

Dear Editor, Dear reviewers

Thank you for your letter dated November 21. We were pleased to know that our work was rated as potentially acceptable for publication in Journal, subject to adequate revision. We thank the reviewers for the time and effort that they have put into reviewing the previous version of the manuscript. Their suggestions have enabled us to improve our work. Based on the instructions provided in your letter, we uploaded the file of the revised manuscript. Appended to this letter is our point-by-point response to the comments raised by the reviewers. The comments are reproduced and our responses are given directly afterward in a different color (blue). We hope that the revised manuscript is accepted for publication in the Journal of World Journal of Diabetes.

Sincerely,  
Prof. Wang

#### **SUGGESTIONS FROM EDITOR:**

(1) This study aims to assess the associations among nutrition, bone mineral density (BMD) and body composition in patients with T2DM. This article has creativity and innovation.

Thank you for your approval.

(2) The abstract should be standardized: Background, aim, methods, results, and conclusion.

Reply: We have added background to the abstract, see page 1.

(3) Please add PMID and DOI numbers to your references. They are available at: <http://doi.crossref.org/simpleTextQuery>. If there are no PMID or DOI numbers, please provide the website.

Reply: Thank you very much for your advice. We have added PMID and DOI numbers to the references via the method you provided, see the references section.

(4) We suggest adding secondary title to the result section in order to explain the topic more clearly.

Reply: We have added secondary title to the result section, including 'Patient characteristics' 'Associations between GNRI, BMD, T-FAT and ASMI' and 'Multivariate forward linear regression analysis of the determinants of BMD and ASMI', see the result section.

(5) Language evaluation: Grade B (Minor language polishing). The quality of the English language of the manuscript does not meet the requirements of the journal. Before final acceptance, it is recommended that the authors provide the English Language Certificate issued by a professional English language editing company. Please visit the following website for the professional English language editing companies we recommend: <https://www.wjgnet.com/bpg/gerinfo/240>.

Reply: After the manuscript is revised, we will select the professional English language editing companies you recommend to obtain an English language certificate issued by a professional English language editing company.

## COMMENTS TO THE AUTHOR

Reviewer: 1

Dear authors I was pleased to review your article and I have the following comments: Nutrition is mandatory to a healthy life and prevention. Your study is very important and should be published.

Thank you for your approval.

(1) Please explain the limitation of your study. English edits are required.

Reply: First, this study was cross-sectional in design. In cross-sectional studies, we collect data at a particular point in time, which makes it impossible to determine the temporal relationship between two variables and the order of causation. Second, we didn't select a single sex or a single age group. However, we feel that such studies are closer to clinical situations. With the findings in this study, we hope to explore them in specific populations next time. Finally, This study was all hospital-based and not representative of patients with stable diabetes. We hope to have the opportunity to conduct this study in the community in the future. Because this was a retrospective study, muscle strength and quality associated with myopenia were not measured, and we hope to explore this in future studies.

Reviewer: 2

In this study, patients were categorized based on baseline nutritional risk index (GNRI) values calculated from ALB level and body weight to assess their nutritional status and were analyzed. The conclusion "A high GNRI, was associated with a lower HbA1c, higher BMD at all bone sites, higher lean mass index and higher ASMI" is somewhat innovative.

Thank you for your approval.

(1) But because this study was retrospective and the GNRI calculation was related to body weight and ALB level, how the ideal weight is known is not mentioned.

Reply: Thank you very much for this important comment. We have added ideal weight calculation to "Data collection".

Men: ideal weight = height[cm] - 100 - ([height - 150] ÷ 4);

Women: ideal weight = height[cm] - 100 - ([height - 150] ÷ 2.5).

(2) When making model adjustments, the indicators are related to body weight and albumin level, whether it is necessary to consider the problem of collinearity between model indicators.

Reply: When adjusting the model, the index is related to body weight and albumin level, so collinearity among model indexes needs to be considered. In order to solve collinearity problem, we perform multivariate forward linear regression, see Table 6.

(3) In addition, patients' weight and albumin levels may vary dynamically, and there may be differences among the three groups depending on the patient's medication use, whether or not they have an impact on the patient's index levels, it is recommended that patients be matched before analysis.

Reply: Thank you very much for your suggestion. We really didn't think through this question in this study. We will consider this point in follow-up research.

(4) In addition, the authors noted that the patient's age span was large and no single

sex-and-age analysis was performed, suggesting that the analysis be performed after patient matching.

Reply: Thank you again for your suggestion about my research. In future studies, we will consider your suggestion and analyze patients after matching to study relevant problems in specific age ranges.

(5)Information on medication and lifestyle was seen in the results section, and it was recommended that specific questionnaires be added to the supplementary material or that information be described in the methodology.

Reply: Thank you very much for this important comment. We have added the information on medication and lifestyle in the “Data collection” of the methodology.

## Editor-in-chief 1

### **1. Questions about smoking and drinking history.**

Reply: After checking the original data, it was found that most of the data were missing and could not be restored, so the relevant descriptions on page 7 have been deleted.

### **2. Please provide detailed information about the determination of ideal weight.**

Reply: The calculation of the ideal weight is described in "Calculation of the GNRI" on page 8.

### **3. The grade of insulin resistance in enrolled subjects might have a critical relevance and should be reported. The role of this index should be examined and discussed.**

Reply: Thank you for your suggestion, we agree with you very much, but because we collect data retrospectively, we found that more patients did not complete insulin resistance test during hospitalization, so we have no choice but to abandon this parameter. We consider exploring this correlation in future studies.

### **4. Authors should provide information about normal distribution of data.**

Reply: We have added the description on page 9.

### **5. Patients should be better compared according to ongoing glucose-lowering therapy.**

Reply: This is a good suggestion. Some hypoglycemic drugs have been found to have an effect on bone mineral density in the previous literature, but this study mainly aims to explore the relationship between nutrition and bone mineral density. Therefore, we can consider grouping according to hypoglycemic drugs in future studies.

### **6. The existence of possible gender-related effects should be explored by authors.**

Reply: This is a good suggestion. We compared the correlations by gender in figure one. The GNRI was found to be positively and significantly associated with ASMI, T-FAT and BMD at all bone sites in men and women.

### **7. When discussing results, authors should take into account that the exposure to environmental pollutants (mainly air pollutants) is able to significantly affect both the clinical features of T2DM (mainly onset of disease and blood sugar control) and the nutritional status. The role of this possible confounder should be shortly discussed.**

Reply: Unfortunately, environmental pollution is something that we really didn't consider at the beginning of the study. I have added a brief discussion to page 13.

## Editor-in-chief 2

**Please include the same data from subjects without diabetes. It is critical to show whether any of these associations is specific in patients with diabetes or whether it is simply associations due to the aging process.**

Reply: This is a good suggestion. We also considered whether there was a correlation due to age when analyzing the data, so we did a group analysis of age in Table 2-4 and found that there was still a correlation. For comparison with non-diabetic patients, I think it's a good suggestion to consider related studies in the future.