

Reaction of morph-functional components of children's organism on ecological factors

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In order to study the influence of unfavourable ecological factors on changeability of morph-functional indexes of children's organism we have done complex research of anthropometric indexes at about 900 newborns, and children of 3-10 age, born and living in Belgorod region (Russia) with different level of anthropogenic pollution. We used complex of morph-functional research of VV Bunak, J Mateigka and P Deurenberg with the following statistic processing of material obtained. Analysis of newborns' morph-functional characteristics on their individual signs, taking into consideration ecological situation, has revealed higher mean values relatively to indexes of body mass, dimensions of head and chest at boys and girls from regions with critical ecological situations in comparison to newborns from regions with satisfactory ecological situations. On the contrary, the results of investigations in level of physical development of pre-school and younger school age children have shown that boys and girls from regions with higher level of ecological pollution have reliably lower values practically in all anthropometric indexes. Besides that comparative analysis of component body structure has determined the increasing of percent contents in lipid body mass both at boys and girls, living in regions with critical ecological situations. Thus, the changeability character of individual signs in children's organism depends on the ecological situation in region of his/her birth and living, and its intensity is connected with the age and genital organism peculiarities, and also with manifestation of urbanistic factor, social component and accumulation degree of impact effect of anthropogenic burden gradually.