

Pioneer DreamCare Dr Glucose Non Invasive 先锋一言糖 无创测糖仪

Guide

使用指南



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- The product name and trademark is reserved to the original manufacturer. Please do not use the product in public without authorization.
- 產品名稱及商標均為原廠所有，未經授權，請勿公開使用



- Dr Glucose is a health information detection device. The detected data cannot be used to replace the diagnosis, counsel, or advices provided by doctors and physicians.
- 本產品為優糖精量健康助理非醫療器材，這些數據不可取代醫師的看診、諮詢、診斷或建議的治療。

English instructions / 中文说明

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Thank you for Choosing Dr Glucose!

This manual contains comprehensive information about our product, precautions and many more.

Please read it carefully before using.
We hope you enjoy our product.

感谢您选用无创测糖仪!

用户指南内有关于无创测糖的产品讯息,特性和使用方法。在使用之前,请详读此用户指南。祝您使用愉快!

Dr Glucose, is useful for obtaining many body health data.

It is non-invasive, so you will not feel any pain during testing. You can also use it several times a day to keep track of your body health. Through countless laboratory-based experiments and combination of integrated sensor technology, Dr Glucose is also to collect various health data.

无创测糖仪能够透过撷取很多身体的健康信息。产品本身为无创,所以使用者不需要担心会感到有任何痛楚。亦可实现一日多次的健康检测,达到随时随地健康检查的效果。本产品采用高度集成技术和多种血糖测试方法融合技术,可以检测并收集多种参数。

Power Management/电量管理

- 1) Press power button to switch on Dr Glucose. 2) Dr Glucose will automatically shut down in 3 minutes without using.
- 3) Dr Glucose will automatically shut down in 10 seconds after testing.
- 4) Testing is not allowed during charging.
- 5) Press and hold power button for 3 seconds to switch off Dr Glucose.

- 1) 轻按开机键启动无创测糖仪
- 2) 无创测糖仪闲置 3 分钟后,将自动关机
- 3) 无创测糖仪测试完毕后,将在 10 秒钟后关机
- 4) 充电时请勿使用无创测糖
- 5) 将电源键持续压按 3 秒即可关机

**A. Power LED 工作指示灯:**

When Dr Glucose is switched on, LED will lit in blue.
无创测糖仪处于开机状态时, LED 会亮蓝灯

B. Ventilation area 散热区域:

The system can be cooled here.
让产品有更好的散热功效

C. Power Button 开机键:

When pressed, Dr Glucose is switched on.
启动无创测糖仪的按钮

D. Micro USB port 界面:

Dr Glucose can be charged here.
无创测糖仪的 USB 充电孔

E. Reset Button 重置键:

When pressed, Dr Glucose is reset to factory setting.
重无创测糖仪至原厂设定

F. Bluetooth LED signal 蓝芽指示灯:

When connected to a smart device, LED will lit in blue.
与产品做蓝芽链接时, LED 灯将亮蓝灯显示

- 1)Temperature range: 20 - 27 degrees
- 2)Humidity range: 20% - 70%
- 3)Atmospheric Pressure Range:700-1060hPa
- 4)Avoid direct contact with sunlight
- 5)Avoid contact with toxic or flammable gas
- 6)Working Rated Voltage: 5V
- 7)Working Rated Current: 1A

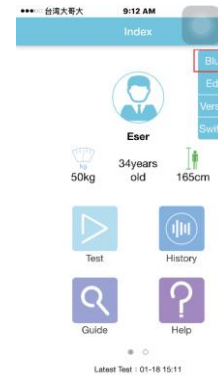
- 1) 环境温度 : 20 - 27 摄氏
- 2) 环境湿度 : 20% - 70%
- 3) 气压范围 : 700hPa ~ 1060hPa
- 4) 避免直接受到阳光的直接照射
- 5) 避免放置于有毒物体或易燃气体环境下使用
- 6) 工作额定电压 : 5V
- 7) 工作额定电流 : 1A

Please be aware of the following, or test result will be affected

- 1) Use Dr Glucose only on a flat surface.
- 2) Keep your nail up during the testing process.
- 3) Suitable finger temperature: 29 - 35 degrees
- 4) Test Interval is 10 minutes, minimum time required for heat to be fully dissipated from the sensor.
- 5) Do not apply Isolation products such as nail polish and sunblock before testing.
- 6) Allow cooling down after sports for at least 1 hour.
- 7) Allow cooling down after bathing or washing for at least 30 minutes.
- 8) Test after consuming alcohol is not allowed.
- 9) **Please put in finger into sensor, don't press down while testing otherwise it may affect test result.**
- 10) **Our APP is unable to accommodate to all existing Android smart phone models, if you encounter dropping characters or unable to input text, please set your font size to medium.**

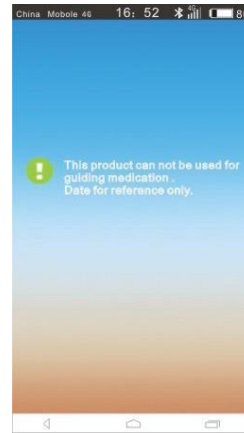
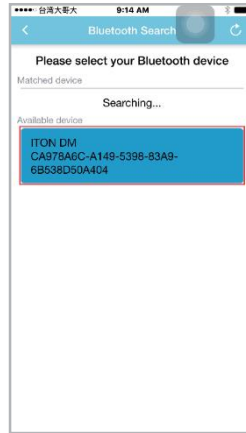
使用前请注意以下事项，否则将影响测试结果

- 1) 请将无创测糖仪摆置于平面上使用
- 2) 检测时请将指甲面朝上，伸至探头底部
- 3) 检测时手指需保持在 29 - 35 摄氏温度
- 4) 连续检测需间隔至少 10 分钟
- 5) 勿使用指甲油或防晒油等隔离乳液
- 6) 运动过后需至少休息 1 小时
- 7) 洗澡或洗手后需至少休息 30 分钟
- 8) 测试前请勿喝酒
- 9) 测试时手指轻放勿重压感测探头以免数据失真
- 10) 因 Android 手机型号多样化,如软件 APP 无法适应,出现掉字或无法完整显示或无法输入时,建议将字体大小改成中等



1. Make sure your iOS device's Bluetooth is switched on.
2. Open up Dr Glucose app, and logged into profile, on the upper right hand corner of the app, there is an option button. Once pressed, a dropdown list menu appears.
3. Select Bluetooth.

1. 将蓝牙开启
2. 开启无创测糖软件 APP,并且登入您的账户,登入后在画面的右上角,点选更多选项键
3. 点选蓝牙搜索

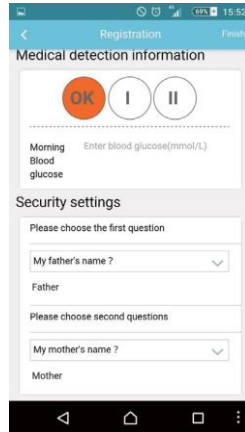
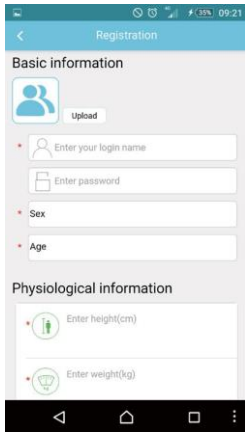


Splash Page APP 开启画面

4. If the device's Bluetooth is switched on, it should be able to detect Dr Glucose device, named ITON DM: xxx. Press it to connect. Once connected, it should be highlighted in blue as shown in the picture below.
 5. You should be able to run a test once the procedure is completed.
4. 请确认蓝牙已开启, 如有开启, 用户可点选无创测糖机器代号: ITOM DM: xxx, 点选将它联结至手机,
5. 点选完毕后, ITOM DM: xxx 反蓝表示选择完毕, 用户方可开始进行测试

Every time Dr Glucose APP is opened, user will be reminded that data shown at the end of the test is for health trend monitoring and referencing only.

每次无创测糖 APP 开启时, APP 会提醒用户本产品主要用来追踪健康趋势以及管理, 并非医疗用途。



Registration 注册画面

First time user will be required to insert the following
第一次使用无创测糖并注册的用户需要输入以下讯息:

- 1)Name/姓名
- 2>Password/密码
- 3)Gender/性别
- 4)Age/年纪
- 5)Height/身高
- 6)Weight/体重
- 7)※Diabetic History/糖尿病史
- 8)Two safety questions/两项安全问题

※Diabetics info include
type-1, type-2 diabetics,
and fasting glucose level.
※糖尿病史讯息包括用户
是一类或二类糖尿病, 以及
清晨血糖值

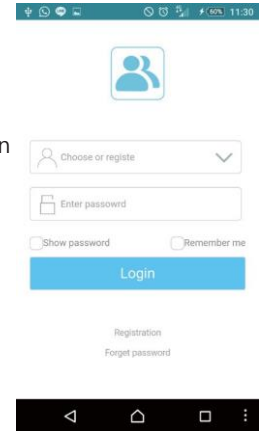
Once completed, click finish on the upper right to
complete registration.

当数据都输入完毕过后, 点选右上角的完成结束注册流程

Login Page APP 登入画面

User will be required to login
here by choosing his profile
and password here.

开启 APP 画面时, 用户需要选
择账号并输入密码, 即可登
入。



User List 用户列表

By pressing "choose user",
user can select his/her own
profile from the list.

点选"选择用户", 从名单中选择
用户自己本身储存的帐户。

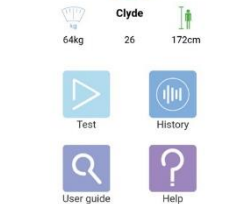
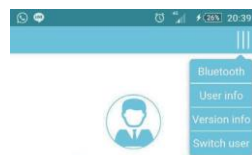




User List 用户列表

By pressing the rubbish icon, user can delete unneeded profile from the APP. Password is needed in order to delete the profile.

点选垃圾桶图标能够让用户删除不再需要的帐户, 用户必需输入帐户的密码方可删除。



Insert Password 输入密码

When you have inserted incorrect password, you will not be allowed to proceed. The box will be highlighted in red.

如果密码输入错误时, 用户将无法登入, 密码字段会显示为红色警惕用户。

Main Menu APP 主画面

Once user has logged in, user enters the main menu. If the user needs to log out, he/she can do so via the upper right 'more options' button.

登入后, 用户将来到 APP 主画面。如用户想要登入, 可透过右上角的『更多选项』键做登入的动作。



Shows the weight of user.(in kg)
显示用户的体重值(公斤)



Shows the height of user.(in cm)
显示用户的身高值(公分)



Testing: Enters pre-testing interface
检测: 点选进入测试前的接口



History: User can check his past test results here.
历史记录: 点选查看此用户以前的测试纪录



User Guide: User notifications can be read here.
用户指南: 点选查看用户注意事项



Help: Info about Dr Glucose, all tested index, health can be read here. 帮助: 点选查看产品工作原理, 和健康数值 的意义以及其他讯息



Self-Calibration: User can start calibration process here.
自标定: 点选使用 30 天自我校准模式



Clear self-calibration: User can clear all self-calibration setting.
清除自标定: 点选清除所有校准的数据

Pre-testing 测试前接口

Every time the user would like to test, he/she needs to check the appropriate meal conditions and medicine (multiple choice applies), and press "begin test".

每次用户测试前,必须选取最符合当下状况的饮食状态和用药状态后(可复选),再点选开始测试。



Empty

Fasting glucose: User has not eaten anything for 8 hours or more.
清晨空腹: 用户 8 小时以上未进食



1 hour

1 hour has passed since user's previous meal. Test to see Glycemic index is high or low, varies from age and metabolism rate. The value is not real glucose. 餐后一小时: 用户离上次进食已超过一小时 测试升糖指数高或低, 其数值依据年龄及代谢速度有不同变化



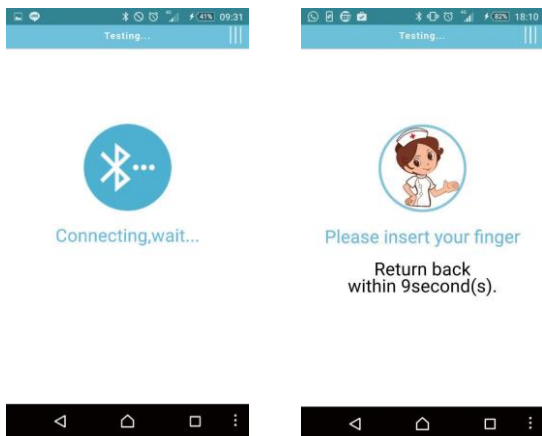
2 hour

2 hours have passed since user's previous meal. Test to see real blood glucose value. 餐后两小时: 用户离上次进食已超过两小时 测试得到真正的血糖值



3 hour

3 hours have passed since user's previous meal. Test to see if user is hungry or low blood glucose. When in red, user is on low glucose; when normal, user is simply hungry. Varies from age and metabolism rate. 餐后三小时: 用户离上次进食已超过三小时以上 用户能测试 当下状态为饥饿或低血糖, 如数值结果为红色, 表示 用户为低血糖; 如数值结果为正常, 表示用户为饥饿状态, 测试 数值依据年龄及代谢速度有不同变化



System processing page 设备流程

After user presses 'Begin test', he/she may see the messages below.
在点选开始检测过后, 用户可能会遇到以下状况:



Bluetooth connecting in progress
蓝牙设备连结中



Please insert your finger
请用户伸入手指

※Please put in finger into sensor, don't press down while testing otherwise it may affect test result.

※测试时手指轻放勿重压感测探头以免数据失真



Environmental temp.
too low or high 环境
温度过低或过高



Environmental humidity
too low or high 环境湿
度过低或过高



Skin temperature too
low or high 体表温度
过低或过高



Data collecting error
has occurred 数据采集
异常, 错误提示



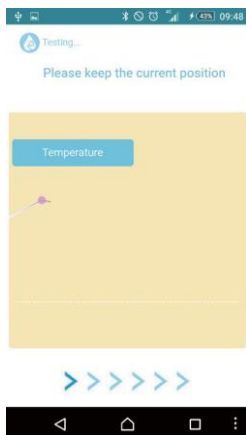
System has failed to connect to device.
搜寻设备失败



10minutes interval needed between
two tests. 测试的间隔必须至少超过
10 分钟



Sensor temp error has occurred.
测试传感器温度错误

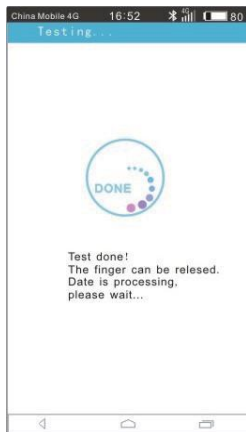


Testing in Progress...

测试中...

After user has inserted his finger into the probe, APP will automatically start the testing process, screen will start running animation, total of six groups.

当用户将手指伸入探测器,APP将会开始自动检测。检测动画将会呈现九种健康指标。



Test Done!

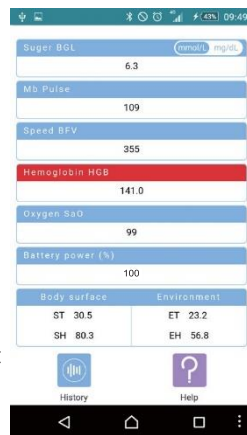
测试结束!

After the test has been completed, user can remove his/her finger. The data is processing for a brief moment before showing all the health data.

辛苦了! 测试结束后,用户可以 将手指收回。系统需要一点时间 将收集到的健康指标呈现出来!

Test Results screen

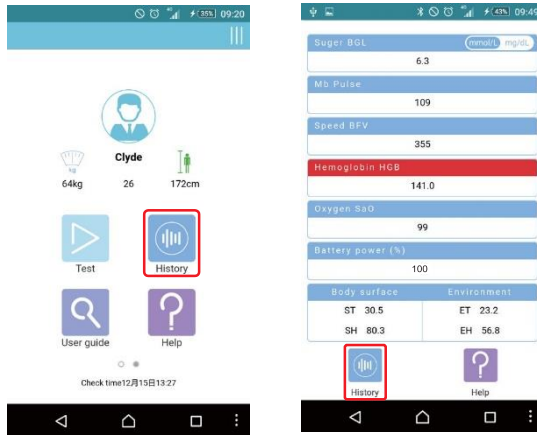
At result screen, all nine health data are shown: Blood glucose level, pulse, blood flow velocity, hemoglobin, oxygen saturation, body surface temp and humidity, environmental temp and humidity. Hemoglobin is highlighted in red because it is outside normal range. Battery life is also shown.



测试结果

九项健康指标一目了然! 血糖, 脉搏, 血流速度, 血红蛋白, 血氧饱和度, 体表温湿度, 环境温度湿度。由于血红蛋白数值落在不正常的范围,所以打上红色提醒用户。无创测糖的剩余电量也有显示出来。





Via either test results screen or main screen to access the 'history' page. User may access his/her past test results to better monitor his/her health trends.

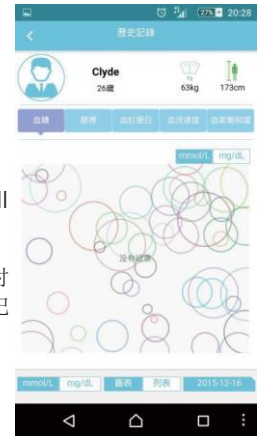
用户可以透过测试结果页面或 APP 主页面进入历史纪录页面。点选历史纪录页面, 用户可以读取之前检测过的任何一项健康数值, 随时了解健康指标的趋势, 并随之调整饮食、运动量。

History Interface (Empty)

无历史纪录

When user has not run any test in a new day, and no data has logged yet, the bubble animation screen will appear.

每当日期刷新, 用户尚未测试时, 历史纪录页面会显示『没有纪录』, 并呈现泡泡的背景动画。



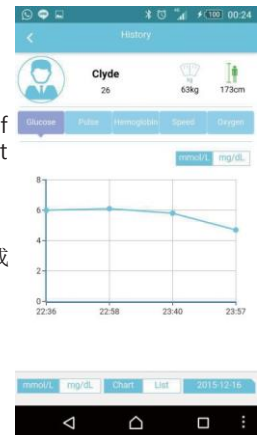
History Interface (Graph chart)

曲线型历史纪录

User can toggle two types of interface, either graph chart or data list.

(Highlighted in red)

用户可以选择用图表曲线型, 或列表型来检视历史纪录。(点选红框内的范围做切换)



Date	2015-12-16			
Time	22:36	22:58	23:40	23:57
Result	6.0	6.1	5.8	4.7
Status				
Glucose	24.9	21.6	19.6	20.9
Pulse	39.0	43.3	49.2	46.2
Hemoglobin	31.3	30.2	28.4	26.9
Speed	61.1	65.4	70.6	78.5

History Interface (Data Listing) 列表型历史纪录

User can press on each health parameter, such as glucose, pulse, hemoglobin, speed, oxygen, to view each specific health data test results.

用户可以点击每个健康指标来得知每一项测试的数据结果。

Date	2015-12-16		
Time	09:49		
Result	99		
取消	确定		
年	月	日	
2013	10	14	
2014	11	15	
2015	12	16	
2016	17		
2017	18		

Date Toggling 选择日期

On the lower right, user can switch the dates (year/month/day) to recall the test results on that specific day.

用户可以在右下角切换日期(年/月/日)来查找特定日期的测试结果。

As everyone has different body metabolism rate, there is a small part of population which the test results are largely deviated from the actual results. Their results can be self-calibrated to improve the similarity.

Step1: Choose any meal status timing (eg. fasting glucose for 8hours or more)

Step2: Measure using the user's most trusted glucose device, and insert the test result into Dr Glucose after the user has completed testing.

Step3: User must achieve 20 tests in 30 days in order to complete self-calibration process.

因为人体差异, 少部分人群的测试结果偏差较大, 可以透过自校准拉近相似度。

第一步: 选定任一时间点, 如清晨空腹。

第二步: 在这个时间点, 利用用户最信任的血糖仪来量测血糖值, 把测得的血糖值输入至无创测糖, 再进行量测。

第三步: 用户必须在 30 天内完成 20 次测试来完成自校准。



Pre-Calibration Interface 校准前界面

Pre-Calibration Interface is very similar to pretesting phase, except two additions. After the fields are completed, proceed to test as per normal.

Red box A:

Test counter reminds the user to complete 20 tests in 30 days.

Red box B:

For user to insert the result obtained from user's most trusted glucose device. (in mmol)

校准前接口和测试前接口相似，增加两项目。输入完成后方可进行测试。

红格子 A: 告知用户在 30 天内尚须完成的次数

红格子 B: 输入用户最信任的血糖仪测试出来的血糖值 (mmol)

- 1) Before use, calibrate Dr Glucose to ensure it works normally.
- 2) Protect Dr Glucose from water. Once splattered, cut off the power supply, switch off and contact service.
- 3) Keep Dr Glucose clean. Use a soft damp cloth to clean and sterilise. DO NOT use steam to sterilise. Protect nonwaterproof finger clip probe from any liquids.
- 4) DO NOT sterilise under high temperature or disinfect with electron beam or radiation.
- 5) Ensure Dr Glucose is not disturbed by strong EMI, such as from a radio transmitter or mobile phone.
- 6) Before use, check any damage that may harm personal safety or affect Dr Glucose performance. Once per month or more frequent checks are recommended. If any damage is found, replace the damaged part immediately.
- 7) DO NOT store Dr Glucose near metal objects to avoid accidental short circuiting of the inbuilt battery.
- 8) DO NOT use Dr Glucose immediately after taking it from a cold to a warmer and more humid place.
- 9) Keep Dr Glucose from vibrating, corrosive, and flammable materials. Protect from extreme temperatures and humidity.
- 10) Dr Glucose must be maintained by authorised and qualified engineers. DO NOT disassemble.
- 11) Do not throw, hit, or scratch surface of Dr Glucose.
- 12) The power wire needs to be connected to a two-wire socket. DO NOT use a defective socket. DO NOT replace the power wire arbitrarily. Place wires, conduits, and all cables properly.
- 13) Install Dr Glucose at a fixed place to avoid injuries and damage caused by falling.
- 14) DO NOT block the Dr Glucose's ventilation to ensure effective heat dissipation.
- 15) Before testing, ensure Dr Glucose is working normally, in a suitable environment.
- 16) Check and replace frequently used accessories and cables; Dispose damaged parts as electronic waste properly.

- 17) DONOT use in a place with flammable gas, such as oxygen-mixed anesthetic.
- 18) DONOT take out the battery. DONOT throw the battery into the fire, it may explode.

- 1) 使用前请校准本产品, 确认其正常工作。
- 2) 避免被水溅湿, 若本产品被溅湿, 请立刻切断电源并联络维修人员。
- 3) 保持产品清洁, 以软布沾清水拧干擦拭。整机和探头严禁使用蒸气清洁。指夹式探头非防水, 严禁液体流入。
- 4) 禁止使用高温消毒, 或使用电子射束和 γ 放射杀菌。
- 5) 确保本产品使用环境不受较强的电磁干扰源的干扰, 例如无线发报机或移动电话等
- 6) 在使用前, 用户必须检查产品确保没有明显可能影响人身安全或仪器性能的损坏。推荐的检查周期为每月一次或更短时间。如果发现明显的损坏, 请更换损坏零部件。
- 7) 在收纳时, 请不要将金属物体与产品混放在一起, 以免产品内置电池发生意外的短路。
- 8) 当产品从寒冷环境转到温暖、潮湿的地方, 不要立即使用。
- 9) 保持操作环境无震动、无腐蚀、无可燃物质, 以及避免过高或过低的温度和湿度。
- 10) 本产品必须由经过授权的合格工程师维修, 请勿擅自拆开设备。
- 11) 虽然产品主机和探头设计牢固, 抗摔抗震。但使用中应务必小心, 不能摔碰及表面划伤。
- 12) 电源线需插在有两线的插座上, 不要使用不良的插座。不要随意更换本设备的电源线。注意电源线、导管和所有电缆的放置。
- 13) 请将产品安装到固定位置, 避免跌落造成人员受伤或者产品损坏。
- 14) 本产品散热孔严禁堵塞, 以保证有效散热。
- 15) 操作者在使用本产品监测之前, 必须确认产品处于正常的工作状态和操作环境下。
- 16) 定期检查重复使用的附件是否损坏, 电缆等是否连接可靠, 必要时需置换并按电子废物妥善处理已坏附件。
- 17) 不要在有可燃性气体的地方使用, 例如有氧气混合的麻醉剂。
- 18) 请勿将电池取出, 切勿将电池丢至火中, 以免引起爆炸。