



Information brochure



Kidneys and kidney damage

Kidneys are important for the body. They filter the waste from the blood and excrete it via the urine. If the kidneys function less well, this has far-reaching consequences. The earlier kidney damage is discovered, the sooner it can be treated.



In the Netherlands, there are approximately 1.7 million people with chronic kidney disease



Almost 50% of these men and women are not aware that they have chronic kidney disease



People aged 45 years and older have a higher risk to develop chronic kidney disease



People with chronic kidney disease have a higher risk of developing cardiovascular disease

Why perform the NierCheck?

The NierCheck (kidney check) tests whether there is too much protein in your urine. This is a sign of (starting) kidney damage. Next to kidney damage, high blood pressure, high cholesterol, or high blood sugar might be present. By detecting kidney damage in an early stage, it can be treated earlier. This can prevent further damage to the kidneys, heart and blood vessels.

Why this brochure?

You decide whether or not to participate in the NierCheck study. The information in this brochure may help you make this choice.

Who has been invited for this study?

This is the first phase of a population screening. This means that we explore whether a population screening will be ultimately carried out in the Netherlands. We want to investigate how many people want to participate in such a population screening. We also want to find out which of the two methods tested for measuring the amount of protein in the urine is preferred by the participants. For this, 15,000 people living in the municipality of Breda are invited. This concerns both men and women between the ages of 45 and 80. The municipality of Breda was chosen because the population in this municipality is roughly comparable to that of the Netherlands in terms of structure and composition.



What if I already know that I have too much protein in my urine?

Do you already know that you have too much protein in your urine? Or you already know that your blood pressure or cholesterol is too high, that you have diabetes or a reduced kidney function? Or are you already being treated for this? Then we still ask you to participate in this study, so that we can better assess the added value of the urine test.

Who conducts the research?

The research is conducted by employees of Amphia Hospital and the University Medical Center Groningen.

Is participation in the NierCheck study free of charge?

The urine test is free. The follow-up screening at the Amphia hospital is also free. We reimburse travel costs and parking costs incurred for the follow-up screening at the Amphia hospital. You may need to be treated by your doctor based on the results of the screening. These costs are not included in the NierCheck study, but are standard health care costs. These costs therefore fall under your health insurance policy.

The research is made possible by a grant from the Kidney Foundation and the government (Top Sector Life Sciences & Health).

The NierCheck

In this study two different tests for measuring protein in the urine are investigated. So it could be that someone in your area has received a different test than you. The two tests are:

- **NierCheck A:** This group of participants collects urine with a tube. The participant sends this tube by mail to the laboratory where the amount of protein in the urine will be measured.
- **NierCheck B:** This group of participants performs a urine test with a dipstick at home. The amount of protein is measured via an app on the mobile phone.

Your test

The following research group has been determined for you:

NierCheck B: urine test with a dipstick and an app.

On the next page you can see briefly how the test works. Please carefully read the instructions before you start the test. If you want to participate in the research, please take the NierCheck test within 2 weeks after receiving the invitation letter. You will receive a reminder 3 and 6 weeks after receiving the invitation when we have not received your test.

How does it work?

You can easily take the test using your smartphone.



Step 1

Download the NierCheck app via the App Store or Google Play *



Step 2

Open de app en volg de instructies.



Ready!

You will immediately see the test result in the app.

* If you don't know how to download the app, you could perhaps ask a friend or family member to help you with this. If you do not have a smartphone, you may be able to borrow one from someone that you trust.

The result of the test

You will immediately see the test result in the app. Within 2 weeks you will also receive the result via a letter. The following results are possible:

1. Normal

The amount of protein in your urine is normal. No follow-up research is required. You have now completed the study.

2. Abnormal, or high abnormal

An excessive amount of protein has been found in your urine. This can be a snapshot. Protein loss can sometimes be temporarily too high. For example in the event of a fever or after intensive exercise. That is why an extra test must be done. If this test also shows that you have too much protein in your urine, then you will be invited for a follow-up screening.

What is the follow-up screening?

The follow-up screening takes place at the Amphia hospital in Breda (location Molengracht). Your blood pressure, height and weight will be measured here. A urine test will also be done. Furthermore, some blood will be drawn for some blood tests (2 tubes of a total of 7 mL). You will also be asked to complete a questionnaire. The results of this follow-up screening will show whether you have a high blood pressure, high cholesterol, diabetes and/or reduced kidney function. If abnormal values are found, you will be referred to your own general practitioner.

Duration of the total investigation

You will receive the result of the urine test within 2 weeks after receiving the test at the laboratory. The total duration of the study depends on the result of the urine test:

- If the amount of protein in the urine is normal, you have completed the study after the first test.
- When an increased amount of protein is found in the urine and has been confirmed with an extra test, you will be invited for a follow-up screening at the Amphia hospital. In this case, the total duration of the study will be approximately 6 weeks. This is of course longer if the participant does not take the urine test or comes to the follow-up screening within 2 weeks after the invitation.



You decide whether you want to participate

Participating in this research is voluntary. You may always decide not to participate or to stop. You do not have to provide a reason for this.

Permission

If you want to participate, we need your permission for this. You can give this in the app. The form has also been added to the invitation letter, so that you can already read it. Without your permission you cannot measure the amount of protein in your urine with the app!

Possible benefits

If you participate in the study, you will find out if the amount of protein in your urine is too high or normal. If this is too high, you may have a higher chance of developing kidney damage or cardiovascular disease. In that case your general practitioner will be able to help you to reduce this chance.

Possible disadvantages

A possible disadvantage of participating in the study may be that the study produces tension. It is also possible that the test is not 100% accurate and not everyone with an increased risk of kidney, heart and vascular diseases is detected.

Independent doctor

Do you have a question about the NierCheck study that you would rather not ask the researchers? Then you can call or email an independent doctor: 050 361 34 15 or c.f.m.franssen@umcg.nl.



The occurrence of kidney, cardiovascular disease

A few years after this research, we want to see whether early detection of people with an increased risk of kidney, cardiovascular disease has been useful. Therefore, we want to obtain information about the occurrence of these diseases from the Bureau of Statistics (CBS). This allows us to investigate whether people who participated in the NierCheck study have developed diseases less frequently. We also want to ask the health insurance companies if less healthcare costs have been incurred. By submitting the test with the consent form, you consent to the researchers being able to request information about your health and healthcare costs.

Will my general practitioner also receive the result (s)?

Only when you participate in the follow-up examination at the Amphia hospital will your general practitioner receive your results. All general practitioners in the municipality of Breda have received information about this study.

Your data

We have received your name and address from the government.

If you send the test with the consent form, you give permission for the researchers to be able to follow your name and address with the government data (Basisregistratie Personen). This allows the researchers to inform you about the results of the research, for example.

We protect your privacy

We use all research data only for the NierCheck study. We ensure that researchers do not know which data belongs to whom. We do this by linking your data (name, address and date of birth) to a code. The researchers only see the code. They will therefore not know your name and cannot use it in articles or reports that they write.

A few employees can see your name and address. This is necessary, for example, to invite you to take the test, send the results of the test, or to perform quality checks. These employees adhere to the rules of the General Data Protection Regulation (GDPR).

Saving your data

We only use your information for the NierCheck study. We do not provide your medical information to anyone. The data collected is stored for 15 years after the end of this study. This retention period is legally established for conducting scientific research. After this, all data will be destroyed.



**Choose for your health.
Do the NierCheck!**

Deze informatie is in het Nederlands beschikbaar op:
Bu bilgiye Türkçe olarak ulaşabilirsiniz:

هذه المعلومات متوفرة باللغة العربية على الموقع التالي:

www.niercheck.nl/vertalingen

**Do you have any questions or do you need help? Look at
the website www.niercheck.nl or call us 050-36 13 221**