Reviewer's report

Title: Resting energy expenditure and carbohydrate oxidation are higher in elderly patients with COPD: a case control study

Version: 1 Date: 5 March 2012

Reviewer: Sandra Barbalho

Reviewer's report:

Introduction is appropriate and objective is clear.
Methods used are adequate.
Results, discussion and conclusion are appropriate.
Required revisions:

Results and discussion
1- Authors should include one or more references to the phrase “When carbohydrates are oxidized in the absence of oxygen, only 2 ATP molecules per millimol of carbohydrates are generated, while the presence of oxygen increases ATP/millimol generation to 36 ATPs.” And also to the phrase “Hence, individuals with COPD need to oxidize greater amounts of carbohydrates than healthy individuals to generate similar amounts of ATP molecules”.
2- Authors should explain the links between their results and PPAR-# and PGC-1.
3- Please, correct the phrase “Although individuals with COPD have lower aerobic metabolism and fats are only oxidized in the presence of oxygen, their fat oxidation was not affected, [9].” See that there is a “,” in the end.
In this same phrase: If this and other studies have found that patients with COPD have higher REE, how authors would explain lower aerobic metabolism? The increase in REE would not be enough to complete oxidation of carbohydrate and fats?

Conclusion
In conclusion I suggest that authors use
“In the group studied in this work it is possible to conclude that elderly patients with COPD have higher REE, RQ and carbohydrate oxidation than healthy controls”, instead of
“In conclusion, elderly patients with COPD have higher REE, RQ and carbohydrate oxidation than healthy controls”.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published
Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
No competing interests