

## Response to Comment on "Effect of Glycemic Index and Glycemic Load on Atherosclerotic Stenosis and Stroke"

Min Peng<sup>1</sup>, Xiang Li<sup>2</sup>, Yujing Liu<sup>2</sup>, Min Zou<sup>3</sup>, Yaqian Xia<sup>2</sup> and Gelin Xu<sup>1,2</sup>

Min Peng, Xiang Li and Yujing Liu contributed equally to this work.

<sup>1</sup>Department of Neurology, Jinling Hospital, Medical School of Nanjing University, Jiangsu, China

<sup>2</sup>Department of Neurology, Jinling Hospital, Jinling Clinical College of Nanjing Medical University, Jiangsu, China

<sup>3</sup>Department of Hematology, Xiangtan City Central Hospital, Hunan, China

We thank Yuan and Zhou for their interest in our study<sup>1</sup>). Cornering their comments and queries, we would like to further discuss the related issues here.

Yuan and Zhou highlighted that the process of the food frequency questionnaire (FFQ) for collecting nutritional data was subjective. We agree on this point; nutritional data on an individual level can be collected using the FFQ or analyzing the food composition<sup>2</sup>). The major advantage of the FFQ lies in that it is simple, easy to operate, and can be implemented in large populations. The major disadvantage of the FFQ is that its accuracy largely rests on a standardized recalling process, without which there may be significant memory biases. However, the advantages of the FFQ are the disadvantages of the food composition analysis, and vice versa. A relatively large sample size is required for analyzing a number of parameters in this study; thus, FFQ may be an optimal choice. To improve the accuracy of the FFQ, interviewers were trained in advance and the subjects were provided with reference pictures for quantifying food sizes during the interviews in this study. As Yuan and Zhou indicated, patients could change their diet pattern after a having a stroke or other chronic diseases. It should be noted that the proportion of patients who had a previous stroke was relatively small in this study (22.1%)<sup>3</sup>).

Multivariate logistic regression analysis was used to identifying factors associated with atherosclerotic stenosis in patients with stroke. Yuan and Zhou debated that the propensity score matching method should be used. In general, propensity score matching is used in case-control or cohort studies for evaluating the effects of intervention<sup>4</sup>). This was a cross-sectional

study without any interventions, which rendered the propensity score matching method rather irrational.

Yuan and Zhou regarded the use of statins as a major confounder for evaluating atherosclerosis, and patients with a history of using statins should be excluded in this study. As we explained, this was a cross-sectional study, and no patients should be excluded. If a confounder could influence the outcomes, it should be adjusted, but not excluded.

### Conflicts of Interests

The authors declare no conflicts of interests.

### References

- 1) Yuan M, Zhou H. Effect of Glycemic Index and Glycemic Load on Atherosclerotic Stenosis and Stroke. *J Atheroscler Thromb*, 2020; 27: 1243-1244
- 2) Ye Q, Hong X, Wang Z, Yang HF, Chen XP, Zhou HR, Wang CC, Lai YC, Sun LY, Xu F. Reproducibility and validity of an FFQ developed for adults in Nanjing, China. *Br J Nutr*, 2016; 115: 887-894
- 3) Peng M, Li X, Liu Y, Zou M, Xia Y, Xu G. Dietary Glycemic Index and Glycemic Load in Relation to Atherosclerotic Stenosis of Carotid and Cardiovascular Risk Factors in Ischemic Stroke Patients. *J Atheroscler Thromb*, 2020; 27: 1152-1159
- 4) Deb S, Austin PC, Tu JV, Ko D, Mazer CD, Kiss A, Fremes SE. A Review of Propensity-Score Methods and Their Use in Cardiovascular Research. *Can J Cardiol*, 2016; 32: 259-265