

# Transferrin Information Sheet

## Iron and Transferrin

Iron is a mineral with several essential functions in the body. It is required to transport oxygen around the body and is also essential for growth, normal cell function, and the production of connective tissue and some hormones (1).

Transferrin is the main protein that binds to and transports iron around the body.

Healthy transferrin levels vary slightly by age and gender. 174 - 364 mg/dL is considered normal for adult males aged 14 - 60 years, while the normal range for adult females is 180 - 382 mg/dL. The normal ranges for over 60 years are slightly lower, at 163 - 344 mg/dL (males) and 173 - 360 mg/dL (females) (2).

## Signs of iron deficiency

Low iron levels inhibit the production of hemoglobin, resulting in reduced red blood cells and a condition called anemia, which affects an estimated two billion people around the globe (3). Symptoms include:

- Tiredness
- Fatigue
- Pale skin
- Shortness of breath
- Headaches
- Dizziness

If left untreated, anemia can have serious repercussions, including impaired cognitive function, disturbances in the digestive system, and impaired immunity. Pregnant women, young children and frequent blood donors are at a much higher risk of iron deficiency (4).

## Signs of excess iron

Increased iron concentrations occur in hemochromatosis and acute liver disease (5). Excess iron cannot be naturally excreted from the body, so it accumulates in organs and tissues, eventually causing serious health complications.

The symptoms of iron overload include:

- Fatigue
- Depression
- Joint pain
- Decreased sex drive
- Abdominal pain
- Shortness of breath
- Memory problems
- Heart flutters

Further serious complications can occur in untreated individuals, including heart failure, liver cirrhosis and disease, and endocrine problems (6).

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## Where can I find more info?

Visit [www.genetrackdiagnostics.com](http://www.genetrackdiagnostics.com) for full test information, including specimen collection requirements

### CONTACT US:

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### NOTE:

This brochure is provided for general information purposes only. It is not intended to replace medical advice from a health professional.

### References:

- (1) Bothwell TH, et al. (1989). Nutritional iron requirements and food iron absorption. *J Int Med.* 226(5), 357-365.
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- (4) Camaschella C. (2015). Iron-Deficiency Anemia. *N Engl J Med.* 372, 1832-1843.
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- (6) Beutler E, Felitti V, Gelbart T, Ho N. (2001) Genetics of Iron Storage and Hemochromatosis. *Drug Metab Dispos.* 29(4):495-499.