

Iron Deficiency Anaemia

Iron deficiency is the most common nutritional deficiency in the world. Up to 80% of the world's population might be considered iron deficient, while 30% may live with iron deficiency anaemia.

The three common situations leading to Iron deficiency are:

1. Inadequate dietary iron intake or Malabsorption of iron due to disease of the small intestine
2. Excess iron loss (bleeding) -Overt/Occult
3. Impaired production/Consumption/Destruction-Hemolysis/consumption coagulopathies

Symptoms of Iron Deficiency Anaemia

- Extreme fatigue
- Weakness
- Pale skin
- Chest pain, fast heartbeat or shortness of breath
- Headache, dizziness or lightheadedness
- Cold hands and feet
- Inflammation or soreness of your tongue
- Brittle nails
- Unusual cravings for non-nutritive substances, such as ice, dirt or starch
- Poor appetite, especially in infants and children with iron deficiency anaemia

Iron Rich Food for dietary deficiency

- Red meat, pork, poultry, seafood
- Beans, Dark green leafy vegetables, such as spinach
- Dried fruit, such as raisins and apricots
- Iron-fortified cereals, breads and pastas

Choose foods containing vitamin C to enhance iron absorption in citrus juices, like Broccoli, Grapefruit, Kiwi, Leafy greens, Melons, Oranges, Peppers, Strawberries, Tangerines, Tomatoes.

Chronic blood loss Causes

Digestive tract

- Inflammatory-for example, peptic ulceration, IBD
- Neoplastic-most commonly colonic adenocarcinoma
- Vascular malformations-angiodyplasia
- Parasitic-for example, hookworm

Genito-urinary tract

- Haematuria, pathological gynaecological bleeding-Menorrhagia

Respiratory tract

- Recurrent epistaxis, haemoptysis-all causes

Malabsorption syndromes

- Atrophic gastritis
- Helicobacter pylori infection
- Gastrectomy/gastric bypass
- Proton-pump inhibitors

Iron chelation

- Tea, coffee, calcium, flavonoids, oxalates, phytates
- Wide range of antacids, Pica syndrome

Enteropathies

- Coeliac disease
- Crohn's disease
- NSAID enteropathy
- Rarer enteropathies, for example, Whipple's disease

Small bowel surgery

- Small bowel resection/bypass

Genetic disorders

- Iron-refractory iron deficiency anaemia
- Divalent metal transporter 1 deficiency anaemia

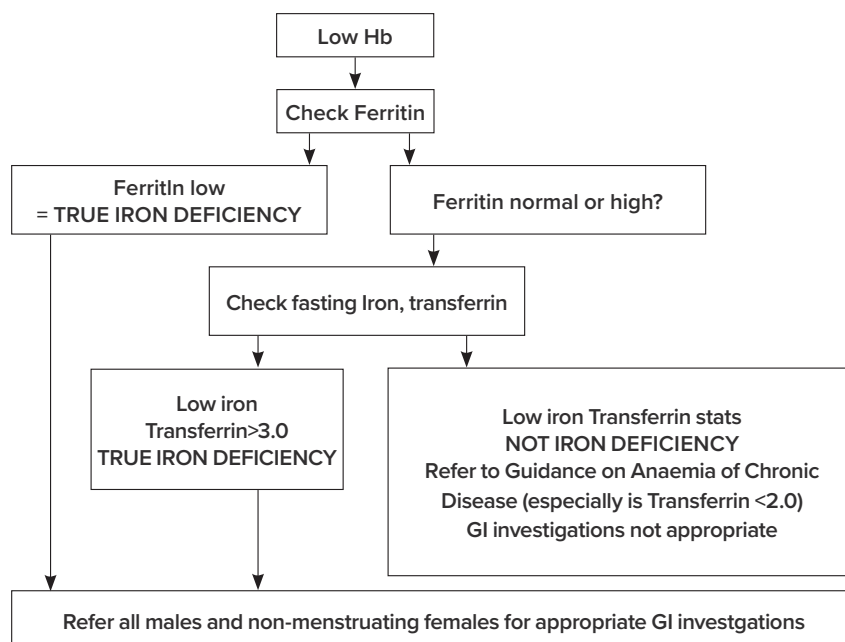
Chronic kidney disease

Chronic inflammatory disorders

For example rheumatoid arthritis

Continued overleaf...

Investigation of Iron Deficiency Anaemia In the absence of GI Symptoms



In the presence of true, proven iron deficiency, approximately **10% of males and non- menstruating females will have a significant GI problem** underlying this.

- These individuals should be referred for appropriate GI investigations if they are sufficiently fit to undergo them
- Investigation of the upper and lower GI tract will be undertaken
 - Upper GI Endoscopy combined with either
 - Colonoscopy or CT colonography or minimal preparation CT scan
 - Capsule Endoscopy for further small bowel evaluation if indicated due to symptoms or persistent Iron deficiency

GI investigations are not appropriate in other types of anaemia **unless there are clear GI symptoms to be investigated**

- Menstruating females should not undergo GI investigation in the absence of GI symptoms or a family history of colon cancer
 - Testing for Coeliac disease is appropriate in these patients
- GI investigations may be appropriate for patients >50 years (and without history of menorrhagia) with proven iron deficiency in the absence of anaemia.

References

GESA Iron deficiency anaemia investigation and management

<https://apps.nhs.uk/scot/refhelp/Gastrointestinal/IronDeficiencyAnaemia>

<https://www.mayoclinic.org/diseases-conditions/iron-deficiency-anemia>



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Dr Tiwari provides a tailored consultation to every individual patient with evidence-based care in all areas of Gastroenterology and Hepatology.

Her area of interest are Hepatitis, Fatty Liver disease, Advanced Liver Cirrhosis, Liver cancer, Upper GI Disorders, colorectal cancer screening and inflammatory bowel disease. She is efficient in gastroscopy, colonoscopy with polypectomy, management of acute GI bleeding of any cause, dilatation of strictures, placement of PEG tubes and capsule endoscopy (pill cam).

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