

Nutrition Journal 2005, 4:32 doi:10.1186/1475-2891-4-32

Published: 14 November 2005

## Abstract

#### Objective

To investigate whether daily diet provides adequate selenium intake in healthy men and women living in Tehran, Iran.

#### Method

Serum level of selenium was determined in 184 healthy individuals of both genders. The samples were divided into two age groups, adults and children, for analysis. The serum level of selenium was determined using hydride generation and flame atomic absorption spectroscopy.

#### Results

The mean and standard deviation of serum selenium levels in children (1–16 years) was  $84.3 \pm 11 \mu g/l$  and there was no significant difference between genders in this group. In adults (older than 16 years) the mean serum selenium level was  $100.6 \pm 13 \text{ SD } \mu g/l$ ; among women the mean was  $93.9 \pm 14 \text{ SD } \mu g/l$  and among men it was  $102.2 \pm 12 \text{ SD } \mu g/l$ . The mean selenium level in men was higher than in women and data analysis showed a significant difference between them (p < 0.005). There was also a positive correlation between higher selenium serum concentration and age in men (P < 0.001). Daily intake of selenium in men and women was calculated to be 67  $\mu g$  and 62.1  $\mu g$  respectively.

### Conclusion

Our results show that the serum concentration of selenium in an Iranian population is similar to other nationalities in the Middle East, particularly Saudi Arabia.

Pre-publication history PubMed record Related literature: Articles citing this article on Google Scholar on PubMed Central Other articles by authors On Google Scholar Safaralizadeh R Kardar GA Pourpak Z Moin M Zare A Teimourian S ⊖on PubMed Safaralizadeh R Kardar GA Pourpak Z Moin M Zare A Teimourian S Related articles/pages on Google on Google Scholar on PubMed Tools: Download references Download XML Email to a friend Order reprints Post a comment Sign up for article alerts Post to: Citeulike

# Connotea Del.icio.us

- 🕒 Digg
- Facebook



© 1999-2008 BioMed Central Ltd unless otherwise stated < info@biomedcentral.com > <u>Terms and conditions</u>