

	<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. 4 342-344

[\[Image PDF \(252K\)\]](#) [\[References\]](#)

### Changes due to ageing in the concentrations of trace elements in the whole blood that assist with the process of antioxidation

[Masao Kondo](#)<sup>1)</sup>, [Naomi Aiba](#)<sup>1)</sup>, [Emi Higashi](#)<sup>1)</sup>, [Jun Oka](#)<sup>2)</sup> and [Masatoshi Kajimoto](#)<sup>3)</sup>

1) Department of Applied Nutrition, National Institute of Health and Nutrition

2) Tokyo Kasei University

3) Sagami Women's University

(Accepted: September 24, 2004)

#### Abstract:

Seven elements, Co, Cr, Cu, Mn, Ni, Se, and Zn, in the whole blood of a total of 94 healthy individuals (36 males and 58 females), ranging from 30 to 79 years of age, were measured by the coupled plasma-mass spectrometer (ICP-MS) method. Gender differences were found only in Cu ( $p < 0.05$ ). By age bracket, low values were measured for Cu in the 70s, Co in the 60-70s, Cr, Ni and Se in the 60s, Zn in the 40s, and Mn in the 30s and 60s. These results reveal that there is a trend for many elements that are involved in antioxidation, except for Zn, to decrease with ageing.

**Key words:** [whole blood](#), [trace elements](#), [ageing](#), [antioxidation](#)

[\[Image PDF \(252K\)\]](#) [\[References\]](#)

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

[RIS](#)

[BibTeX](#)

To cite this article:

Masao Kondo, Naomi Aiba, Emi Higashi, Jun Oka and Masatoshi Kajimoto, "Changes due to ageing in the concentrations of trace elements in the whole blood that assist with the process of antioxidation", *Biomedical Research on Trace Elements*, Vol. **15**, pp.342-344 (2004) .

