**Author’s response to reviews**

**Title:** Impaired lung function is associated with non-alcoholic fatty liver disease independently of metabolic syndrome features in middle-aged and elderly Chinese

**Authors:**

Li Qin (qinli@126.com)  
Weiwei Zhang (amanda_zww@126.com)  
Zhen Yang (yangzhen1020@hotmail.com)  
Yixin Niu (niuniu@163.com)  
Xiaoyong Li (lixiaoyong@126.com)  
Shuai Lu (lushuai@126.com)  
Yin Xing (xingyin@126.com)  
Ning Lin (linning@126.com)  
Hongmei Zhang (zhonghongmei@126.com)  
Guang Ning (ningguang@163.com)  
Jiangao Fan (fanjiaogao@163.com)  
qing su (suqingxinhua@163.com)

**Version:** 2 **Date:** 31 Jan 2017

**Author’s response to reviews:**

Dear Editor:

Our manuscript has been extensively revised in accordance with the enclosed reviewers’ comments. All changes in manuscripts emphasized by red characters.
In the methods, it is reported that “those with alcohol consumption greater than 140 g/wk for men and 70 g/wk for women” were excluded from the study. In tables 1&2, however, 357 “drinkers” are included. Please explain.

Answers:

We are sincerely appreciative of reviewer’s insightful and thought-provoking comments. As reviewer’s description, “In the methods, it is reported that “those with alcohol consumption greater than 140 g/wk for men and 70 g/wk for women” were excluded from the study. In tables 1&2, however, 357 “drinkers” are included.” The definition of 357 “drinker” in tables 1&2 were people who drinking but alcohol consumption less than 140 g/wk for men and 70 g/wk for women.

Please describe how the final number of participants was reached.

Answers:

We thanks for reviewer’s comments. According to reviewer’s suggestion. we have briefly described the final number of participants was reached.

In 2011, China launched a national survey of Risk Evaluation of cAncers in Chinese diabeTic Individuals: a IONgitudinal (REACTION) study, which was conducted among 259,657 adults, aged 40 years and older in 25 communities across mainland China, from 2011 to 2012. The data presented in this article are based on the baseline survey of subsamples from Shanghai in eastern China. All studied individuals came from the Chongming District in Shanghai, China. There were 9930 participants who had complete information about age; sex; smoking and alcohol consumption habits; and a medical history including the use of medications, BMI, and a hepatic ultrasonic examination. Participants meeting the following criteria were excluded: 1) those with a history of known liver diseases such as hepatitis, cirrhosis, or malignancy; 2) those with alcohol consumption greater than 140 g/wk for men and 70 g/wk for women. Thus, a total of 8850 participants were eventually included in this analysis. Of these, two communities participants received lung function test. 1,842 participants were eventually included in the analysis. The protocol was approved by the Institutional Review Board of Xinhua Hospital affiliated with Shanghai Jiao-Tong University School of Medicine.
Were there any data collected regarding sleep duration/quality and symptoms of sleep apnea? Since sleep apnea is related to both insulin resistance and lung function, it could explain (at least partly) the study results. If no such data exist, this should be noticed as a limitation.

Answers:

It’s a very constructive and thought-provoking suggestion! However, due to study design defect, we could not get the data regarding sleep duration/quality and symptoms of sleep apnea in this study. According to reviewer’s advice, we have discussed it as a limitation in “Discussion” part.

In a cross-sectional study, as the present one, statements as “associated with increased risk of NAFLD” should be avoided, since only associations are justified. Please replace the term “risk of NAFLD” in the abstract (line 25)/what’s new (line 3) /discussion (line 35) by “prevalence”.

In table 3, please include the numbers of participants with/without NAFLD (not just the percentages)

Table 3 should come first (as Table 1)

Answers:

We thanks for reviewer’s reminder. According to reviewer’s instruction, we have changed it in manuscript.