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## HEALTHY LIFESTYLE AND ITS ROLE IN DENTISTRY

**Obidov Boburjon Mukhiddin ugli**

**Student of the Faculty of Dentistry of the Andijan branch of Kokand University**

**Annotation.** A healthy lifestyle is an important factor in strengthening human health, preventing diseases, and increasing life expectancy. Especially in the field of dentistry, adherence to a healthy lifestyle is of particular importance in oral hygiene, the prevention of dental and gingival diseases, and increasing the effectiveness of treatment. Studies show that improper nutrition, harmful habits, stress, and non-compliance with hygiene rules are the main risk factors for dental diseases. At the same time, the prevalence of dental diseases can be significantly reduced through regular physical activity, proper nutrition, psychological stability, and adherence to personal hygiene rules. This article analyzes the basic principles of a healthy lifestyle, its significance in dental practice, and its role in preventive processes based on scientific literature and foreign experience.

**Keywords:** healthy lifestyle, dentistry, oral hygiene, prevention, dental diseases, gum diseases, nutrition, bad habits, stress, physical activity.

### Introduction

In recent years, the issue of forming a healthy lifestyle has become one of the priority areas of healthcare policy worldwide. According to the World Health Organization (WHO), 50-55% of human health depends on lifestyle, 20% on environmental factors, 15% on hereditary factors, and only 10% on the level of medical care. This shows that a healthy lifestyle (HLS) plays an invaluable role in the overall health of the body, in particular, in the prevention of dental diseases.

According to WHO reports, dental caries and periodontal diseases are among the most common diseases among the world's population. For example, global epidemiological studies conducted in 2022 revealed that more than 3.5 billion people have various dental problems, and 44% of them suffer from caries-related diseases. According to the Ministry of Health of the Republic of Uzbekistan, about 80% of school-age children have signs of caries, and the frequency of periodontal diseases among adults is more than 60%.

In the high prevalence of dental diseases, improper nutrition, excessive sugar consumption, harmful habits (smoking, alcohol), non-compliance with personal hygiene rules, and the negative impact of stress are recognized as the main risk factors. In this regard, the promotion of a healthy lifestyle, increasing the culture of oral hygiene among the population, and strengthening preventive measures are considered one of the modern problems of dental science.

This article analyzes the importance in dental practice of the main components of a healthy lifestyle - proper nutrition, regular physical activity, mental stability, rejection of bad habits, and observance of personal hygiene rules.



Also, based on international and national statistical data, the role of STT in the prevention of dental diseases is considered.

### **Literature review and Methodology**

The issue of a healthy lifestyle (HLS) has been widely studied by international and domestic researchers, and its role in maintaining human health and preventing dental diseases is especially emphasized. According to the World Health Organization (WHO), the sustainable development of healthcare is directly related to the popularization of STIs, which, along with general diseases of the body, is also a key factor in reducing oral problems.

At present, diseases of the oral cavity are one of the most common health disorders in the world. According to the WHO report (2022), **more than 3.5 billion people** suffer from dental diseases. Of these, dental caries occupies the leading position in 44% of cases, and periodontal diseases - in 20%. Researchers (Petersen, 2019; Peres et al., 2020) indicate that the main components of STT - balanced nutrition, reduced sugar intake, and adherence to regular hygiene and preventive measures - significantly reduce oral diseases.

Research by Uzbek scientists also confirms the relevance of this direction. According to the statistics of the Republican Dental Centers and the Ministry of Health, caries is observed in **70-80%** of school-age children, and in adults, the prevalence of periodontal diseases is **60%**. At the same time, a large part of the population (about 40-45%) visits a dentist only after pain or exacerbation of the disease (Karimov, 2021). This indicates an insufficient maintenance culture.

In foreign literature, effective results on the application of elements of a healthy lifestyle in dentistry are presented. For example, in studies conducted in the USA (ADA, 2020), due to regular hygienic education and healthy nutrition programs, the prevalence of caries among students decreased by 25-30%. Epidemiological observations conducted in European countries have shown that periodontal diseases are 2 times less common among the population who follow a healthy diet and hygiene (Moynihan & Kelly, 2019).

Also, the influence of harmful habits (smoking, alcohol) on dental diseases is substantiated in many scientific sources. According to WHO data, dental calculus and periodontal diseases occur **3-4 times more often** in smokers than in non-smokers. Observations by Uzbek scientists also confirm this result, indicating a high level of dental problems in individuals who do not observe oral hygiene and engage in harmful habits (Usmanov, 2020).

Analysis of the above-mentioned scientific sources shows that adherence to the principles of a healthy lifestyle is important not only for general health, but also for strengthening dental health. International experience shows the effectiveness of preventive programs and the promotion of STT. Therefore, in the conditions of Uzbekistan, one of the urgent tasks in the field of dentistry is to raise the culture of oral hygiene among the population, to widely promote a healthy lifestyle among children and youth.



In this study, questionnaires, clinical observation, and statistical analysis methods were used to assess the influence of healthy lifestyle factors on dental health.

### 1. Object and participants of the study

The study was conducted in secondary schools and medical centers of the city of Tashkent and the Fergana region. A total of 520 respondents were involved:

- Students aged 6-17 years - 280 people;
- young people aged 18-30 years - 140 people
- Adults over 31 years old - 100 people

Participants were assessed by indicators of a healthy lifestyle (nutritional habits, hygiene, harmful habits, physical activity), as well as the state of dental health.

### 2. Research methods

1. Survey method - participants answered the following questions:

- Frequency of tooth brushing (once a day, twice a day, or more).
- Consumption of sweets and sugar (low, medium, high).
- Smoking and alcohol consumption.
- Level of physical activity (low, medium, high).

2. Clinical observation - dentists noted the presence of dental caries, dental calculus, and periodontal diseases.

3. Statistical analysis - the collected data were processed using the SPSS 26.0 program, and the  $\chi^2$  test and correlation indicators were calculated.

### 3. Forms of recording research results

Table 1. Relationship of respondents with STT indicators and dental diseases

Indicators	Dental caries (%)	Periodontal disease (%)	Healthy oral cavity (%)
Brush teeth once a day	72.	48.	15.
Brush teeth 2 times a day	38.	21.	41.
High sugar consumption	69.	44.	12.
Low sugar intake	32.	20.	48.
Smokers	74.	53.	11.
Non-smokers	41.	22.	37.

- STT indicators (hygiene, nutrition, rejection of harmful habits) are directly related to dental health.
- By increasing preventive measures, it is possible to expect a decrease in dental diseases by 25-40%.



- This research methodology can be used in the development of programs for promoting STT in dentistry.

#### Results and Discusses

The analysis showed that the main components of a healthy lifestyle - proper nutrition, regular hygiene practices, abstaining from smoking and alcohol, as well as physical activity - play a significant role in the prevention of dental diseases.

**Table 2. Influence of tooth brushing frequency on caries prevalence (%)**

Tooth brushing frequency	Caries prevalence	Healthy oral cavity index
Less than 1 time per day	68%	12%
1 time per day	52%	21%
2 times a day	34%	58%
More than 3 times a day	25%	73%

As can be seen from the table, in those who brush their teeth more than twice a day, the caries index decreases almost 2.5 times, while the healthy oral cavity index is observed at a higher level than three times.

#### Sugar consumption and prevalence of dental diseases

- Among high sugar users, caries accounted for 71%.
- In the group of average consumers, this indicator was 48%.
- And among low consumers - no more than 29%.

These results show that reduced sugar intake reduces the prevalence of caries by 2-2.5 times.

The results are consistent with the data presented in international scientific literature. For example, according to the WHO (World Health Organization) 2022 report, the prevalence of dental diseases among a healthy population is 40% lower. Also, studies by A. Sheiham and R. Watt (2019) confirm that oral hygiene and dietary factors determine about 70% of oral health.

During the analysis, it should also be noted that adherence to a healthy lifestyle significantly reduces treatment costs in dental practice. For example, According to the Ministry of Health of Uzbekistan (2023) , individuals undergoing regular preventive check-ups reduce dental treatment costs by 25-30%.

A healthy lifestyle is an effective factor in the prevention of dental diseases and is also important from a socio-economic point of view in improving the health of the oral cavity of the population.

#### Conclusion

According to the results of the conducted research and analysis, it was established that a healthy lifestyle is an important factor in ensuring dental health. The research shows that:

- The habit of brushing more than 2 times a day reduces the spread of caries by 2-2.5 times.



- Reducing sugar consumption is an effective factor in the prevention of dental diseases, in particular, caries and periodontal diseases.
- In a healthy lifestyle, oral health indicators are significantly higher, and treatment costs are reduced by 25-30%.

In general, the role of a healthy lifestyle in dentistry not only reduces diseases, but also has important socio-economic significance. Therefore, increasing public awareness of a healthy lifestyle and expanding preventive measures is an urgent task.

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