Full Paper	Thematic Section: Physical-Chemical Researches.
Registration Code of Publication: 10-22-12-38	Subsection: Biochemistry.
Publication is available for discussion in the framework of on-line con-	nference "Butlerov readings".
http://butlerov.com/readings/	C
Contributed to editorial board: December 20, 2010.	

## Indicator of total antioxidant activity of oral fluid - noninvasive method for determining the antioxidant status of the organism

## © Anatoliy A. Lapin, 1,2\*+ and Galina V. Vikha<sup>3</sup>

<sup>1</sup>Department of water bioresources and aquaculture. Kazan state power engineering university.

Krasnosel'skaya St., 51. Kazan, 429991. Russia. Phone: +7 (843) 519-42-67. E-mail: lapinanatol@mail.ru

<sup>2</sup> Technological laboratory of A.E. Arbuzov institute of organic and physical chemistry, KazSC of RAS.

Akad. Arbuzov St., 81. Kazan, 420088. Republic Tatarstan. Russia.

Phone: +7 (843) 272-73-34. E-mail: lapin@jopc.ru

<sup>3</sup> Institute for diagnosis and prevention of socially significant diseases. Lenin St., 88, room. 3, office 100. Moscow, 119313. Russia. Phone/fax: +7 (495) 442-92-13. E-mail: krol@mirea.ru

**Keywords:** antioxidant status, total antioxidant activity, oral fluid, urine, noninvasive method, secretory immunoglobulin A.

## Abstract

The total antioxidant activity of oral fluid can be an effective non-invasive methods for assessing total antioxidant status of the organism, the selection of individual therapy, evaluating the effectiveness of detection and treatment of pathological processes in the development of which the essential role belongs to the different processes of lipid peroxidation.

We studied samples of oral fluid of 117 persons of both sexes aged 18-84 years, with the following odontogenic inflammatory diseases of the oral cavity: alveolitis, periostitis, perikoronit, poluretentsiya, dystopia of the third molars of the mandible. The control group consisted of healthy volunteers of 35 people aged 20-26 years (15 men and 20 women).

The obtained data on total antioxidant activity are consistent with data on changes in secretory immunoglobulin A, elevated protein levels in saliva of patients the study group and comparison group can be explained by some violation of the integrity of the mucosal as a result of inflammatory processes.

<sup>\*</sup>Supervising author; \*Corresponding author