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**Introduction.** Circadian rhythm is one of the most important mechanisms in human body, which coordinates biological rhythms with the environmental changes in the day-night cycle. People are diurnal species, so we are used to work during the day and to sleep during the night. Sleep and Circadian Rhythm Disruption (SCRD) occurs when natural circadian rhythms are pushed out of synchronization, for example in shift work.

**Aim of the study.** Define the mechanistic links between sleep and circadian rhythm disruption and hyperglycemia. Apply this knowledge for the development of evidence-based clinical interventions. Transfer this knowledge to the broader community, patients and caregivers.

**Materials and methods.** This study was based on physiological, biological and laboratory investigations, that were used to determine respiratory frequency, heartbeat frequency, muscular strength, tremor, blood and liver tests.

**Results.** It was established that shift-workers have increased level of glucose in blood.

**Conclusions.** Sleep and Circadian Rhythm Disruption in shift work leads to hyperglycemia, that can induce diabetes mellitus.

**Key words:** circadian rhythm, disruption, shift work, hyperglycemia

## 214. HYGIENIC EVALUATION OF REAL FOOD AND NUTRITION OF STUDENTS

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**Introduction.** Health of the younger generation is a priority for any state. Thus, reforms in the higher education system emphasize the students' health status and physiological needs during the learning process.

**Materials and methods.** The study was conducted by questioning 50 students, including 11 men and 39 women, from study years I to VI. The questionnaire included 18 questions about daily nutrition.

**Results.** Nutrition is provided by a varied assortment of foods, providing the human body with nutrients and biologically active substances (proteins, lipids, carbohydrates, vitamins and mineral salts). The results of this study showed that 90% of students have an irregular diet and only 10% of them strictly follow a diet. Using the waist and body mass parameters of people in the study, we calculated BMI, which found that 80% of the examined subjects are normal weight, 6% are underweight, 8% overweight, and grade I obesity was reported in 6%. Analyzing student food surveys, we can see that most commonly used in vegetables in the daily diet are potato, carrot, onion and cabbage, and the least used are broccoli. If we are talking about the prevalence of fruit in the nutrition of the students, we notice that the most used fruits are apples, bananas and oranges, and the rest of the fruits are used at a lower percentage, the least used to be quince, plum and pear. Similarly, following the study I noticed that 54% of investigators prefer to eat spicy food, 46% prefer salty food. The share of people who love to eat sweet produce was 52% and the share of those who love fatty foods accounted for 8%.

**Conclusions.** The results of this study show that 80% of people are normal weight and 90% of them do not have a healthy diet, which requires us to develop measures to improve the nutrition of students in university institutions.

**Key words:** nutrition, students, body mass index, health

## 215. ASSESSMENT OF THE PHYSICAL ACTIVITY AND NUTRITION OF THE SECOND YEAR STUDENTS OF NICOLAE TESTEMITANU SUMP<sub>h</sub>