lead to a decrease in consuming traditional foods among the indigenous people of the Russian Arctic. Our data support the notion that the traditional northern diet promotes healthy vitamin D levels, while adherence to the "western" type of diet correlates with a lower 25OHD concentration. Supported by 026-F grant of the Perm State Pedagogical University.

Key words: nutrition, lifestyle, vitamin D, 25OHD, indigenous people, circumpolar regions, Arctic

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## TO THE BIOARCHAEOLOGY OF CHILDREN'S BURIALS FROM GONUR-DEPE BRONZE AGE SITE, TURKMENISTAN

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The aim of this communication is to discuss the results of bioarchaeological investigations of the remains from Gonur-depe tombs, where sub-adult human beings were buried. Gonur-depe is a well-known Bactria-Margiana archaeological complex site (Southern Turkmenistan, III-II mill. BC). The skeletal remains of 37 individuals received from 36 tombs in 2009-2010 excavation are analyzed. The sample has such an age structure: 8.3% belongs to the fetus and newborns, 30.6% - to children less than 1 year, 30.6% - to 1-3 year-olds, 8.3% - to 4-6 year-olds, 11.1% - to 7-9 year-olds, 8.3% - to 10-12 year-olds and 2.8% - to 12-15 year-olds. Cribra orbitalia was the most common stress marker. Distribution of this indicator shows significant differences between the infantilis I and infantilis II age subgroups. Variability of the long bones was considered separately for each age interval. Deviations from the M. Maresh standards were calculated by dividing the individual values of the parameter to the age standard ones. Individual deviations from the age standards vary in the range of 0.73–1.02 (average value – 0.90). Proximal segments of the extremities reveal a greater delay in growth rather than the distal ones. The infants aged 0.2–2 years demonstrate the smallest "lag" from age standards of longitudinal growth rates. Primary distal growth in the sub-adult sample is connected with the dolicho- and mesomorphic types of body proportions (relatively elongated forearm and calf). Overall, the results of bioarchaeological research of the sub-adult burials from Gonur-depe confirm once more the thesis about good adaptation of this ancient group to the local environmental conditions and show that main body proportions of the adaptive types according to Tatyana Alexeeva (in this case - the Arid one) are formed in the early childhood. The investigations are supported by the Russian Fund for Basic Research (project 13-06-00233a).

Key words: bioarchaeology, children's burials, Arid adaptive type, Turkmenistan, Bronze Age

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## CROW'S INDICES OF DIFFERENTIAL FERTILITY IN RUSSIA'S TWO LARGEST CITIES: INTERETHNIC VARIATION AND SECULAR TRENDS

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Using Russia's 2002 census data, population replacement parameters and Crow's indices of the opportunity for selection have been analyzed in Moscow and St.-Petersburg in 7 cohorts of females with completed fertility (years of birth from the early 20th century till 1962). During the whole time period, average number of births per female (kav) in 5 ethnic groups under study (Russians, Ukrainians, Byelorussians, Tatars and Jews) was less than 2, that is not enough even for simple population replacement. In female 1953–1957 birth cohort kav varies from 1.33 (Jews) to 1.61 (Tatars). Proportion of infertile females (having no births) in two megalopolises is considerably larger (up to 20% in the senior age cohorts) than in populations with traditional culture. Selection component due to differential fertility (If) was high in female cohorts born before the 2nd