

# Total Iron



## Clinical Applications

- Supplements Inadequate Dietary Intake of Iron\*
- Supports Increased Requirement for Iron\*
- Supports Healthy Ferritin and Hemoglobin Levels\*

*Iron bis-glycinate is a well-studied, 100% fully-reacted, patented form of iron exclusively from Albion Laboratories®. The amino acid glycine is actually one of the two starting materials the body uses to synthesize hemoglobin. Therefore, Total Iron contributes two key factors. This form of iron has higher bioavailability, lower toxicity, less food reactivity, less food interactions and has a longer shelf life than any other common form of iron.*

All ND Formulas Meet or Exceed cGMP Quality Standards

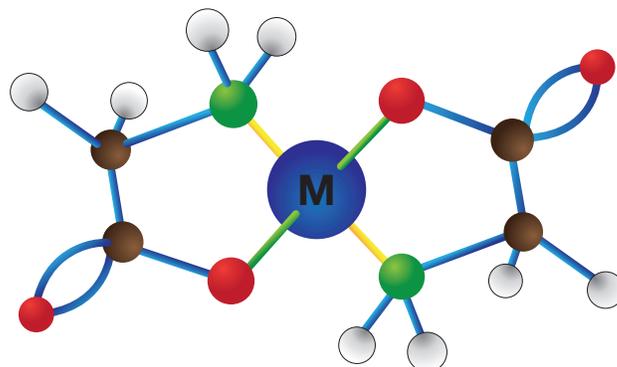
## Discussion

Ferrous iron is reacted with glycine to form bis-glycinate chelate, a non-electrically charged compound that is totally nutritionally functional. The absence of electrical charge, uncommon for an iron supplement, makes it less likely that Total Iron can interfere with absorption of other minerals such as calcium, vitamin E or vitamin C. Iron solubility from iron bis-glycine chelate is not affected by pH changes from 2-6. This means it travels unchanged through the stomach, into the intestine, where it is absorbed and released for transport throughout the body.\*

Patient compliance with iron bis-glycinate appears to be better than that seen with inorganic forms of iron supplements for two reasons. First, the taste: In a study with 145 pregnant women (that concluded daily supplementation with iron bis-glycinate chelate was significantly more effective even at a lower dose than ferrous sulfate) the percentage of taste complaints among the women given ferrous sulfate was 29.8%, while 0% of the women on the bis-glycinate chelate complained about taste. Second, iron bis-glycinate is less likely to have any of the gastrointestinal side-effects associated with standard iron supplementation.\*

A published absorption study showed there was a significant correlation between iron absorption of iron bis-glycinate chelate to serum ferritin ( $r = -0.60$ ,  $p < 0.03$ ) (The higher the ferritin the lower the absorption and vice versa.) The amount of iron stored in the body regulates iron bis-glycinate chelate absorption. This translates into less chance of toxicity. Another benefit of the bis-glycinate chelate form of iron over other iron supplements is that it doesn't act as a pro-oxidant.\*

Iron is an important component of hemoglobin, myoglobin, and ferritin. These proteins are involved in the transport, storage, and release of oxygen to the tissues.\*



Iron bis-glycinate Courtesy of Albion Laboratories, Inc.®

**\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.**

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# Supplement Facts

Serving Size: 1 Capsule  
Servings Per Container: 120

	Amount Per Serving	%Daily Value
Iron (as Ferrochel® Ferrous Bisglycinate Chelate)	29 mg	161%

**Other Ingredients:** Microcrystalline cellulose, HPMC (capsule), stearic acid, magnesium stearate, and silica.



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## Directions

Take one capsule daily, or as directed by your healthcare practitioner.

Children and pregnant or lactating women should consult their healthcare practitioner prior to use. Do not use if tamper seal is damaged.

## Does Not Contain

Wheat, gluten, corn protein, yeast, soy, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or preservatives.

## References

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10. Garcia-Casal MN, Layrisse M. The effect of change in pH on the solubility of iron bis-glycinate chelate and other iron compounds. *Arch Latinoam Nutr*. 2001 Mar;51(1 Suppl 1):35-6. [PMID: 11688079]
11. Szarfarc SC, de Cassana LM, Fujimori E, Guerra-Shinohara EM, de Oliveira IM. Relative effectiveness of iron bis-glycinate chelate (Ferrochel) and ferrous sulfate in the control of iron deficiency in pregnant women. *Arch Latinoam Nutr*. 2001 Mar;51(1 Suppl 1):42-7 [PMID: 11688081]
12. Olivares M, Pizarro F. Bioavailability of iron bis-glycinate chelate in water. *Arch Latinoam Nutr*. 2001 Mar;51 (1 Suppl 1): 22-5 [PMID: 11688077]
13. Pineda O, Ashmead HD. Effectiveness of treatment of iron-deficiency anemia in infants and young children with ferrous bis-glycinate chelate. *Nutrition*. 2001 May;17(5):381-4. [PMID: 11377130]
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15. Pelton R, Lavalley JB, Hawkins EB, et al. *Drug Induced Nutrient Depletion Handbook*. 2nd ed. Cincinnati, OH: Lexi-Comp Inc; 2001. Additional references available upon request.

## Warning

Accidental overdose of iron-containing products is a leading cause of fatal poisoning in children under 6. Keep this product out of reach of children. In case of accidental overdose, call a doctor or poison control center immediately.

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