

Format:

Abstract ▾

Send to ▾

[Asian Pac J Cancer Prev](#). 2017 Mar 1;18(3):819-821.

## Urinary Iodine Concentrations in Cancer Patients

Kargar S<sup>1</sup>, Shir Yazdi SM, Atashi SR, Neamatzadeh H, Kamali M.

### Author information

1 Department of General Surgery, Shahid Sadoughi Hospital, Shahid Sadoughi University of Medical Sciences, Yazd, Iran. Email: smshir yazdi@yahoo.com.

### Abstract

**BACKGROUND:** It has been suggested that incidence of some cancers, especially examples in the breast and stomach may be influenced by the iodine intake. However, only few studies are available at present. Therefore, we have conducted the present assessment of iodine status in Iranian patients diagnosed with a malignancy.

**MATERIALS AND METHODS:** This cross-sectional study was conducted in 85 patients diagnosed with different types of cancer at Shahid Sadoughi Hospital, Yazd, Iran. The method used was based on the Sandell–Kolthoff reaction.

**RESULTS:** The median urinary iodine concentration (UIC) was 17.4 µg/L, with ≤20 µg/L indicative of severe iodine deficiency. According to the WHO/IC C IDD/UNIC EF classification, 88.1%, 7.1% and 2.4% of patients had a UIC <20 (severe), 20–49 (mild), and 50–99 µg/L (moderate), respectively. There was no statistically significant differences in UIC between men and women.

**CONCLUSION:** The UIC values indicate that Iranian cancer patients were seriously iodine deficient according to WHO/UNIC EF/ IC C IDD, and that this is a suitable index to assess iodine status in Iranians. Daily consumption of salt fortified with iodine or other approaches to increase intake might be effective strategies for prevention or reduction of malignancies.

**KEYWORDS:** Iodine; Iodine deficiency; urinary iodine concentration; cancerPMID: 28441792 PMCID: [PMC5464505](#) DOI: [10.22034/APJCP.2017.18.3.819](#)

Free PMC Article



LinkOut - more resources



### Full text links



### Save items

 Add to Favorites ▾

### Similar articles




[A comprehensive assessment of urinary iodine conc \[Nutr J. 2012\]](#)[Iodine nutrition status in pregnant women \[Thyroid. 2011\]](#)[Evaluation of iodine nutritional status in Tehran, \[Thyroid. 2010\]](#)[Review Iodine nutrition status in lactating moth \[Thyroid. 2015\]](#)[Review Thyroglobulin as a biomarker of iodine \[Thyroid. 2014\]](#)[See reviews...](#)[See all...](#)

### Related information

[Articles frequently viewed together](#)[MedGen](#)[References for this PMC Article](#)[Free in PMC](#)

### Recent Activity

[Turn Off](#) [Clear](#) [Urinary Iodine Concentrations in Ca](#) PubMed [Cited In for PubMed \(Select](#)

-  [Iodine stimulates estrogen receptor singling and its](#)
-  [Iodine stimulates estrogen receptor singling and](#) PubMed
-  [Assessment of Japanese iodine intake based o](#) PubMed

[See more...](#)

You are here: [NCBI](#) > [Literature](#) > [PubMed](#)

[Support Center](#)

**GETTING STARTED**

- [NCBI Education](#)
- [NCBI Help Manual](#)
- [NCBI Handbook](#)
- [Training & Tutorials](#)
- [Submit Data](#)

**RESOURCES**

- [Chemicals & Bioassays](#)
- [Data & Software](#)
- [DNA & RNA](#)
- [Domains & Structures](#)
- [Genes & Expression](#)
- [Genetics & Medicine](#)
- [Genomes & Maps](#)
- [Homology](#)
- [Literature](#)
- [Proteins](#)
- [Sequence Analysis](#)
- [Taxonomy](#)
- [Variation](#)

**POPULAR**

- [PubMed](#)
- [Bookshelf](#)
- [PubMed Central](#)
- [PubMed Health](#)
- [BLAST](#)
- [Nucleotide](#)
- [Genome](#)
- [SNP](#)
- [Gene](#)
- [Protein](#)
- [PubChem](#)

**FEATURED**

- [Genetic Testing Registry](#)
- [PubMed Health](#)
- [GenBank](#)
- [Reference Sequences](#)
- [Gene Expression Omnibus](#)
- [Genome Data Viewer](#)
- [Human Genome](#)
- [Mouse Genome](#)
- [Influenza Virus](#)
- [Primer-BLAST](#)
- [Sequence Read Archive](#)

**NCBI INFORMATION**

- [About NCBI](#)
- [Research at NCBI](#)
- [NCBI News & Blog](#)
- [NCBI FTP Site](#)
- [NCBI on Facebook](#)
- [NCBI on Twitter](#)
- [NCBI on YouTube](#)

National Center for Biotechnology Information, U.S. National Library of Medicine  
 8600 Rockville Pike, Bethesda MD, 20894 USA  
[Policies and Guidelines](#) | [Contact](#)

