

	<b>BIOMEDICAL RESEARCH ON TRACE ELEMENTS</b> Japan Society for Biomedical Research on Trace Elements
<a href="#">Available Issues</a>   <a href="#">Japanese</a>	
Author: <input type="text"/> <a href="#">ADVANCED</a>	Volume <input type="text"/> Page <input type="text"/>
Keyword: <input type="text"/> <input type="button" value="Search"/>	<input type="text"/> <input type="text"/> <input type="button" value="Go"/>



[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1880-1404

PRINT ISSN : 0916-717X

## Biomedical Research on Trace Elements

Vol. 15 (2004) , No. 3 272-274

[\[Image PDF \(333K\)\]](#) [\[References\]](#)

### Daily intake of major and trace elements in residents of Gomel oblast, Belarus

[Susumu Ko](#)<sup>1)</sup>, [Kunio Shiraishi](#)<sup>1)</sup>, [Sarata Kumar Sahoo](#)<sup>1)</sup>, [Larisa Shevchuk](#)<sup>2)</sup>, [Valery E. Shevchuk](#)<sup>2)</sup> and [Pavlo V. Zamostyan](#)<sup>3)</sup>

1) Research Center for Radiation Emergency Medicine, National Institute of Radiological Sciences

2) Gomel branch of Scientific Research Institute of Radiation Medicine & Endocrinology

3) Research Center for Radiation Medicine of Academy of Medical Science of Ukraine

(Accepted: September 9, 2004)

#### Abstract:

Gomel oblast in Belarus is one of the areas most seriously affected by the Chernobyl nuclear power plant accident. While food contamination by radionuclides has been well studied after the accident, no reports describing intakes of stable elements could be found. This paper describes a preliminary investigation on elements intakes. Diets of adults and children in the region were analyzed by ICP-AES and ICP-MS. The daily intakes of elements for Belarusian children were estimated as follows: Ba (1.6mg); Ca (0.44g); Cd (12 $\mu$ g); Co (20 $\mu$ g); Cs (3.3 $\mu$ g); Cu (0.90mg); Fe (29mg); K (2.2g); Mg (0.17g); Mn (2.4mg); Na (2.1g); P (0.65g); Rb (0.83mg); Sr (1.5mg); Th (0.50 $\mu$ g); U (0.36 $\mu$ g); and Zn (5.0mg.) Although a deficiency in Zn intake was found, the intakes of radionuclides such as <sup>232</sup>Th and <sup>238</sup>U were below levels of other regions.

**Key words:** [Chernobyl](#), [Belarus](#), [dietary intake](#), [ICP-AES](#), [ICP-MS](#), [elements](#), [radionuclides](#)

[\[Image PDF \(333K\)\]](#) [\[References\]](#)

Download Meta of Article[\[Help\]](#)

[RIS](#)

To cite this article:

Susumu Ko, Kunio Shiraishi, Sarata Kumar Sahoo, Larisa Shevchuk, Valery E. Shevchuk and Pavlo V. Zamostyan, "Daily intake of major and trace elements in residents of Gomel oblast, Belarus", Biomedical Research on Trace Elements, Vol. **15**, pp.272-274 (2004) .

---

JOI JST.JSTAGE/brte/15.272

Copyright (c) 2005 by Japan Society for Biomedical Research on Trace Elements

---



---

[Japan Science and Technology Information Aggregator, Electronic](#)

