

давлением и температурой тела ($r = -0,55$), показателями уровня холестерина и уровня глюкозы ($r = -0,66$), а также между показателями уровня холестерина и температурой тела ($r = 0,65$). В то же время между уровнем глюкозы и систолическим артериальным давлением ($r = 0,71$), а также уровнем холестерина и систолическим артериальным давлением ($r = 0,77$) наблюдается сильная линейная связь ($p = 0,001$).

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PHYSIOLOGICAL AND BIOCHEMICAL CHARACTERISTICS OF PEOPLE OF DIFFERENT CHRONOTYPE

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Rhythm is one of the main laws of geographical cover, the main feature of all living organisms. In living systems, all physiological processes are subject to regular rhythmic oscillations, called biological rhythms. Biological rhythms are the cyclical fluctuations of the intensity and nature of biological processes and phenomena. It is genetically programmed, autonomous self-sustaining processes that occur in the interaction with the environment, resulting in a continuous superposition of external to internal rhythms. And the rhythm of the functional state of all the tissues, organs, systems and organism as a whole is the result of this summation. Biological rhythms are one of the important mechanisms of adaptation of the organism to the environment, as well as serve as a universal criterion of its functional state, health and wellbeing. Of particular importance among a wide variety of biological rhythms in maintaining both the health and functioning of the whole body, have circadian rhythms with a period of oscillation of about 24 hours.

Manifestation biorhythmological processes depends on the internal synchronization of the biochemical processes of an organism with each other and indicates the condition of full health. A living organism is a complete system characterized by hierarchical interdependence, in connection with which he should be able to correlate the functionality of their systems with synchronous changes in other systems at all levels, not only in the time interval, but also in the biological space.

The adaptation to environmental factors, processes of media is very important temporal organization of physiological functions underlying the formation of the biological rhythms of the body [3] and the corresponding organism belonging to one or another chronotype: morning or evening. Light mode has a specific effect on the circadian system of the organism, as its external synchronizer.

For a man characterized by a myriad of biological rhythms: for examples cell cycle, heartbeat, respiration, diurnal and seasonal changes. During the day the performance phase alternated with periods of relaxation and sleep. At the same time in the morning peak of activity accounted for between 8 to 12 hours, and the daily peak of activity falls on the period from 15 to 18 hours. These periods of activity be sure to alternate periods of relaxation. As already mentioned, each person can individually chronotype: morning («larks»), evening («owls»), the day («dove»). The "owls" maximum daily rhythms of activity and rest is shifted to later, and the "Lark" - to earlier hours. The «doves» activity peak around mid-day period. About 20 % of people have a pronounced morning or evening type of activity.

Human chronotype largely determine the mental and physical performance, as well as a number of other psychophysiological indicators. This is vegetative and emotional reactivity, morbidity, ability to tolerate hypoxia, and many others. However, despite the presence of numerous scientific literature data, the system of natural mechanisms of temporal types are far from the final study, making it difficult to use the achievements of chronobiology in the practical activity of man.

In this regard, the aim of this study was to investigate the relation of some physiological and biochemical characteristics of the person and his individual chronotype.

With Horna-Otsberga test profiles two sample test of 100 people each chronotype were selected with a distinct «morning» or «evening» chronotype.

There were statistical significant differences of average glucose level, body temperature, systolic blood pressure for representatives chronotype investigated. Chronotype also significantly affect the change in cholesterol concentration in the blood throughout the day. It was also established that between the end points, there was a fair degree of linear relationship.

Keywords: chronotype, biorhythms, circadian rhythms, chronobiology, physiological and biochemical features of the organism.

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