What is haemochromatosis?
Haemochromatosis is a term used describe iron overload. This is a metabolic condition that causes increased absorption of dietary iron. This iron is then deposited in – and can ultimately damage – organs such as the liver, heart and pancreas. Without treatment, haemochromatosis can cause premature death.

Haemochromatosis is usually hereditary, but can be acquired through multiple blood transfusions or excessive iron supplementation. Hereditary (genetic) haemochromatosis accounts for most cases of iron overload.

How many people have it?
The prevalence of the genotypes that predispose to iron overload in Australia is 1 in 300 but it can be as high as 1 in 80 for people of Celtic ancestry. It affects women and men equally and 12% of the Australian population carry one gene for haemochromatosis, but are unlikely to get clinically significant iron overload.

Why do our bodies need iron?
Iron, in small amounts, is essential for the production of red blood cells which carry oxygen to the tissues. Our bodies have no method of excreting excess iron, so levels are controlled by not absorbing more iron than is needed.

A person with haemochromatosis absorbs a great deal more iron than is necessary.

What are the symptoms of too much iron?
Symptoms are often vague and also commonly associated with other conditions, including: tiredness, weight loss, joint pains (particularly the knuckle and first joint of the first two fingers), abdominal pain, diabetes, liver disorders, sexual disorders, decrease in body hair, discolouration or bronzing of the skin, palpitations and shortness of breath, impaired memory, mood swings, irritability, depression and sometimes setting off metal detectors!
Prevention of symptoms and resulting organ damage is possible if a person is diagnosed early and iron levels are maintained in the lower normal range. For this reason all blood relatives of the affected person should be tested and treated if necessary.

How do you treat haemochromatosis?
Current treatment involves the removal of some blood at regular intervals similar to the routine donation process. When this is done the body’s response is to make extra blood, using up some of the stored iron. Venesections may be as frequently as twice weekly at first, becoming less often as the iron levels decrease. Donations from donors with hereditary haemochromatosis are often suitable for clinical use if screening and donation criteria are met. Treatment should begin at any level above normal and continue until the iron levels in the blood return to be within the low normal range.

BLOOD FACT
The haemochromatosis gene originated around 40,000 years ago in Ireland in response to famine. It was spread by Vikings ‘visiting’ other countries.