Comments from Referee:

**Referee:4 General comments**

The main aim was the description the relationship between food groups and the time of day when they were consumed, and how such relationships may vary by the status of

type 2 diabetes

1. The importance of the topic should be justified in the introduction part.

**RESPONSE**: Thanks for the suggestion. We have added description on diabetes prevalence in the NDNS RP sample. It was reported that 3.4% of men and 2.3% of women aged 19-64 years were found to have glucose concentration above 6.9 mmol/L. The proportion of men with undiagnosed diabetes increased with age to over 20% but not in women (2.1%) [1].

[1] Almoosawi, S., Cole, D., Nicholson, S., Bayes, I., Teucher, B., Bates, B., Mindell, J., Tipping, S., Deverill, C. and Stephen, A.M., 2014. Biomarkers of diabetes risk in the National Diet and Nutrition Survey rolling programme (2008–2011). J Epidemiol Community Health, 68(1), pp.51-56.

1. Which tools did you use for collecting the data about the food intake of participants?

**RESPONSE**: Food records diary is used in the NDNS RP to collect food intake data.

1. What were the inclusion and exclusion criteria?

**RESPONSE**: This is a nationally representative survey that includes all children and adults living in UK who are aged 4 years and above. There is no specific limits to inclusion and exclusion criteria as it is designed to be representative of UK population. However, we restricted the food diary recordings to those who aged 19 years or older (adult population).

1. More relevant and updated papers should be discussed in the discussion part.
2. Why you selected some food groups and assess the relationship between them and diabetes?
3. Time of the day was categorized into 7 slots. However, these categories did not use in the analysis. Why you select these categories.

[Response] The interest is to find unhealthy food consumed at night. (eating late references)

We needed to collapse the categories into night vs. day time for logistic regression.

1. In the method part, it is written that 60 standard food groups were used. However, in table 1, 37 food groups were analyzed. What is the reason for these differences?

[Response] Food groups contributed >= 90% calories were listed in table 1. Followed previous literature’s style.

1. More analysis should be used for obtaining the main aim of the study. The result part is very week and should be improved.

[Response] Additionally adjusted for BMI in the revised manuscripts.

1. The main aim was “to describe the relationship between food groups and the time of day when they were consumed, and how such relationships may vary by the status of type 2 diabetes” however the results were not related to the main aim.

[Response] We used CA as a tool to generate hypothesis. Healthier foods were more consumed earlier in the day. We chose the unhealthy foods that were flagged up that they were eaten at night. (find more papers about unhealthy food eaten at night)

1. You should explain the ethical statement.