

TAKE **IRON** SERIOUSLY

Recognizing the symptoms of iron deficiency and iron deficiency anaemia is often the biggest hurdle to getting a diagnosis. The symptoms can manifest in different ways, they are hard to pinpoint and can be associated with a number of other health conditions.^{1,2}

CASE STUDIES OF 2 SINGAPOREAN WOMEN WITH IRON DEFICIENCY



CASE STUDY 1

Ms X is in her early 40s. She has a busy day job on top of looking after her 3 teenage children. **She has a balanced diet but suffers from heavy periods.** She's **constantly fatigued**, but in recent months has noticed that she's getting more **breathless on exercising**. She's also finding it **harder to concentrate at work**. Ms X ended up seeing her GP who did a blood test which showed that **she had a low haemoglobin, and a very low ferritin level.**



CASE STUDY 2

Ms Y is in her 30's. She leads an active lifestyle and has been of good health. **She switched to a Vegan diet a year ago, and recently noticed that she has been experiencing hair loss and her nails have been getting rather brittle and crack easily.** Ms Y saw her dermatologist for hair loss. The dermatologist did a series of blood tests **and detected a low level of ferritin.**



Both of these women are presented with common features of iron deficiency - a condition which affects up to 1 in 5 Singaporean women of child-bearing age³. Let us look at some important facts about iron deficiency.

IRON DEFICIENCY FACTS



#1 It is always important to have a full discussion of your symptoms and medical history with your doctor as other medical issues can have the same symptoms as iron deficiency.



#2 Iron deficiency can be diagnosed on a simple blood test with your doctor. A full blood count will tell if you are anaemic - that is when your haemoglobin level is low, and ferritin level will indicate if you are iron deficient. The ferritin level can sometimes be elevated due to infection or inflammation, so sometimes the serum iron level and iron saturation levels are used instead



#3 Iron deficiency does not always cause anaemia. While iron deficiency is the most common cause of anaemia, it is not uncommon to see women with a low normal or normal haemoglobin but with low iron levels. Even if you are not anaemic, you can have symptoms of fatigue, poor concentration, or hair and nail issues if your ferritin level is low.



#4 Iron deficiency can cause hair loss. There are many causes of hair loss, however patients with low iron stores (ferritin levels <70ng/ml⁴) are more likely to experience hair loss and may benefit from iron replacement to boost their stores.



#5 Iron can be found in both meat and plant based foods. However, the body tends to absorb lower proportions of plant based iron (non-haem), and as such vegans or vegetarians can sometimes be more prone to iron deficiency



#6 Iron supplementation can be given as oral preparations or as an intravenous injection into the veins. While oral formulations are the preferred first line option, many women find oral iron challenging to take due to the metallic taste, and common gastro-intestinal effects (indigestion, constipation). The newer forms of intravenous iron therapy are safe and effective to administer, and are often used to give a more rapid boost of iron level in women with significant iron deficiency, or with pronounced symptoms.

1. Cappellini MD et al. Iron deficiency across chronic inflammatory conditions: International expert opinion on definition, diagnosis, and management. Am J Hematol. 2017 Oct;92(10):1068-1078. 2. Auerbach M, Adamson JW. How we diagnose and treat iron deficiency anemia. Am J Hematol. 2016;91(1):31-38. 3. Loy S et al. Iron status and risk factors of iron deficiency among pregnant women in Singapore: a cross-sectional study. BMC Public Health. 2019 Apr 11;19(1):397. 4. Trost L et al. The diagnosis and treatment of iron deficiency and its potential relationship to hair loss. J Am Acad Dermatol 54(5), 824-844 (2006).



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