

### THE ASSESS OF FUNCTIONAL CONDITION OF SCHOOLCHILDRENS ORGANISM USING THE METHOD OF VARIATION CARDIOINTERVALEOMETRY

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The assess of functional condition of schoolchildren's organism using the method of variation cardiointervaleometry was carried out. The variability of cardio rhythm was researched at students of 14-16 years old at the Ishim comprehensive lyceum. The research revealed that parasympathic influences in the regulation of cardio-vascular system dominate at girls of 14 years old, as for the boys of the same age the influences of a sympathetic department of vegetative nervous system were dominating. As girls are growing up the role of sympathetic influences in the regulation of cardio-vascular system was increasing. The state of mechanisms regulating cardio rhythm was assessed basing on the standard deviation (SD). The researched schoolchildren of 14 years old of both sexes had standard deviation which was approaching an average norm. Standard deviation of older boys was approaching the highest point of the norm, it indicates that the parasympathic influences of the vegetative nervous system on the regulation of cardio rhythm at boys were growing. Older girls demonstrated an undulating change of the level of standard deviation. Negative functional state was revealed in all age groups of boys and in the group of girls of 15 years old. As for older teenagers the number of children referred to this group was larger. Critical level of functional state was more often for boys than for girls excepting the age group of 16 year old ones. The largest number of teenagers having the critical functional state – 31,3 % was fixed with boys of 15 years old. It was adjudged that growing up is accompanied by the worsening of functional state of organisms of the researched schoolchildren.

### АНАЛИЗ ФАКТОРОВ, ОКАЗЫВАЮЩИХ ВЛИЯНИЕ НА ФОРМИРОВАНИЕ ЗДОРОВЬЯ ГОРОДСКИХ И СЕЛЬСКИХ ШКОЛЬНИКОВ

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Проведен анализ факторов, оказывающих влияние на формирование здоровья городских и сельских школьников. Условия обучения в обследованных школах вносят существенный вклад в формирование здоровья учащихся. Впервые проведен сравнительный анализ состояния здоровья, распространения хронической патологии и адаптации к условиям образовательного процесса городских и сельских школьников юга Тюменской области. Состояние здоровья обследованных школьников определяется типом учебного заведения. Проанализирована структура заболеваемости городских и сельских школьников, проживающих на юге Тюменской области. Установлено, что среди обследованного контингента подростков наиболее часто встречаются нарушения осанки, на втором месте по распространенности патология органа зрения. Школьники, обучающиеся в общеобразовательном лицее, характеризуются прогрессивным снижением показателей здоровья. Проведена оценка адаптации к условиям учебной среды путем расчета индекса функциональных изменений. Установлено, что наиболее благоприятно адаптация происходит у учеников Карасульской сельской школы, где созданы наиболее благоприятные условия здоровьесберегающей среды. Полученные результаты позволят учебным заведениям определить корректирующие направления деятельности по сохранению и укреплению здоровья учеников.

### THE ANALYSIS OF THE FACTORS INFLUENCING HEALTH-FORMING OF SCHOOLCHILDREN IN TOWNS AND COUNTRYSIDE

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The analysis of the factors forming health of schoolchildren in towns and countryside was carried out. The conditions of studies at schools having been researched, contribute greatly to health-forming of students. For the first time the comparative analysis of the state of health, the spread of chronic pathology and the adaptation to the conditions of academic process at urban and country schools by schoolchildren in the south of the Tyumen Region was carried out. The state of health of the schoolchildren, having been observed, was defined by the type of an educational establishment. The structure of morbidity of schoolchildren living in towns and countries of the south of the Tyumen Region is analyzed. It was discovered that the most common among the teenagers having been examined are the abnormalities of bearing the second most common are pathologies of organs of vision. The schoolchildren from the comprehensive lyceum are characterized by a progressive deterioration of health. The assess of adaptation to the conditions of educational environment is carried out by means of counting the index of functional changes. It was found out that the adaptation is the most pleasant for the students of the Karasul rural school where they have created the most pleasant conditions for the health-saving environment. The results obtained will allow educational establishments to define the directions of corrective activities to keep and improve students' health.