

Dear Reviewers,

We sincerely appreciate your thoughtful comments on our manuscript titled "Dietary Fiber Intake and Its Association with Diabetic Kidney Disease in US Adults with Diabetes: A Cross-Sectional Study" (Manuscript NO: 90857). Your constructive feedback has played a crucial role in refining our work.

Reviewer #1:

### **1.Methodology**

1.1 Regarding your comment on the study's methodology, our cross-sectional analysis, based on the NHANES database, indeed aims to evaluate the relationship between dietary fiber (DF) intake and diabetic kidney disease (DKD).

1.2 In response to your concerns regarding research methodology, we employed a multivariate regression model and conducted adjustments within three models. The findings reveal that with an increase in DF intake, there is a linearly inverse correlation with the occurrence risk of DKD. We also confirmed the stability of the association through subgroup and sensitivity analyses.

### **2.Figures and Tables**

Your acknowledgment of the well-conducted study is appreciated. To provide clarity, we offer a comprehensive overview of the article's figures and tables.

Figure 1 delineates the participant enrollment process in our study, while Figure 2 portrays the subgroup analysis. Our investigation encompassed five subgroups, incorporating age, sex, BMI, HbA1c, and eGFR. Table 1 compares baseline characteristics of the study population stratified by tertiles of DF intake. Table 2 comprises univariate analysis, aiming to elucidate potential factors associated with the risk of DKD. Table 3 entails multivariate analysis, involving three models, to scrutinize the correlation between DF intake and DKD. Supplementary materials in our study include an additional table and a figure. Supplementary Figure 1 depicts the outcomes of restrictive cubic

splines, revealing a linear negative correlation between DF intake and DKD (nonlinear,  $P = 0.814$ ). Supplementary Table 1 presents sensitivity analysis, exploring the relationship between DF intake and DKD after excluding those with extreme energy intake.

### **3.Addressing Full Manuscript Access Concerns**

Addressing your concern about not having access to the full manuscript, we have summarized key points from the introduction, literature review, discussion, and conclusion, including the primary objectives, findings, and conclusions from these sections.

#### *3.1 Introduction Summary*

In the introduction, we outlined the characteristics of diabetes and its global trends. As a prevalent complication of type 2 diabetes, DKD is linked to end-stage renal disease and cardiovascular diseases, emphasizing the importance of delaying or improving DKD. We briefly introduced the concept of DF and its primary food sources. Previous studies have shown its positive effects in regulating blood glucose, lipids, enhancing insulin sensitivity, mitigating inflammation, slowing diabetes progression, and reducing the risk of cardiovascular and chronic kidney diseases. Finally, we introduced the main purpose of our study: evaluating the relationship between DF intake and DKD.

#### *3.2 Discussion Highlights*

In the discussion, we succinctly presented the main results, cited previous studies supporting the notion that increased DF can lower the incidence of type 2 diabetes, explored potential mechanisms underlying the protective effects of DF on type 2 diabetes, and further analyzed potential mechanisms for its protective effects on the kidneys. Limitations of our study were also addressed, and we committed to addressing these limitations in future research to further validate our findings and assist in formulating dietary strategies for type 2 diabetes patients.

#### *3.3 Conclusion Modifications*

In the conclusion, based on the main results of the entire study and your reviewer comments, we have made certain modifications to the conclusion section.

#### **4. Ethical Considerations**

Ethically, our study, constituting a secondary analysis of public data from the NHANES database, adheres to NHANES guidelines with written informed consent and NCHS Institutional Review Board approval.

#### **5. Language Refinement and Certification Submission**

##### *5.1 Language Refinement*

In this section, we highlight our efforts to enhance the readability of the manuscript by refining the language.

##### *5.2 Non-Native English Editing Certificate*

As part of our commitment to addressing language deficiencies, we have submitted a "Non-Native English Editing Certificate."

#### **6. Manuscript Modifications**

##### *6.1 Integration of Feedback and Editorial Input*

Here, we discuss the collaborative effort involving your feedback and editorial input, which led to specific modifications in the manuscript.

##### *6.2 Highlighted Revisions*

The revised sections, reflecting the implemented changes, are uniformly highlighted in yellow throughout the document.

We sincerely appreciate your time and effort in reviewing our manuscript. Your insightful comments have significantly contributed to the improvement of our research.

Best regards,

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