



# HOMOCYSTEINE

## What is Homocysteine?

Hyperhomocysteinemia, elevated levels of homocysteine, can be associated with an increased cardiac risk. Elevated concentration of homocysteine is a frequently observed finding in the blood of these patients. Although such patients lack some of the vitamins involved in the metabolism of homocysteine, the elevated homocysteine levels are mainly due to impaired homocysteine removal from the blood by the kidneys.

Deficiencies in vitamin B12, folic acid and vitamin B6 are associated with raised homocysteine levels.

Other factors that contribute to raised levels of homocysteine include poor diet, poor lifestyle - especially smoking and high coffee and alcohol intake, some prescription drugs diabetes, rheumatoid arthritis and poor thyroid function.

The normal healthy range for healthy individuals is considered to be between 5 and 15  $\mu\text{mol/L}$ . However levels as low as 6.3  $\mu\text{mol/L}$  are thought to confer an increased risk and each 5  $\mu\text{mol/L}$  can increase the risk of coronary heart disease events by approximately 20%.

However it is not all bad, homocysteine levels can be tested using the Randox Homocysteine test. Through diet and vitamin supplementation high homocysteine levels can be reduced to normal.

## Features of Randox Homocysteine

- Enzymatic method
- Convenient two-part liquid ready-to-use reagents
- Stable on board the analyser for 28 days at 10°C
- Measuring range 1.7-47.9  $\mu\text{mol/L}$
- Two levels of standard included in the kit
- Limited interference from bilirubin, haemoglobin, intralipid and triglycerides
- Suitable for both human serum and plasma (Li Hep or K EDTA samples)

## Useful links

[Download our Reagents Brochure](#) for information on a wide range of clinical assays from Randox.

[Contact us via our enquiry form](#)

Buy online via our Randox Store [www.store.randox.com](http://www.store.randox.com)