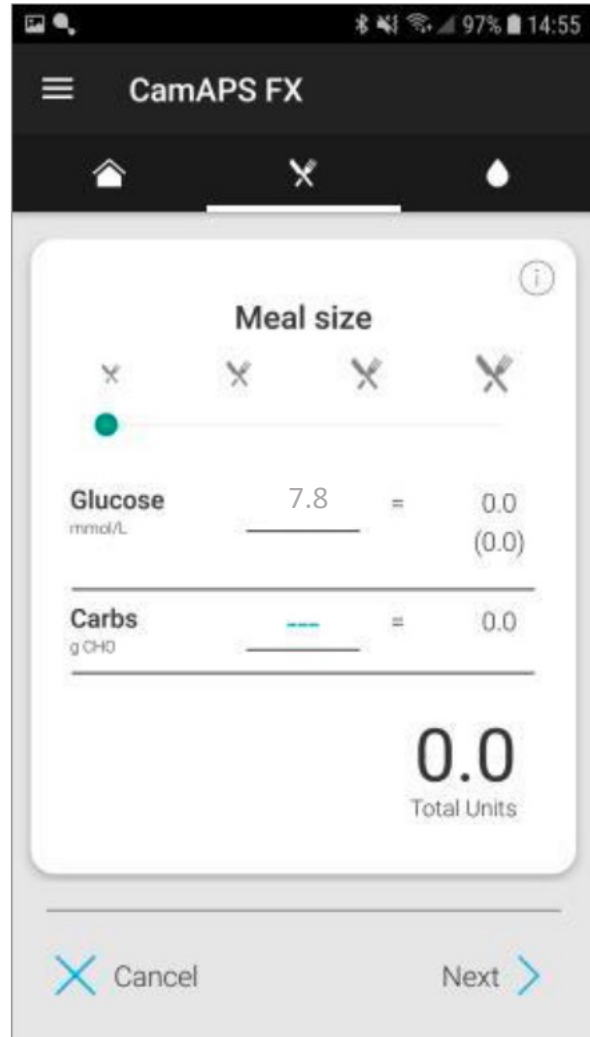


Bolus Calculator... pre-meal bolus

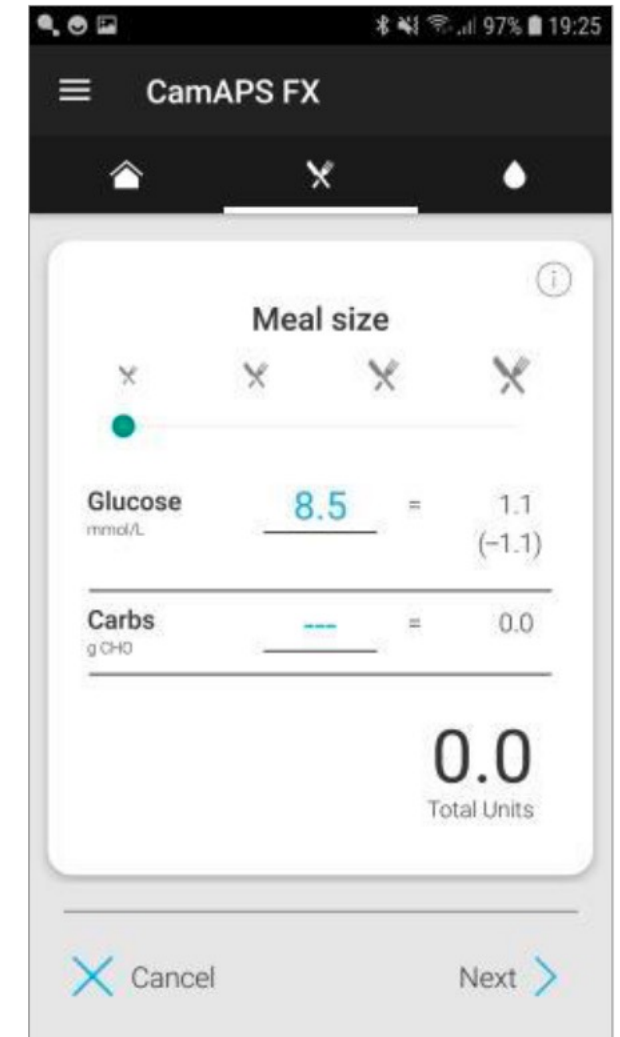
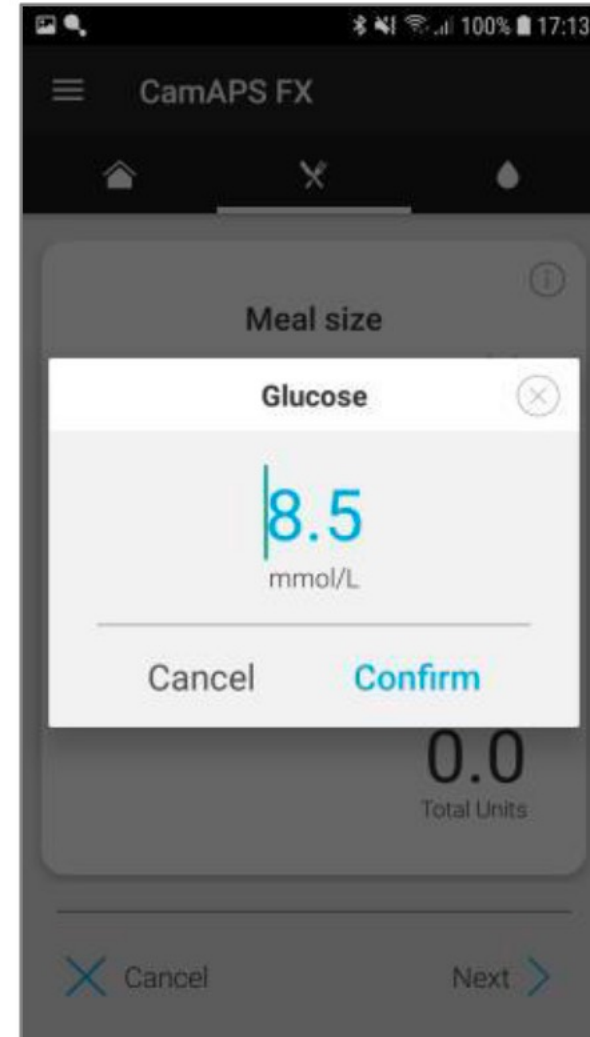
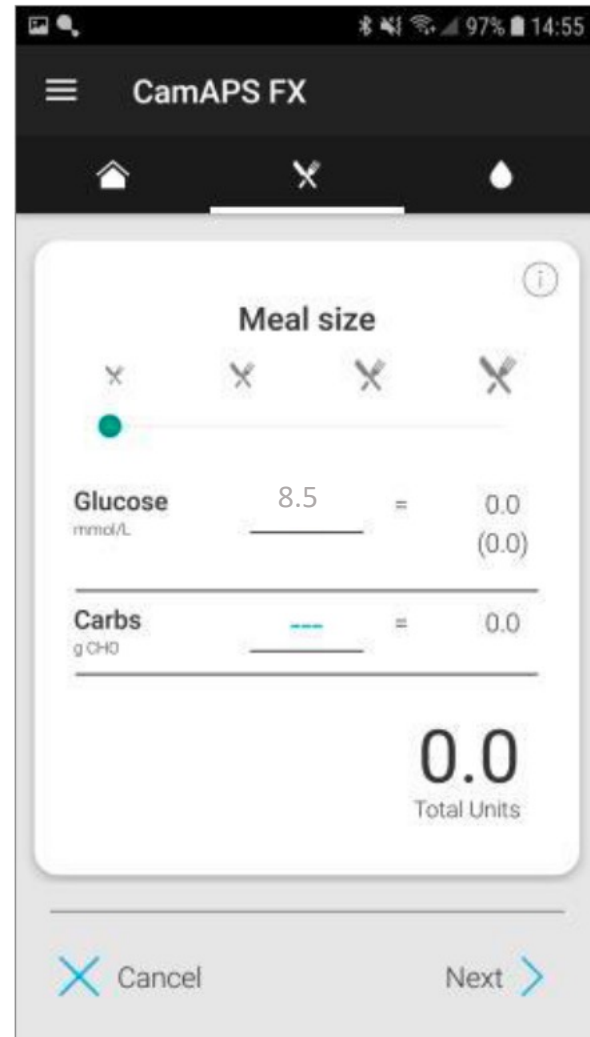
Ideally
10-15 minutes
before eating

Consider splitting bolus:

- not reliable eater
- large carb meal
(±60 grams or more)



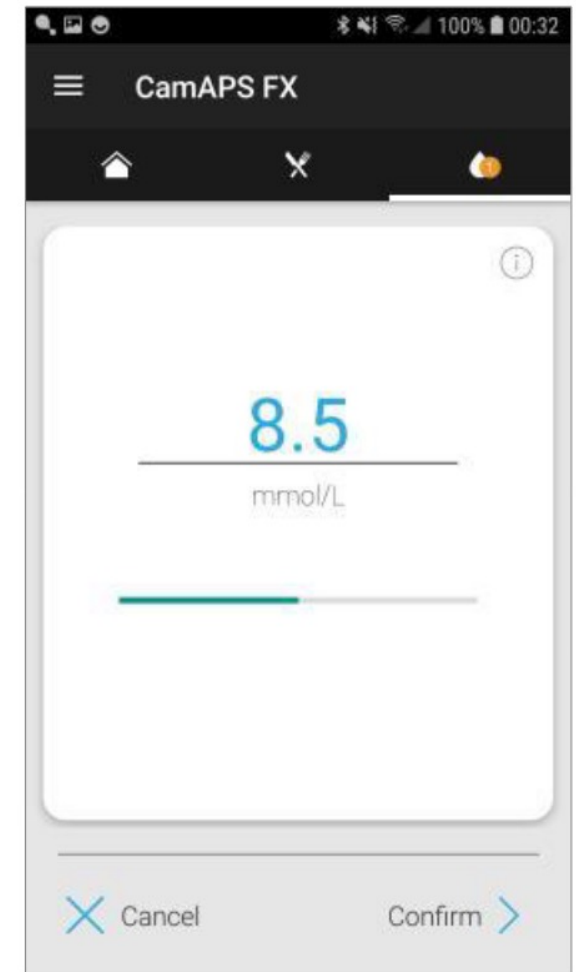
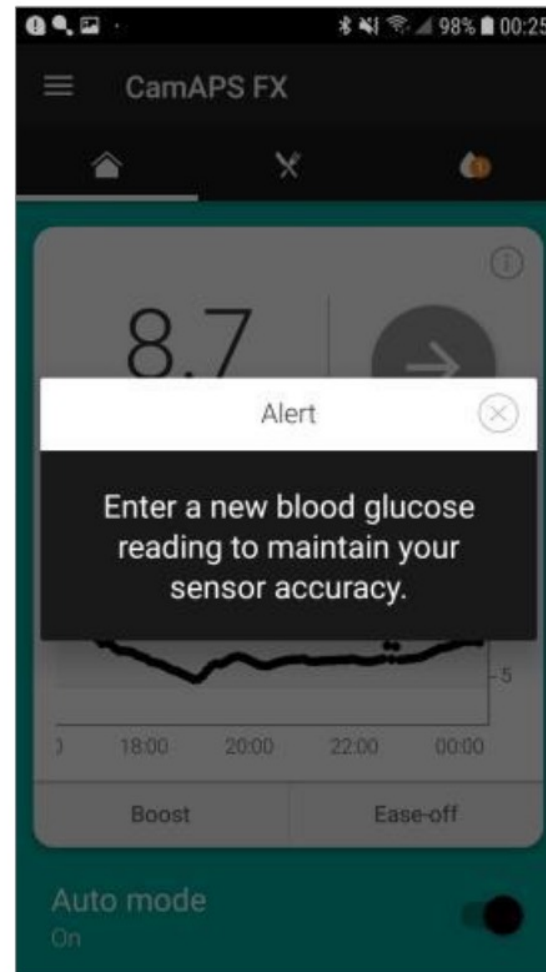
Bolus Calculator... correction bolus



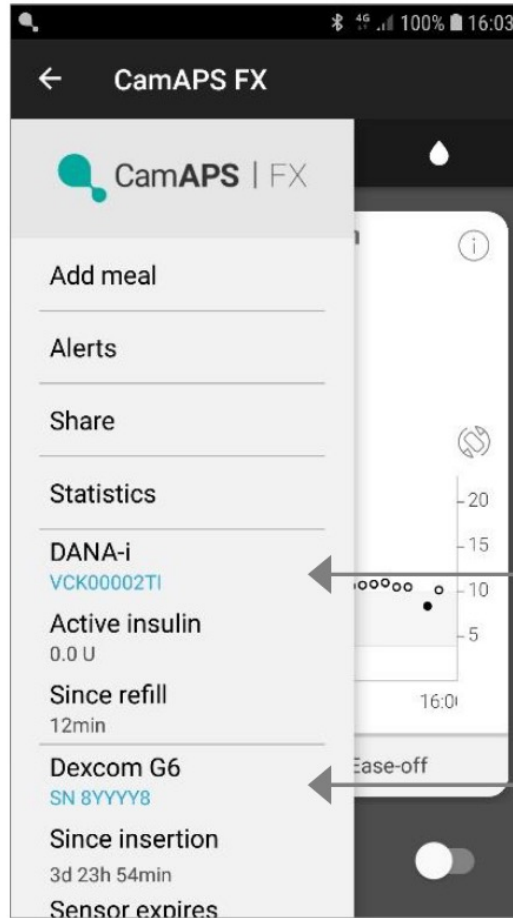
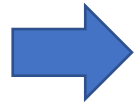
Calibrating the sensor – only when necessary

If sensor inaccurate:

- ✓ More than 3mmol/L difference
- ✓ Pick a time when glucose stable
- ✓ Do NOT calibrate if glucose and sensor accurate

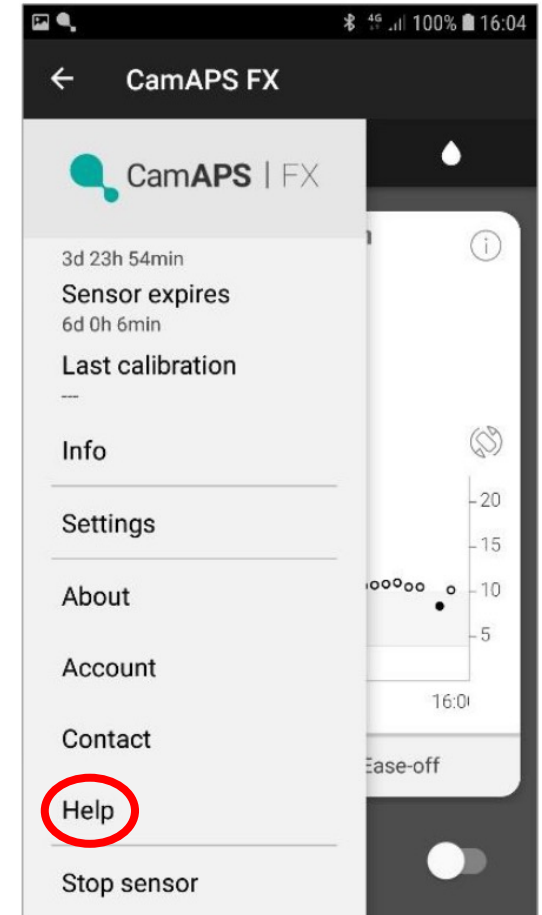


Main menu

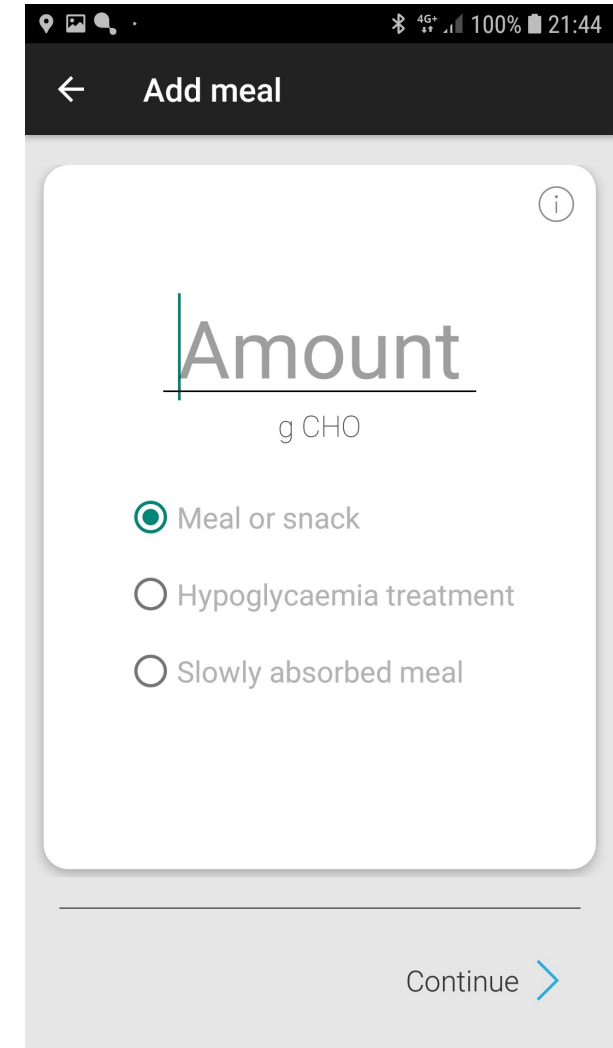
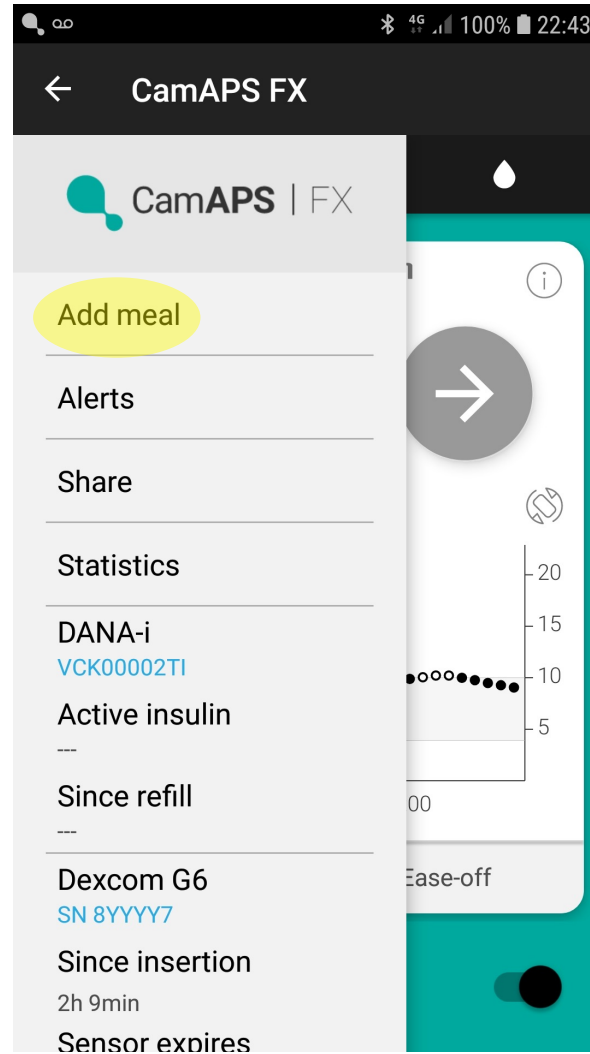


Pump related section

CGM related section



Add meal



Add meal

✓ Meal or snack

- extra snacking, topping up meals
- during or at end of meal
- if snack, close to a previous bolus

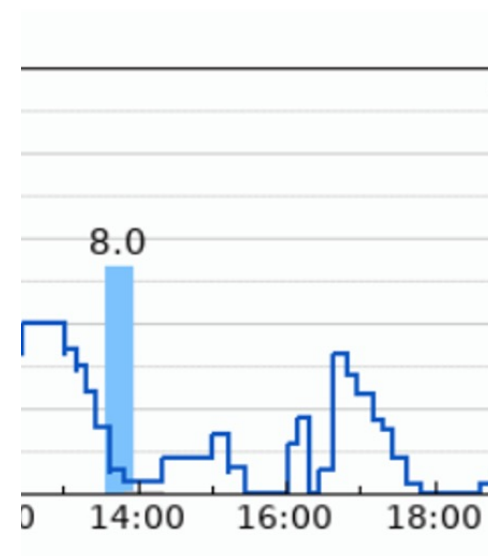
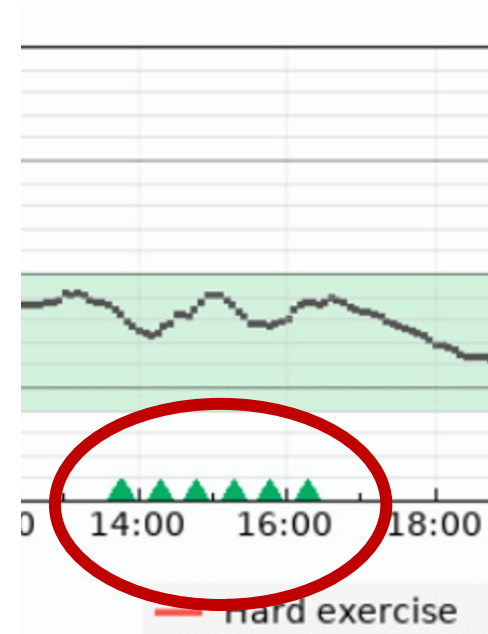
✓ Hypo treatment

- treat hypo
- enter fast-acting carbs to document the treatment
- CamAPS FX will NOT give insulin (unless hypo ++ over-treated) and will “soften” its calculations

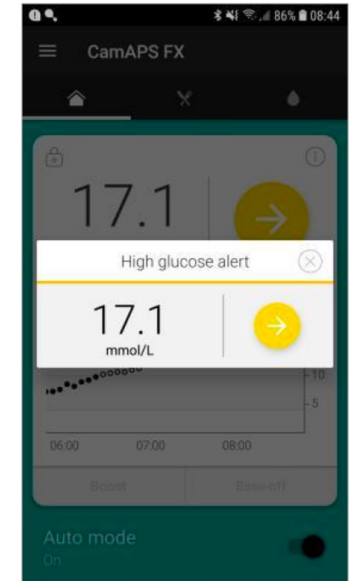
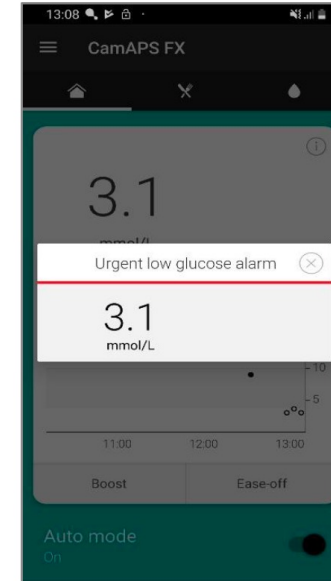
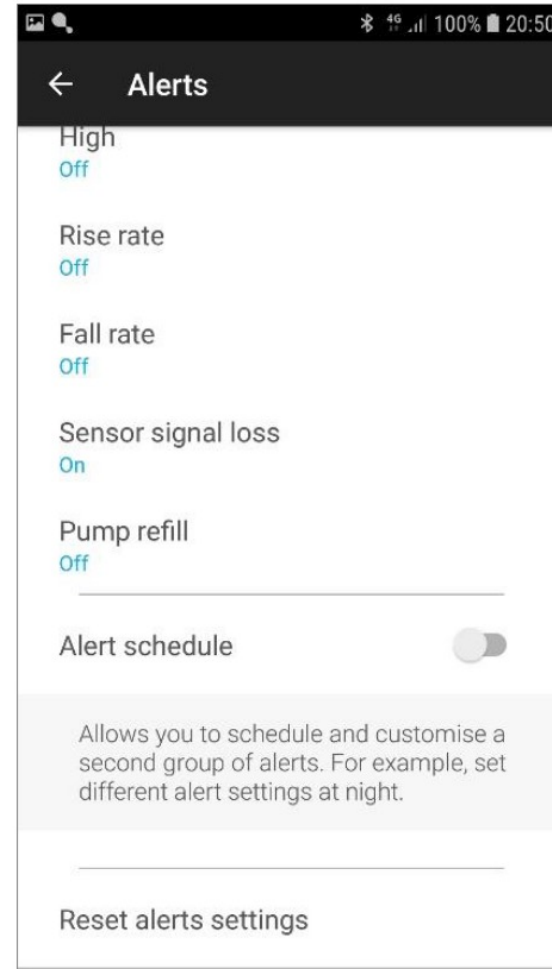
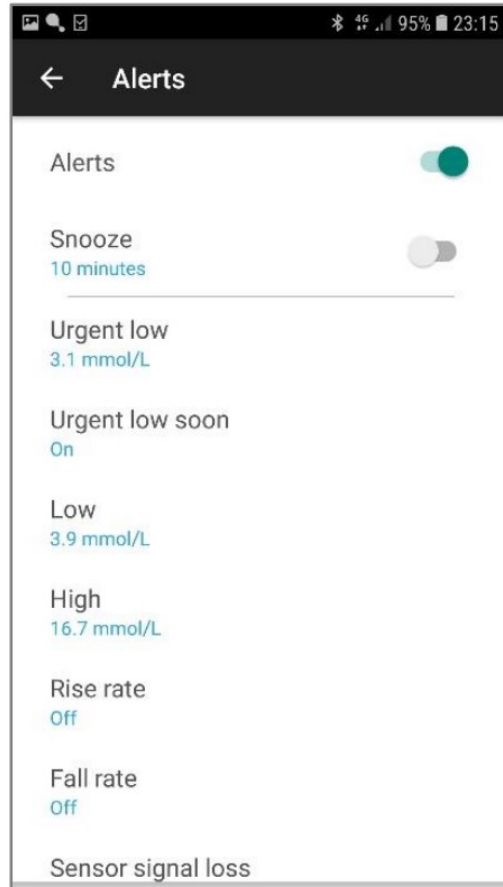
✓ Slowly absorbed meal

- give % as pre-meal bolus using bolus calculator
- input rest of carbs eaten here
- algorithm will deliver extra insulin over 3-4 hours depending on glucose levels

CamAPS FX will deliver ONLY more insulin in response to rising glucose levels

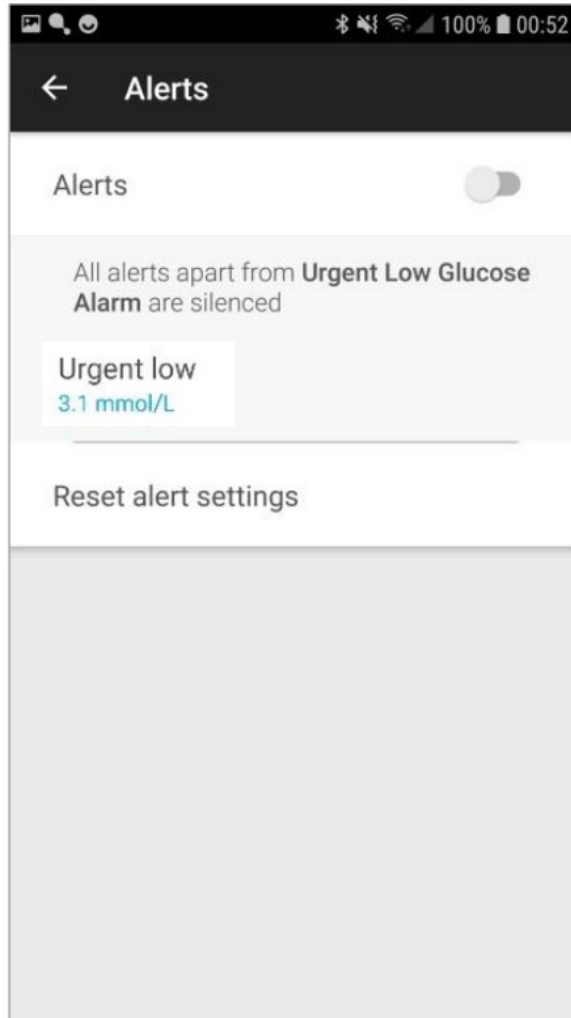


Alerts



Need to set phone's "widget and banners" to show glucose on phone's locked screen
✓ Look in notifications setting on phone

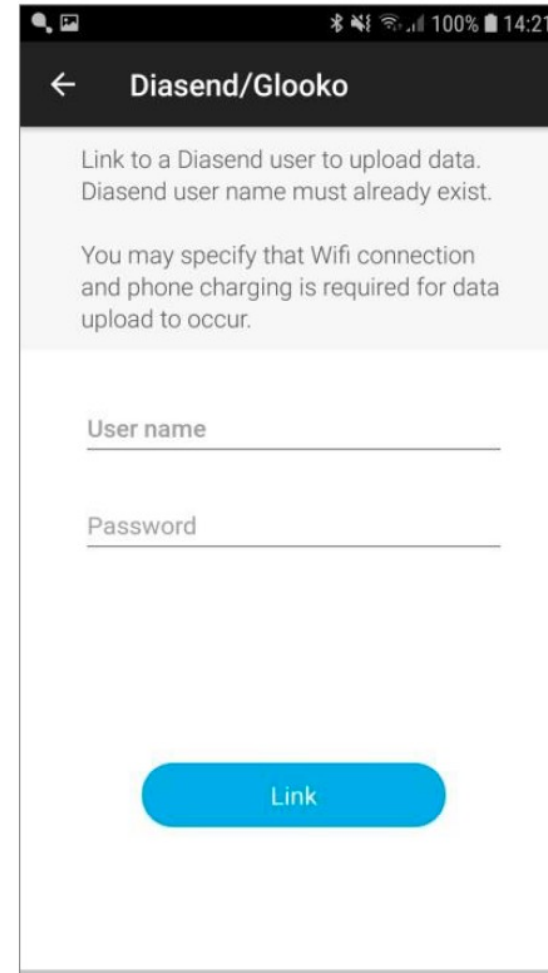
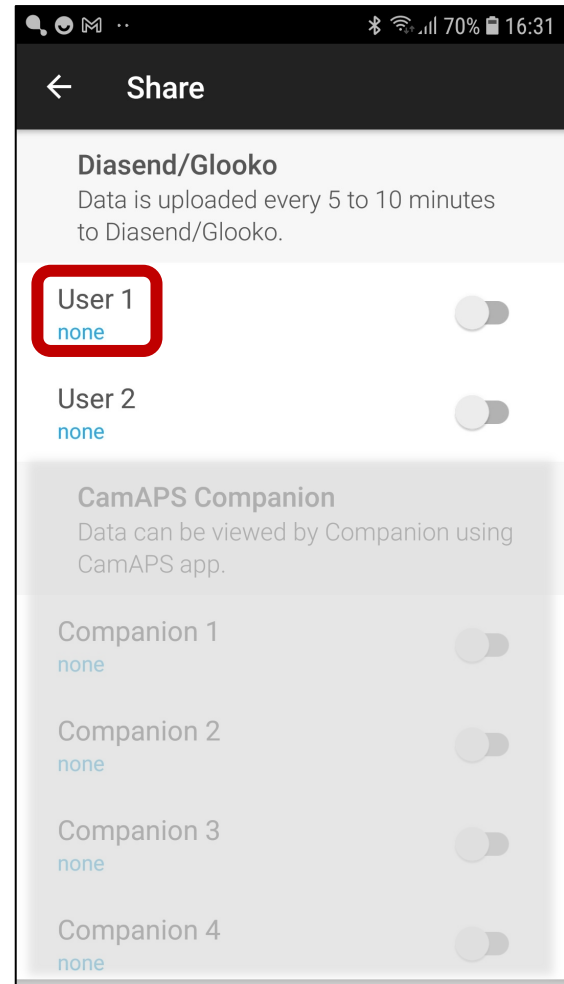
Alerts can be silenced...



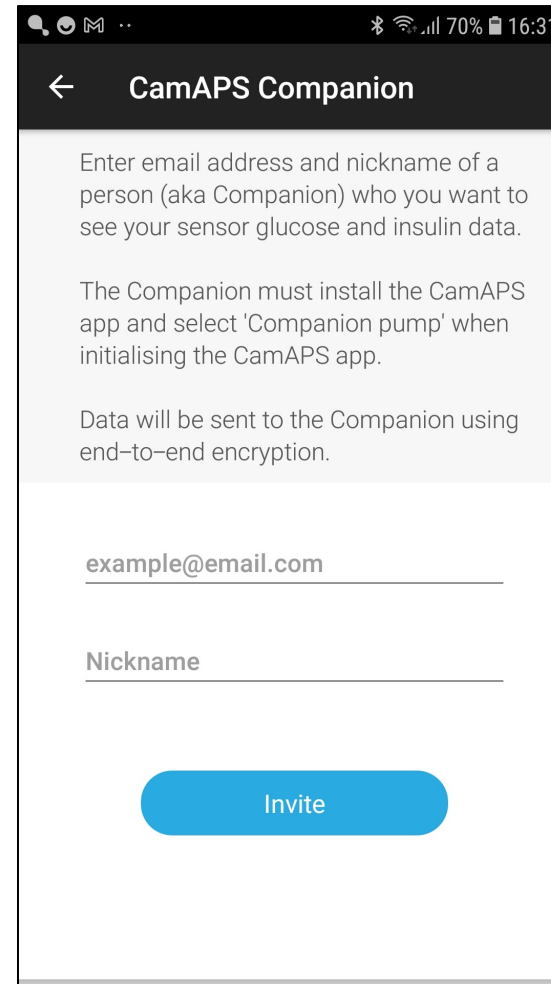
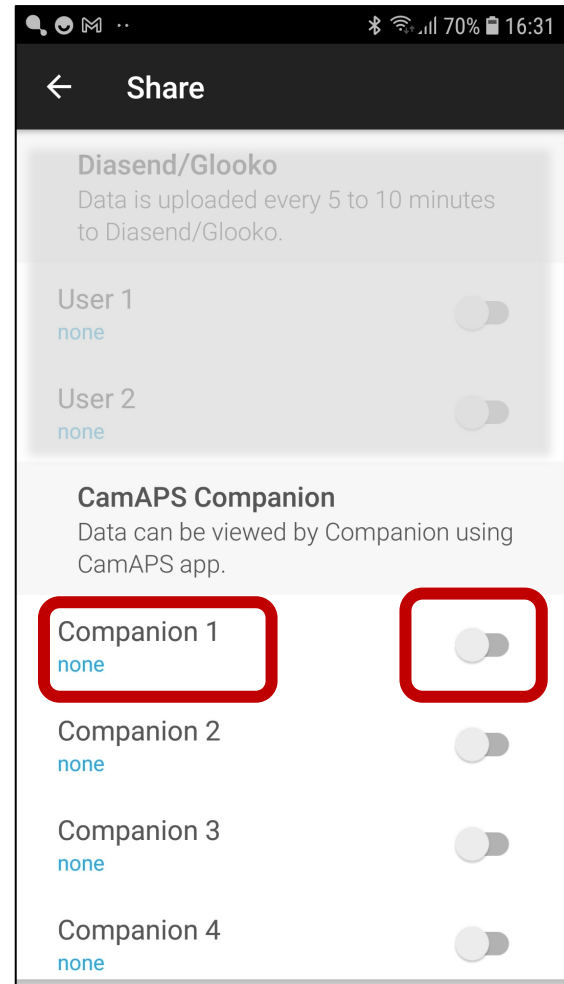
'Silenced alerts' icon



Share data via Diasend, CamAPS Companion and SMS text alerts



Share data via Diasend, CamAPS Companion and SMS text alerts



Share data via Diasend, CamAPS Companion and SMS text alerts

To send SMS alerts,
phone must have:

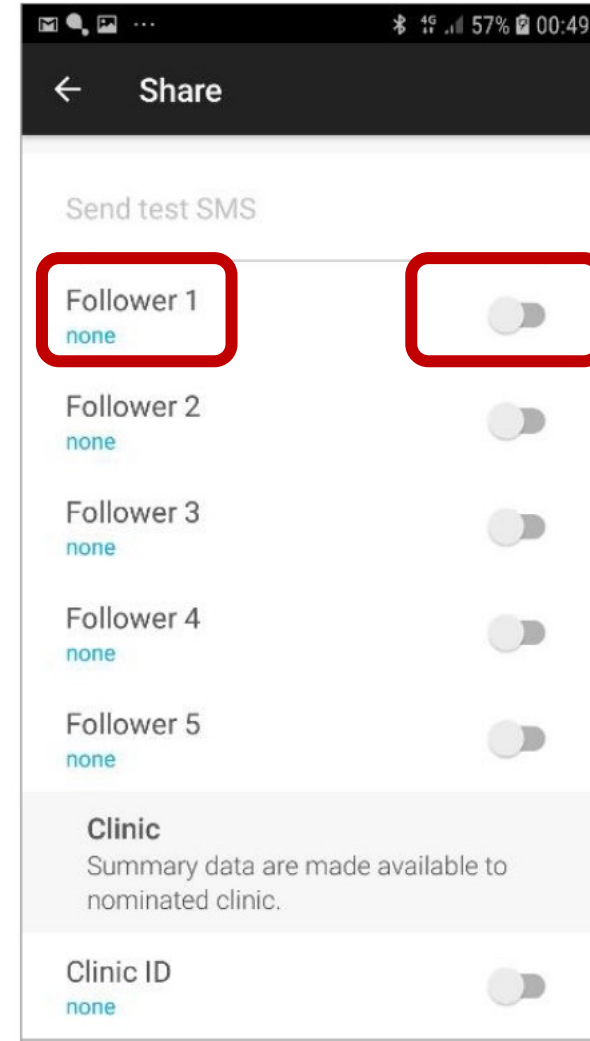
- ✓ SIM card
- ✓ Mobile signal and data

Please clear alert on user's phone:

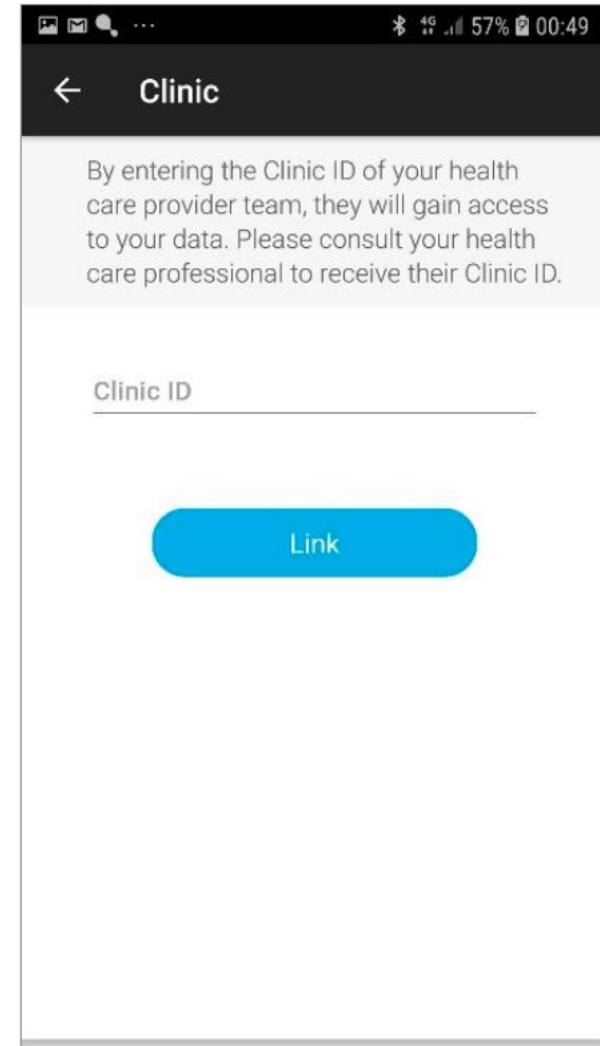
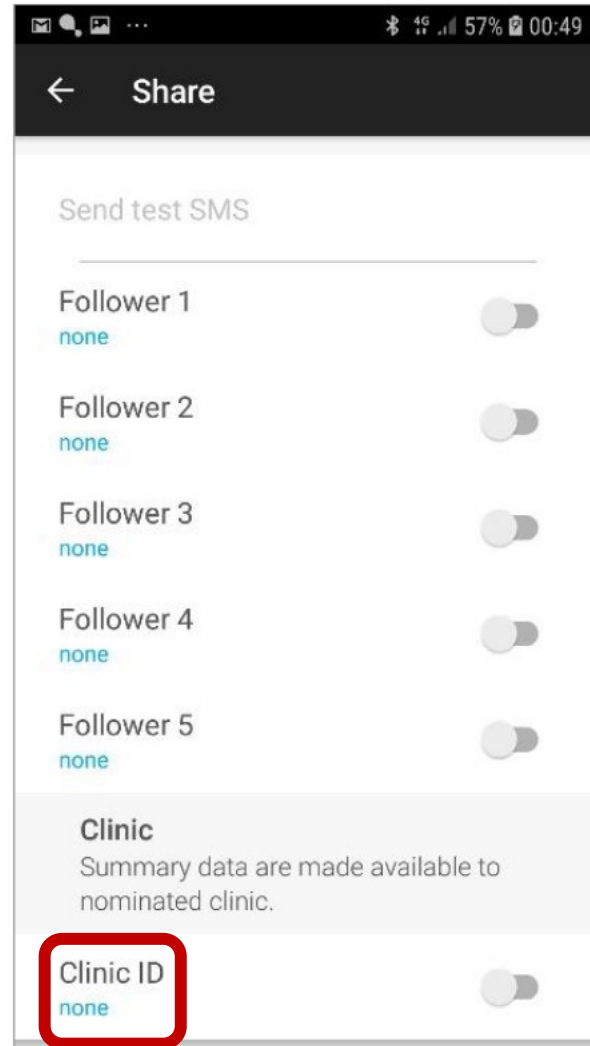
- ✓ If not, repeated SMSs will be sent to all active followers for safety reasons

Toggle SMS on / off:

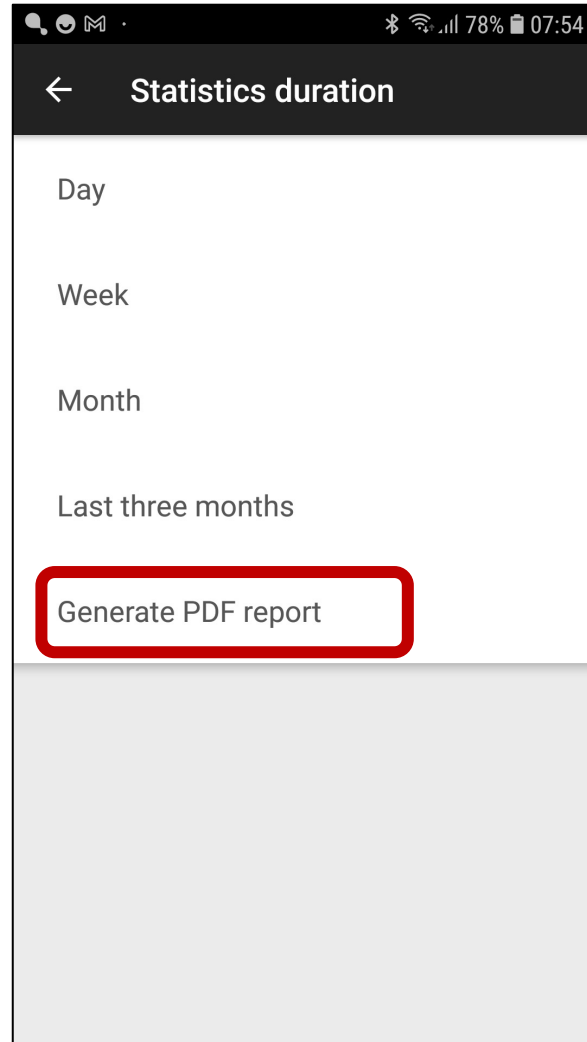
- ✓ Turn off SMS for carers who are not full time. As appropriate



Sharing data with clinic via CamAPS clinic



Statistics

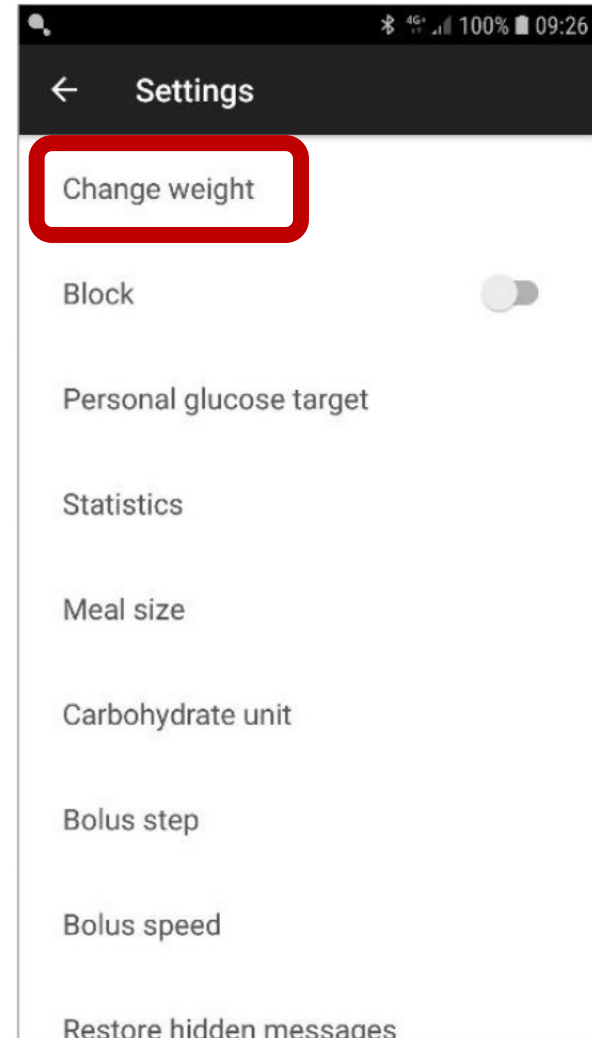
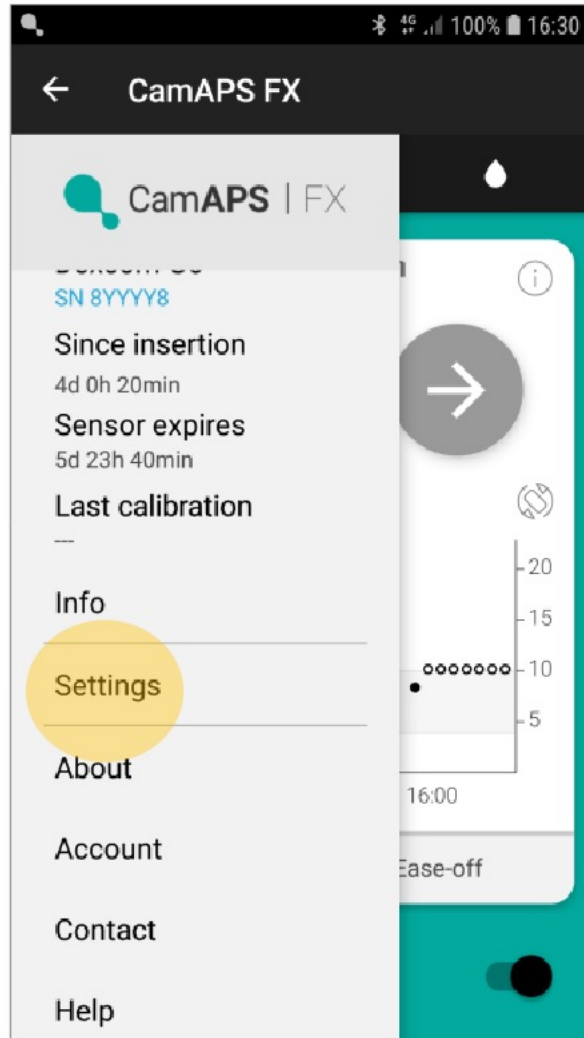


Statistics

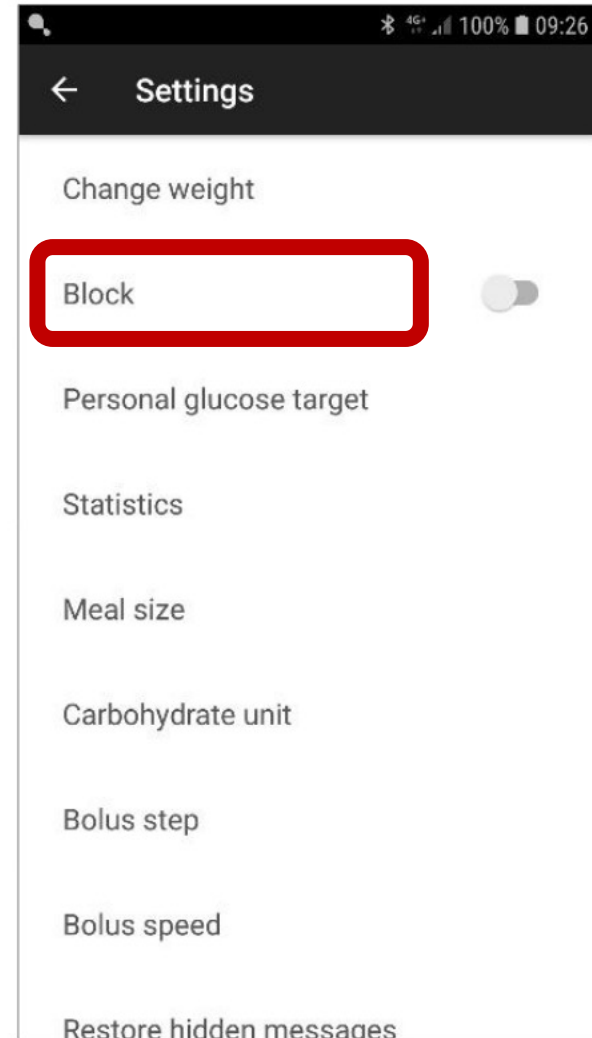
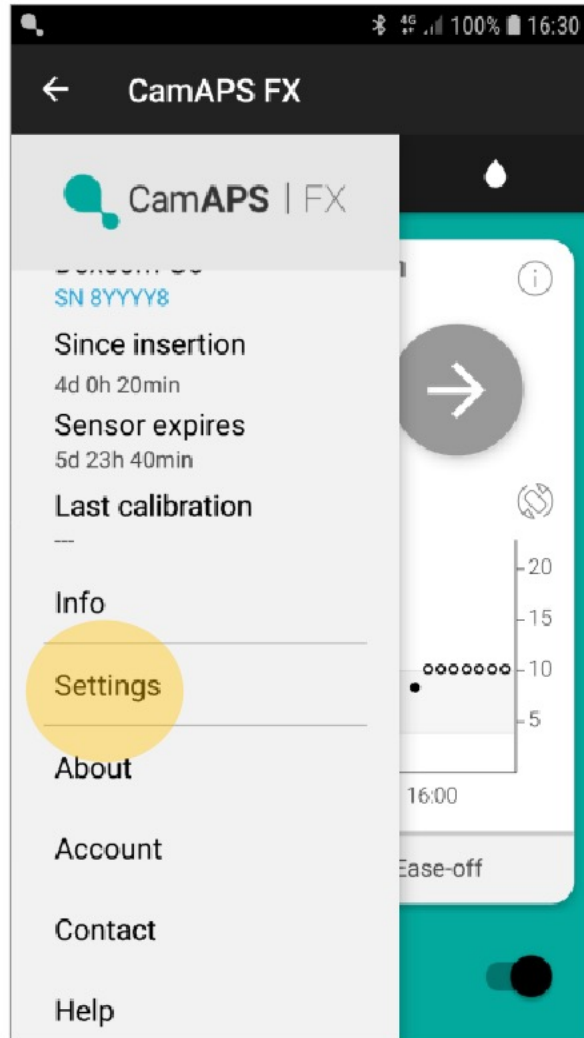
Wednesday, 5 December 2018

Average glucose	10.1 mmol/L
GMI	7.7 %
GMI	60 mmol/mol
Glucose SD	3.5 mmol/L
Glucose CV	35 %
Time in target	53 %
Time below target	1.7 %
Time above target	45 %
Number of hypos	1
Average hypo duration	25 minutes
Sensor glucose availability	100 %
Total daily dose	28.3 U/day
Total daily bolus	1.8 U/day
Total daily basal	26.5 U/day
Auto mode use	67 %
Auto mode interrupted	0
No sensor glucose	0
No connection to pump	0

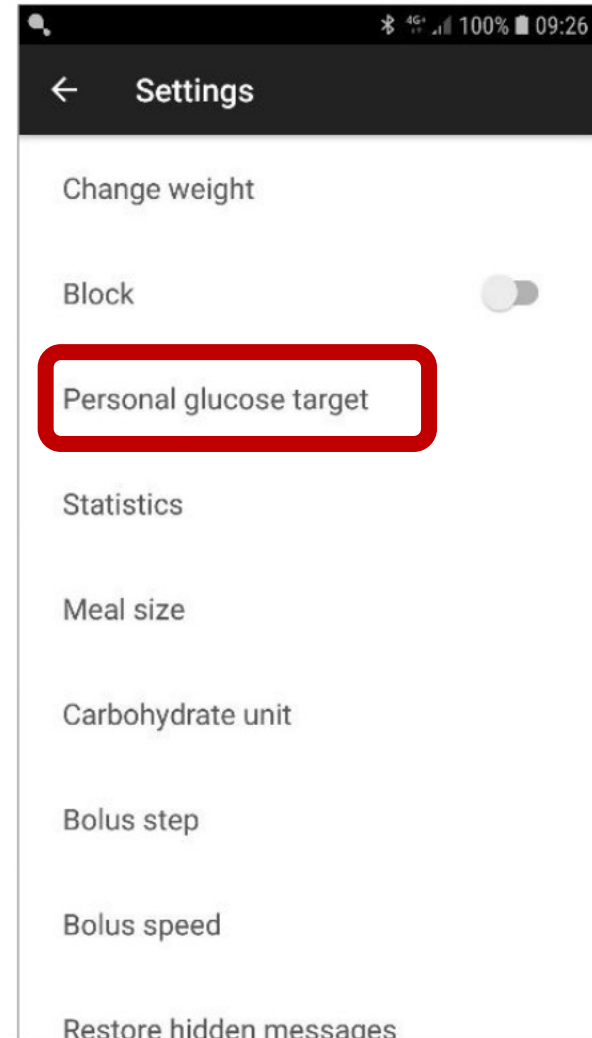
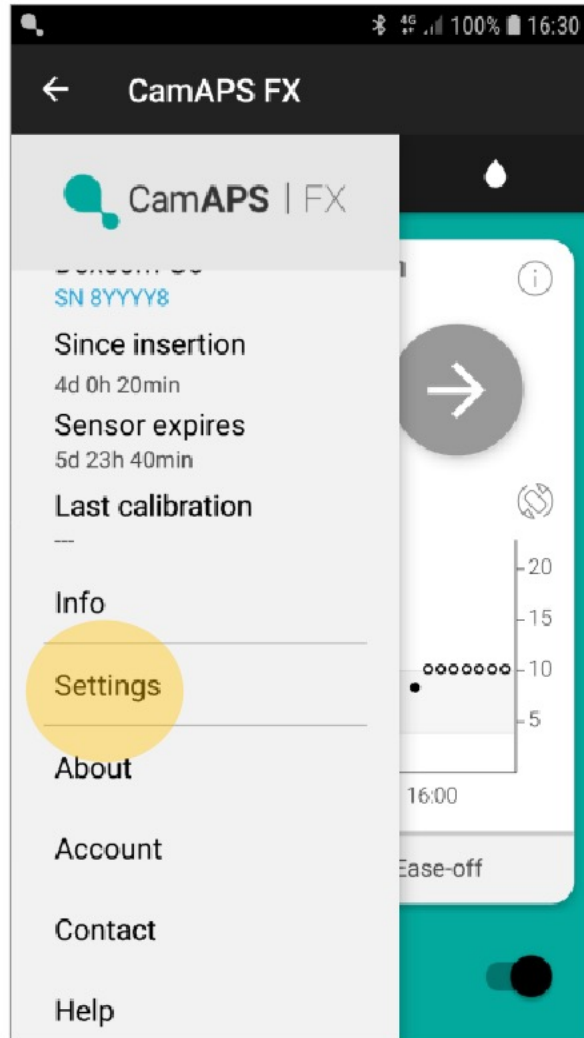
Settings



Settings



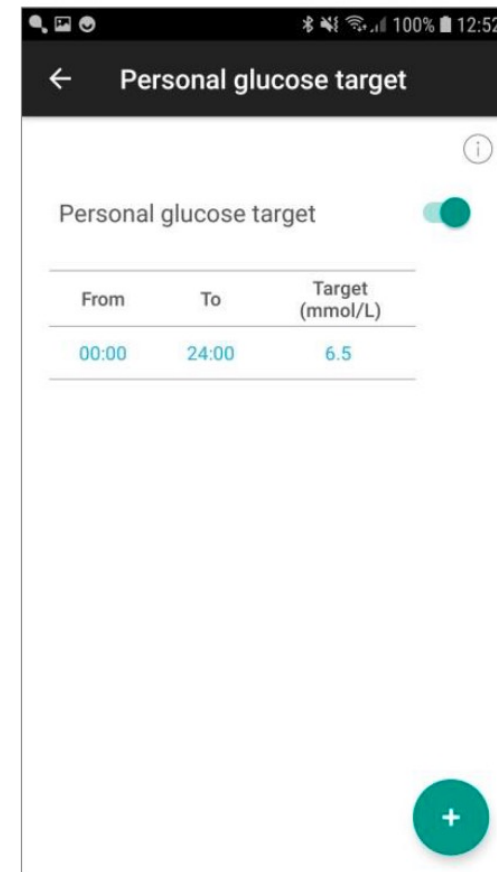
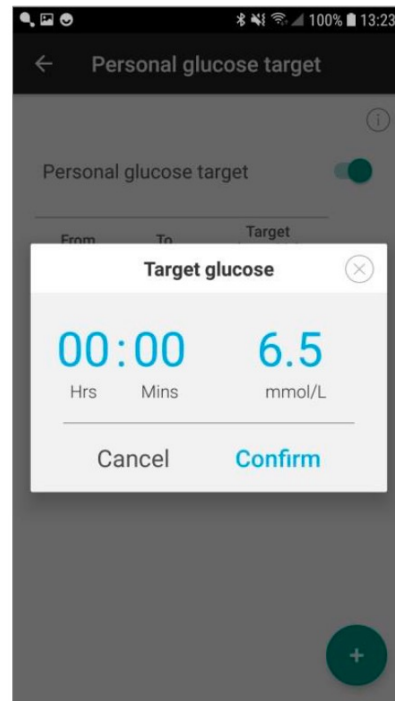
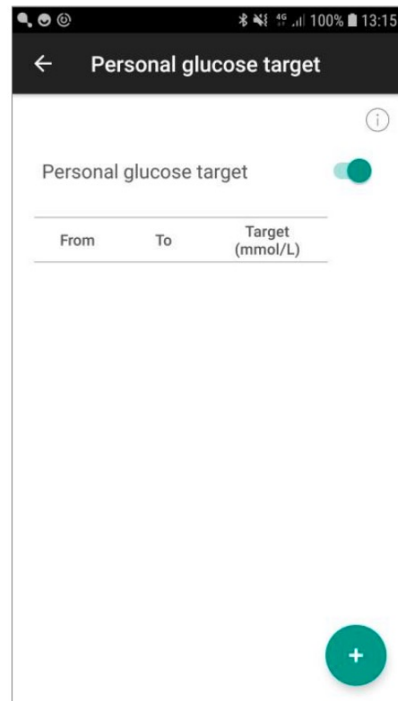
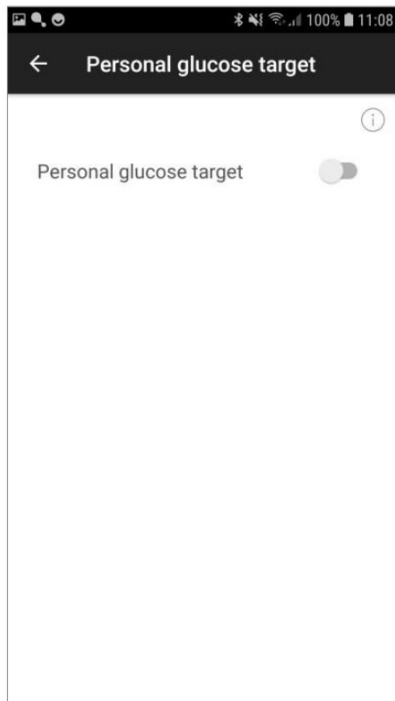
Settings

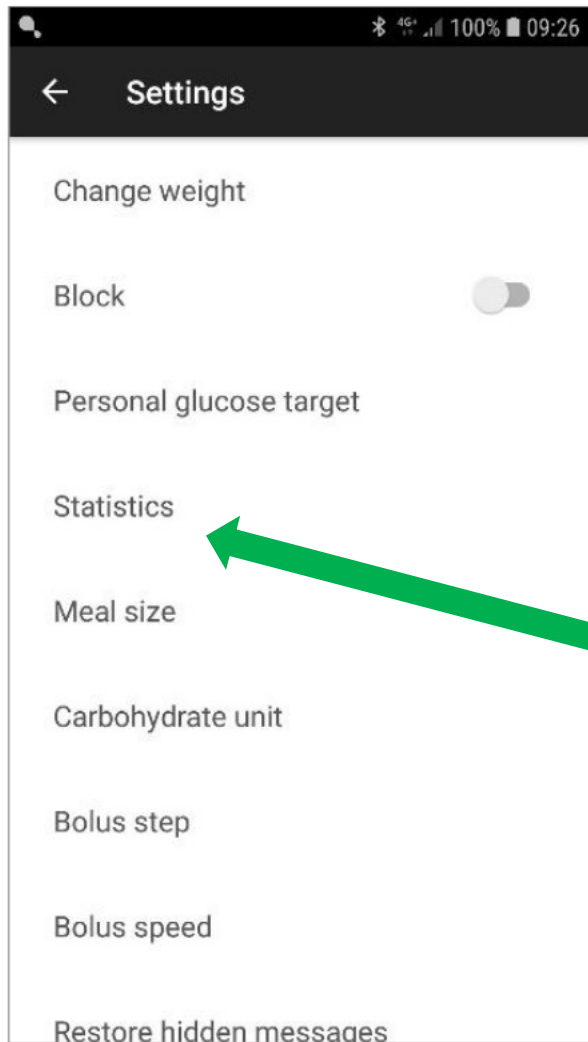


Personal Glucose Target

Default = 5.8 mmol/L

Strongly recommend a higher PGT
is programmed when starting
CamAPS FX

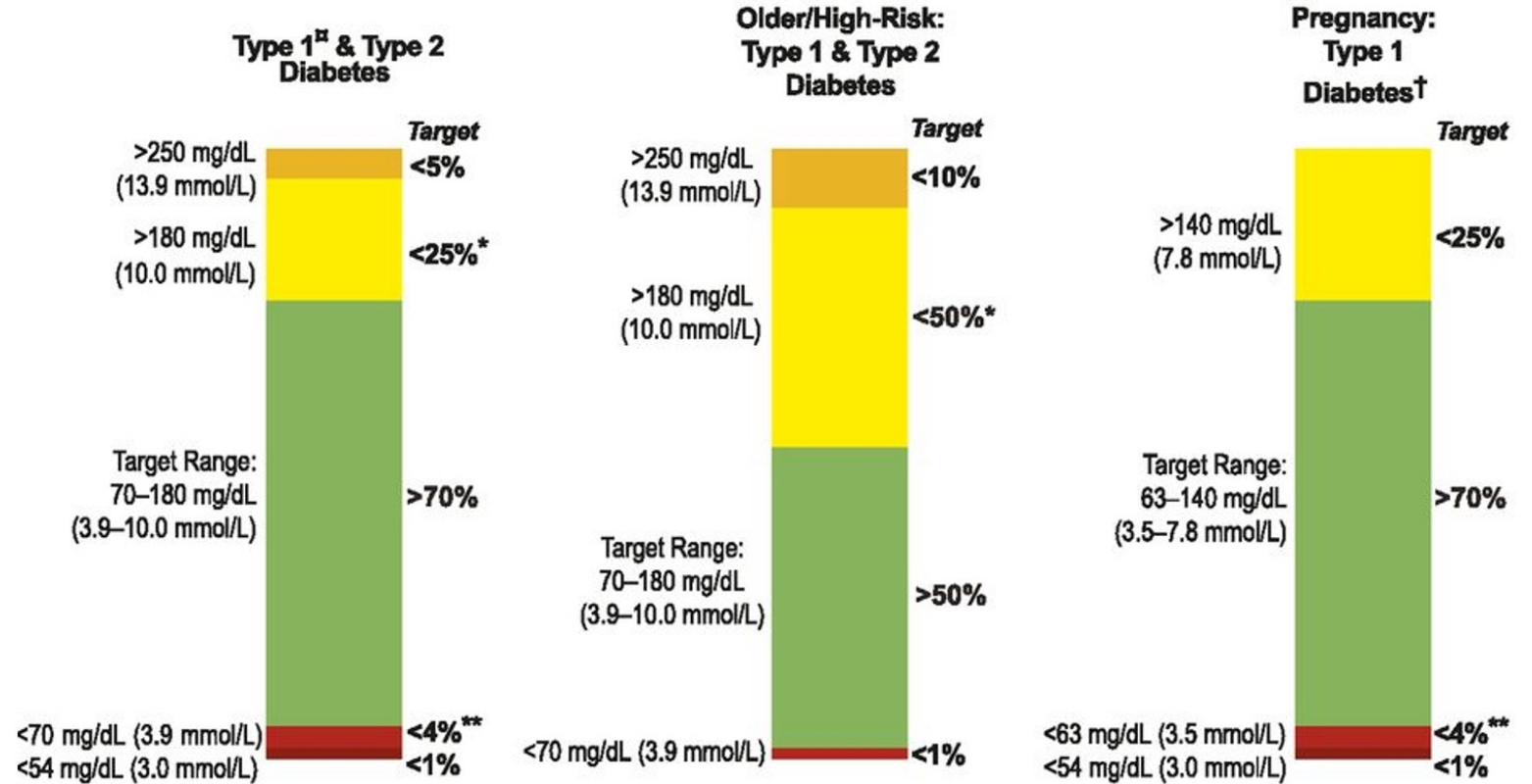




3.9 – 10 mmol/L

Time in Range (TIR)

3.9 – 10 mmol/L



‡ For age <25 yr., if the A1C goal is 7.5%, then set TIR target to approximately 60%. (See *Clinical Applications of Time in Ranges* section in the text for additional information regarding target goal setting in pediatric management.)

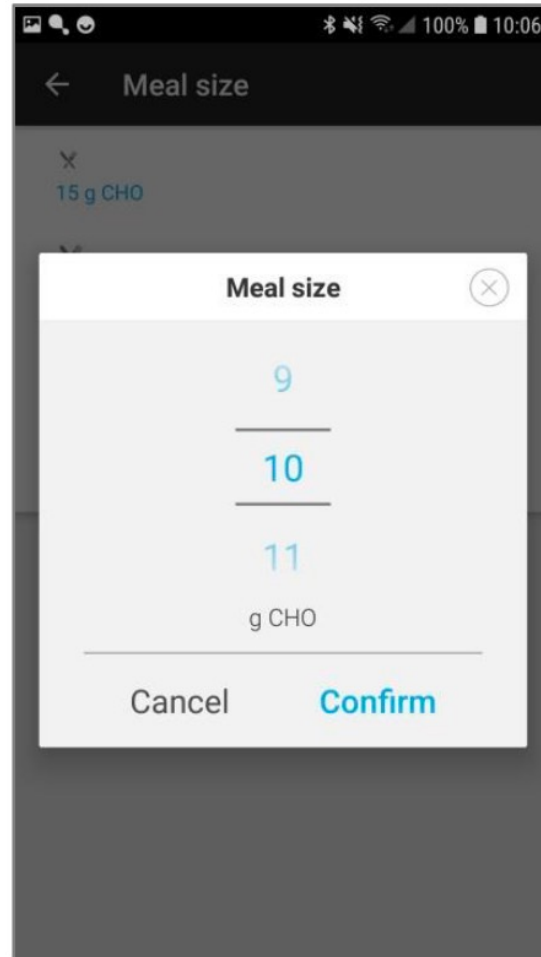
† Percentages of time in ranges are based on limited evidence. More research is needed.

§ Percentages of time in ranges have not been included because there is very limited evidence in this area. More research is needed. Please see *Pregnancy* section in text for more considerations on targets for these groups.

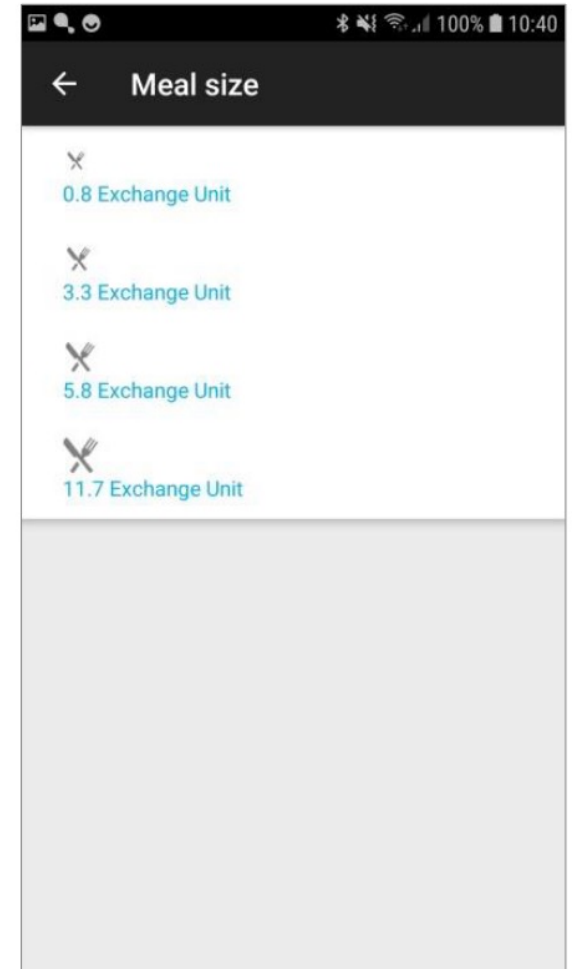
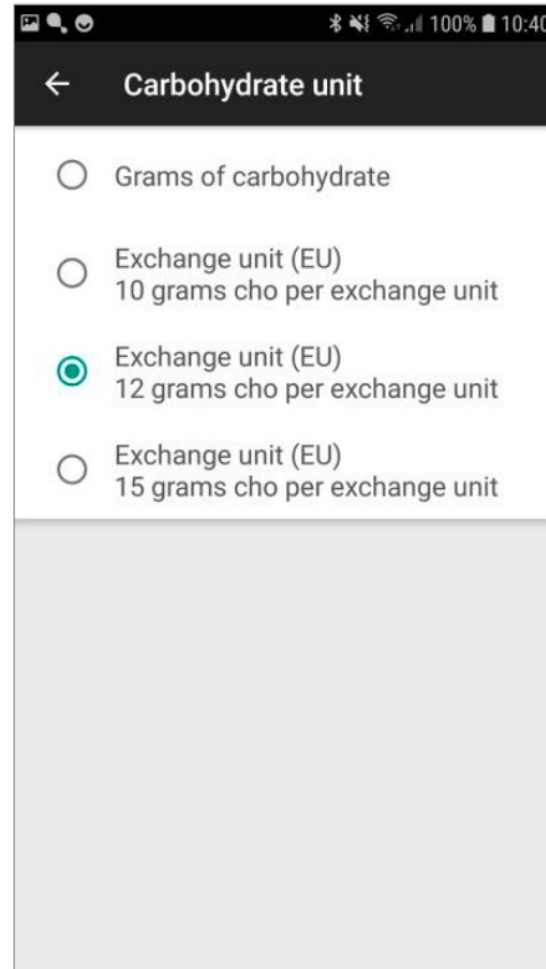
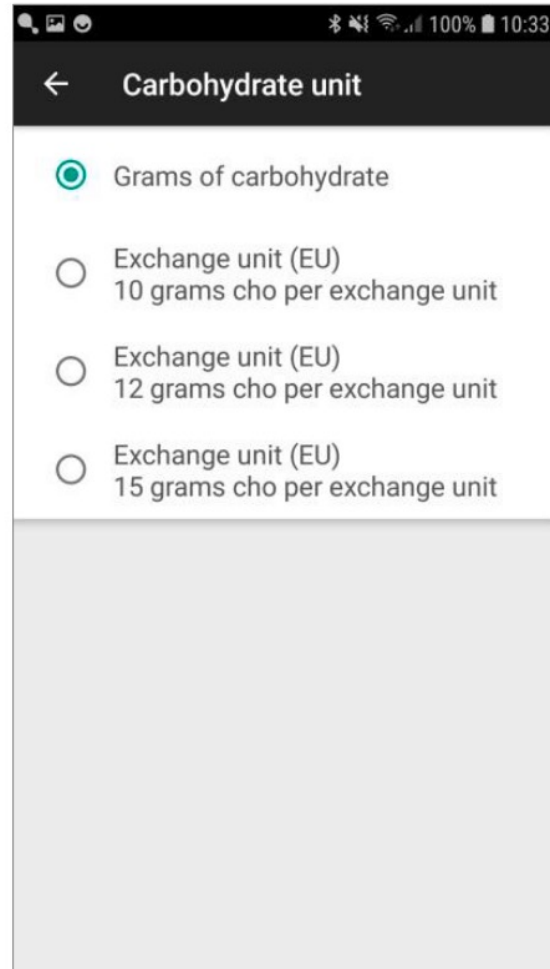
* Includes percentage of values >250 mg/dL (13.9 mmol/L).

** Includes percentage of values <54 mg/dL (3.0 mmol/L).

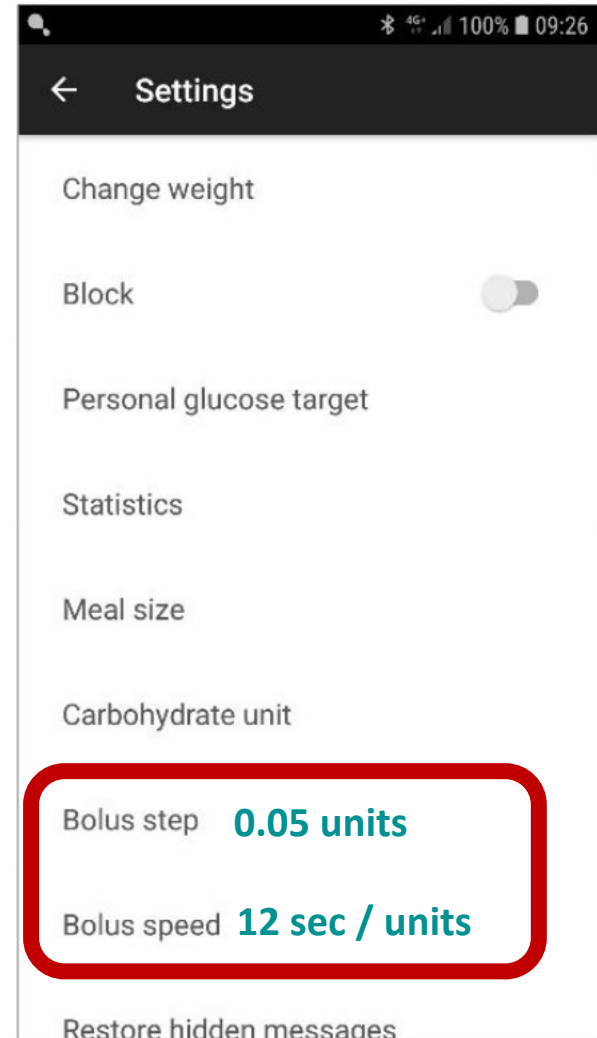
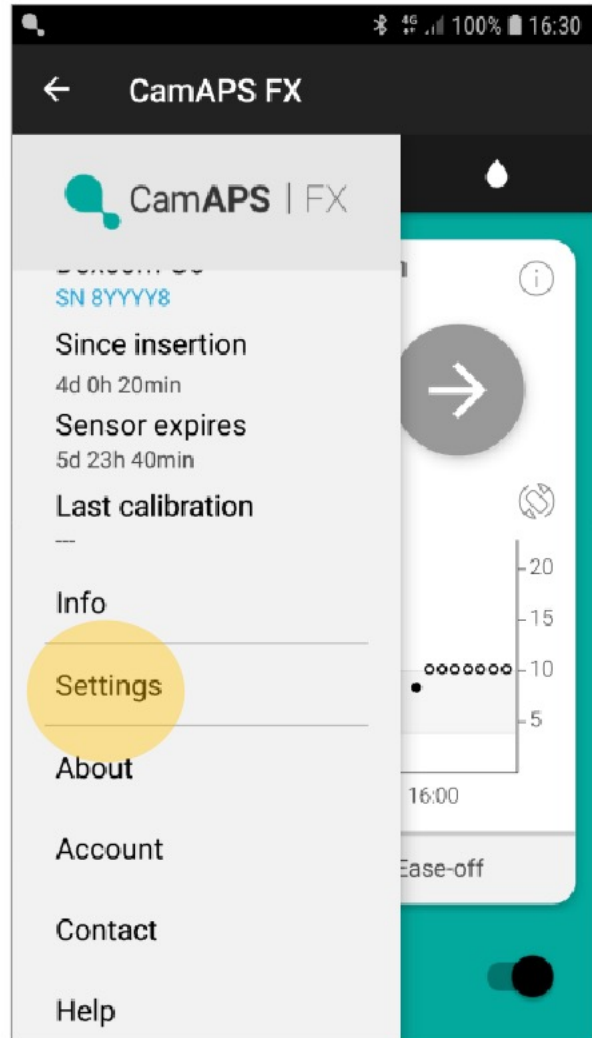
Meal Size



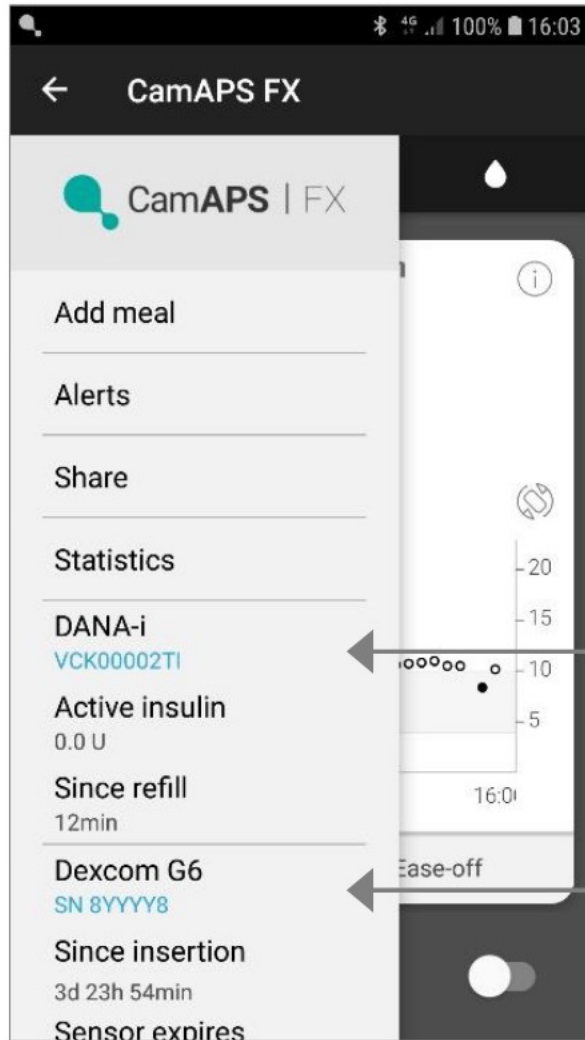
Carb grams or exchanges



Last few things on settings menu

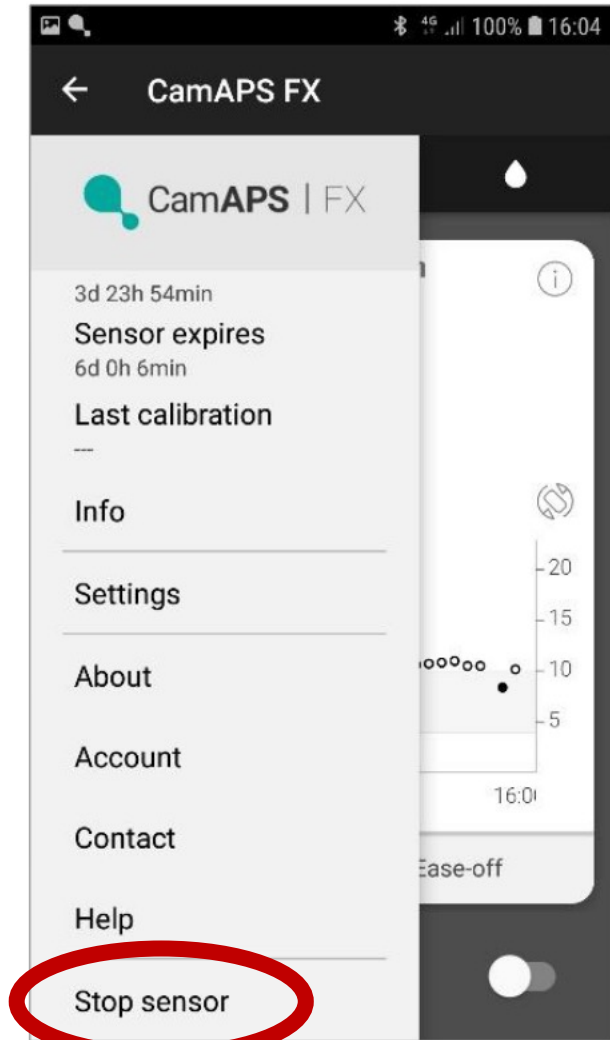


Stopping Dexcom sensor



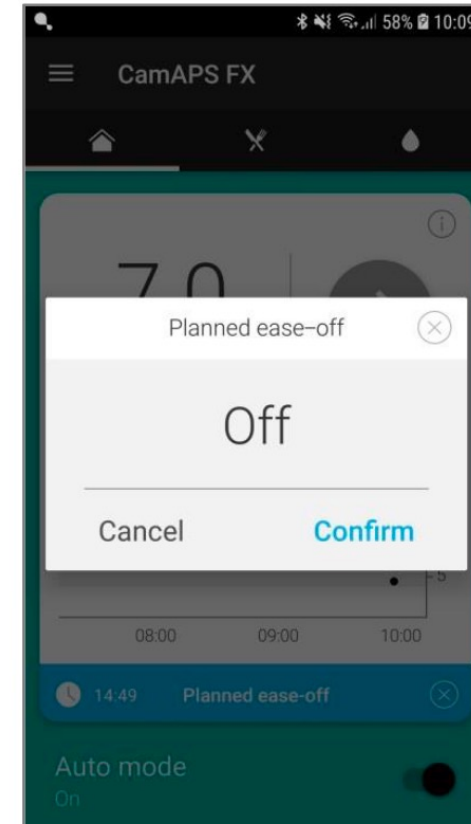
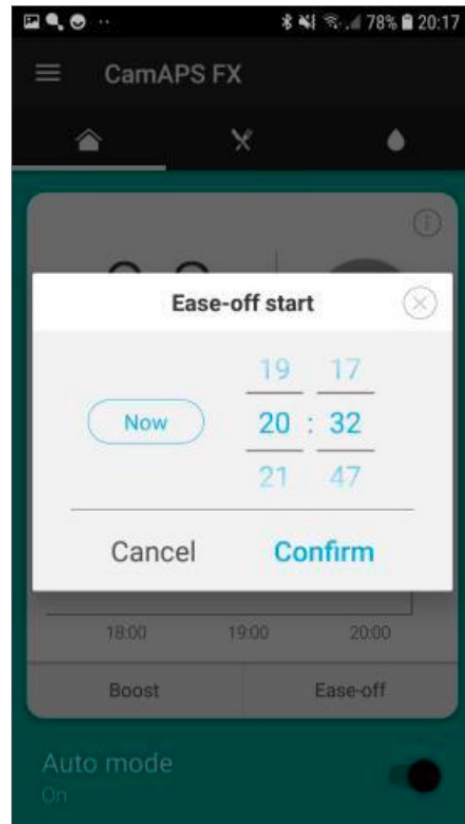
Pump related section

CGM related section

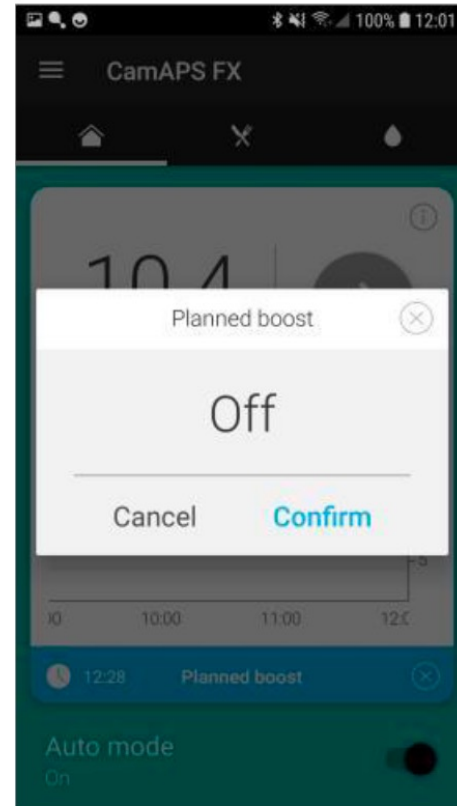
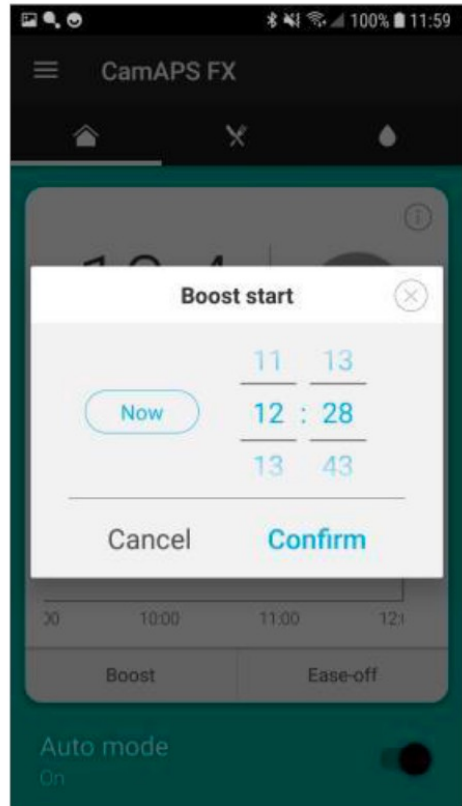


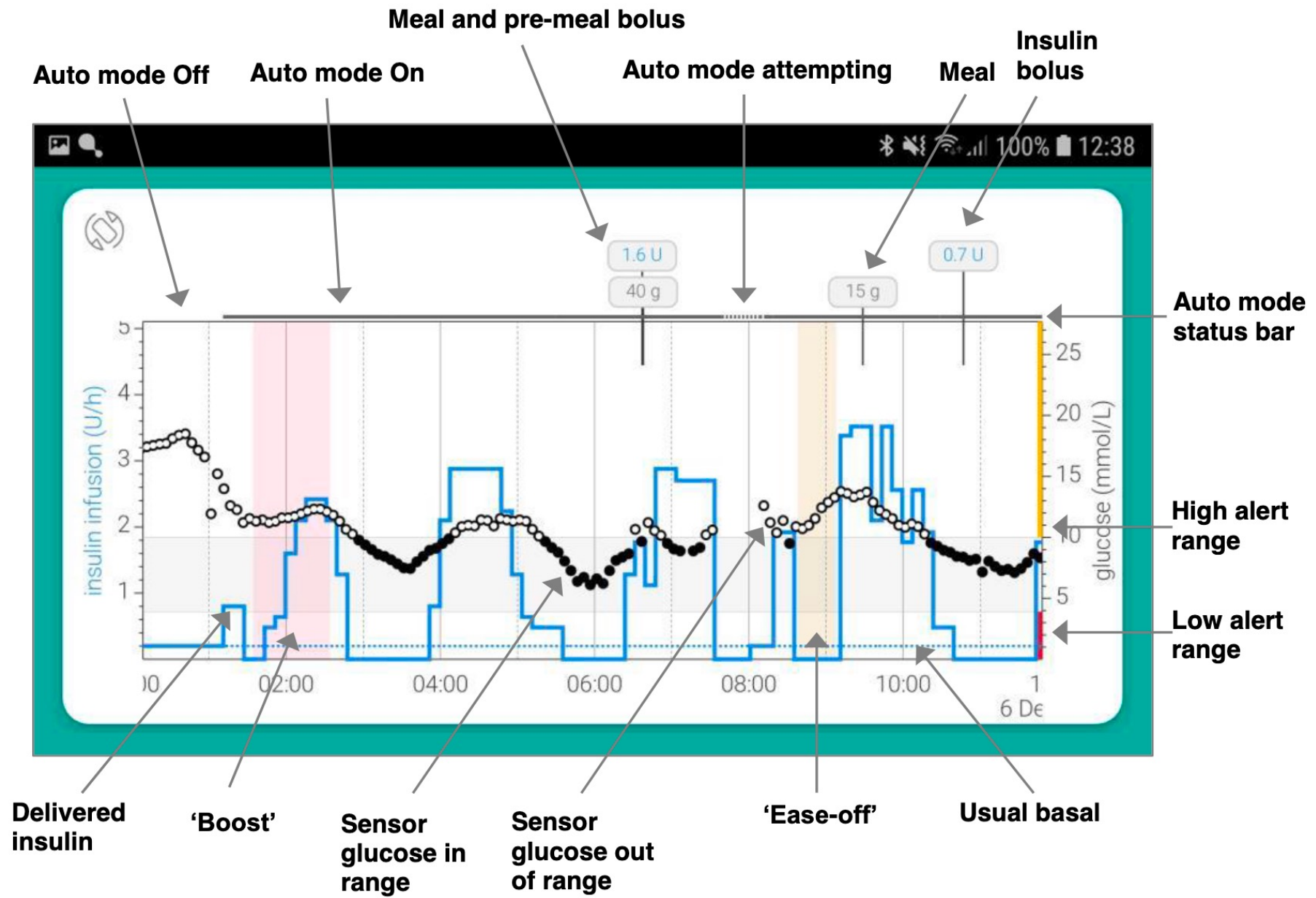


Using “Ease-off”



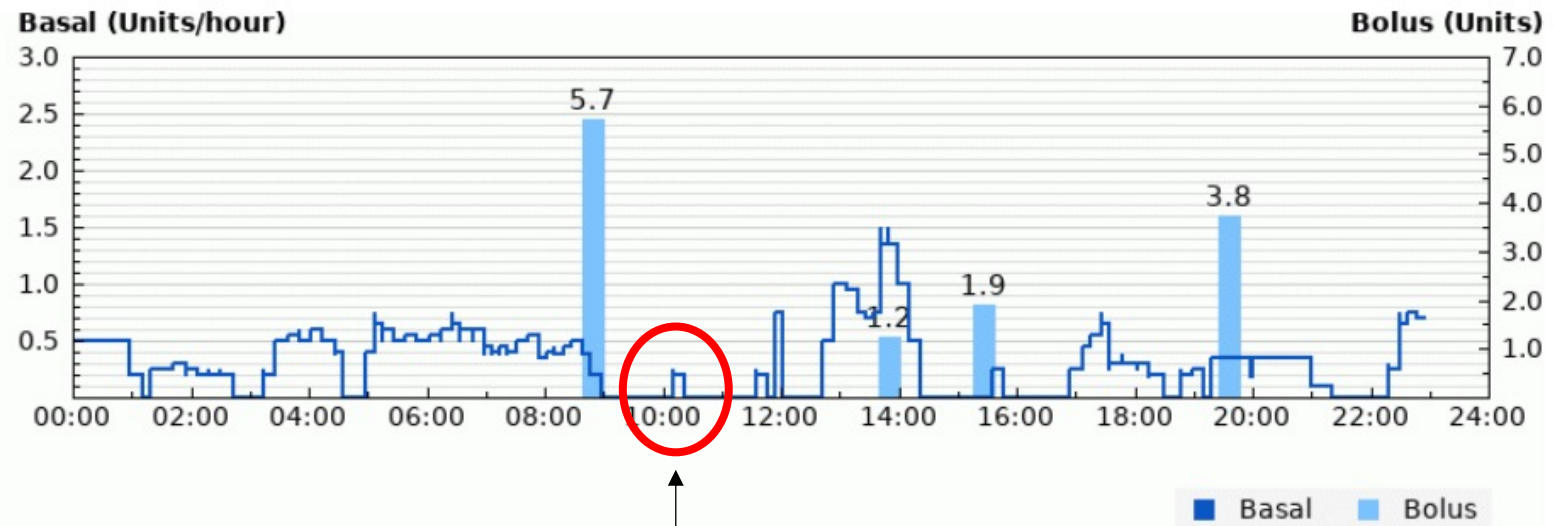
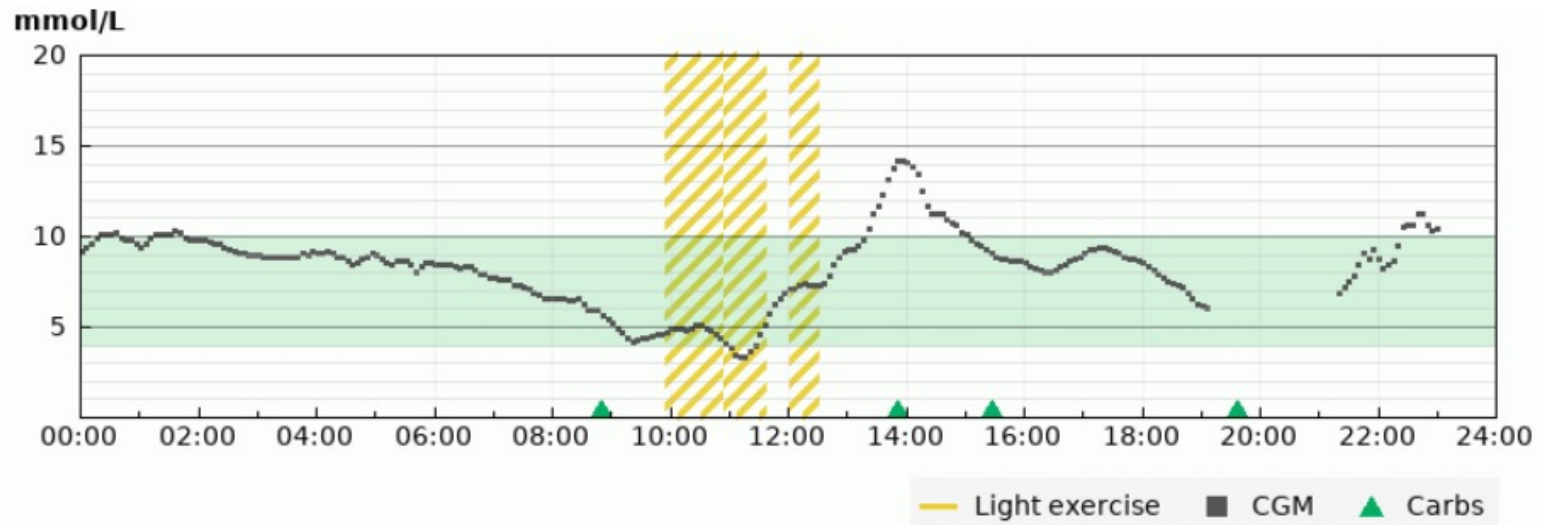
Using “Boost”





“Ease-off” and “Boost” in action...





Insulin pulse to keep tubing patent

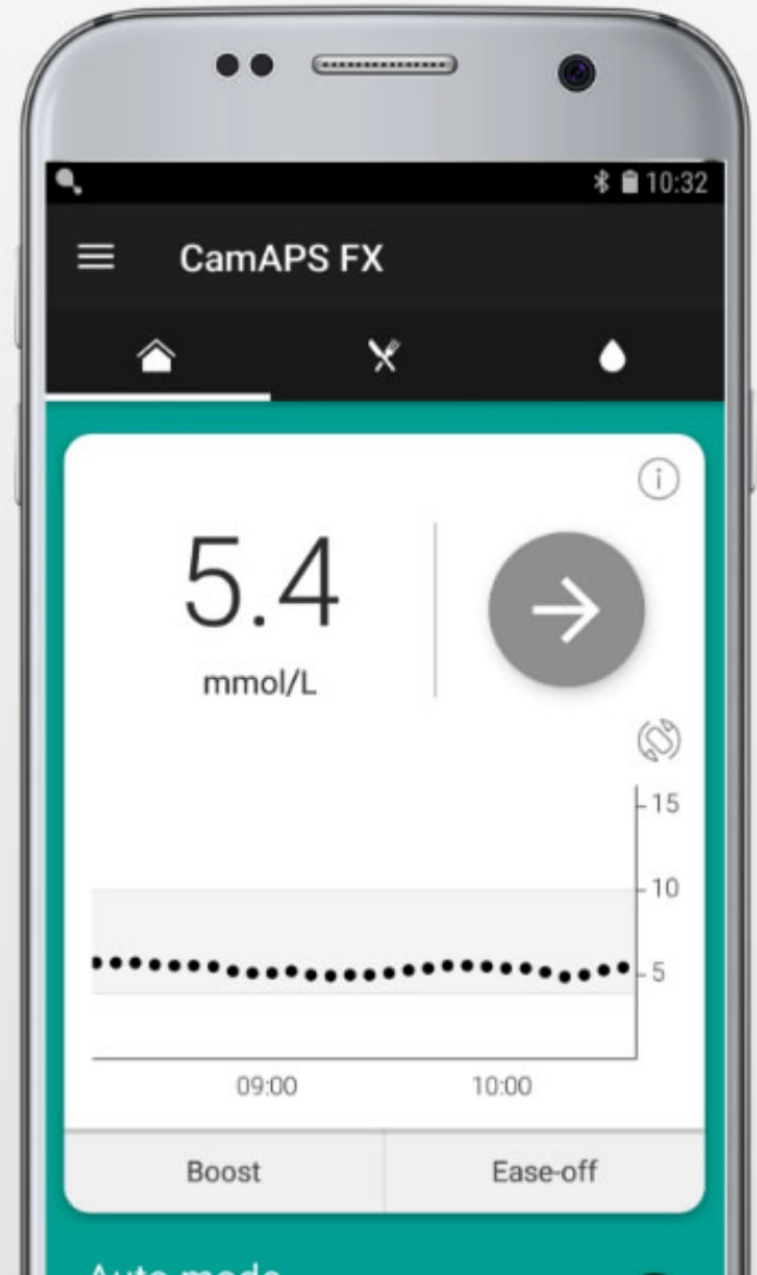
Practicalities

Suspend insulin delivery

- ✓ more than **15 minutes** disconnected
- ✓ suspend on Dana Pump
- ✓ app alerts every 30 minutes when pump suspended

Carb Ratios

- ✓ adjust on the Dana Pump

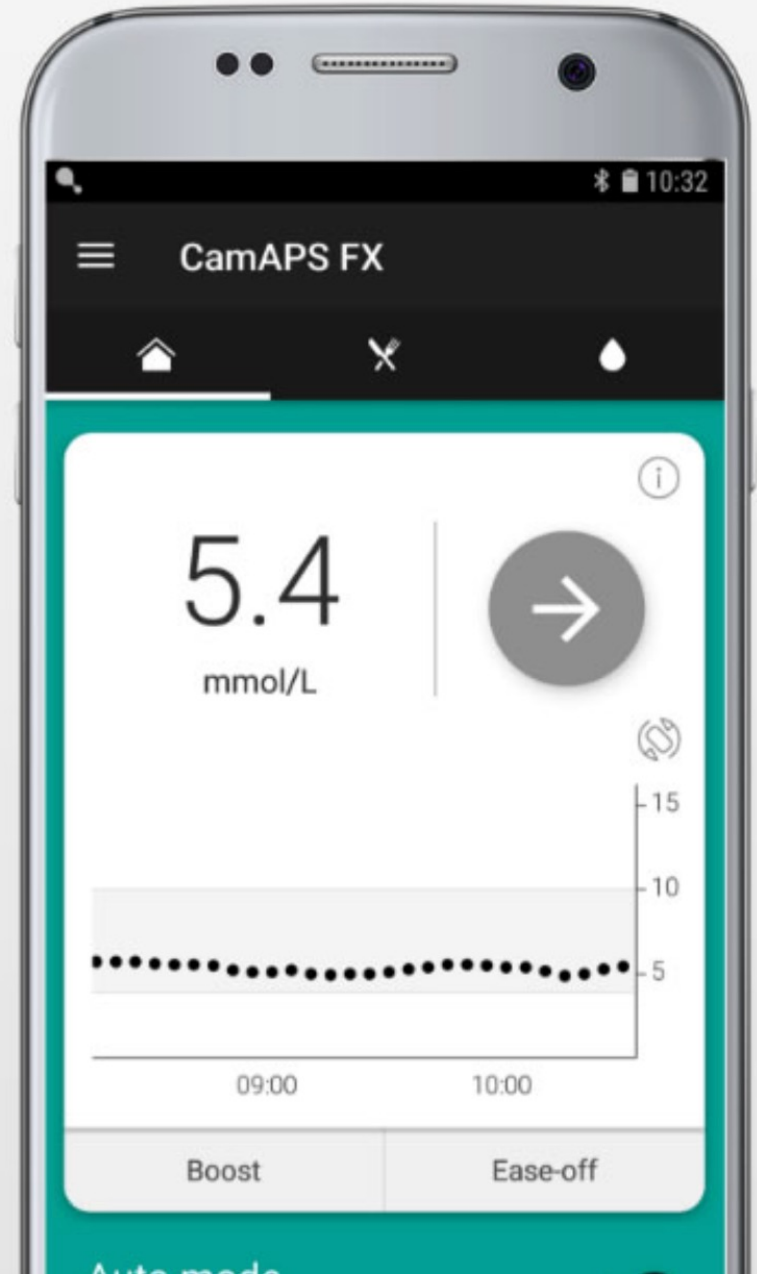


Practicalities

Minimising connectivity issues:

- ✓ Bluetooth range < 6m
- ✓ carrying phone in the day time
- ✓ charging phone at night
- ✓ switching phone off and on regularly
(? at set / sensor changes)

App's **Help** menu has link to **CamAPS FX user manual** = great troubleshooting guide



Help?

CamDiab customer support:

✓ support@camdiab.com

✓ 020 3695 3780

Closed FB groups

✓ CamAPSFx for kids

✓ CamAPS users

