

## FRUIT AND VEGETABLE IMPACT ON ORAL HEALTH IN YOUNG ADULTS

### IMPACTUL CONSUMULUI DE FRUCTE ȘI LEGUME ASUPRA SĂNĂTĂȚII ORALE LA ADULTUL TÂNĂR

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**Abstract.** *Frequent consumption of fruit and vegetables has a significant effect both on overall health and oral health status. Young people and adults should respect the principles of good eating habits that will ensure a long-term oral health . There are numerous studies that attest to the decisive importance of daily consumption of fruits and vegetables.They represent the largest deposits of nutrients that nature makes available , in terms of content in dietary fiber , so in cellulose form a basic component of human consumption, the rest being represented by carbohydrates , proteins , lipids , water, vitamins and mineral salts . Fruits and vegetables provide a significant contribution of fiber and antioxidants, essential nutrients that help the body fight heart disease , obesity , various cancers, disorders of the immune system and not least of dental caries and periodontal disease . A number of fruit (apples like) during chewing removes food debris and dental plaque, saliva stimulating and helping to maintain a normal pH.Fruit is a natural food and is most beneficial way of food. Any fruit that is high in vitamin C , helps maintain. Fruits are healthy in their natural state , the preserved parts bring high added sugar in the mouth , favoring the production of cavities. Our study , conducted on a sample of 55 patients , aged between 20 and 35 years , highlights the fact that a relatively small number of patients ( 29 % ) ate fruits and vegetables daily .*

**Key words:** healthy periodontal marginal, dental hygiene, ,oral health, vegetables, fruits.

**Rezumat.** *Consumul frecvent de fructe și legume are un efect important atât asupra stării generale de sănătate, cât și a sănătății orale. Populația tânără și adultă trebuie să respecte principiile unei alimentații corecte care va asigura o sănătate orală de lungă durată. Există numeroase studii care atestă importanța decisivă a consumului zilnic de fructe și legume. Acestea reprezintă, cele mai mari depozite de elemente nutritive pe care natura ni le pune la dispoziție, în ceea ce privește conținutul în fibre alimentare, deci în celuloza, alcatuiesc o component de baza a alimentației umane,*

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*restul fiind reprezentate de glucide, proteine, lipide, apă, vitamine și de sărurile minerale. Atât fructele, cât și legumele asigură un aport considerabil de fibre și antioxidanți, nutrienți esențiali care ajută organismul să lupte împotriva bolilor de inimă, a obezității, a diverselor tipuri de cancer, a tulburărilor legate de sistemul imunitar și nu în ultimul rând a cariei dentare și bolilor parodontale. O serie de fructe (merele de exemplu) în cursul masticatiei îndepărtează resturile alimentare și placa bacteriană dentară, stimulând secreția salivară și contribuind la menținerea unui Ph normal. Consumul de fructe este un mod natural de alimentație și este cel mai benefic mod de hrană. Orice fruct care are un conținut ridicat de vitamina C, ajută la menținerea sănătății parodontiului marginal. Fructele sunt sănătoase în starea lor naturală, cele conservate în schimb aduc un adaos mare de zahăr în cavitatea orală, favorizând producerea leziunilor carioase. Studiul nostru, efectuat pe un lot de 55 de pacienți, cu vârste cuprinse între 20 și 35 de ani, scoate în evidență faptul ca un număr relativ mic de pacienți (28%) consumă zilnic fructe și legume.*

**Cuvinte cheie:** caria dentară, boli parodontale, igiena orală, sănătate orală, legume, fructe.

## INTRODUCTION

Food does not only affect the health of vital organs, but also dental health and oral cavity. Eating fruits and vegetables is a natural food and is most beneficial way of food for humans. These foods have a large amount of water composition (average 75 -90%), which dilutes the effects of sugars they contain and stimulate salivary flow (whose effect is flushing of food waste). Also, fruits and vegetables contain vitamins and minerals, and antioxidants or phytochemicals that help protect the body against cancer, diabetes and cardiovascular diseases. There is consistent evidence on the protective effect from higher consumption of fruits and vegetables for cancers of the stomach, esophagus, lung, oral cavity and pharynx, endometrium, pancreas and colon (Steinmetz and Potter, 1996). The lack of vitamins or decreases in the diet may cause major disturbances in all cells and tissues. Avitaminosis A, B, C can be responsible for the production of characteristic lesions, so that they vary among massive keratinization of oral mucosa with a tendency to change in flexibility hyperplasia and color avitaminosis A capillary fragility and increased general and local feature beriberi C (Ursache, 1996).

Unhealthy diet has been implicated as a risk factor for many chronic diseases that are known to be associated with oral diseases (Scardina and Messina, 2012). A healthy, balanced diet rich in fresh fruits and vegetables, has a beneficial effect on the health of both the body and the structures of the oral cavity: teeth, periodontal and oral mucosa.

## MATERIAL AND METHOD

To highlight the daily consumption of fruits and vegetables young patients in our study, was conducted on a sample of 55 patients, aged between 20 and 35 years

who have received dental treatment on demand in the Clinic for Dental Prosthetics of Faculty of Dental Medicine, University "Apollonia" in Iasi.

On the basis of research on data obtained from patients carrying the aforementioned batch of clinical examination by studying classical algorithm development: history, general medical examination, examination and intraoral extra.

During anamnesis we evaluated the conditions of life and work and recorded data on the diet because it is a factor with multiple facets for both body and for the system generally stomatognat. Data on food hygiene and eating habits were rational or not eating, food deficiencies (vitamins, minerals) associated with a low consumption of fruits and vegetables, food texture preferences, toxic abuse.

They were included in the trial patients who met criteria for inclusion - exclusion (age group, area of origin, level of education, degree of collaboration with the physician, oral-dental pathology). The patients in the group and gave their written consent to participate in this study were included only those patients who signed and dated informed consent form.

## RESULTS AND DISCUSSIONS

**Characterization lot.** In terms of patients' gender distribution is homogenous group, however the number of females (29 respectively 52.72% of the lot) more than men (26 -what represents 47.27% of the group) (fig. 1). Regarding the origin environment most patients are from urban to 60%.

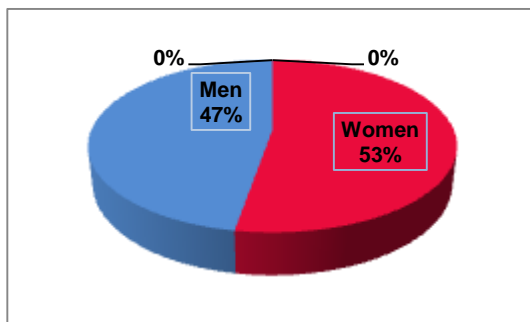
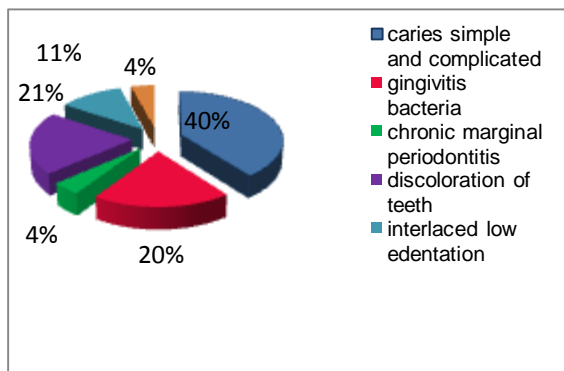


Fig. 1 Distribution of patients by gender

Patient distribution of studies is: secondary education (18.18%), vocational school (20%), high school (29.09%), post high school (10.9%), higher education (21.81%). It is observed that most patients have secondary education.

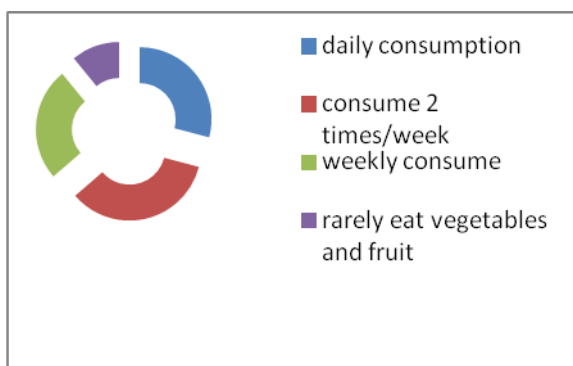
Regarding oral diseases, patients in group caries simple and complicated - 38 cases, gingivitis bacteria - 19 cases, chronic marginal periodontitis - 4 cases, discoloration of the teeth causes extrinsic - 20 cases, partial edentulous interspersed low - 11 cases, injuries the oral mucosa (thrush, herpes, angular cheilitis) - 4 cases (fig. 2).



**Fig. 2** Oral-dental pathology in patients of the study group

Eating vegetables and fruit the following aspects (fig.3):

- 16 patients stated that daily consumption (29%)
- 19 patients consume 2 times / week fruit and vegetables (34.5%)
- 14 patients weekly consume fruits and vegetables (25.5%)
- 6 patients rarely eat vegetables and fruit (11%)



**Fig. 3** Consumption of fruits and vegetables

It may be noted that only 29% of patients consume daily fruits and legume. In regarding gender distribution of fruit and vegetables, females consume fruits and vegetables daily in a higher proportion than men (31% compared to 27%).

Fruit on preferences regardless of season, area of origin and studies on apples ranks first, followed by peaches and plums.

Another aspect was assessed preference consistency alimentelor. In 31% (17 patients) prefer soft foods in proportion hearty food is preferred, 29% prefer fibrous foods, and 9% of patients had no preference.

Regarding the consumption of toxic situation is as follows: 58.18% (32 patients) of the patients are smokers. Besides the harmful effects on the body,

smoking affects the teeth and periodontal health. Smokers are prone to plaque formation in a faster pace, leading to the emergence of chronic gum disease, which increases the risk of tooth loss. Discoloration of teeth because of ingredients is another effect of cigarette smoking.

It was assessed and oral hygiene. It is well known that the existence of healthy teeth and dental care (fillings, crowns, dentures fixed, movable prosthesis, dental implants etc.) with a long life, is directly conditional on proper oral hygiene and thorough. also, oral hygiene often can be correlated with dietary preferences (fig. 4) and rhythm meals.

Proper hygiene level study group was present in 60% of patients, while 40% of patients had a poor hygiene. Patients who ate fruits and vegetables daily had a rate of 81.25% a proper hygiene while patients consuming 2 times weekly fruit and vegetable shows a proper hygiene at a rate of 52.63%.

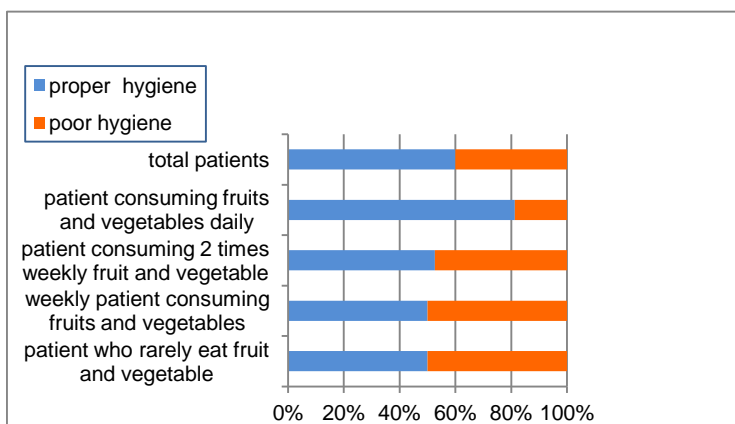


Fig. 4 Oral hygiene and eating fruits and vegetables

## CONCLUSIONS

Fruits and vegetables helps clean teeth and gums because they are tough and foods high in fiber. Therefore, patients who consume fruits and vegetables daily have the best oral hygiene. Of the 16 patients who prefer fruit and vegetables in the diet, 81.25% have a proper hygiene.

Soft and sticky foods accumulate in grooves and fissures on the occlusal surface and faces the proximal cause plaque build up. Eating foods and drinks that contain sugars or starches feed the bacteria in plaque, producing acids that attack tooth enamel.

Our recommendation was to limit consumption of snacks between meals and beverages sweet, fizzy or patients to choose nutritious foods, fresh fruits and vegetables, plain yogurt, which help maintain proper oral hygiene to prevent damage to your tooth enamel.

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