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Perhaps the single most important factor for women considering supplementary iron is the frequent occurrence of uncomfortable side effects -

such as stomach upset, bloating, and nausea. Ferractiv® iron supplement powder is a unique, iron multi-amino acid chelate ingredient which has been clinically proven to be well tolerated. A study of 60 healthy, premenopausal women in a randomized, double blind, placebo controlled trial showed a statistically significant reduction in side effects when given an equivalent amount of iron as Ferractiv® as compared to ferrous sulfate, one of the most commonly used and well absorbed iron salts.

Additionally, *in vitro* experiments sussing a novel and highly sensitive iron absorption assay, developed by Dr. Ray Glahn and colleagues at USDA and Cornell University Department of Food Science, have shown Ferractiv® iron supplement to be highly bioavailable - meeting or exceeding the benchmark for bioavailability (ferrous sulfate- heptahydrate) in this model system.

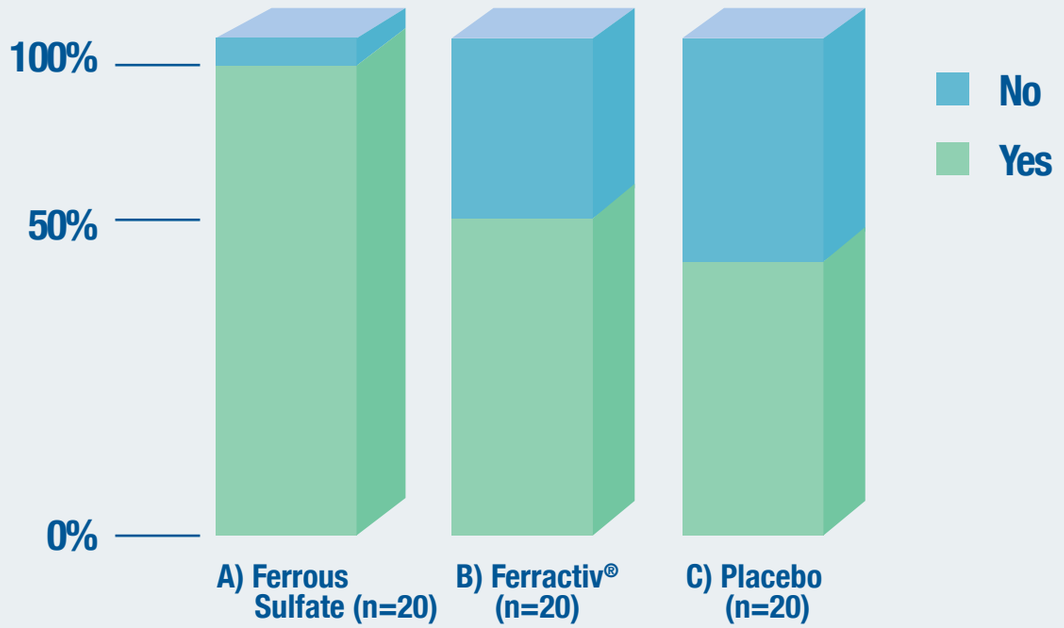
This *in vitro* work has been extended to the clinic, where large scale (n=450) trials in pregnant, anemic women demonstrates the superior performance of Ferractiv® iron supplement. Women receiving Ferractiv® containing capsules responded more quickly, with fewer complaints of discomfort, when being treated for iron deficiency anemia by three separate clinical measurements. Importantly, these benefits were realized at a comparable cost on a per-dose basis when compared to frequently used alternatives.

Finally, Ferractiv® has been studied at the atomic level in collaboration with the Canadian Light Source at the University of Saskatchewar in Saskatoon, Canada. The CLS is Canada's national synchrotron. This world- class research facility enables scientists and engineers to study the microstructure and chemical properties of materials. Ferractiv® was analyzed using the Hard X-ray Micro Analysis Beamline 6ID. The collaboration between Biotron and the CLS has demonstrated a quantitative difference between both the bonding energy and bond distances of the atomic structures within the multiple amino acid matrix of Ferractiv®. This data enables a definitive distinction to be made between this fully-reacted mineral chelate and other unreacted physical blends or irritating, low value inorganic salts.

Taken together, these data prove that Ferractiv®is unmatched as a safe, economical, well tolerated, highly bioavailable and unique iron-preparation - the ideal iron ingredient for safe, gentle, and effective supplementation.

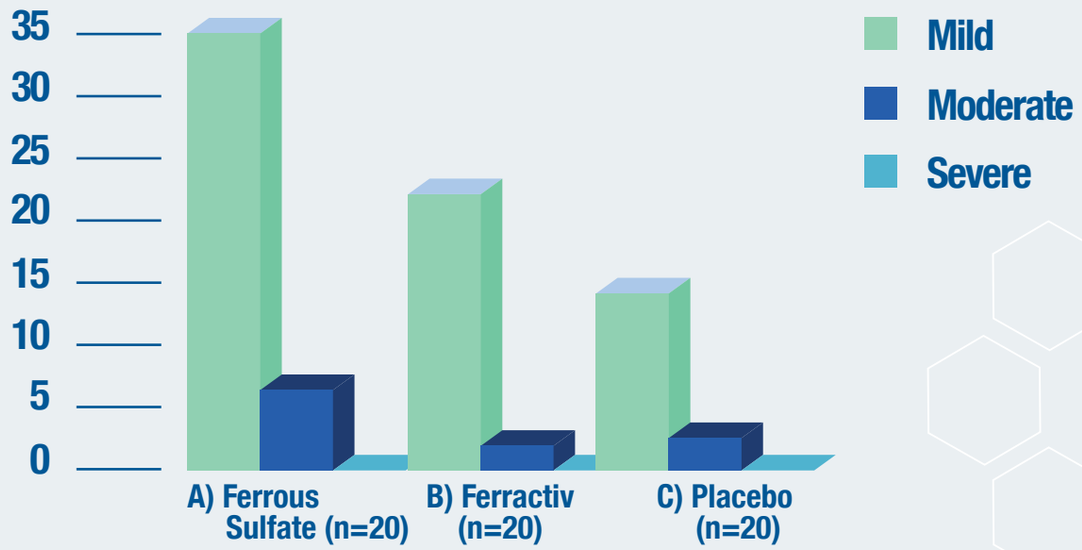
ADVERSE EVENTS:

The proportion of subjects reporting adverse events after 7 days was significantly higher for those given Ferrous Sulfate vs. Ferractiv® Iron Multi Amino Acid Chelate 10% ($p<0.05$) and Placebo ($p<0.05$). There was no statistically significant difference in adverse reporting between AAC and Placebo.



SEVERITY CLASSIFICATION OF ADVERSE EVENTS:

Shown are total numbers of adverse events reported by test product category and the severity of the event (mild and moderate). No severe events were reported in any group. Some patients reported more than one mild adverse event.



REFERENCE:

1) Fouad, G.T., Evans, M., Barss, S., Baisly, J., Crowly, D.,Guthrie, N. “Saftey and tolerability of iron amino acid chelate in premenopausal women”. Presented at FASEB, San Diego, California 2008.

2) Glahn, R.P., Lee, O.A., Yeung, A., Goldman, M.I., Miller, D.D. Caco-2 cell ferritin formation predicts nonradiolabeled food iron availability in an in vitro digestion/Caco-2 cell culture model. J. Nutr. 1998 Sep;128(9):1555-61.

3) Data on file, Biotron Laboratories, Inc. Centerville, Utah 84104 (July, 2008).

4) Abdel-Lah, M., Rasheed, Sl, Hassan,ll, El-sayed, A. Iron chelated amino acid therapy versus oral iron therapy for the treatment of iron deficiency anemia with pregnancy. The Journal of the Egyptian Society of Obstetrics and Gynecology. 2006; Vol. 32 No. 4, 5 &6: 419-428.

5) Data on file, Biotron Laboratories, Inc. Centerville, Utah, 84104 (December, 2008). “X-Ray Absorption Spectroscopic Measurements of Cr, Fe and Cu in Dietary Supplements”.

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