

## International Conference and Exhibition on Nutritional Science & Therapy

August 27-29, 2012 DoubleTree by Hilton Philadelphia, USA

## Analysis of selected metallic impurities in soft drinks marketed in Lagos, Nigeria

Oguntibeju OO1, Adepoju-Bello AA2, Onuegbu MT2, Ayoola GA2 and Coker HAB2

Faculty of Health & Wellness Sciences, Department of Biomedical Sciences, Cape Peninsula University of Technology, Bellville, South Africa

Twenty brands of soft drinks commonly consumed in Lagos, Nigeria were analysed for lead, cadmium, nickel, silver, chromium and zinc using standard biochemical procedures. The aim was to determine whether the concentrations of toxic metals in commonly consumed soft drinks are below or above the upper limit for each of the metals as set by World Health Organization (WHO). Results showed that cadmium was present in four of the samples at a concentration ranging from 0.023-0.158 mg/l, lead was present in three of the samples at a concentration ranging from 0.5045-3.0275 mg/l. Nickel was present in six of the samples at a concentration ranging from 0.016-0.063 mg/l while silver was absent in all of the samples. Some of the samples analysed can be said to be safe for human consumption because the values of the metals were below the allowable limits as set by WHO while others could not be said to be safe as the levels of metals were above the allowable limits as set by WHO. Therefore, it is suggested that health authorities and soft drink producing companies should pay more attention to the sources of these metals in soft drinks.

## **Biography**

O.O Oguntibeju is an Associate Professor and Group Leader (Nutrition and Chronic Disease Research Unit), Oxidative Stress Research Centre in the Department of Biomedical Sciences, Faculty of Health & Wellness, Cape Peninsula University of Technology, Bellville, South Africa. He lectures and supervises postgraduate students and collaborates with other scientists nationally and internationally. As an academic and researcher, he is involved in the field of nutrition and oxidative stress in cardiovascular disease, diabetes and HIV/AIDS. He reviews manuscripts for over 30 national and international scientific journals and has authored and co-authored over 60 scientific publications. He has received various awards such as the Research Excellence Award at his current university and has presented papers at national and international conferences. Prof O.O Oguntibeju holds a master degree in Biochemistry and a doctoral degree in Biomedical Science. He is a Chartered Scientist (CSci) and Fellow of the Institute of Biomedical Science, London.

bejufemi@yahoo.co.uk

J Nutr Food Sci ISSN: 2155-9600 JNFS, an open access journal

<sup>&</sup>lt;sup>2</sup> Faculty of Pharmacy, Pharmaceutical Chemistry Department, University of Lagos, Nigeria