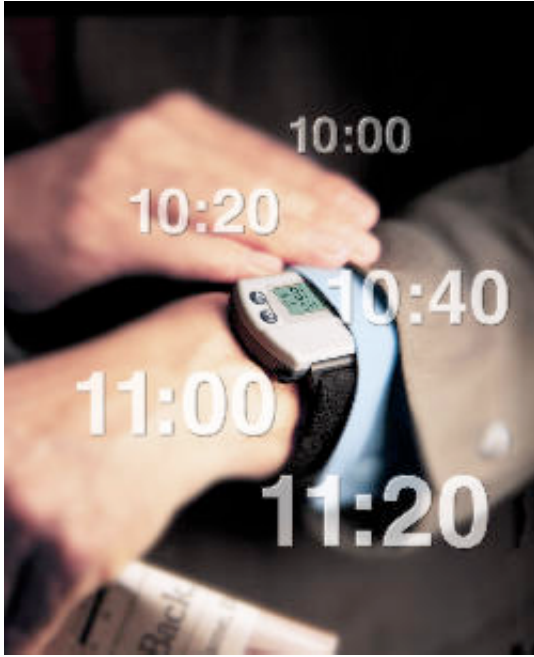


Cygnus GlucoWatch

Information about the GlucoWatch Biographer by Cygnus

Photo of a GlucoWatch Biographer



Matthew Cooper tests 3 GlucoWatches simultaneously as part of a medical trial in 2001



[[See photo bigger](#)]

This new device for measuring glucose has been authorised for use in Britain. The GlucoWatch Biographer does not measure blood glucose directly, but measures slight chemical reactions on the surface of the skin. US manufacturers Cygnus report that it is only being released gradually at selected centres around the UK. It potentially has the ability to help insulin pump users to fine tune their overnight basal rates.

The meter is worn like a wrist watch, and has a sticky pad which keeps the watch in firm contact with the skin. The pad lasts for 12 hours, and the meter gives a reading every 20 minutes. It is reported that the next version of this GlucoWatch, which is already being tested in America, will give readings every 10

minutes.

The meter is not currently available free on prescription. In June 2001, the prices quoted were £350 for the meter, and £50 for a box of 16 testing pads which can only be used once.

For more information, see <http://www.glucowatch.com/uk> or ring UK 0800 028 5256.

Comments from a selection of people who have used it:

Neil Deacon

Neil Deacon <nd75596@hotmail.com> tried the GlucoWatch in May 2001, and he writes:

First thing I noticed was how small it was: it's about the half the size of a credit card.

The main purpose of getting the GlucoWatch was to test my blood glucose readings overnight. It's fine getting up and testing your blood but I feel this does not give a proper overall view of your levels.

What you need to do before monitoring your blood glucose levels:

- First thing is to charge the AAA battery (supplied with the GlucoWatch). This takes 3 hours.
- Then you run a system check which takes 30 seconds. You should get a pass on this test.
- Then you squeeze the AutoSensor in a press for 10 seconds. This makes sure the gel is spread evenly over the sensors.

Once this is completed, you can remove the protective strip and place it on your skin. I tried it on my forearm, but this was in the way at night as I sleep on my arm. I then tried the top of my arm which was much better.

Then you begin the warm up process (3 hours!!!) and then run the calibration (take a blood test with your finger prick meter and enter the result into the GlucoWatch). 30 minutes later it will start monitoring your blood glucose levels.

Overall I was impressed with the GlucoWatch but it does take a long time before you actually get a test result out of the device. But the results are displayed so you can check them every 20 minutes.

I am in the process of sending the Gluco Watch back, as I said it works well but I think I had a reaction to the glue they use.

Richard Oppenheimer

Richard Oppenheimer <r.oppenheimer@btinternet.com> also tried the GlucoWatch in May 2001, and he writes:

I felt that the results were dubious in the extreme. Couldn't rely on them better than +/- 2 mmol/L (+/- 40 mg/dL). I did do an overnight run (very uncomfortable due to the intense itching you get from it every 5 mins as it does its stuff).

I wouldn't rely on its results to tweak overnight basal rates, which is a shame because adjusting basal profiles is just what you need it for.

The rash came up for me a couple of days later and took up to ten days to heal. Also it skips readings with the slightest disturbance in terms of change in temperature, perspiration and even using mobile phone in the same hand as you are wearing the watch. The warm up period isn't 3 hrs as they say, it's 3hrs then it's ready for calibration which takes a further 20 mins if you get it right first time.

If the [MiniMed continous monitor](#) was downloadable during its 3 days to a PC then if you could hire one it would be great for basal rate tweaking.

Chris Cairns

In July 2001 Chris Cairns <ccairns@haverford.edu> in the US had a more positive experience with the GlucoWatch:

The GlucoWatch is being sold in the UK. Fifteen centres in the US are enrolling initial patients, patients who use the watch regularly. Besides the two comments here, where are the reports from people who have used this watch? I would like some confirmation of my own beginning experience with this device. I bought mine in the UK. I do not live there. I am not part of a test or trial. I am involved in a self-test. Skin irritations are non-existent. It skips a reading for perspiration, ie when physically working or active. Otherwise it posts numbers that are completely within the ballpark. It is tracking consistently and within expected parameters (formed by my own knowledge and experience with diabetes). It records numbers all night, every twenty minutes. On a steady night you can scroll back in the morning and see how you glided through the night - 4.6, 5.2, 4.8, 5.7, 5.3, 5.2 etc. Alarm goes off for high or low (which you set yourself; so far mine is 9.0 and 4.4) and makes enough noise to wake you up. This item will be terribly useful to those who are on a pump or other forms of intensive management. Someone else on this board posted that their acquaintance reported that it was a "Godsend". This is my experience. This is a remarkable machine.

Phil Robson

Phil Robson's <phil@hospital2000.com> experiences:

I purchased a GlucoWatch in the UK and have been using it where I live and work, in Thailand, for the last few weeks.

I purchased the Watch for several reasons:

- To get a better idea of overnight *BG* levels
- To closely monitor post meal readings.
- To wear when travelling (I fly regularly.)
- To monitor effects of exercise / change in insulin regimen / change in diet etc. on *BG* levels.

Comments on use:

- I do get a red circular rash that lasts up to a week.
- Very sensitive to perspiration – I rarely get a reading walking around a relatively well air conditioned hospital building in Bangkok. Getting a reading outside in the heat and humidity is not possible.
- I get frequent DATA errors 40 mins to 80 minutes after an injection / meal. I wonder if this is due to rapidly fluctuating *BG* levels causing the problems?

Overall:

Given that this is new technology, I find the information invaluable to helping me maintain optimised *BG* control. I look forward to the day when a PC interface is developed to download readings and the day when the instrument can provide information during exercise or when walking around the streets of Bangkok!

Donald ODonnell

Experiences of Donald ODonnell's <Donald7@btinternet.com>, 23 Sep 2001:

I have had the watch for 6 days. The first day I had a nurse come to go through the running of it and I found it not too hard. I did not have a problem using the watch and I was hoping that it would work for me as I had heard that there has been a lot of people that it has not worked for.

Anyway – back to the first day. I thought the watch was working until after a period of 6 hours I remembered there is a warm up period of 3 hours. I started to get SKIP PRSP and the time come up on the watch. This means a perspiration skip. The watch can not function in damp or hot places. (Just a note: I work in a kitchen.) I got 3 readings of the same. In fact the watch did not work for me the first day.

The next time I put the watch on was that night – 3 hours before bed – to see if it would work through the night. I got a few readings in the early part of the night. The night passed and morning arrived. At 6.30am it was time for me to get up for work. I had a look at the watch reading and I did get a good few readings, till I started to get low blood sugars. The watch must have alarmed but I did not hear it and, after a few SKIP PRSP had showed up, it turned off. I could still see all the readings that were on the watch before I started to sweat my way to morning.

I have been getting SKIP readings for a couple of days. I have been on the phone to the company please note a free call everyday. I have found the guys and gals on the other end very kind and helpful.

Today I was at home. No work – just a day at home. TV and a friend around for lunch. How did I get on today with the watch? Well – I got over 23 readings. However, near the end of the afternoon I started to get a reading of CAL. This message is asking me to enter a blood glucose reading from my normal meter and it did this over 5 times. There was something going wrong I think. So I got on the phone to the company and went through the readings that I got all day. They made a note of it and are going to forward them to someone who will know a bit more. I asked the guy how long had he worked there? 2 weeks he told me. So I am prepared to wait for more help.

Also after I took off the watch, (I had the watch on the arm where, as the company had told me) I had little burn like blisters, little red 1/2 inch dots where the AutoSensors pressed to the arm. I had to shave the arm, so the watch could be placed on the skin with no interference from the body hair.

I have been in touch with the GlucoWatch people, and have had long conversations with them about my experiences going through the start of the watch.

Finally I made my mind up, and with GlucoWatch people. That was, because of my life style, it is not practical for me or any other person to use the watch if they work in a kitchen, the watch is too sensitive. Because I spend most of my time at work it is not practical for me. So I have sent it back to them and I will be getting back the cost of the watch £250.00. I was one of the lucky ones, as they do not offer this now to new customers.

They found that some people were using the watch just to get their blood sugar readings over 12 hours, every 20 minute interval, useful if you need a full night's readings. And they were returning the watch before the time had lapsed and they would have to pay the cost out right. In my return letter, I asked them to keep me informed of the improved watches just in case they will work for me.

Editor: John Neale <jneale@webshowcase.net> John Neale is not a medical professional. He has Type 1 diabetes and uses an insulin pump. The information given here is based on his own personal experience. [More about John Neale...](#)

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