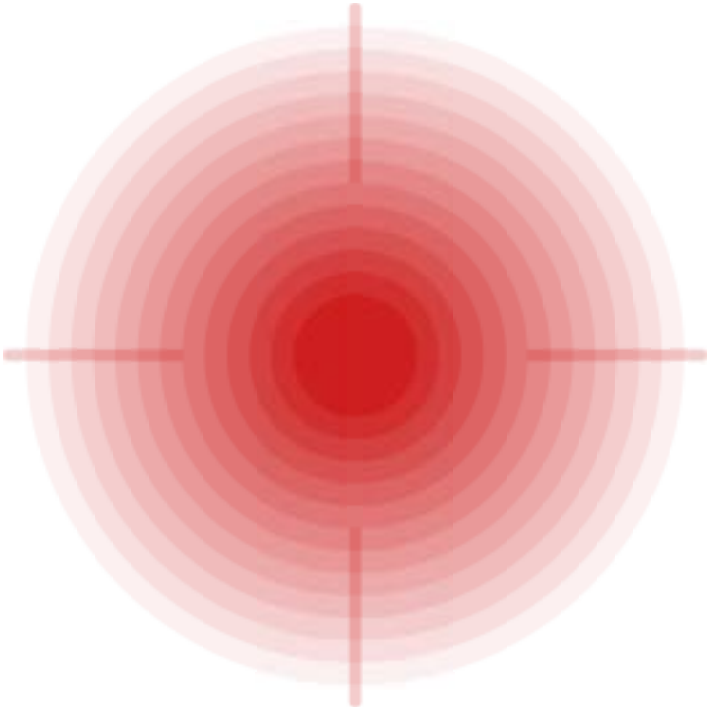
PATIENT INFORMATION LEAFLET

dr sophia khalique ASSOCIATES



HIGH-SENSITIVITY CRP (hs-CRP)

BACKGROUND

High-sensitivity C-reactive protein (hs-CRP) is a marker for inflammation in the body. It's much more sensitive than a standard CRP test, allowing us to detect really low levels of inflammation. Whilst inflammation helps the body's natural defence against infection or injury, chronic inflammation is thought to increase the risk of conditions like **cardiovascular disease (CVD)**.

Why is hs-CRP Important for Heart Health and Longevity?

Atherosclerotic Cardiovascular Disease (ASCVD) is the leading cause of preventable death worldwide. Inflammation plays a role in the development of ASCVD by increasing the risk of plaque formation in blood vessels. This can cause blockages and/or an increased risk of **heart attacks** and **strokes**.

- A higher **hs-CRP level** can signal inflammation in your blood vessels, meaning a higher risk of ASCVD.
- hs-CRP is a marker of inflammation but it is **not the direct cause of atherosclerosis**.

How is hs-CRP Measured?

As part of an advanced **Preventative Health Assessment**, we may check hs-CRP with a simple blood test to measure levels. Your results, together with other investigations, help us identify if you're at a higher risk.

hs-CRP levels may temporarily rise due to infections, injuries, or chronic inflammatory conditions like arthritis. Therefore, to ensure accurate results, we advise against testing whilst you're ill.

Who Should Have an hs-CRP Test?

The hs-CRP test is beneficial for anyone wanting a full evaluation of their cardiovascular risk. We often include it as part of a comprehensive Preventative Health Assessment.

We recommend it if:

- You have risk factors for ASCVD such as high blood pressure, cholesterol, smoking, obesity, or a family history of heart disease.
- You need additional information for preventative medicine purposes to guide treatment decisions, such as whether to start a **statin** or other measures.

What Does a High hs-CRP Level Mean?

- High hs-CRP levels indicate inflammation in your body, which suggests a higher risk for developing ASCVD.
- hs-CRP is not specific to ASCVD. Elevated levels may also result from:
  - Infections (e.g., colds, flu, or urinary tract infections).
  - Autoimmune conditions like lupus or rheumatoid arthritis.
  - Smoking, obesity, or lack of physical activity.

How Can You Lower hs-CRP Levels?

1. **Medications:**
   - **Statins:** these cholesterol-lowering drugs reduce inflammation and thus lower hs-CRP levels.
   - **Anti-inflammatory treatments**: emerging therapies specifically targeting inflammation are under investigation.
2. **Lifestyle Changes:**
   - **Healthy diet:** Adopt an anti-inflammatory diet rich in fruits, vegetables, wholegrains, and healthy fats like omega-3 fatty acids.
   - **Exercise regularly:** Aim for at least 150 minutes of moderate exercise per week.
   - **Quit smoking:** Smoking contributes to chronic inflammation and raises hs- CRP levels.
   - **Maintain a healthy weight:** Obesity is associated with higher inflammation and hs-CRP levels.
   - **Get good quality sleep:** Sleep deprivation or poor quality sleep increase bodily inflammation.
   - **Reduce alcohol:** Excess alcohol consumption increases inflammation
   - **Manage stress:** Chronic psychological stress and conditions like depression are linked to elevated inflammatory markers.
3. **Treat underlying conditions:**
   - Address infections or chronic inflammatory diseases that may be contributing to raised hs-CRP e.g. Dental problems, gum disease.

Is hs-CRP Alone Enough to Predict Heart Disease?

No. Whilst hs-CRP provides valuable insights into your cardiovascular risk, it is typically used in conjunction with other risk factors, such as:

- Age
- Blood pressure & smoking status
- Other cardiovascular risk markers including cholesterol
- Family history of heart disease

101 HARLEY STREET, LONDON W1G 6AH / +44 20 7935 4357 / OFFICE@DRSOPHIAKHALIQUE.COM / WWW.DRSOPHIAKHALIQUE.COM