

LET'S HAVE A CONVERSATION ABOUT IRON-DEFICIENCY ANAEMIA

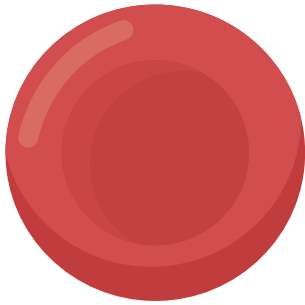
WORDS LIM TECK CHOON DESIGN HO KAN KEONG

Your red blood cells have a simple but vital task: to transport oxygen from the lungs to the rest of your body.

The cells of your body will utilize oxygen to convert the foods you have consumed into energy. This energy is then used to power your body's numerous functions—from more obvious ones such as movement to 'hidden' ones such as digestion of your foods, breathing, enabling the heart to keep beating, and more.

Just imagine: what happens when you don't have enough red blood cells in your system?

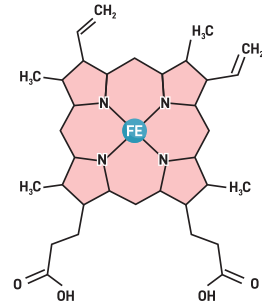
Structure Of Haemoglobin



Red Blood Cell (Erythrocyte)



Haemoglobin Molecule



Hemo b Group

Iron, indicated here by its chemical element symbol Fe (short for 'ferrum'), is an important component of haemoglobin, a protein found in red blood cells.

IRON IS IMPORTANT TO THE BLOOD



PROFESSOR DR NAZIMAH IDRIS

Professor of Obstetrics and Gynaecology
IMU University
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"Iron is a key part of red blood cells," explains Professor Dr Nazimah Idris.

According to her, in the red blood cell there is a protein called **haemoglobin**.

It is this protein that enables the red blood cell to bind to oxygen molecules and transport them from the lungs to other parts of your body.

The haemoglobin also enables the red blood cell to bind to carbon dioxide molecule—the "waste" gas produced from energy production—and deliver the carbon dioxide to your lungs for expulsion.

SO, WHAT HAPPENS WHEN MY BODY DOESN'T HAVE ENOUGH IRON?

Because iron is an integral part of the haemoglobin, **inadequate amounts of iron in your body** will result in

either **fewer red blood cells** or red blood cells that are **smaller with less haemoglobin** than normal.

As a result, these red blood cells are not able to carry enough oxygen to your tissues and organs.

Should this happen to you, you are said to have developed **iron-deficiency anaemia**.

HOW DO I KNOW IF I HAVE DEVELOPED IRON-DEFICIENCY ANAEMIA?

"Mild anaemia usually has no symptoms," says Prof Dr Nazimah.

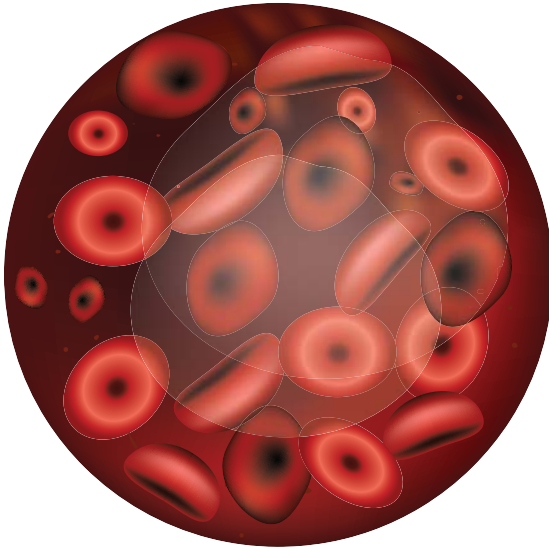
However, as your anaemia worsens over time, symptoms such as those in the table below can manifest.

These symptoms get worse as your anaemia progresses, reducing your ability to carry out your daily activities as well as your overall quality of life.

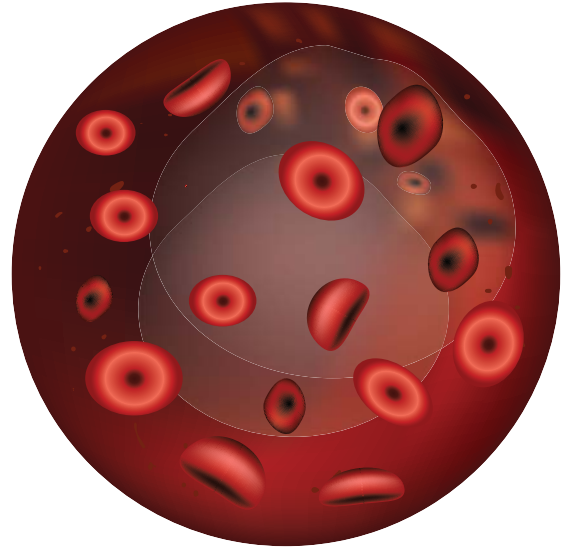
"If the condition is left untreated over a long period of time, it is possible to develop **heart failure** from severe anaemia," says Prof Dr Nazimah.

COMMON SYMPTOMS OF IRON-DEFICIENCY ANAEMIA.

- Feeling weak or tired more often than usual, or after exercising
- Headaches
- Dizziness
- Palpitations
- Problems in concentrating



Normal



Anaemia

What is anaemia? Well, it's a condition in which there aren't not enough healthy red blood cells (normocytic anaemia) or there isn't enough haemoglobin in your red blood cells (microcytic anaemia) to carry oxygen to your tissues. If this condition is caused by a lack of iron, then it's called iron-deficiency anaemia.

ARE THERE ANY GROUPS OF PEOPLE THAT ARE MORE AT RISK OF IRON-DEFICIENCY ANAEMIA?

"Iron deficiency anaemia is largely due to either **poor iron intake** or **increased blood loss from frequent bleeding episodes** such as gastro-intestinal bleeds or heavy menstruations," explains Prof Dr Nazimah.

Contrary to popular opinion, women are not the only group of people that are at risk of this condition.

Children. Children undergo a tremendous growth spurt between birth and age 2, and Prof Dr Nazimah states that these children will need more iron.

Hence, children with anaemia may develop related problems such as delayed development of motor skills and issues with learning.

Pregnant women. "Iron requirement increases during pregnancy," says Prof Dr Nazimah, "and pregnant women may develop iron-deficiency anaemia if they **do not take enough iron** during this stage."

Iron-deficiency anaemia may increase the woman's chance of developing pregnancy-related complications such as **premature birth** or giving birth to **babies with low birth weight**.

Women. Women that frequently experience **heavy menstruation** or have conditions such as uterine fibroids that can cause heavy menstruations, have a higher risk of developing iron deficiency anaemia.

People aged 65 and older. People over 65 are more likely to have iron-poor diets and certain chronic diseases that can affect their iron intake or digestion—thus increasing their risk of developing iron-deficiency anaemia.

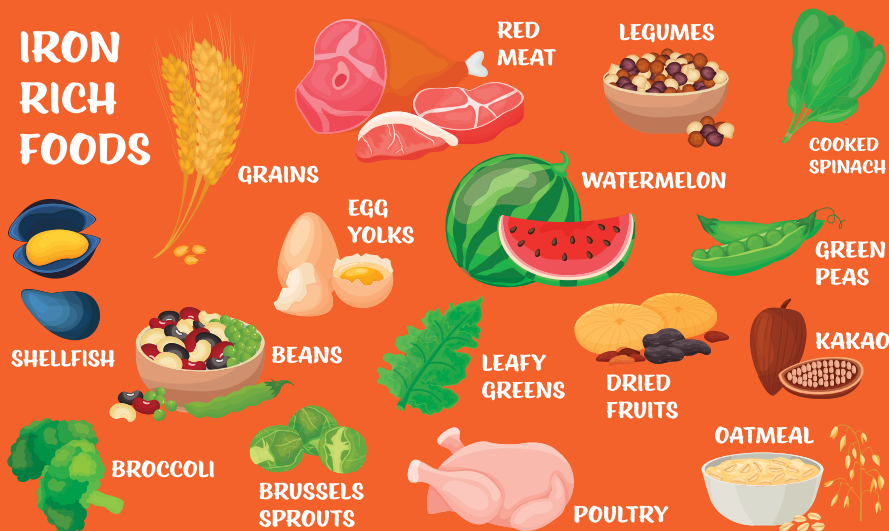
IF I AM IN ONE OF THE HIGH-RISK GROUPS, SHOULD I GO FOR REGULAR ANAEMIA SCREENING?

While it is possible to detect the presence of anaemia through a blood test, current research has yet to find any conclusive evidence that routine screening will be beneficial for children and pregnant women.

Hence, to date there is no official recommendation from medical bodies when it comes to routine anaemia screening.

If you are concerned about iron-deficiency anaemia, however, you can discuss the matter further with your doctor.

IRON RICH FOODS



VITAMIN C

VITAMIN C HELPS THE BODY ABSORB IRON MORE EFFICIENTLY



Some common iron-rich foods that, when consumed, can help reduce the risk of iron-deficiency anaemia. Consult a dietitian for more advice, as people's dietary needs may vary due to factors such as current health status, age, gender, etc.

HOW IS IRON DEFICIENCY ANAEMIA TREATED?

"The most appropriate treatment option will depend on the cause of one's iron deficiency anaemia," explains Prof Dr Nazimah.

"If your anaemia is due to iron loss from bleeding—such as from heavy menstruation, bleeding in the gastrointestinal tract, etc—then the **bleeding has to be stopped first**," she further states.

Iron supplementation, usually in the form of tablets that can be taken orally or through a drip, will often be prescribed.

However, if your haemoglobin levels are too low and you have having severe symptoms, Prof Dr Nazimah shares that a blood transfusion is usually necessary.

Note that your iron levels **may take some time to get back to normal**. Depending on the person, this may take a few months or longer.

Hence, while you may start to feel better after a few days of treatment, you should continue to follow-up with your medical appointments and keep taking iron supplements until your tests confirm that your iron levels are confirmed to be restored to normal values.

WHY CAN'T I JUST GET SOME IRON SUPPLEMENTS FROM THE PHARMACY? THAT WILL SOLVE THE PROBLEM, RIGHT?

It is never a good idea to take anything, even supplements, to solve a health problem without knowing the root cause of the problem.

As you've seen, inadequate iron consumption isn't necessarily the only cause of iron-deficiency anaemia. It can also be caused by a medical condition that has to be identified in order to be treated.

Therefore, it is best to consult a doctor if you suspect that you have iron-deficiency anaemia.