

SECULAR CHANGES IN MORPHOLOGICAL STATUS OF THE ABKHAZIANS FOR THE LAST 30 YEARS

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The paper presents the results of anthropological studies of the adult Abkhazian population (aged 20 to 90 years old) of three villages for 30 years. The data were collected in 1980, 1990 and 2010. Secular changes of stature were examined in the pooled data. The results show that Abkhazians, born between 1920 and 1990, reveal the existence of secular trend in stature, with the rate of 0.24 cm for men and 0.85 cm for women for each decade. Secular dynamics of stature for men is not even, whereas for women - it is a gradual increase over the entire historical period. Maximal average values are found in women born in 1981-1990. For men, minimal average values of stature are found for those born in 1931-1940, as a consequence of a difficult period of social upheaval (collectivization, purges, the Great Patriotic War), maximal values - for those born in 1961-1970, as a result of the acceleration process. Men born in 1981-1990 are characterized by a slight decrease in their height as a result of the unfavorable growth conditions in the 1990's. Analysis of the distribution of individual values for stature indicates the continuation of acceleration process and its stabilization for women. Comparative analysis of the skinfolds in the Abkhazians of different generations was also performed, and body mass components (subcutaneous fat and total body fat) were calculated with J. Matiegka's equations. The findings show a marked increase in the skinfold thickness (subscapular, chest, abdominal) in men and women of the 2010 survey, as well as high rates of age-related changes in these traits. The same is true for the fat mass. With each subsequent survey, the younger generation of the Abkhazians is characterized by weaker physical development as demonstrated by hand grip strength. The results of the study show that environmental factors have a strong effect on the physical status of the genetically stable population of rural Abkhazians. In the former longevity population of Abkhazians there is a trend towards acceleration of the age-related changes. This may be explained by the unfavorable socioeconomic processes of the 1990's in Abkhazia.

Key words: *physical anthropology, stature, body weight, body-mass index (BMI), fat mass, secular trend, age changes*

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VITAMIN D STATUS IN NORTHERN INDIGENOUS PEOPLE OF RUSSIA LEADING TRADITIONAL AND "MODERNIZED" WAY OF LIFE

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Vitamin D status in the groups of Northern indigenous people of Russia leading close to traditional (semi-nomadic reindeer herding), post-traditional (in settlements) or "modernized" (in towns) way of life was analyzed. The study groups consisted of 328 Nenets and Komi aged 18-60 years living in the Arctic (66-67°N). Urban Komi (n=101) living in non-Arctic area (57-61°N) formed a control group. The concentration of serum 25OHD, as a transport form of vitamin D, was assessed by the enzyme immunoassay analysis. The group average 25OHD levels in both rural and urban Arctic residents are within the range of the values seen in the non-Arctic urban subjects adjusted for season: 39.7- 47.7 nmol/l. Abandoning traditional lifestyle associates with lower vitamin D levels in the Indigenous Arctic people. Mean \pm standard deviation of 25OHD values among Nenets were lower in those living in the administrative center (a big settlement) with a population of 1460 (32.2 ± 12.90 nmol/l) than in the residents of small settlements (39.6 ± 14.08 nmol/l), and in reindeer herders (42.4 ± 13.45 nmol/l). Komi people living in towns had lower 25OHD concentrations (47.7 ± 12.00 nmol/l) than Komi reindeer herders (68.7 ± 25.20). The transition from semi-nomadic to post-traditional and "modernized" way of life has