NHS
University Hospitals of Leicester
NHS Trust

Screening for diabetes when you have cystic fibrosis (adults and children)

Cystic Fibrosis Service

Information for Patients

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What is cystic fibrosis diabetes (CFD)?

Cystic fibrosis diabetes (CFD) is common in people who have cystic fibrosis. CFD is like other types of diabetes, but how it starts and is managed is different. Around 1 in 5 teenagers and 1 in 3 adults have CFD.

Cystic fibrosis causes a build-up of thick fluid (secretions) in the pancreas. This thick fluid damages the cells that make insulin. This results in the body not having enough insulin. Without enough insulin, your body cannot process the sugar (glucose) in your food. This causes high blood sugar levels. High blood sugar levels can lead to:

- peeing more especially at night,
- weight loss,
- tiredness,
- more breathless (reduced lung function),
- more chest infections (exacerbations).
- feeling very thirsty and wanting to drink much more than normal.

If you have any of the above symptoms, please contact the cystic fibrosis nurses.

What does the screening for CFD involve?

The CF service will start screening at age 10. We do a blood test called HbA1C. It measures the average sugar in your blood over the last 2 to 3 months. This test is done every year. It is part of your annual review blood tests.

Oral glucose tolerance test (OGTT)

This is done as part of the annual review for patients age 10 or over in the children's clinic.

It is not usually done in adults. You will have this test if you become pregnant or cannot do flash/ continuous glucose monitoring.

1. You have to come into a hospital outpatients area for this test.
2. You should not eat or drink for 8 to 12 hours before this test. You can only have the special sugary drink we give during the test.
3. You will need to be in the hospital for about 2 to 3 hours. You must stay in the hospital during this time. You will be encouraged to sit and rest.
4. You have a blood sample taken, at the start.
5. You will drink the special sugary drink.
6. After 2 hours you will have another blood sample taken.

Flash/continuous glucose monitoring

This is done every year in all patients over the age of 10. It is done in addition to the OGTT in children.

- A small sensor is fixed to the back of your arm in clinic.
- Attaching the sensor can be a bit uncomfortable for some. It is not painful to wear or use.
- The sensor measures the sugar in the fluid under your skin. It is called interstitial fluid.
- The sensor is read by using an app on your mobile phone (if you do not have access to a smart mobile phone, you may be given a special reader).
- You need to scan the sensor at least 8 times a day using your mobile phone or reader. You need to do this for 7 to 10 days. We will show you how to do this. The system works out a chart that shows patterns in your glucose levels.
- You can shower, bathe, exercise (including swimming). You can do normal day to day activities whilst wearing the sensor.
- You can take off the sensor yourself when the monitoring ends. Put it in the sharps bin. The specialist diabetes nurse and consultant review the results.
- Keep a food diary whilst the flash/continuous glucose monitor is in place. Record all food and drink with as much detail as possible. Include the brand and number of grams or a description of portion size. You can fill out a food diary on the flash/continuous glucose monitor app. You can use a written food diary if you prefer because you do not have access to the app. Please ask your specialist dietitian for a food diary if you want to do a written one. It will help when we look at the results.
- We will also use the food diary to check that you are getting all you need from your food. We will also check the amount of fat in the diet compared to the dose of enzymes. Your specialist Dietitian will contact you if need to make any diet changes this may be over the phone or at your next clinic appointment.

What if I have diabetes?

If your results show you have diabetes or at risk of developing diabetes you will be reviewed. This is by:

- the specialist diabetes nurse,
- a consultant that specialises in diabetes and
- the cystic fibrosis specialist dietitian.

They will review your results. They will talk to you about treatment choices.

Depending on your results you may need to change your lifestyle. This could mean change to your diet and exercise. You may need to start treatment such as insulin. You will be involved in deciding your treatment.

Contact details

Adult Cystic Fibrosis Team:	0116 250 2699
Paediatric Cystic Fibrosis Team:	0116 258 6694

More information

Cystic Fibrosis Trust:

https://www.cysticfibrosis.org.uk/

DiabetesUK:

www.diabetes.org.uk/diabetes-the-basics/other-types-of-diabetes/cystic-fibrosis-diabetes

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہِ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغةٍ أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل
જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।
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