

Basic Reporting

The reviewed manuscript aimed to evaluate the associations of 24-hour movement guidelines adherence with fruits and vegetables intake in university students.

Generally speaking, the novelty is less enough, however, the authors have given an entire study about the examine the correlation between compliance with 24-hour movement guideline (24-hour MG) and intake of fruits and vegetables (IFV) in Chinese University students.

The manuscript is written in clear language, with sufficient references included. It provides a clear, concise, and direct background on the subject matter.

I have thoroughly reviewed all raw data files, ethical letters and found them to be satisfactory, with no flaws in data management.

Some points should be corrected and clarified. The details as below,

1.The background is well-developed and highlights the importance of healthy eating habits, PA, SB, and sleep in maintaining overall health. However, it could be strengthened by providing more specific examples or statistics related to the impact of unhealthy eating habits and the benefits of healthy behaviors.

2.The literature review is thorough and provides a good overview of previous research on the 24-hour MG, PA, SB, and sleep in relation to health outcomes. However, it could be more focused on studies relevant to university students and the specific relationship with IFV.

3. The authors should double check the citation format in main body of manuscript.

Experimental design

In a cross-sectional study, it is important to clearly define the inclusion and exclusion criteria to ensure that the study sample is representative and the results are valid. The inclusion criteria specify the characteristics that participants must have to be eligible for the study, while the exclusion criteria specify the characteristics that disqualify individuals from participating. Here is how this could be addressed in the manuscript:

The statement should be as follows:

"In this cross-sectional study, the inclusion criteria were Chinese university students aged 18 years and above who were currently enrolled in a university. Participants were

required to have completed the survey questionnaire in full. Exclusion criteria included individuals who did not provide written informed consent, those who were not currently enrolled as college students, and those who did not complete the questionnaire. Additionally, participants with known medical conditions or disabilities that could affect their physical activity, sedentary behavior, or dietary habits were excluded from the study."

Consider including a flow diagram to depict the student's selection process, including screening, enrollment, and follow-up, to enhance transparency and clarity. It's just a suggestion.

Validity of the findings

Although the study is not new in terms of its purpose.

However, I believe, the study findings summarize and provides valuable insights for future research and health promotion strategies targeting university students in China. The study focused on university students in China, which may limit the generalizability of the findings to other populations. Future studies should aim to replicate the findings in diverse populations to enhance the generalizability of the results.

In the Discussion section, the content should focus on comparing the obtained results with previous findings. Authors should emphasize relevant factors and avoid discussing irrelevant content. E.g., Line 284, 285, same for others.

The discussion acknowledges the limitations of the study, such as the cross-sectional design and reliance on self-reported questionnaires. However, further discussion on the potential impact of these limitations on the study's findings and their implications would enhance the discussion.

Some other minor revisions should be addressed,

Heading number should not be insert in all main section from introduction to conclusion (e.g 1, 2...).

Don't use subheading numbers in throughout the manuscript.

e.g., 2.1 Study design and participants, 2.2.1 24-hour movement behaviors
same for others.

Line 83 The word "associaiton" should be "association."

Line 228 This limitation may hinder the comparability of our findings with prior research." - The word "comparability" should be "comparison."

Line 103 This body of literature suggests that compliance with the 24-hour MG...The sentence should be rewrite.

Line 190 Table 3 delves into specific combinations of adherence to the 24-hour MG....the sentence is poor should be improved.

191 variables, post-covariate adjustment.

Line 229 "Scientific evidence has proposed that adhering to the recommendations of following more movement behaviors (e.g., 3 versus 2 or 2 versus 1) was linked with improved health benefits." - This sentence should be revised for clarity, perhaps as: "Scientific evidence suggests that adhering to more recommendations for movement behaviors (e.g., 3 versus 2 or 2 versus 1) is linked to improved health benefits."

Line 224 The word "assoiaton" should be "association."

Line

Line 235 What do you mean by self-rated health?

Line 235 Why does it mention the self-rated health in this section? Is it part of the objective of the research?

Line 251 You mentioned that, "This gap poses a challenge in directly comparing our findings with previous research" it should be better to provide a valid reference here?

Line 271-272 The sentence is a bit unclear and could be improved for better clarity. It seems like you're trying to convey that adherence to recommended sleep guidelines is associated with a lower frequency of reduced fruit consumption.

Line 286 Yet, studies specifically exploring this relationship among Chinese university students.... Sentence should be revised.

Table captions are not satisfactory right now; they should be improved if possible. To improve the table captions, you can make them more descriptive and specific.

For table title, instead of just stating the content of the table, you can provide more context or highlight key findings. Here are some revised table titles:

Original: Table 1 - Participant Characteristics

Revised: Table 1 – Demographic and sample Characteristics of Chinese University Students (N=1,793).

Same for the others....

In Table 1 authors mentioned n, % and below they elaborate it as

Age (mean ± standard deviation) 20.7 1.6

Body mass index (mean ± standard deviation) 20.3 2.9

Perceived family affluence (mean ± standard deviation) 5.7 1.6

I think the use of "%" and "SD" may cause confusion here for readers. Can you please clarify this?