TruFerraTM





CLINICAL APPLICATIONS

- · Increases Systemic Iron Without Adverse Effects
- Increases Energy Levels
- Supports Healthy Immune and Cognitive Function

ESSENTIAL MINERALS

TruFerra™ provides effective support for iron repletion. TruFerra™'s patented formula maintains iron in its most absorbable form and targets the body's natural site of iron absorption for enhanced bioavailability compared to other iron supplement forms.¹ Specially formulated to be non-constipating and non-nauseating, TruFerra™ is less likely to cause gastrointestinal irritation, and is clinically proven to significantly increase iron levels, resulting in improved energy and vitality.² Iron supports healthy bodily functions such as the formation of hemoglobin for red blood cells, immune system activity, energy production and cognitive function.

Overview

Iron, an essential mineral, plays a pivotal role in maintaining optimal health. Adequate iron levels in the body are essential for various physiological functions, including oxygen transportation, energy production, cognitive function, cell division, biotransformation and immune system support.³

Iron is a required mineral for several processes within the body. Approximately 70% of the iron within the body is found in the hemoglobin of circulating red blood cells. Of the remaining iron distributed in other tissues, around 20% is in storage form as ferritin or hemosiderin in the liver, spleen and bone marrow. Myoglobin participates in muscle-specific oxygen exchange and accounts for the final 10%. Iron is a vital part of cytochrome enzymes for cellular respiration and metabolism, especially hepatic biotransformation. Trace amounts of iron are present in transferrin for iron blood transportation.⁴

The human body has intricate mechanisms for iron absorption, transportation and utilization due to its inherently high redox

potential. The primary site of iron absorption occurs in the duodenum, with the upper jejunum acting as a secondary iron absorption site especially during times of increased need.⁵ Dietary iron is present as animal source heme-iron or plant source non-heme iron. Heme iron is absorbed by the heme carrier protein 1 (HCP1).⁴ Dietary or supplemental non-heme iron is absorbed by the divalent metal transporter 1 (DMT-1) in the duodenum; however, absorption only occurs when iron is present in its reduced ferrous (Fe²⁺) form. Supplemental iron can cause significant gastrointestinal (GI) irritation and side effects when the iron form has poor bioavailability due to the oxidation of iron to the ferric state (Fe³⁺) in the stomach.⁵ Clinical research reports that up to 80% of people can experience GI side effects like abdominal cramping, nausea, constipation or diarrhea when taking low-bioavailability forms, resulting in a 50% early discontinuation rate.^{6,7} Iron absorption from any source is further optimized when stomach acid is sufficient and when iron is not consumed with calcium supplements, antacids or tannin-rich drinks like tea and coffee.⁵

Iron is essential for all people; however, certain populations may have an increased need for it. People with restricted diets who have reduced or no intake of the more bioavailable heme iron from animal sources can experience increased iron needs. Certain health conditions, especially GI conditions with malabsorption, can require additional intake to maintain optimal iron status.³ Lastly, those with an active lifestyle, especially endurance athletes, also have additional iron needs due to iron loss during perspiration, increased red blood cell lysis and muscle protein synthesis with exercise.⁸

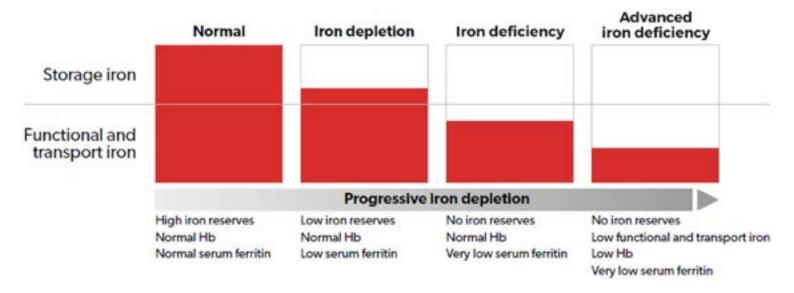


Women are especially susceptible to iron insufficiency, with up to 30% having a clinical or subclinical need for additional iron. The need for iron is highest for women during pregnancy, postnatally or during times of heavy menstruation. Menstruation is the leading cause of iron loss in the developed world, with up to 66% of women experiencing heavy menstrual periods. Pregnancy is a time of increased iron demand due to the bodily demands of fetal development and increased blood volume. Dietary changes alone are usually insufficient to satisfy iron requirements. 11

The World Health Organization (WHO) recommends that women supplement with 30 to 60 mg of iron daily to satisfy the increased iron need.¹² Due to normal blood loss during labor and delivery, the WHO recommends that women continue to supplement with iron for six to 12 weeks postnatally.¹³

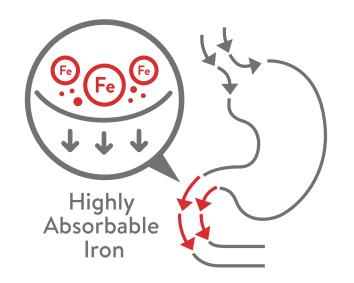
Increased bodily iron needs exist as a spectrum from ideal iron levels requiring no lifestyle changes to increased iron insufficiency and the need for dietary or supplemental intervention. Iron repletion interventions are most successful when bodily iron levels are increased without causing GI side effects that impair quality of life.¹⁴

The Spectrum of Iron Deficiency



The TruFerra™ Difference for Optimal Iron Repletion[†]

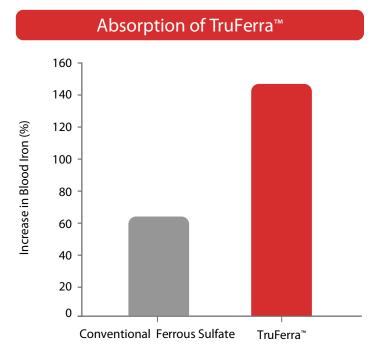
TruFerra[™] is a unique form of supplemental iron with superior bioavailability, offering maximal iron repletion without GI side effects. Unlike other supplemental iron, TruFerra[™] contains the patent-protected ST1406A[®] formula that delivers iron in its ideal ferrous (Fe²⁺) form to DMT-1 transporters in the duodenum for optimal absorption.





Enhanced Bioavailability[†]

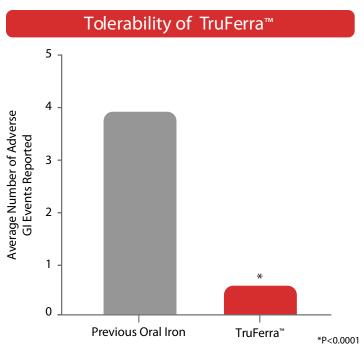
In clinical evaluation, a standard dose of TruFerra[™] demonstrated over twice the absorption of conventional ferrous sulfate, with the greatest repletion observed in iron-deficient individuals.¹



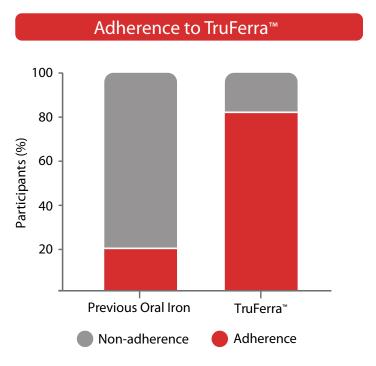
TruFerra™ showed over 2X better absorption compared to standard iron sulfate (p<0.001) in a prospective, randomized, cross-over, human clinical study.

Better Tolerability and Adherence[†]

Further clinical evaluation showed TruFerra™ caused six times less GI irritation than standard oral iron, leading to four times greater adherence.²



Reported adverse GI events comparing previous oral iron with TruFerra™ (p<0.0001).



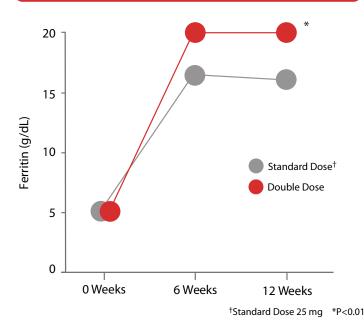
Participants taking TruFerra™ were 4X more likely to be adherent versus previous oral iron.



An Effective Solution for Increasing Iron and Energy Levels[†]

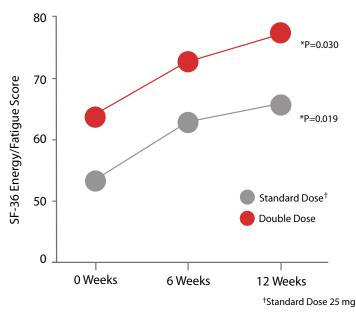
TruFerra™ is clinically proven to increase iron stores by more than 100% in six weeks with iron levels still maintained at 12 weeks.²

Increase in Iron Stores with TruFerra™



The 25 mg and 50 mg groups showed a 100% increase in ferritin levels (8 to 16 g/dL) and a 122% increase in ferritin levels (9 to 20 g/dL) at the end of 12 weeks (p=<0.01).

Energy Scores over Time with TruFerra™



Energy scores increased significantly in the 25 mg group (p=0.019) and 50 mg group (p=0.030) over the study period.

Directions

1 capsule per day or as recommended by your health care professional.

Serving Size 1 Capsule Servings Per Container 30 Amount Per Serving Amount Per Serving Iron 30 mg (as Ferrous Sulfate) No Daily Value for Adults and Children 4 or more Years of Age 167% 111%

Other Ingredients: Whey Protein Isolate, Natural Vegetable Capsule (Hypromellose, Sodium Copper Chlorophyllin (color)), Sodium Acetate, Ascorbic Acid and Acetic Acid.

Contains: Milk

ID# 264030 30 Capsules



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*ST1406A® is a patent protected iron formulation developed by Solvotrin Therapeutics and licensed to Ortho Molecular Products.

