Reviewer's report

Title: Postprandial cardiac function in type 2 diabetes and the effect of pre exercise - a pilot study.

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Reviewer: Bryan H Hackfort

Reviewer's report:

The authors investigated the effects of two pre-exercise regimens or no exercise on the cardiovascular postprandial response to “fast-food” using recently diagnosed type II diabetics and age matched/BMI matched controls. Major strengths of this manuscript are that the authors investigated each exercise regimen on each participant with sufficient time between trials and that they are testing the response in a disease state versus healthy control.

Major

1. It would be interesting to see the cardiac response to a normal Norwegian meal. It was stressed that a fast food meal induces greater cardiac workload in Type II diabetics but does the response to a normal meal differ in type II diabetics and normal volunteers.

2. The discussion states: “The lack of exercise-induced improvements in postprandial TAS in the present study may be explained by the lack of postprandial changes in circulating glucose- and triglyceride levels.” P14. However, figures 3A (Glucose) and 3C (Triglycerides) show significant increases in postprandial glucose and triglyceride levels for both T2D and controls. Please elaborate.

3. Are there differences in response to gender? You have n = 10, but in the abstract and table 1 you specify only 7 males. The way it is written in the abstract it looks like the age and weight is only for males. It may be interesting to increase the number of females or remove them completely to measure gender difference or remove confounding results based on gender, respectively.

Minor

1. The significance labeling on the figures needs to be more evident as to which point it is denoting as significant (on all figures). Text says significance at one time point but often times it looks like it is denoting significance on the wrong time point.

Discretionary

1. Do you have any data on drug use that may confound your results such as NSAID use? A heavy exercise session after abstaining from exercise for a couple of days may elicit sore muscles.
Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.