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# CONSUMPTION OF FRUIT AND VEGETABLES AND **QUALITY OF LIFE**

## CONSUMUL DE FRUCTE ȘI LEGUME ȘI CALITATEA VIEȚII

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Abstract. A major public oral health problem with considerable social and economic cost is oral diseases such as dental caries, periodontal disease, tooth loss, oral mucosal lesions, dental traumas that have a major impact on individuals, and Society with reduced quality of life. The diet rich in sugar and fat and low in fiber, vitamins and essential minerals are associated with dental caries and premature tooth loss. The study was carried out with the help of own questionnaires containing questions that refer to different aspects of the quality of life, such as satisfaction with personal life, food risk factors and behavior towards oral health, the impact of oral affairs. From the data obtained, we noticed that at a young age the aesthetic aspects are considered impervious to the perception of the quality of life, whereas in the adult population the diet and the quality of the consumed food are the first.

**Key words:** life quality, oral health, vegetables, fruits, minerals, vitamins

Rezumat. O problemă majoră de sănătate publică orală, cu un cost social si economic considerabil, sunt afecțiunile orale, precum caria dentară, bolile parodontale, pierderea dintilor, leziunile mucoasei orale, stomatita ulcerativă necrozantă sau traumatismele oro-dentare ce au un impact major asupra indivizilor și societății cu reducerea calității vieții. Dieta bogată în zahăr și grăsimi și săracă în fibre, vitamine și minerale esențiale se asociază cu carii dentare și pierderea prematură a dinților. Studiul a fost realizat cu ajutorul unor chestionare proprii care cuprind întrebări ce fac referire la diferite aspecte ale calității vieții, precum: satisfacția față de viața personală, factorii de risc alimentari si comportamentul fată de sănătatea orală, impactul afecțiunilor orale asupra vieții sociale. Din datele obținute am observat că la vârsta tânără aspectele estetice sunt considerate impoartante în percepția calității vieții, pe când la persoanele adulte, pe primul loc sunt dieta și calitatea alimentelor consumate.

Cuvinte cheie: calitatea vieții, sănătate orală, legume, fructe, minerale, vitamine

### INTRODUCTION

One of the fundamental human rights is the general feeling of happiness and satisfaction in relation to life and the environment, including aspects such as health, leisure time, culture, rights, values and beliefs, aspirations and basic living conditions of these elements (Watt, 2000). Another definition (Wilson and Cleary, 1995) puts the quality of life in relation to "the harmonious and simultaneous

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satisfying of all human needs: health, civilized living conditions, economic and social security, free time, culture, education, dignified, supportive and positive interpersonal relationships, a rationally organized society based on freedom, democracy and constructive morality."

From a health point of view, the quality of life reflects physical and mental health, but also the ability to react to factors in physical and social environments, and has a higher degree of subjectivity compared to life expectancy, and can therefore be difficult to measure (Watt, 2000). Life quality assessments of oral health and its development over time are particularly important for practitioners.

For this purpose various health questionnaires were designed, and the resulting data could be included in analytical studies that follow the factors involved (Leao and Sheiham, 1995; Locker, 1997; Mahler, 1998), or how the individual perceives his or her state of health (Inglehart *et al.*, 2002; Sadana, 2002).

An integral part of the general health, oral health with the usual tools for measuring quality of life in relation to health, does not cover the specific impact of oral health problems on the quality of life of individuals, and specific tools are needed.

Individual and population health is related to the well-being of the community, its living standards, everything that experts call the "quality of life" existing in a particular society. In this context, illness is not only a problem of human biology, but also an important social problem dependent on social behaviors, norms or values, habits, habits and lifestyles of a particular population and its constituent groups.

## **MATERIAL AND METHOD**

In this study we selected a group of 65 patients aged between 20 and 70 who presented themselves in the Dental Prosthesis Clinic with functional disorders. In addition to the usual clinical examination, patients have received a series of questionnaires on general health, socioeconomic status, medication, food consumption, preferences and eating habits that have established nutritional deficiencies. At the same time each patient gave his written consent to participate in this study.

The risk factors of a deficient nutritional status to be analyzed are: psychosocial (loneliness and isolation, lack of financial resources, loss of appetite and interest in feeding, depression), physical (changes in absorption capacity and use of nutrins, changes in the metabolic capacity of nutrients, changes in the energy and activity process, the effects of medication on appetite and the absorption of nutrients and their use), functional (disorders of vital functions: sight and hearing, physical disabilities: arthritis, stroke lead to inability to buy and carry), oral (changes in food chewing, taste and smell changes, drug-induced xerostomia)

The questionnaire method is one of the more commonly used methods because it is easier to achieve, a skilled person can investigate an appreciable number of people. Sometimes important aspects of a person's life may influence the state of nutrition and identify important clues in this regard, playing an important role in collecting information necessary to establish a link with the person concerned.

## **RESULTS AND DISCUSSIONS**

From the processing and analysis of the data obtained from the questionnaires we have obtained a series of data that led us to the quality of life lost by the interviewed subjects.

Depending on the socio-demographic variables, we obtained the following results:

- patients over 28 years of age are more satisfied with personal life at a rate of 24.61% (tab. 1);
- women are more satisfied than men, with 35.38% and 13.85% respectively (tab. 2);
- middle school subjects are more satisfied than those with higher education (tab. 3, fig. 3).

Most of the respondents perceive the level of pay as good and very good (52.3%), while 47.7% characterize it as weak and very weak, considering the salary benefits a significant part of motivation in the workplace (fig.1,2).

Table 1
Distribution of patients satisfied with personal life by age group

Age groups	Number of patients	The degree of satisfaction with personal life			
20-28 years	8	YES	3	4.61%	
		NO	5	7.70%	
28-30 years	11	YES	8	12.30%	
		NO	3	4.61%	
30-40 years	16	YES	13	20.02%	
		NO	3	4.61%	
40-45 years	13	YES	7	10.77%	
		NO	6	9.23%	
45-65 years	8	YES	3	4.61%	
		NO	5	7.70%	
< 65 years	9	YES	3	4.61%	
		NO	6	9.23%	

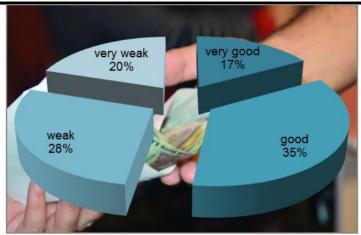


Fig. 1 Satisfaction based on salary level

Satisfaction with the workplace and the income achieved is more than 50% (work - 60%, salary - 53.85%), (fig. 2).



Fig. 2 Satisfaction with work and earnings

 ${\it Table \, 2}$  The distribution of patients satisfied with their personal life by sex

The sex of the patients	Number of patients	The degree of satisfaction with personal life		
Women	37	YES	23	35.38%
		NO	14	21.54%
Men	28	YES	9	13.85%
		NO	19	29.23%

The flexibility of social norms on femininity and masculinity as well as the reality of the current society require different management tailored to the current needs of women and men. Balancing professional and personal life programs are a response to these different needs (Harvard Business Review on Work and Life Balance, 2000).

Depending on the social variables, the studies show that the satisfaction with the personal and professional life of the subjects with higher education is 20%, compared to those with secondary education, 13.85% and primary, 9.23% (tab. 3, fig. 3).

 ${\it Table \ 3}$  The distribution of patients satisfied with their personal lives according to their studies

Patient studies	Number of patients	The degree of satisfaction with personal life		
Primary education	17	YES	6	9.23%
		NO	11	16.92%
Secundary education	26	YES	9	13.85%
		NO	17	26.15%
University studies	22	YES	13	20%
		NO	9	13.85%

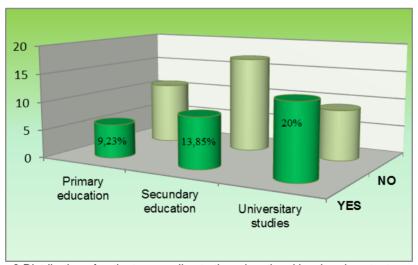


Fig. 3 Distribution of patients according to the educational level and contentment to personal life

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Food is usually understood as the variety of foods consumed, while nutrition means the consumption and absorption of nutrients. Nutrition and nutrition influence the teeth in 3 ways:

- R teeth structure,
- R dental caries.
- R dental erosion.

There are many causes of defects in the teeth structure, and nutrition is just one of them.

From the point of view of the prevention of oro-dental disease, the problem of rational nutrition in the civilized man has two aspects:

- food consistency,
- the chemical composition of foods.

Consistency of foods determines the health of teeth. Consumption of hard, hard, crunchy foods like raw vegetables and fruits (carrot, bell pepper, radishes, jelly, apples, pears, quinces) contributes to the cleaning and self-cleaning of dental surfaces as well as soft tissue massage surrounding, stimulating action on gingival circulation.

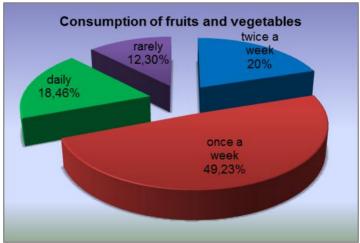


Fig. 4 Distribution of patients according to the frequency of fruit and vegetable consumption

Daily consumption of hard fruits (apples, pears) and vegetables is mandatory because they have a high water content that diminishes the effect of sugars contained in saliva. An important aspect is that acid foods (citrus and tomatoes) should be consumed as part of a large meal (lunch, dinner) minimize acid in the oral cavity.

Taking into account the aforementioned considerations, we also included in the questionnaire the analysis of the consumption of fruit and vegetables. In the studied group, unfortunately the consumption of fruits and vegetables is low, only 18.46% of the patients declared that they consume fruits and vegetables daily and 20% consume 2 times a week or more (fig. 4).

At the same time, we know that acids and sugar in food can destroy the enamel, and this has to be compensated for with phosphorus and calcium-containing foods that contribute to the remineralization of teeth. Foods containing essential minerals help maintain the healthy tooth enamel and these can also be found in plant sources: cabbage, snapac, broccoli.

It is also necessary to consume vitamin-rich foods because the body needs vitamin D to absorb calcium, which also helps to strengthen the teeth and keep them healthy. Deficiency of vitamin D can affect the bones and make them brittle. In the oral cavity, lack of vitamin D can cause gum disease and even jaw fracture. At an early age, deficiency may affect the formation of teeth. The most important source of vitamin D is the sun, but can also be taken from vegetables and fruits: mushrooms, whole grains, nuts, apples.

Patient-patient communication plays an important role in the patient's treatment of odontal, periodontal, prosthetic. Patience, understanding as a necessary thing for the psychic stability of the patient, explaining health awareness, discussing treatment alternatives, physician skills, organizing working time, trust, speed and professionalism are the means to improve quality the life of any patient.

Of particular importance is the result of dental treatment and the quality of life of the patient, the fact that the physician must understand the psychosocial and emotional status of the patient, especially when restoring lost functions of the stomatognomate system, this being the role of prosthetic treatment. That is why it is advisable for the doctor and the patient to discuss the treatment plan and the changes it will have on the patient's quality of life.

### CONCLUSIONS

- 1. The quality of life in relation to oral health is a relatively new concept, but growing in the field of dental medicine. This concept has enjoyed much attention from researchers over the past two decades. There has been much progress in measuring the quality of life in relation to oral health, initially among adults.
- 2. Oral health has affected young people's quality of life mainly by reflecting on food consumption, oral hygiene, emotional stability and aesthetic function.
- 3. Presenting the assessments / perceptions that adults make of the conditions in which they live: analyzing components of the adult's personal life (income, living conditions, family relationships, personal health, workplace) and social life (the chance to have a job, proper housing, access to the desired education, conditions for family formation, corruption in society).

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4. Assessments of quality of life are predominantly positive or positive, and its perception in the near future is in a favorable light: thus, almost half of young people (57%) perceive the quality of life as compared to last year and 23% perceive an improvement.

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