

Information about pathology tests to help Australians take control of their health and make the right decisions about their care.

WHAT YOU SHOULD KNOW ABOUT YOUR TESTS FOR INFLAMMATION

C-reactive protein (CRP) is a blood test used to detect inflammation. Another blood test for inflammation is ESR but it is not as accurate or as specific as CRP in most situations.

Your doctor may order C-reactive protein and ESR

- To check to see if you have inflammation or infection
- To help decide how severe it is
- To monitor inflammation levels if you are having treatment

Inflammation is a vital part of our immune systems' response to injury and infection.

C-reactive protein (CRP) is a protein made by the liver and released into the blood in response to inflammation. It plays an important role in the immune process.

Levels of CRP start to rise soon after inflammation or an infection affects the body.

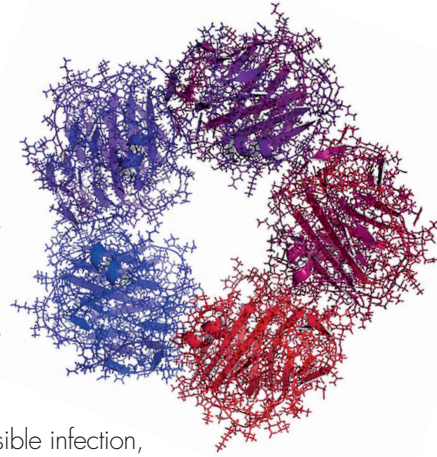
CRP levels can increase many hundred-fold and then drop quite quickly as soon as the inflammation passes.

This makes CRP a useful test to monitor the effectiveness of treatment.

You may need a CRP test if your doctor suspects you have rheumatoid arthritis, lupus or another other autoimmune disease, or if it is possible you have inflammatory bowel disease such as Crohn's disease or ulcerative colitis.

It can show how severe the inflammation is. It is also used to assess how well your treatment is working.

CRP is also used to look for possible infection, such as in monitoring people after surgery.



A CRP test is not specific enough to diagnose a particular disease. Rather, it can give your doctor evidence that there is inflammation and that further testing and treatment may be needed.

It does not show where the inflammation is in your body.

A more sensitive form of the test, C-reactive protein high sensitivity (hsCRP), is used to assess your risk of heart disease.



CRP and ESR as tests for inflammation

Another test to monitor inflammation is called the erythrocyte sedimentation rate (ESR). Both CRP and ESR give similar information.

However, CRP appears and then disappears sooner than changes in the ESR. Thus, your CRP level may fall to normal if you have been treated successfully, such as for a flare-up of arthritis, but your ESR might still be abnormal for a while longer.

CRP is not affected by as many things as is ESR, which can be affected by periods and pregnancy as well as some medications. This makes CRP a better test for some types of inflammation.

Because ESR is an easily performed test and requires only relatively simple equipment, many doctors still use it as an initial test when they think a patient may have inflammation.

Other tests you might need

In order to get a full picture of your health, your doctor might request a group of tests together, including CRP, ESR, Liver Function Tests and a Full Blood Count among others.

Tests specific to your symptoms might be ordered as well, such as the ANA (antinuclear antibody) and RF (rheumatoid factor) for autoimmune diseases. If it's possible you have an infection, cultures can be ordered to identify the type of bacteria.



What do your results mean?



Interpreting the many variations in test results is complex. An abnormal result may not mean you have anything to worry about.

Other health conditions, extreme stress and pregnancy affect the levels of CRP, as well as medications.

Talking with your doctor about what your results mean for you is important.

What are reference intervals (reference ranges)?



Your results are shown in your report as a comparison against a set of numbers called reference intervals or reference ranges. This is the range of test results considered 'normal' for the general population.

If a result in your report is outside this range it can be flagged as high (H) or low (L). This does not necessarily mean that anything is wrong and depends on your personal situation. They need to be interpreted by your doctor.

What happens next?



Your tests might need to be repeated to see if the results change over time. This can indicate whether your condition is getting better or worse and whether any treatment you are having is working.

You might need further, different tests to see what's causing your symptoms.



5 questions to ask your doctor

Why does this test need to be done?

Do I need to prepare (such as fast or avoid medications) for the sample collection?

Will an abnormal result mean I need further tests?

How could it change the course of my care?

What will happen next, after the test?

Having a medical test



The choice of tests your doctor makes will be based on your medical history and symptoms. Make sure you tell them everything you think might help.

You play a central role in making sure your test results are accurate. Do everything you can to make sure the information you provide is correct and follow instructions closely.

Talk to your doctor about any medication you are taking. Find out if you need to fast or stop any particular foods or supplements. These may affect your results.



For more detailed information on these and many other tests go to labtestsonline.org.au
You'll also find short animations about CRP and reference intervals

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Please use this QR code to access more information



www.labtestsonline.org.au

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- Funded by the **Australian Government**, we are not-for-profit and independent of any commercial interests.
- We are managed by the Australasian Association for **Clinical Biochemistry and Laboratory Medicine (AACB)**, the principal professional association dedicated to the advancement of clinical biochemistry and laboratory medicine in Australasia.
- We are supported by the **Royal College of Pathologists of Australasia**.
- As the consumer pathology testing support resource for **My Health Record**, there is a direct link to the LTO ^{AU} website embedded in the pathology results pages of every registered person's online record.

