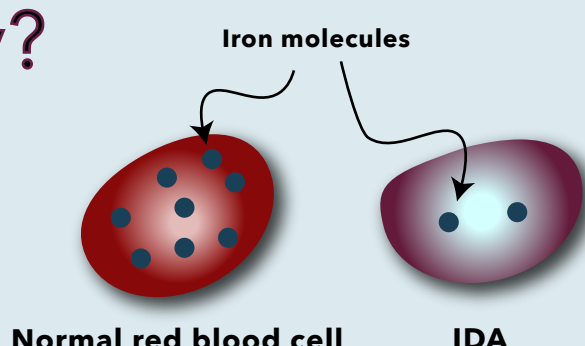




# IDA IN NDD-CKD WHAT YOU SHOULD KNOW

## What Is Iron Deficiency?

Iron deficiency (ID) means a shortage of **iron**, and without enough of it, the body's red blood cells **cannot deliver enough oxygen** to our tissue and organs.<sup>1</sup>



## What Causes Iron Deficiency?

- Lack of iron in your diet
- Issues with iron absorption in your gut
- Increased blood loss
- Increased need for iron<sup>2</sup>

## Conditions Linked to Iron Deficiency

- Chronic kidney disease
- Chronic heart failure
- Chronic pulmonary disease
- Inflammatory bowel disease
- Chronic autoimmune diseases
- Cancer
- Obesity
- Surgical procedures<sup>2</sup>

### Diet



↓ Intake, eg, vegan  
Malnutrition  
Polyphenol/tannins  
↓ Vitamin C

### ↓ Absorption



Gastritis, Drugs  
Surgery, H. pylori  
Celiac disease,  
Enteritis, Bleeding,  
Hookworm

### Needs



Pregnancy  
Children  
EPO/chemotherapy  
Athletes

### Blood Loss



GI lesions/cancer  
Menorrhagia  
Blood donations  
Hematuria  
Coagulopathy

### Inflammation



IBD  
Chronic disease  
(↑Hepcidin)

### Other



Hemolysis  
Iron metabolism disorders

## Why Are Patients With CKD More Likely to Have Iron Deficiency?

- IDA is a **common complication** of CKD<sup>1</sup>
- If you have CKD, you may have **lower levels of iron**<sup>3</sup>
- Many patients with CKD also have **blood loss causing iron deficiency**, especially if they are treated with dialysis for kidney failure<sup>3</sup>
- Patients with CKD often have iron absorption issues due to **infections, inflammation, and malnutrition**<sup>3</sup>

## Symptoms of Iron Deficiency



- Extreme fatigue
- Shortness of breath
- Pale skin
- Brittle fingernails
- Body aches and feeling weak
- Headaches and dizziness
- Fainting
- Heart palpitations
- Chest pain
- Sleep disturbances
- Trouble concentrating<sup>1,4</sup>

## References:

1. Mayo Clinic Website. Iron Deficiency Anemia. Date accessed August 2022. <https://www.mayoclinic.org/diseases-conditions/iron-deficiency-anemia/symptoms-causes/syc-20355034>
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