### **Accepted Manuscript**

Title: High serum selenium levels are associated with impaired fasting glucose and elevated fasting serum glucose in Linyi, China

Authors: Zhe Li, Xia Li, Wen Ju, Guanrui Wu, Xiaomei Yang, Xiaofeng Fu, Xibao Gao

PII: S0946-672X(17)30568-0

DOI: https://doi.org/10.1016/j.jtemb.2017.09.023

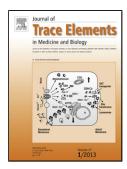
Reference: JTEMB 25990

To appear in:

Received date: 4-5-2017 Revised date: 18-9-2017 Accepted date: 23-9-2017

Please cite this article as: Li Zhe, Li Xia, Ju Wen, Wu Guanrui, Yang Xiaomei, Fu Xiaofeng, Gao Xibao. High serum selenium levels are associated with impaired fasting glucose and elevated fasting serum glucose in Linyi, China. *Journal of Trace Elements in Medicine and Biology* https://doi.org/10.1016/j.jtemb.2017.09.023

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



## **ACCEPTED MANUSCRIPT**

# High serum selenium levels are associated with impaired fasting glucose and elevated fasting serum glucose in Linyi, China

Zhe Li Shandong University in China
Xia Li Shandong University in China
Wen Ju Shandong University in China
Guanrui Wu Shandong University in China
Xiaomei Yang Shandong University in China
Xiaofeng Fu Shandong University in China

Xibao Gao Professor of Shandong University in China Number 44 in Wenhua Road

Telephone: 0086-18853128099 E-mail address: chem@sdu.edu.cn

#### Highlights

- This is a large observational study about the association among high serum selenium, impaired fasting glucose and elevated fasting serum glucose which contains 8142 participants in China.
- This study takes basic information, physical examination and laboratory detection information as concomitant variable and is special to add dietary information as concomitant variable.

#### Background

The relationship between selenium level and impaired fasting glucose or elevated fasting serum glucose remains controversial. This study aimed to evaluate these associations in China.

#### Methods

This observational population study adopted a cluster sampling approach to enroll participants. Baseline information on selenium categories was tested using one-way analysis of variance and Kruskal–Wallis equality-of-populations rank tests. Multivariable logistic regression was used to investigate the association between serum selenium level and impaired fasting glucose or elevated fasting serum glucose.

#### Results

The mean serum selenium concentration was 121.5  $\mu$ g/L which in a relatively high baseline Se status. Differences were observed among individuals with normal,

#### Download English Version:

## https://daneshyari.com/en/article/7638995

Download Persian Version:

https://daneshyari.com/article/7638995

<u>Daneshyari.com</u>