

# The analysis of factors participating in the formation of lifestyle of schoolchildren in Irkutsk

## Analiza czynników biorących udział w tworzeniu stylu życia dzieci w wieku szkolnym w Irkucku

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**Cel.** Analiza czynników biorących udział w tworzeniu stylu życia dzieci w wieku szkolnym.

**Materiał i metoda.** Przeprowadzono badania ankietowe obejmując nimi 700 uczniów w Irkucku w wieku 11-13 i 14-15 lat.

**Wyniki.** Na stan zdrowia badanych dzieci w wieku szkolnym wpływa negatywnie szereg czynników.

**Wnioski.** Wiele dzieci w wieku szkolnym w Irkucku prowadzi niezdrowy styl życia.

**Słowa kluczowe:** dzieci w wieku szkolnym, zdrowie, styl życia

**Aim.** Estimation of parameters of schoolchildren's lifestyle.

**Material & method.** A questionnaire survey was carried out among 700 of the Irkutsk schoolchildren aged 11-13 and 14-15 years.

**Results.** Results of schoolchildren's study showed that there was a number of negative factors influencing their health status.

**Conclusion.** Many schoolchildren of Irkutsk lead an unhealthy lifestyle.

**Key words:** schoolchildren, health, lifestyle

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### Introduction & aim

Health status of the children's population of the Russian Federation is a medical and social problem [1,2]. Health status of children and teenagers is characterized by a decrease of physical development parameters and adaptive opportunities of an organism, and an increase of various risk factors [3,4].

Lifestyle is one of the leading factors significantly influencing health status. Therefore we estimated the lifestyle parameters of schoolchildren in Irkutsk under the aegis of the international project «Health and behavior of school-aged children» (Health Behavior in School-aged Children). Within the project the interethnic investigations organized by the European regional bureau the CART are carried out [1].

### Material & method

A questionnaire survey was carried out among 700 of schoolchildren aged 11-13 and 14-15 years. The research results allow the estimation of conditions of

schoolchildren's lifestyles, reveal the factors negatively influencing their present health status and enable to carry out the forecast and also to reveal differences in lifestyles of schoolchildren living in various regions of our country and other countries of the world.

### Results

At the estimation of schoolchildren health status according to the parameters of self-estimation the following results were obtained: 46% of girls and 87% of boys at the age of 11-13 years in our region assess themselves as healthy. 75% of girls and 88% of boys aged 14-15 years assess themselves as healthy.

56% of girls and 63% of boys aged 11-13 years are quite happy and successful and 4% of boys and 15% of girls feel despair almost every day. 40% of girls and 72% of boys aged 14-15 years feel quite happy and successful, 16% of girls and 8% of boys feel despair, 67% of boys and 54% of girls aged 16-18 years (fig. 1) are quite happy.

A healthy lifestyle assumes refusal of harmful habits, including smoking and the use of alcoholic drinks. Now the special trouble is caused by the fact that children and teenagers smoke and drink alcohol. Considering smoking and alcohol as serious health risk factors it is necessary to estimate them as the negative lifestyle factors.

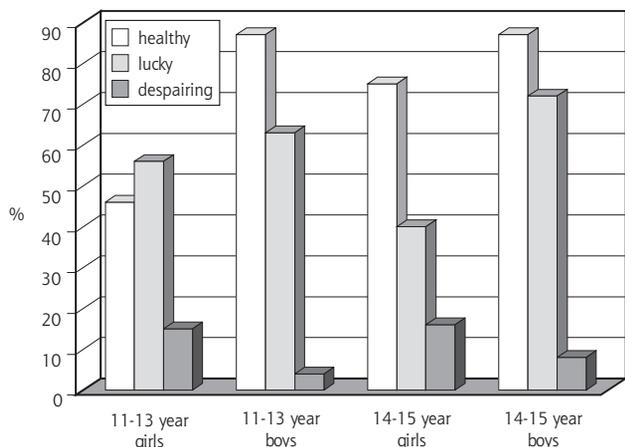


Fig. 1. Value judgment of own health by schoolchildren

As a result of the research it was established that 28% of girls and 48% of boys among the pupils of the 5-6 forms and up to 80% of girls and 84% of boys of the 8-9 forms smoked. The average number of smoking girls of the 5-6 forms was 5% and girls of 8-9 forms – 13%, boys – 14% (fig. 2.). In Irkutsk 95% girls in the 5-6 forms and 66% of boys in the 8-9 forms do not smoke.

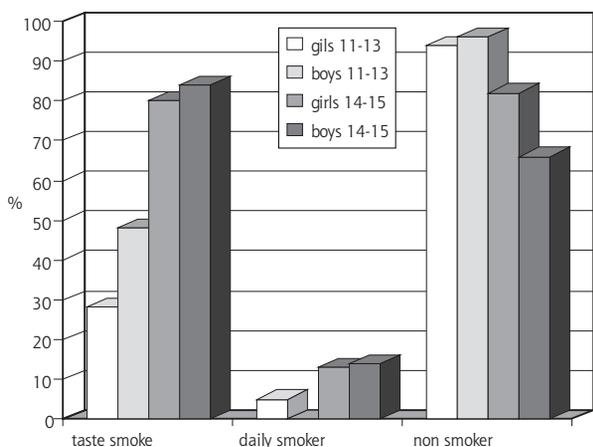


Fig. 2. Attitude of schoolchildren to smoking

44% of girls and 50% of boys admitted that they drank alcohol for the first time at the age of 11-13 years. At the age of 14-15 years these figures increased up to 88% among girls and to 80% among boys. 8% of the interrogated boys of the 6th forms, 4% of girls and 16% of boys of the 8-9 forms drink beer every week (fig. 3). Also with the years the usage of strong alcoholic drinks increases.

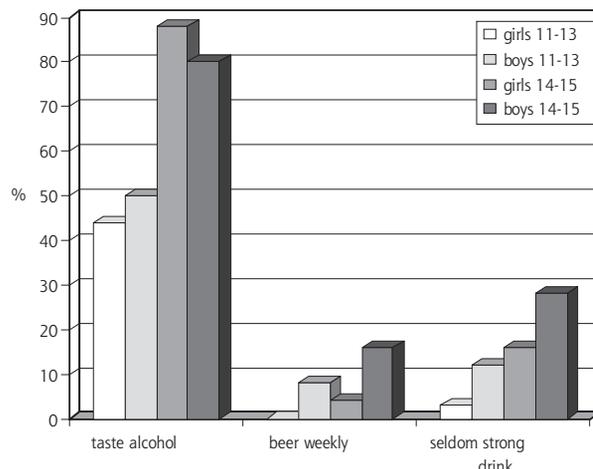


Fig. 3. Attitude of schoolchildren to alcoholic drinks

The survey carried out among the schoolchildren of 14-15 years of age revealed that at the age of 14 years 4% tasted hashish or marihuana, at the age of 15 – 8% of girls and 12% of boys, 4% used other drugs.

Physical activity is one of the components of a healthy lifestyle, which is considered as the activity of an individual directed to achieve physical perfection and it reflects a socially motivated attitude of a person to physical training.

Physical activity was estimated due to the parameters describing motives for physical culture studies of participation in sports activity, volume of physical training. The level of participation in sports activity as a whole can be estimated by schoolchildren as insufficient: on a regular basis schoolchildren are engaged in physical exercises after classes 2-3 times and more times a week, 53% of the respondents in the 6th forms and 56% in the 8-9 forms, 50% in the 10-11 forms, and among the boys this percent is higher than among the girls (fig. 4). So, in Irkutsk, 70% boys and 29.7% girls are independently engaged for two and more hours per week.

At school age the need to go in for sports and physical exercises shapes the future. Having reached the age of 20 about 85% of school children plan to go in for sports and physical exercises.

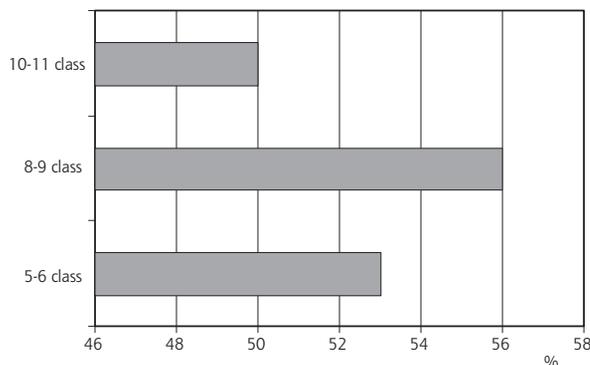


Fig. 4. Physical exercises employment of school-aged children

The leading motive for sports activity of schoolchildren is the wish to improve health. 58% of boys and 69% of girls want to improve health, irrespective of age and gender, in the western part of Russia the given parameter varies from 69 to 78%.

The analysis of the parameters describing features of physical activity of schoolchildren has allowed to establish the following: The level of physical activity of girls is much lower in comparison with boy's factors of the same age.

94% of boys and 91% of girls have daily time for the viewing of telecasts within one hour and more. More than 46% of boys and 27% of girls are busy with computer games for one hour and more. 29% to 72% of boys and 21% to 28% of girls watch TV for about 4 hours per day and more (fig. 5).

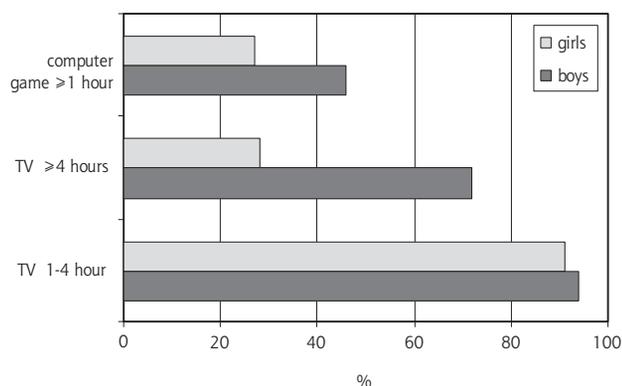


Fig. 5. Time spent by schoolchildren on computer activity and watching TV

Nutrition is one of the main factors of preservation of health and significant irregularities were revealed in the subjects' nutrition.

5% of girls at the age of 11-13 years and 21% at the age of 14-16 years and 9% boys at the age of 14-16

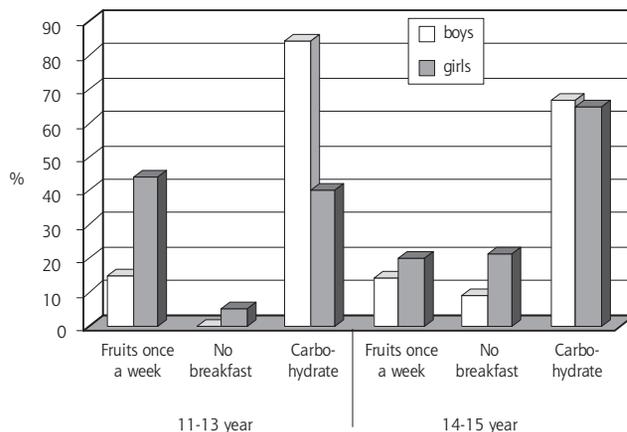


Fig. 6. Irregularities in nutrition of schoolchildren

years never have breakfast. 44% of girls and 15% of boys at the age of 11-13 years eat fruit and vegetables less than once a week. At the age of 14-15 this percent is still reduced. Sweets, chocolate and sweet drinks are included in the diet of 40% of girls and 84% of boys of the 6th forms and 65 and 67% accordingly in the senior forms that correspond to the prevalence of simple carbohydrates in the diet.

## Conclusions

The study data specify irregularities in the diet and an equation of consumption of the basic nutrients by a large number of respondents.

Thus it was possible to establish that a high percentage of schoolchildren manifest factors which can negatively influence health status. The number of schoolchildren using alcohol, starting to smoke, having lower physical activity have been increasing within the years and it accordingly results in deterioration of health parameters.

## Piśmiennictwo / References

1. Fedorova AI, Sharmanova SB. Socio-pedagogical monitoring of health, physical activity and lifestyle of schoolchildren. Chelyabinsk, Chelyabinsk State Education and Research Center, Ural Branch, Russian Academy of Education 2004: 88.
2. Onishchenko GG. Sanitary-epidemiological welfare of the child population of Russia. Hygiene and Sanitation 2008, 2: 72-78.
3. Polyakov SD, Khrushchev SV, Korneev IT, et al. Monitoring and correction of the physical health of students. Airis-Press, Moscow 2006: 96.
4. Rzyankina MF, Andryushkino EA. The health of children in educational institutions. The Organization and Control Rostov-na-Donu, Feniks 2005: 376.