ISBN: 978-81-941253-2-7

# IRON DEFICIENCY ANEMIA: A REVIEW

**Sasirekha Parida and Sujit Kumar Mishra**
Department of Zoology, School of Applied Sciences, Centurion University of Technology and Management, Odisha, India

## ABSTRACT
*Anemia affects one fourth of the world's population, and iron deficiency is the most common cause of anemia. Iron deficiency anemia is only a part of the spectrum of iron deficiency syndrome. In this review we are discussing about the evaluation and management of iron deficiency anemia.*

***Keywords:*** *iron deficiency, serum ferritin, refractory iron deficiency anemia, obscure GI bleed*

## INTRODUCTION
Iron deficiency anemia (IDA) is the most prevalent forms of anemia. Globally it accounts for approximately 50% of anemia. In developing countries 30-70% of the population is iron deficient. IDA is thought to affect the health of more than 1 billion people worldwide [1].

### *Iron metabolism*
Duodenum and proximal jejunum is the major sites of iron absorption. Adult men have about 1 g of storage iron mostly in liver, spleen, and bone marrow. Only a small amount of iron enters and leaves the body on a daily basis [2]. Most iron is recycled from the breakdown of old red blood cells by macrophages of the reticuloendothelial system. (See Figure 1)

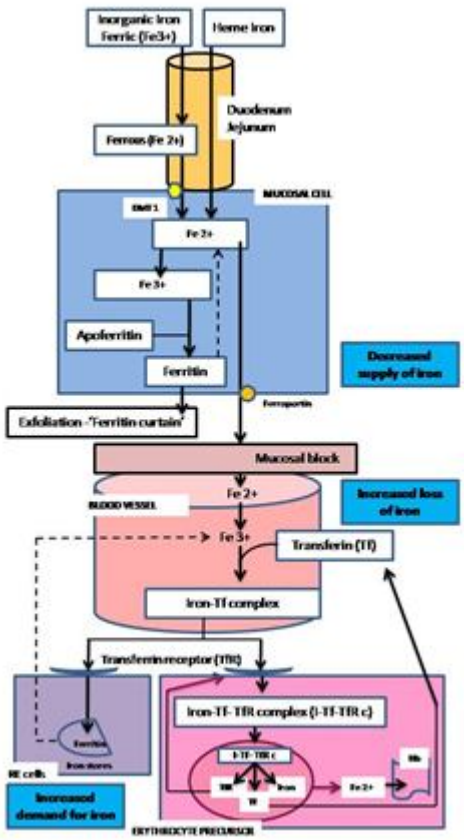


**Figure 1: Iron metabolism and mechanism of iron deficiency anemia**

The normal iron content of the body is approximately 3 to 4 g. It is distributed in the body as follows:

1. Hemoglobin in circulating red cells and developing erythroblasts - about 2.5 g

2. Iron-containing proteins (eg, myoglobin, cytochromes, catalase) - 400 mg