Cardiopulmonary exercise test (CPET)

We have given you this factsheet because your doctor has referred you for a cardiopulmonary exercise test. It explains what a CPET is and what happens before, during, and after your appointment. We hope that this factsheet answers some of the questions you may have. If you have any further questions or concerns, contact us using the details at the end of this factsheet.

What is a cardiopulmonary exercise test?

A cardiopulmonary exercise test (CPET) is a test to look at your current level of fitness. A CPET measures how your heart, lungs and muscles respond to exercise. The test can help find or monitor problems with your heart or lungs. This test is normally requested after you have performed some initial tests to see how well your lungs work (breathing tests like spirometry or gas transfer).

Before your CPET appointment

We will send some paperwork to read and complete before your appointment. We may send this in the post or to your email.

If you are diabetic, please let us know before your appointment.

If you feel unwell (sickness, diarrhoea, or fever) in the 48 hours before your planned appointment or develop any new symptoms, please contact us. We may need to reschedule your appointment.

Please try to get plenty of rest the night before your appointment.

On the day of your appointment:

- drink plenty of fluids, but avoid caffeinated drinks such as tea, coffee or fizzy drinks because they may affect your results
- do not eat a heavy meal within two hours of the appointment (a small, light meal is fine)
- do not smoke
- do not drink alcohol within four hours of your appointment
- wear loose-fitting clothing and footwear suitable for doing exercise (you can change your clothes at the hospital, if necessary)
- (if you are a woman) please wear a bra, because we will need to apply some electrodes (sticky dots) to your chest
- If you have chest hair, we may need to shave a small area of your chest so the electrodes can stick to your skin properly. (You can shave at home before your appointment if you prefer.)
- (if you have long hair) bring hair grips and/or hair bands to tie back your hair

- take all your medication as usual, unless your doctor has told you not to
- bring your completed paperwork (sent to you by post or email).

During your appointment

How long is my appointment going to be?

Your appointment will last for around an hour. If you are more than 15 minutes late, we will not be able to do your test, and you will need to reschedule your appointment.

What will happen at my appointment?

1. During your appointment, there will be at least two members of staff present. We will read through the paperwork we sent you, ask you a few health questions, and answer questions you have.
2. We will ask you to sign a consent form. Signing the form means that you understand what the appointment involves and agree to have the test.
3. We will measure your blood pressure and take some blood from your finger to measure your blood lactate (a substance in your blood that increases when you exercise).
4. We will ask you to do a breathing test called spirometry, which will measure how much air you can breathe in and out and how fast you can blow air out.
5. We will apply some sticky dots to your chest called electrodes. These will monitor your heart rate and rhythm (electrocardiogram).
6. We will ask you if you are happy for us to apply a vasodilator cream to your earlobe. The cream ensures good blood flow to your ear for when we take a blood sample after your exercise.
7. We will fit you with a facemask to measure your breathing and levels of certain gases. We will then clip a pulse oximeter probe to your earlobe to measure your heart rate and the oxygen levels in your blood.
8. You will sit on a stationary bike, and we will take your resting measurements for three minutes. After this, you will start to pedal, and we will gradually increase the resistance as if you are going up a hill. While you are cycling, you will do the spirometry test and have your blood pressure taken at regular intervals so we can see how your body responds to exercise. You will continue to exercise until you are too tired to continue.
9. We will then take some blood from your earlobe. One member of staff will leave the room to analyse the blood.
10. While you are recovering, we will ask you some questions about why you stopped and how you felt while you were cycling.
11. When you have finished the exercise, we will monitor you as you recover. Once you have returned to your resting measurement, your appointment will be complete.

After your appointment

Once the test is completed, one of our specialist staff members will make a report of your results and send it to the doctor who requested the test. Your doctor will then discuss the results with you and any recommendations.

Getting here

If you need help getting to your appointment, you may qualify for patient transport. Please contact your GP surgery to discuss this.

Contact us

If you have any questions or concerns, please contact us.

Respiratory Physiology Department
D Level
Centre Block
Southampton General Hospital
Tremona Road
Southampton
SO16 6YD

If you have any questions or concerns about your appointment date and time:
Telephone: **023 8120 2093** (Monday to Friday, 9am to 3pm)

If you have any questions or concerns about the test or what happens at the appointment:
Telephone: **023 8120 1360** (Monday to Friday, 9am to 4pm)

Useful links

www.nhs.uk/tests-and-treatments/spirometry/

https://www.uhs.nhs.uk/departments/perioperative-care/perioperative-cardiopulmonary-exercise-test-cpet

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For help preparing for your visit, arranging an interpreter or accessing the hospital, please visit **www.uhs.nhs.uk/additionalsupport**

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