

Abstract

- Page 1, line 17: Please reword to say “Obesity is thought to be associated with a reduced capacity...”
Response: The sentence was reworded
- Page 1, line 28: Please reword to say “controlling for CRF”.
Response: The sentence was modified
- Page 1, line 25: R^2 values can't be negative. Should this be $r = -0.54$?
- Please make sure to include p-values with all Pearson r values and R^2 . There were some results mentioned in the literature for which p-values weren't provided. This needs to be consistent. Without state p-values, the reader is not able to interpret the significance of the results, or agree with the concluding statement that MFO and RER_{peak} are valid indicators of TFO during steady-state exercise at FATmax.

Response: Thank you for the observation, the p values were included and the R^2 values were modified in the abstract and Figure 3.

Introduction

- Please make sure that you are consistent when you state “FATmax.” In some places, it was written as “Fatmax.” Please proofread your document and make corrections as needed (one example being on Page 1, line 63).
Response: The term was revised and corrected throughout the entire manuscript. Thank you
- Page 1, line 41: Again, please reword to say “associated with obesity.”
Response: The sentence was reworded
- Page 2, line 49: Please correct “perform” to “performed”.
Response: The sentence was reworded
- Page 3, line 80: Please correct “metabolic flexible” to “metabolically flexible”.
Response: The sentence was corrected
- Page 3, lines 90-91: Please reword this sentence to say, “...are associated and truly represent...”
Response: The sentence was corrected
- Page 3, lines 99-100: This final sentence of the Introduction does not entirely make sense. It is not clear what you mean by “the last.” Please reword to make it a complete and clear sentence.

Response: The sentence was corrected as follows: “We hypothesized that Metflex markers would be correlated and directly related with body fatness, because systematic evidence failed to demonstrate a low exercise fat oxidation in subjects with obesity”.

Methods

- Page 4, line 124: I am assuming that all 3 laboratory sessions performed between 8:00-11:00 h and after 10-12 h of overnight fasting. This is not entirely clear from the text. Please say if these conditions were applied to all laboratory testing sessions or only the first evaluation session.

Response: The experimental conditions were applied to all laboratory testing sessions. This was specified in the text. Thank you.

- Page 5, line 183: Please change the last word on this line from “de “ to “the”.

Response: Thank you the word was changed

- Page 5, line 200: Please change “realized” to “performed”.

Response: Thank you the word was modified

- Page 5, line 201: Please change “data was reported” to “data were reported”.

Response: The sentence was modified

Results and Discussion

- Page 6, lines 206-207: These sentences need to be reworded some. In particular, it is fine to say that “all participants were considered obese”. Also, it is better to say that the participants’ cardiorespiratory fitness was low, rather than saying that they were physically unfit. Since ACSM publishes VO₂peak norms for sex and age, please reference these ACSM norms when stating that participant cardiorespiratory fitness was low.

Response: The sentence was modified according to the reviewer's recommendation and the ACSM reference (No. 22) was included.

- Page 6, Table 1: Please say “body mass” rather than “body weight”.

Response: The term was modified

- Page 7, lines 225-233 and Page 7, figures 4A-D: Should there be inferential statistics to accompany this substrate utilization data analysis? It is difficult to interpret whether these changes are significant or not.

Response: Dear reviewer, as stated in lines 198-200 Repeated measures ANOVA was used to investigate the dynamic macronutrient oxidation during the 60-min of FATmax exercise. This is important because fat oxidation exponentially decreases below MFO after 10 minutes of continuous FATmax exercise (lines 61-63) questioning the relationship between MFO and TFO. Thus, it was necessary to determine whether fat oxidation rate decreased below MFO in order to test the aforementioned observation.

- Page 9, line 251: The beginning of this sentence is awkward. Do you mean to start with “In spite of the fat oxidation increase...”?

Response: The sentence was corrected.

- Page 9, line 258: Please change “propose” to “proposed”.

Response: The word was changed

- Page 9, line 270: Instead of saying “The here reported results...”, please reword to say, “The results of the present study agree with...”

Response: The sentence was modified.

- Page 9, line 270: This should say, “class III obesity”.

Response: The sentence was corrected, thank you.

- Page 9, line 275: Please change “acids” to “acid”.

Response: The word was changed

- Page 9, line 276: Please place the word “and” before the Roman numeral II. Also, please change “triglycerides” to “triglyceride”.

Response: The text was modified according to the reviewer's recommendation.

- Page 9, line 277: Please change “mechanism” to “mechanisms”.

Response: The word was modified

- Page 9, line 279: Again, please change “the here observed results” to “the results of the present study”. Also change “differs” to “differ”.

Response: The sentence was modified

- Page 9, lines 281-282: This sentence needs to be reworded to make it a complete sentence. Also, “participant’s” should be changed to “participants’ “ (e.g. the apostrophe should be placed after the word).

Response: The sentence was modified and the apostrophe was placed after the word. Thank you.

- Page 10, lines 295-304, 312-314: Please be aware that the word “Metinflex” starts to appear, whereas it has been called “Metflex” in other parts of the manuscript. Please revise in order to be consistent throughout the manuscript.

Response: Dear reviewer, the word “Metinflex” is defined in line 42 and mentioned in the introduction and discussion of the manuscript.

- Page 10, line 315: Please change “would lead” to “may lead”.

Response: The word was corrected

- Page 10, line 323: Please change “raised’ to “rose”.

Response: The word was corrected

- Page 10, line 324: Please change “increases” to “increased”.

Response: The word was corrected

- Page 10, line 325: Please change “reaches” to “reaching”.

Response: The word was corrected

- Page 10, line 330: Please change “a higher individuals CRF” to “higher participant CRF”.

Response: The word was modified

- Page 10, line 331: Please change the word “works” to “investigations”.

Response: The word was corrected

- Page 10, lines 334-335: Please change this sentence to say, “because metabolic rate augments several fold above resting values.”

Response: The sentence was modified

- Page 10, lines 337-339: Please check the grammatical correctness of this sentence...it is a bit awkward to read.

Response: The sentence was revised and modified

- Page 11, line 346: Please reword to say, “the first minutes after exercise onset,”

Response: The sentence was corrected