## BODY COMPOSITION IN RUSSIANS AS ASSESSED BY BIOIMPEDANCE ANALYSIS: THE POPULATION REFERENCE DATA AND SOME COMPARISONS

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819,808 Russian males and females aged 5-97 years, who represented nearly 0.6% of the total Russian population, were assessed cross-sectionally in 2010-2012 by the same type of bioimpedance meter, ABC-01 'Medas'. The measurements were done in 220 Health Centers from 52 out of 83 federal subjects of Russia. The smoothed reference centile curves for anthropometric and BIA variables, such as height, weight, BMI, body fat (BF), fat-free mass (FFM), skeletal muscle mass (SMM), body cell mass (BCM) and other (33 variables in total) were provided based on extensions of the Cole and Green LMS method realized in the software package GAMLSS. At the age interval 5-25 years, our data on median weight and height showed good agreement with the updated 2002 data on the ICRP reference man. As compared to the IOTF reference population, the BMI distributions in children were shifted towards excess weight, with the average BMI z-score +0.41 for boys (29.1% of them being overweight and 12.5% obese) and +0.19 for girls (23.3% overweight and 8.0% obese). 2.9% of male and 3.0% female children were undernourished. The age-standardized prevalence of obesity in adults according to the conventional WHO criteria was 22.5% in men, and 31.9% in women. Our data indicated an increased risk of metabolic syndrome, with the maximum in women aged 55-65 years and the likelihood of developing the disease in this group being 4-5 times higher than in the age range 18-25 years. In male adults aged 50 years and elder, the metabolic syndrome risk was 1.5-2 times less than those in the females. In contrast, the age-standardized prevalence of high disability risk in Russian males aged 50-85 years was more than twice as much as the corresponding value in the females (12.7% vs 5.4%). Generally, our data show a significant interregional variation suggesting the presence of varying health conditions and epidemiological risks.

Key words: body composition, bioimpedance analysis, large database, Russian population, reference data

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## MASTOIDITIS: A CASE FROM LATE OTTOMAN PERIOD SKELETAL REMAINS

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Mastoiditis is an inflammation of the cells in the mastoid region of the temporal bone, and may occur nearly after two weeks of the beginning of acute otitis media. Otitis media is one of the frequently encountered complications, and can lead to deafness when it spread to the surrounding areas. Distribution of the inflammation may cause complications over large endocranial sinuses, lead to meningitis and extradural or the brain abscess, as well. Corruption of drainage of the mastoid cells is the basic pathophysiological mechanisms leading to mastoiditis. Characteristic clinical findings are auricular proptosis, retroauricular erythema and others where the most common symptoms are persistent otalgia, fever, and poor nutrition. Acute mastoiditis is a

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