Comments from Referee:

**Referee:3 General comments (second round)**

**RESPONSE:**

1. **The limitations and strengths.**

Strength: Large sample size, interesting analysis using CA and stratification by DM status

Limitation: Time slot choices may result in different results. When certain foods are eaten does not appear to be novel.

**RESPONSE:**

1. **Comment on the methods, results and data interpretation. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.**

* Correspondence Analysis:

1) Please explain in greater detail, why pudding is considered to be related to the night-time snacking slot (10PM to 6AM) compared to the 5PM -8PM (supper/dinner) time slot? In some of the figures, pudding is in the lower right quadrant, where the 5-8PM slot is. Are there metrics that can be used to determine which time slot has a stronger association? Would using the dot products be appropriate here?

**RESPONSE:**

2) Based on the supplementary table, the foods eaten at the 10PM to 6AM are fairly small. If this group is eliminated, would the CA result in a different map?

**RESPONSE:**

* Logistic regression:

3) The conclusion that “Individuals with undiagnosed diabetes are more likely to consume unhealthy foods at night” implies a comparison against the other diabetes groups and not a comparison to eating an item earlier in the day. Finding that most people drink alcohol or eat desserts such as ice-cream and pudding at night is not something that should surprise us. Most people are not going to drink alcohol during the day. To see formally (statistically) test if there is a difference in eating behaviours among the different DM groups, the logistic regression should be stratified by time slot, and exposure should be the different DM groups. This to me would be a more interesting analysis.

**RESPONSE:**

4) The types of food items that are associated with the 8PM-10PM slot do tend to be eaten at night, so of course the odds of eating these things would be higher. It seems to me that the 8PM-10PM slot should be compared only to other evening or afternoon slots instead. Has this been tried? If not, it seems to me that the ORs are only showing us that certain foods are eaten later at night, and is less about how diabetes status affects eating behaviours.

**RESPONSE:**

5) Please discuss the implications for finding that the odds of eating ice cream or pudding at night are higher. Other than not eating unhealthy food, do the findings suggest that to be healthy and have dessert too, that one must eat dessert such as ice cream and pudding at lunch or breakfast?

Minor issues:

6) Figures: what do the different colours represent?

**RESPONSE:**

1. **Detailed review report to the editor and authors (including any comments on the Q4 Check List):**

The correspondence analysis part of the manuscript can be considered minor edits. I believe the regression should be changed so that the time slots are stratified, the outcomes are the unhealthy foods, and the exposures or predictors are the different DM status groups. The manuscript as it is currently written only tests if foods are eaten at a certain time, whereas the regression I propose tests if diabetic status is related to eating unhealthy foods at a given time period. This method will formally test if the odds of eating certain foods by the different DM groups are statistically different. I apologize for not catching this earlier.

**RESPONSE:**