

We would like thank the editor and reviewers for highly constructive comments on our manuscripts. With these comments, the manuscript has been revised and improved. We appreciate the opportunity for resubmission and reconsideration for the publication in the Journal. Our replies are in "Arial" font. In the revised manuscript, the revised portions are in red font.

### **Reviewer 00504024**

I have a question. It is interesting research, but the difference between type 1 and type 2 DM should be stressed in your research. Please modify as such. It is acceptable for publication with minor change.

**Our reply:** We will like to thank the highly constructive critiques from the reviewer 00504024. We agree with the reviewer's comment regarding the type of diabetes. As current sample set did provide enough information to distinguish type 1 and type 2 diabetes, we chose the generic term "diabetes" in the current version of manuscript. As 95% of diabetes is type 2 diabetes and insulin resistance is a cardinal feature of type 2 diabetes, we agree with the reviewer's comment that the current study is most applicable to type 2 diabetes. In the revised manuscript, we stated that accordingly.

### **Reviewer 00037575**

Huang et al. present a crosssectional study from the data collected during the NHANES III with an emphasis on nonhemachromatotic subjects. The authors find high levels of serum ferritin in diabetic subjects and a negative correlation between serum ferritin concentration and insulin sensitivity, but not with beta cell function. In addition the authors report a correlation between alanine aminotransferase and serum ferritin concentration. Minor issues:

1. The authors report in the result section that there is an association between CRP and serum ferritin in 4 of the studied groups, but in the discussion state that "no consistent relationship of CRP with (...) serum ferritin concentration was observed in all 6 groups.

**Our reply:** We will like to thank the highly constructive critiques from the reviewer 00037575. We agree with the reviewer's comment regarding the statement on the association between CRP and ferritin. Without a consistent result across 3 ethnic/racial groups and both genders, we could not conclude the existence of the observed association. To clarify the issue the statement was rewritten in the revised manuscript.

2. The authors refer to serum ferritin as the second largest pool of iron in the body, however this likely refers to tissue ferritin and not serum ferritin.

**Our reply:** We will like to thank the highly constructive critiques from the reviewer 00037575. We agree with the reviewer's comment regarding the statement on the serum ferritin. Accordingly, the word "serum" was deleted in the revised manuscript.

## **Reviewer 02603551**

This is an interesting study. The authors have evaluated the relationship of iron with diabetes mellitus (DM) and concluded that disordered iron metabolism could play a role in the pathogenesis of insulin resistance and DM through its effect on liver function. Although the novelty of the present study is limited, it still can provide some new insights in the pathogenesis of insulin resistance. A limitation of the present work is that the mechanisms of disordered iron metabolism involved insulin resistance was not included in the present study. Appropriate statistical methods are used in this study. Strengths and limitations of the study are reported in the discussion. I have no major criticisms.

**Our reply: We will like to thank the highly constructive critiques from the reviewer 02603551. We sincerely appreciate the encouragement from the reviewer 02603551. In the manuscript we did stated that "Because of the cross-sectional nature of the study, a temporal relationship and the biological basis of the association between serum ferritin concentration and these metabolic disorders could not be established." From the results of this study, we are working to identify the underlying mechanism of this association.**