

Navigating family planning with diabetes

Jess Jacques was just 25 when she was first diagnosed with type 2 diabetes.

The condition has run in her family for the past two generations, with her dad and paternal grandparents all living with it.

It came as no surprise to Jess' doctor, who said it was likely to happen because of her family's medical history.

Jess said: "I first went to the doctor when I noticed my moods changing for no reason. However, the biggest factor was my lack of spatial awareness – I had become increasingly clumsy. Initially, I thought I just needed my eyes testing, but when I explained the other symptoms, the doctor said they were common indicators of living with unmanaged diabetes".

Jess has been living with type 2 diabetes for the last 10 years, but only started to take control of it in the last few years when she decided to start trying for a family.

She said: "I'm ashamed to say that my initial reaction to the diagnosis was quite nonchalant. I was young, and it didn't make me feel ill as such, so I didn't pay much attention to it."

Jess was given some leaflets to help her understand the condition, and she also attended a talk from Diabetes UK in her local town hall in Warminster at the time, where she was advised to lose weight, manage her diet, and lower her intake of carbohydrates.

According to Diabetes UK, the number of people living with diabetes has now exceeded five million, and approximately 90% of diagnoses are for type 2 diabetes¹. Type 2 diabetes can develop when a person experiences high blood sugar levels due to their body not making enough of a hormone called insulin and/or insulin not working properly. Left untreated, high blood sugar levels, also known as glucose levels, can cause serious health problems called diabetes complications². From nonchalant at diagnosis to confident with management

Jess said: "I was given type 2 diabetes medication to manage blood glucose levels as a weekly injection. At the time, I felt this was enough to manage my diabetes. However, it wasn't until I started using insulin, that I became more regimented with it. For the last two and half years I've used meal-time insulin, basal insulin, and medication to try and manage my diabetes, under the supervision of my doctor".

She adds: "Until I started trying for a baby, I was terrible with finger pricking. It isn't practical, it's painful, and not particularly pleasant in a social environment to be checking my blood sugar levels before meals."

According to the NHS, the best way to reduce the risks for mother and for baby is to ensure diabetes is well managed before and during pregnancy³. Jess' healthcare team referred her to the diabetes clinic at Royal United Hospital in Bath where she was offered glucose sensing technology to support her fertility journey. This system would enable her to keep a closer eye on her levels and to avoid complications.

"It's so easy to have a quick look on my phone^{4,5}, to check my glucose levels at any time of the day. By having access to my glucose readings in real time, I'm able to analyse what other factors could be affecting my levels, including what I eat.

> l've been able to manage my diabetes so much better since having the sensor – it really is life-changing.



For example, I have to inject 1 unit of insulin per 5g of carbs in order to keep it under control. Being able to follow this pattern is crucial, as my HbA1c levels need to be below a certain level in order for me to have IVF treatment." HbA1c is your average blood glucose (sugar) levels for the last two to three months. If you have diabetes, an ideal HbA1c level is 48mmol/mol (6.5%) or below⁶.

You may need to check your sugar levels more often if you're planning for a baby, your treatment has recently changed, or you're having problems managing your blood sugar levels⁶.

The system Jess has been using, Abbott's FreeStyle Libre 2 system, includes features that make it easier to manage her glucose levels. She said: "I've also set alarms⁷ for when my blood sugar levels are too high or too low and I've been woken up a few times in the night when experiencing a hypo (low blood sugar levels)".

"In addition, I like that I am able to keep track of how much my levels have been in the target range as an average over the day and week." l've chosen to give my diabetes team access to my glucose readings and we discuss these at my appointments⁸.

Through glucose sensing technology, Jess also was able to access data which showed her that exercising caused a big spike in her levels. She was then able to discuss this with her healthcare team and was reassured that this is healthy and normal.

Since using the sensor, Jess says that her quality of life and general health have greatly improved.

She said: "Without the sensor, it was easy to fall back into old habits, such as eating without checking my glucose levels or injecting the right amount of insulin. Now if I feel unwell, I can check my levels and take the right action, I can also exercise without worrying that my levels might dip or spike, as I have the confidence that I will be able to identify very quickly if they do".

"I was given this sensor to manage my diabetes while trying for a baby, but I do believe that if this tech was made more widely available on the NHS to others living with type 2 diabetes, there would be a huge improvement in people managing their condition."

Following recent updates to National Institute for Health and Care Excellence (NICE) guidelines⁹, sensorbased glucose monitoring systems, such as the FreeStyle Libre 2 system, are now available to people with type 2 diabetes who are administering multiple daily injections and meet certain criteria.

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Disclaimer: The information provided is not intended to be used for medical diagnosis or treatment. Please consult your healthcare professional about your diabetes management. Individual symptoms, situations and circumstances may vary. 1. Diabetes UK, 2023. https://www.diabetes.org.uk/about_us/news/number-people-living-diabetes-uk-tops-5-million-first-time. Accessed November 2023. 2. Diabetes UK, 2023. https://www.diabetes.org.uk/diabetes-the-basics/types-of-diabetes/type-2. Accessed November 2023. 3. https://www.nhs.uk/pregnancy/related-conditions/existing-health-conditions/diabetes. Accessed March 2024. 4. The FreeStyle Librelink app is only compatible with certain mobile devices and operating systems. Please check the website for more information about device compatibility before using the app. Sharing of glucose data requires registration with LibreView. 5. Glucose readings are automatically displayed in the FreeStyle LibreLink app only when the smartphone and the FreeStyle Libre 2 sensor are connected and in range. 6. Diabetes UK, 2023 https://www.diabetes.org.uk/guide-to-diabetes/managing-your-diabetes/habic. Accessed October 2023. 7. The FreeStyle Libre 2 system has optional alarms. Notifications will only be received when alarms are turned on and the sensor is within 20ft unobstructed of the reading device. 8. The LibreView data management software is intended for use by both patients and healthcare professionals to assist people with diabetes and their healthcare professionals in the review, analysis and evaluation of historical glucose device data to support effective diabetes ranagement. The LibreView software is not intended to provide treatment decisions or to be used as a substitute for professional healthcare advice. 9. NICE technology appraisal guidance TA943 (2023); available at https://www.nice.org.uk/guidance/TA943. 0 2024 Abbott. The sensor housing, FreeStyle, Libre, and related brand marks are marks of Abbott. ADC-100974 v1.0 12/24.

