Are you starting your joint replacement journey in the best possible condition?

The importance of a check-up with your GP and blood tests for anaemia and low vitamin levels in the months leading up to surgery.

This fact sheet is for people who may be having hip or knee replacement surgery.

Make an appointment for a check-up with your GP

If you are already on the waiting list for joint replacement surgery or are likely to go onto the waiting list in the near future, then make an appointment with your GP for a check-up to review:

- existing medical problems
- new or undiagnosed conditions
- general health such as weight, blood pressure and smoking
- the need for blood tests to check for anaemia or other problems such as low vitamin levels

If you have a number of problems then a double appointment (ask the doctor’s surgery when booking) or a second appointment at a later time may be needed. Try to wear clothes that are easy to get on and off.

Why is a check-up with my GP important?

Before major surgery it is important to make sure that your body is in the best condition possible. The sooner problems are found, the more time there is to fix them, without needing to delay surgery. The better your health, the better able you are to get through the surgery and the shorter the recovery time.

What is anaemia?

“Anaemia” is a low red blood cell count. Red blood cells carry oxygen around our bodies, so anaemia can cause symptoms such as tiredness. As many as 1 in 10 people waiting for joint replacement surgery are anaemic and most of them are unaware of it. A blood test that measures the number of red cells in your body (haemoglobin level) can be taken to check for anaemia. If anaemia is found it can often be corrected before surgery but this can take a few months or more.
What are the causes of anaemia?

Our bodies make new red blood cells each day to replace the old ones in tissue called “bone marrow”. Vitamins and a healthy body are needed for the bone marrow to be able to keep up. Anaemia results when the bone marrow can’t make enough new red blood cells or they are being lost too quickly (bleeding). Anaemia has many different causes including:

- low levels of iron in the body (measured by a blood test called a “ferritin” level not by an iron level)
- low levels of other vitamins such as B12 or folate
- conditions affecting the blood or the body including the kidneys

Because anaemia can be due to a medical problem in many different parts of the body, your GP will ask you a range of different questions (symptoms) and also look for any clues (signs) when doing a check-up.

Why are low iron levels especially important?

Low iron levels are a common cause of anaemia. Low iron levels are important even before they become low enough to cause anaemia because they can lead to tiredness and may be a clue to silent blood loss. Body iron levels can be low for a number of different reasons including:

- Blood loss (blood contains iron)
- Low iron in the diet
- Iron not being well taken up (absorbed) by the bowel

Referral to a specialist (gastroenterologist) may be needed to rule out silent bleeding from the bowel or poor iron uptake from the bowel.

Proper treatment of low iron levels (iron tablets prescribed by your GP) may help your body make as much as a bag of blood per week naturally.

How does anaemia increase the chance of needing a transfusion?

People having joint replacement surgery will lose blood due to the operation. The chance of needing a blood transfusion is much greater if you are anaemic (have a low red blood cell count) before surgery. It is best to start surgery with a normal red blood cell count (or a “full tank of petrol”) to reduce the chance of you “running low” as blood is lost during and after surgery.

As the red blood cell count (haemoglobin level) falls, there is a level at which your body does not function as well as normal and a blood transfusion may be needed. This level depends on your general health and other medical conditions especially heart problems. The decision about needing a blood transfusion is made after careful consideration of the risks and benefits in each person’s case.

How does correcting low vitamin levels help with recovery?

If low vitamin levels are corrected before surgery (even in people without anaemia) the bone marrow is able to make new red blood cells more quickly after the operation, helping with recovery.

For more information:

**Talk to your GP, specialist or joint replacement nurse**

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