

THE INFLUENCE OF THE GENES AT THE RHYTHM OR LIFE

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Introduction. The theme of "the influence of genes on the rhythm of life" interesting study of topical scientific issues such as circadian rhythms, sleep, aging, sleep quality, depending on the person's age and the influence of sleep on the body's health.

Aim. The dependence of the amount of sleep and wakefulness, depending on the person's age. To study the properties of the suprachiasmatic nucleus of the hypothalamus. To determine what diseases may occur due to a chronic lack of sleep and elaborate precautions.

Materials and methods. Theoretical materials. Statistically processed reports of experimental studies.

Results and discussion. It was found that with age, the person feels hot flashes vivacity much less than in his youth. It is caused by degeneration of neurons in the suprachiasmatic nucleus of the hypothalamus and the change in the structure of the locus coeruleus (locus coeruleus, LC) – the region of the brain stem. The suprachiasmatic nucleus is the main regulator of circadian rhythms, influences the blue nucleus and cerebral cortex, from which is already dependent on human performance. For this reason, older people are more difficult to tolerate the forced omission of sleep or changing sleep patterns. But despite this, the feeling of sleepiness in the elderly does not differ much from the young. The circadian rhythm can be a kind of "counter" days due to the fact that in a dream observed gene expression that never manifest expression in the waking state of the organism. Statistically it determined that people, who sleep less than 6 hours of sleep or more than 10 hours a day for 2-14 years, fall into the zone of risk of diabetes of the second type. Over 1 year in people chronically enough sleep may develop metabolic syndrome, impaired glucose tolerance. In men, frequent awakenings, and shorter sleep may be a sign of diabetes.

Conclusions. Identified side effects of sleep disorders. Determine the effects of chronic sleep deprivation. Investigations into age groups shows that older people less awake, but do not become more drowsy except in patients with the syndrome of senile drowsiness. The mechanism of the nervous regulation of sleep and how sleep affects the condition of the body at different ages. It is proved that the dream is too long or chronic sleep deprivation can cause the development of diabetes of the second type.