

STUDY REGARDING FRUIT AND VEGETABLE DIET AND ITS INFLUENCE UPON ORAL HEALTH

Mihaela-Păpușa VASILIU¹, Daniela-Ivona TOMIȚA¹,
Liliana SACHELARIE¹, Diana POPOVICI²

e-mail: mihapapy@yahoo.com

Abstract

Poor and unbalanced diet influences oro-dental health, but in the same time, some disorders of the stomatognathic system (edentation) may produce nourishment changes. Eating disorders may have consequences, sometimes irreversible ones, upon some systems (digestive, immune, cardiac, etc.) and can manifest deficiencies in key moments of human development. In our study, conducted on 35 patients, aged 55-85 years, using a questionnaire food, we watched the frequency of fruit and vegetable consumption. The results highlighted the poor consumption, more obvious in case of the elder persons, the consequences being reflected throughout the body. Nutritional status of patients is sometimes influenced by exogenous factors (educational level, income) so that in case of elder patients may occur malnutrition, that may affect functional capacity of the stomatognathic system.

Key words: nutrition, fruits, vegetables, elderly

Food and nutrition are basic requirements necessary for health promotion and protection requirements that allow full affirmation of human growth and development.

Eating habits may be determined by socio-economic and cultural factors, health status and oral health-related factors (Robertson, 1991).

Food can be reflected on health, life expectancy and of course, comfort of life, considering that food is a factor related to the pleasures of existence.

Age is a dynamic phenomenon par excellence, the health and disease changes its rate against the benchmark, which is adulthood. All periods of life have their medical, social, implications and aging is a process that is manifested by changes that start around the peak reproductive period and the main characteristic of his is the diminished ability of living matter to survive in its environment standard room. (Fodor O., 1971 Bodnar, 2012)

In a proper diet, not the amount of food ingested is important, but the ensurance of the variety and an appropriate mixture of food.

Poor oral-dental health due to breaches toothless multiple causes an unbalanced diet with items to consume soft foods. More often lowers intake of fruits and vegetables and vitamin

deficiency default appear, negatively affecting overall health.

In terms of nutritional status it has been found that elder persons present nutrient levels below the limits in this context elderly population with a high risk for nutritional deficiency.

A number of researchers have found that people who consume less fruit and vegetables present more likely to be smokers, to be less educated but instead consume more red meat, high fat dairy and sweets. On the other hand, people who consume more fruits and vegetables tend to consume more total calories per day than those who do not eat fruit and vegetables. (Andrea Bellavia, 2013 Agudo, 2017 Nicklett, 2012).

MATERIAL AND METHOD

The study group includes 35 patients, age between 55-64, anchored in the adult sphere and segment 65 and 85 years, geriatric patients properly. These patients presented themselves Prosthodontics Clinic at the Faculty of Dentistry, University Apollonia from 2010-2013.

Patients were subjected to a general clinical examination, and laboratory stomatognathic system after which settled oro-dental health. For elderly patients, the diagnosis is generally made up of general pathology diagnosis and evaluation of gerontological aging. This requires interdisciplinary collaboration.

¹ Apollonia University, Iasi

² UMF Gr. T. Popa, Iasi

All patients completed a questionnaire food containing issues: socioeconomic factors, origin of

patients, education level, type of food consumed, general diseases, medication associated.

Food Questionnaire

Please answer the following questions of the questionnaire, which aims to collect information on your eating habits:

Studies Male
Female Age

1. do you Eat breakfast every day?

a) always b) Sometimes, c) Never

2. What do you usually eat for breakfast?

a) bread b) request c) Milk d) Coffee e) Juice f)

Yogurt

g) Cakes h) Fruit i) Vegetables

j) Other

3. do you usually have a snack in the morning / afternoon?

a) always b) Sometimes, c) Never

4. How often do you eat a salad or vegetables at lunch or dinner?

a) Always

b) Often

c) times

d) Rarely

e) Never

5. do you usually eat soup?

a) Every day b) 2-3 times a week c) Rarely d)

Never.

6. How many times a week do you eat fish?

a) Every day b) 2-3 times a week c) Rarely d)

Never

7. How often do you eat fruit / vegetables raw?

a) Every day b) 2-3 times a week c) Rarely d)

Never

8. do you Usually have dessert at lunch or dinner?

a) Always

b) Often the

c) times

d) Rarely

e) Never

9. What do you usually eat as dessert?

a) Fruit

b) Vegetables

c) Yogurt

d) Cake

e) Coffee

f) Other

10. What do you drink at meal time?

a) Water

b) Wine

c) juice

d) Tea

e) Other

RESULTS AND DISCUSSIONS

The results gave us a clear picture of interference between patient age, specific technical clinical entities in the field of pathology oral characteristics of evolutionary bearing the imprint of the environment and the individual factors that combined living conditions (nutrition rational or not, the food preferences of qualitatively and quantitatively, chewing stereotype).

Patient age ranged from 55-64 years in the proportion of 22.19%, range 65-74 years being awarded to a percentage of 46.56%, the segment aged 75-84 years having lot, achieve a 21 percent, 04% category over 85 years of age has a rate of 10.21% corresponding age ranges gerontostomatologic corridor.

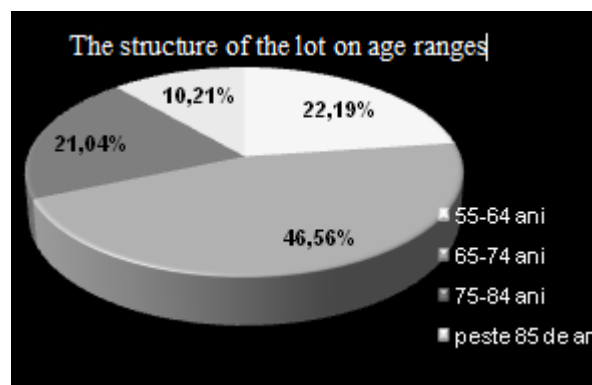


Figure 1 The structure of the lot on age ranges

Although not statistically significant differences between gender distribution within the age ranges pursued, we found a prevalence of male adult age range respectively for 59.61% (figure 1), the prevalence of the same sex and age segments found 65-74ani (50.92%), 75-84 years old (50.14%), while the segment of the aged over 85 years, the prevalence of female sex lies in the proportion of 80.21% to elements that are the morpho-functional basis for defining characteristics of the prosthetic field key issues underlying the choice of therapeutic solutions according to the type of edentulous and installed complications and overall condition (figure 2).

The correlation between tuition levels and age ranges, highlights significant differences between them. There is a prevalence of higher education in the proportion of 28.57% in the group aged 75-84 years, and the other age categories lies a smaller percentage, 25%.

In patients with less education (classes 4-8) was noted in the age cohort 75-84 years, a rate of 14.29%. Importance level of schooling interfere

with patient vision and the demands sanogenic it on therapeutic and dental hygiene solution (figure 3).

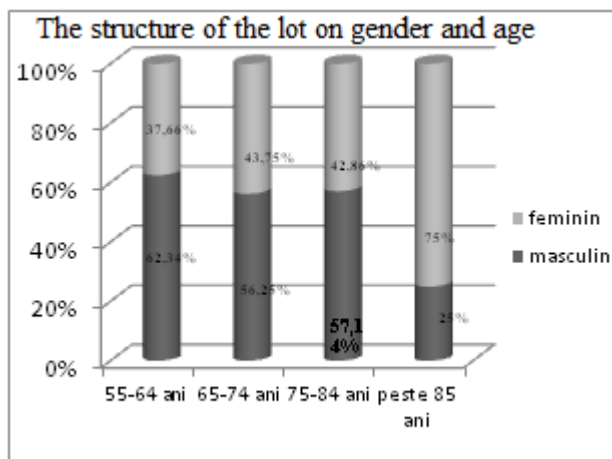


Figure 2 The structure of the lot on gender and age

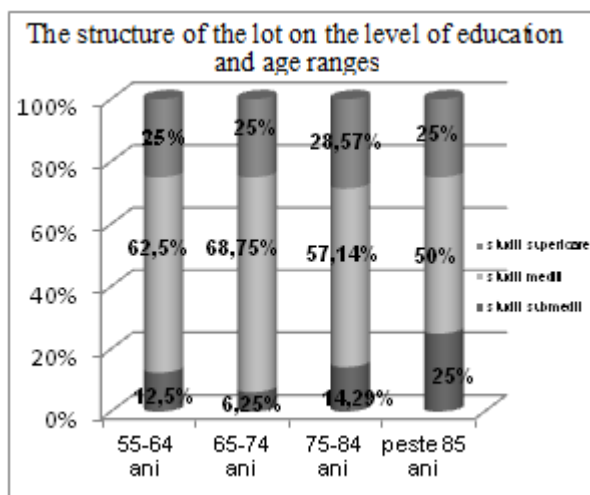


Figure 3 The structure of the lot on the level of education and age ranges

Patients rated the lot, mostly from urban areas (66.24%) and the remaining 33.76% are from rural areas (figure 4).

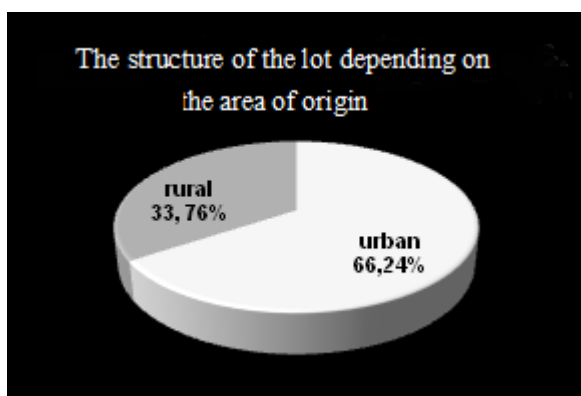


Figure 4 The structure of the lot depending on the area of origin

This factor relates to the origin of living and working conditions, and its elements are reflected in the status Orodonal without avoiding knowledge of existing therapeutic solutions to patients via the internet or media.

Nutrition is one of the most perfect models of analysis of mutual relations between man and the environment. The energy and nutrients in a ratio of finished, are essential in maintaining structural and functional integrity of the organism, even if the capacity adjustment is considerable, malnutrition, protein-caloric specific failings and certain eating disorders, consequences, sometimes irreversible, the systems (digestive, immunological, etc.), and if deficiencies manifest themselves in crucial moments, reflects both the growth and brain development of children and adolescents and human development in general.

The diet of older people is a marker of sanogenității, which varies depending on the socioeconomic level of education and vision of each individual, while grafted on the type of development of the society in which they live (figure 5).

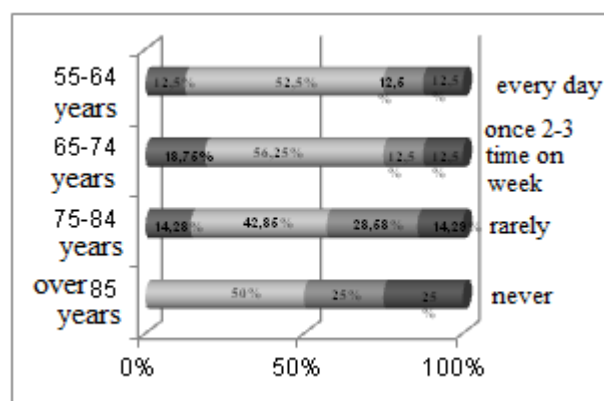


Figure 5 Consumption of fruit and vegetables per week

After processing the data from the completed questionnaires resulting frequency of consumption of fruits and vegetables. Most often such consumption is performed 2-3 times per week.

Nutritional status of patients is influenced by both exogenous factors (low income, educational level, loneliness) and the impairment of functional capacity, dentition incomplete morbid conditions (malabsorption, gastrointestinal disease), impaired immunity, contributing to increased susceptibility the infection, the occurrence of neoplastic diseases.

Malnutrition occurs especially in the elderly less educated, those who live alone in old centers (indicator of low income) and those who have recently undergone a change of lifestyle. The risk

of nutritional deficiency is higher in those who live alone, especially men.

CONCLUSIONS

Patients from the study group notes that fruit and vegetables twice a week, which is a very low, negatively influencing both oral health and on the general. Along with age was found sharp drop in consumption of fruits and vegetables daily or after age 85 years, consumption is almost zero.

In this study, we consider that the Romanian population, consumption of fruit and vegetables is low leading to vitamin deficiencies, with disturbance of the whole organism, incisiv, stomatognath system, where the first periodontal tissue is affected.

REFERENCES

- Agudo A, Cabrera L, Amiano P, Ardanaz E, Barricarte A, Berenguer T, Chirlaque MD, Dorronsoro M, Jakšzyn P, Larranaga N, et al. 2007, *Fruit and vegetable intakes, dietary antioxidant nutrients, and total mortality in Spanish adults: findings from the Spanish cohort of the European Prospective Investigation into Cancer and Nutrition (EPIC-Spain)*. The American Journal of Clinical Nutrition; 85(6):1634-42.**
- Andrea Bellavia, Susanna C Larsson, Matteo Bottai, Alicja Wolk, and Nicola Orsini, 2013, *Fruit and vegetable consumption and all-cause mortality: a dose-response analysis*. AJCN. First published ahead of print June 26, as doi: 10.3945/ajcn.112.056119.**
- Bodnar Dana Cristina, Pantea Mihaela, T. Bodnar, M. Burlibașa, S. G. Dumitru, Cristache Corina Marilena. 2012, *Pathology of the oral mucosa in elderly patients - clinical-statistical study*. Acta Medica Transilvanica, 2 (2): 56-60.**
- Fodor O. 1971, *Biology and age*. Publisher Dacia Cluj; 1971. p.22-45.**
- Nicklett EJ, Semba RD, Xue QL, Tian J, Sun K, Cappola AR, Simonsick EM, Ferrucci L, Fried LP. 2012, *Fruit and vegetable intake, physical activity, and mortality in older community-dwelling women*. J Am Geriatr Soc; 60:862-8.**
- J. M. Robertson, A. P. Donner, and J. R. Trevithick. 1991, *A possible role for vitamins C and E in cataract prevention*, American Journal of Clinical Nutrition 53: 346S-351S.**
- Agudo A, Cabrera L, Amiano P, Ardanaz E, Barricarte A, Berenguer T, Chirlaque MD, Dorronsoro M, Jakšzyn P, Larranaga N, et al. 2007, *Fruit and vegetable intakes, dietary***