

April 23, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (The effects of exercise on mitochondrial function in patients with type 2 diabetes, NO8120-review.doc).

We have replied to all the point raised by the reviewer. Furthermore, we have changed in the legends to Fig. 2-4, so the figures are easier to understand.

Title: The effects of exercise training on mitochondrial function in patients with type 2 diabetes

Author: Steen Larsen, Stinna Skaaby, Jørn W. Helge, Flemming Dela

Name of Journal: *World Journal of Diabetes*

ESPS Manuscript NO: NO 8120

The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

Thank you to the reviewer for constructive criticism and suggestions for improvements. We have adopted the suggestions raised by the reviewer. We believe that the review has improved by this. Below you'll find our response to the specific comments. Changes in the manuscript are made in red.

This is a timely and worthwhile review, however, I have some suggests for the authors of this manuscript. (1) Within the introduction, it would be pertinent to review the pathophysiology of type 2 diabetes prior to providing an overview of the changes to muscle function as a function of exercise or drug. I would also like to see a tighter link made between ROS and their interaction on muscle change/adaptation due to exercise. The authors briefly mention the link throughout the manuscript, but a more focused approach within the introduction would be beneficial and worthwhile.

Response: Thank you for this suggestion. We have made a section in the introduction where the pathophysiology of type 2 diabetes is reviewed briefly. Furthermore we have added a brief section in the introduction where ROS is mentioned in regard to the interaction on muscle changes due to exercise.

(2) It is somewhat surprising that there are too few studies mentioned regarding the effects of high intensity exercise and weight training on cell changes within this pathological group. Please thoroughly exhaust the literature to make sure that all published literature is included within the various sections.

Response: We have looked through the literature and found no extra studies investigating high intensity training in regard to mitochondrial function.

(3) There are a number of spelling mistakes evident throughout the manuscript. For example strength is consistently spelt incorrectly. other notable spelling mistakes include subjects and sensitivity. please address accordingly.

Response: This has been changed throughout the manuscript

(4) Please insert a number beside each reference within the tables, as this reference can then easily be tracked back to bibliography.

Response: The reference number has been added in the table

(5) There are some reference that are not complete, for example reference 36 has no title of paper. Please make sure that all reference are complete.

Response: All references have been completed in the revised manuscript, and the reference list has been updated to the Journals format

(6) Have the authors considered turing this review as it stands into a systematic review article. Whilst it would require a lot of additional effort to determine quality of studies etc, I think it would make the review article more robust.

Response: We agree that the review would be more robust, but it was not the intention with this review.

3 References and typesetting were corrected