why an access ramp is constructed by the excavator to reach the undefined level where the human remains, which are situated in the well, are located. During the removal of the deposit of the wells different challenges, either caused by nature or humans, can be encountered. For example, during the years these abandoned wells were used as "trash pits" (garbage, dead animals, discarded materials) or were altered (e.g., collapsed, water existence) by natural forces. The same reasons can be present during the exhumation process. Once these difficulties are confronted, with the use of several techniques the scientists have to concentrate on the exhumation process, which is mainly followed manually. The procedure depends primarily on the type of burial (single or multiple/commingled), the existence of water or not, whether it was disturbed, and the decomposition of human remains inside the well.

Key words: *forensic anthropology, wells, Cyprus, CMP, human remains, excavation, exhumation*

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COMPARATIVE ANALYZIS OF ANTHROPOMETRIC INDICES OF ATHLETES SPECIALIZING IN SHORT-TRACK AND MOSCOW SCHOOLCHILDREN AT THE AGE FROM 7 TO 16 YEARS

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The aim of the paper is to study and compare variability of individual anthropometric indices in short-track athletes with the control group of Moscow schoolchildren from 7 to 16 years of age. Anthropometric measurements were conducted in conformity with classical methods, accepted at the Institute and Museum of Anthropology, Lomonosov Moscow State University.

Conducted research has allowed to establish that the basic differences between athletes and schoolchildren of both gender groups have been observed at the age of 7–12. Schoolchildren have conceded athletes in all measured parameters. The 13–16-year-old schoolchildren are significantly smaller in all circumferences, but exceed in hand grip strength in both gender groups.

The obtained anthropometric characteristics might be used in sport selection as well as for conducting a medico-biological monitoring.

Key words: *anthropometric indices, short-track athletes, Moscow schoolchildren*

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T/A POLYMORPHISM OF THE FTO GENE IS ASSOCIATED WITH THE PREDISPOSITION TO FAT ACCUMULATION IN THE KALMYKIAN MALES

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The problem of human fatness is one of the most urgent in the modern world. Studies in the field of anthropogenetics revealed some genetic determinants of increased fat accumulation and, as a consequence, of obesity development. The T/A polymorphism (rs9939609) in the fat mass and obesity associated (FTO)

gene, is a strong candidate to explain how the disease modifier polymorphisms may contribute to a lower risk for obesity among trained individuals (Kilpelainen et al., 2011). It has been shown that adults who are homozygous for the A-allele weigh on average 1.5 to 3 kg more than those homozygous for the T allele. This finding has now been replicated in multiple obese cohorts (Fawcett and Barroso, 2010).The aim of the study was to examine possible relationships between T/A polymorphism of FTO with fat accumulation among 101 Kalmykian males (46 wrestlers aged from 14 to 26 years and 52 sedentary controls aged from 17 to 28 years). The program included standard anthropometric measurements (Bunak, 1941). For molecular genetic analysis buccal smears were collected. Genome DNA was extracted with the technique of alkaline extraction. Genotypes were determined with the minisequencing technique followed by MALDI-TOF detection (Ross et al., 1998). Statistical analysis, performed with the software «Statistica 8.0», included descriptive statistics, normalization procedure, one-way ANOVA with Scheffe's test for multiple comparisons. Statistical analysis has revealed the tendency to significant difference in genotype frequencies between wrestlers (FTO*TT 52.5% FTO*AT 32.5% FTO*AA 15.0%) and sedentary controls (FTO*TT 48.9% FTO*AT 32.5% FTO*AA 18.6%), $\chi^2 = 5.52$, p=.06 There is a certain increase of T-allele frequency in the wrestlers' group (69% vs 65%). In general, the athletes demonstrate lower fat accumulation matching with the controls. ANOVA results revealed a lot of associations between FTO genotype and anthropometrical characteristics, describing fat accumulation both in the wrestlers' group (weight, fat mass, chest, waist and hips circumferences, trunk and leg skinfold thicknesses) and in the sedentary controls (trunk skinfold thickness). The carriers of two mutant alleles (AA genotype) demonstrate increased parameters of fat accumulation in both groups. Thus, the presence of two rare alleles of the FTO gene polymorphic system in the genotypes of the investigated Kalmykian males could be considered as a risk-factor of increased fat accumulation. This research is supported by the RFBR grants # 13-06-00702.

Key words: *FTO gene, fat accumulation, wrestlers, Kalmyk males*

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ANTHROPOMETRIC NUTRITIONAL ASSESSMENT OF EGYPTIAN CHILDREN WITH AUTISM

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Autism is the fastest rising developmental disorder in the world today. Studies denote aberrations in conduct during meals, selectivity of food as well as problems in timing of meals. The aim of this study is to assess the nutritional status of children suffering from autism using anthropometric criteria. 100 Egyptian children diagnosed with autism of the age range 3-10 years and of whom 71 males and 29 females were studied. Body weight, height, body mass index, mid-upper arm circumference and triceps skinfold thickness had been assessed in view of the relevant measurements, by age and sex, of normal healthy Egyptian children. The mean Z score of all measurements attempted, calculated BMI and its standard deviations as well as the range are presented. Using single sample t-test, it was found that all measurements are significantly higher than normal with the exception of body height and mid-upper arm circumference. Probably the increase in fat component in our autistic children is due to increased carbohydrate and fat intake as well as sedentary life style, thus suggesting introduction of a feeding program for such children to overcome the unfavorable consequences of the disease.

Key words: *autism, anthropometry, nutrition, children, Egypt*

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