

The Essential Health Check covers these markers:

# **Iron Deficiency**

Ferritin is a protein that stores iron in the body and is the most useful indicator of iron deficiency as stores can be decreased before any blood iron levels are low. This test can also indicate if blood iron stores are too high. If your body is storing too much or too little iron this requires follow up testing from your GP.

#### Vitamin B12

Vitamin B12 has many roles in your body. It plays a really important role in red blood cell production and helps your nervous system to function properly.

Vitamin B12 levels are important for aspects including boosting your energy, improving your memory and helping to prevent heart disease.

### Vitamin D

Vitamin D is needed by the body for both physical and mental health but is best known for making sure that bones and muscles (including your heart) are strong and growing properly. It also helps regulate the immune system. Vitamin D deficiency is related to conditions such as diabetes, heart disease and certain cancers. The development or worsening of mental health conditions, such as depression and low mood has also been linked to inadequate levels of vitamin D.

## **Liver Function**

The liver is responsible for functions vital to life. The liver primarily processes nutrients from foods, removes toxins from the body and builds proteins. It breaks down fats, it converts glucose into energy stores and produces hormones. It also helps the body fight off infections.

- **Albumin;** a protein that is made in your liver. It helps to transport nutrients and hormones, as well as helps to grow and repair tissues in your body.
- **Globulin;** a group of proteins made in your liver. Globulins play an important role in liver function, blood clotting and fighting infections.
- **Total protein;** your albumin and globulin levels combined.
- Alanine aminotransferase (ALT); a protein enzyme that is only found in your liver, so it's
  a good indicator of your liver function. A high ALT level can be a sign of liver damage as the
  ALT protein is released into the bloodstream from the damaged liver cells.



- **Alkaline phosphatase (ALP);** your liver is one of the main sources of ALP, but some is also made in your bones, intestines, pancreas, and kidneys.
- **Gamma-glutamyl transferase (GGT)**; a protein enzyme found mainly in the liver. A high GGT can indicate damage to the liver or bile ducts.
- **Total bilirubin;** a yellow pigment. High bilirubin levels can be a sign that your liver is damaged. Sometimes high levels can be caused by Gilbert's syndrome which is a harmless inherited disorder.

### Cholesterol

When you think of cholesterol, you probably think of 'bad' or high cholesterol. But there's also a 'good' type of cholesterol that your body needs to keep at an optimum level.

Cholesterol plays an important role in many of the body's processes. However, it's important that cholesterol levels don't go out of balance.

High-density lipoprotein (HDL) is the good kind of cholesterol. Low-density lipoprotein (LDL), VLDL and non-HDL are the bad types of cholesterol along with triglycerides that you want to keep in check.

The Essential Health Check measures all of these and total cholesterol as well. The test also calculates your total cholesterol to HDL ratio and your triglycerides to HDL ratio which are both useful information for a GP in determining your risk of heart problems or stroke.

The main aim is to focus on lowering your "bad" cholesterol and triglycerides and increasing your "good" HDL cholesterol to an optimum level.