

Letter to Editor

Dietary counseling: A requisite in geriatric prosthodontics

Introduction

In India, the elderly constitute around 8% of the total population, with a majority (70–80%) of them being malnourished.^[1,2] One of the primary oral health challenges in the elderly is tooth loss due to dental diseases resulting in altered food habits devoid of dietary fiber, essential nutrients, rich in saturated fats, sodium, sugar and cholesterol leading to a wide spectrum of imbalances affecting physical and cognitive functioning.^[3,4]

Replacement of the missing dentition and nutritional counseling are a prerequisite for improving the nutritional status of patients.^[5] Time constraints and lack of training of dentists for nutritional counseling are hindrance in providing dietary guidance.^[6,7] Most geriatric patients consult primary care providers, hence it is prudent for primary care providers to recognize the significance of oral health of elderly and refer oral health problems to dentist.^[8]

Nutritional Requirements of Elderly

Elderly should achieve the nutritional requirements as per Recommended Daily Allowance with at least 200–300 ml of milk/milk products, and 400 g of vegetables and fruits.^[9]

Dietary intervention has benefitted patients with conventional complete dentures or implant-supported mandibular overdentures.^[4] Individuals with few posterior teeth and those with no replacement of their missing teeth are at a higher risk for poor nutrition.^[10] Formal nutritional assessments using the Mini Nutritional Assessment (MNA)^[11] or a Triphasic Nutritional analysis^[12] is integral to create awareness regarding dietary deficiencies. Various methods including qualitative assessment for patient screening, semi-quantitative dietary analysis using food composition tables, computer-assisted nutritional analysis, and complex nutritional problem analysis can be employed.

Recommended Diet Plan after Denture Insertion

Indian diets offer great variety, therefore an organized and individualized plan for a first-time denture user would be essential to ensure that the patient is not overwhelmed with using dentures.

On the day after insertion, a new denture wearer can choose from temperature modulated (to avoid thermal burns) foods, which are liquids or semi-fluid that do not require chewing such as fresh fruit smoothies or simple porridges made from cracked wheat or ragi with milk to improve the nutrient intake.

On the second and third post-insertion days, advise eating soft foods that require a minimum of chewing such as soft cooked rice and dals (lentils), chapattis/roti (flat breads) soaked in milk or cooked dal, boiled vegetables/eggs, idlis etc., and soft fruits in between meals. The patient must be instructed to chew on both the sides, not to bite on any foods with the incisors, cut foods into small pieces, refrain from sticky foods and foods containing small seeds. The patient should report to the clinic for any soreness. By the fourth day, as the sore spots have healed, the patient can begin eating firmer foods.

The placement of a removable prostheses should include regular nutrition counseling sessions for optimum oral health. Early identification of malnourished elderly patients and necessary support must be provided. Regular dietary assessments within a week of placement of dental prosthesis, and every 3–6 months provides oral health care professionals opportunities to educate their patients with tailored recommendations to optimize their dietary choices.^[13]

Conclusion

Nutritional assessments, dietary counseling, and follow-up should be made a mandatory part of undergraduate clinical training with the development of standard protocol for the same.

Acknowledgement

The authors acknowledge inputs provided by Dr Prashanti Eachempati, Dr Seema Puri and Dr Susanthi Ronaki.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

**Kamal Shigli¹, Sushma S. Nayak²,
Kavitha Menon³, Vasanti L. Jirge⁴,
Sivaranjani Gali⁵, Mansi Patil⁶,
Tejas Limaye⁷, Anand Ambali⁸**

Letter to Editor

¹Department of Prosthodontics, D.Y. Patil Dental School, Lohegaon, ³Symbiosis Institute of Health Sciences (SIHS), Symbiosis International (Deemed University), Lavale, Pune, ⁶BHMS, Fellow in Applied Nutrition (Apollo Hospital), ⁷Clinical Nutritionist, KEM Hospital Research Center, Pune, Maharashtra, ²Public Health Dentist, ⁵Department of Prosthodontics, Faculty of Dental Sciences, M S Ramaiah University of Applied Sciences, Bangalore, ⁴Department of Oral Medicine and Radiology, KLE VK Institute of Dental Sciences, KLE Academy of Higher Education, Belgavi, ⁸Department of Medicine, BLDE (Deemed to be University), Geriatric Clinic, Shri B M Patil Medical College Hospital and Research Centre, Vijayapura, Karnataka, India

Address for correspondence: Dr. Kamal Shigli, Gateway Towers, Tower No. 98, Flat No. 904, Amanora Park Town, Hadapsar, In Front of Magarpatta City, Pune, Maharashtra - 411 028, India.

E-mail: kamalshigli@yahoo.co.in

References

1. India Ageing Report 2017. Available from: <https://india.unfpa.org/sites/default/files/pub-pdf/India%20Ageing%20Report%20-%202017%20%28Final%20Version%29.pdf>. [Last accessed 2020 Jun 26].
2. Mishra CP. Malnutrition-free India: Dream or reality. *Indian J Public Health* 2017;61:155-62.
3. Guiglia R, Musciotto A, Compilato D, Procaccini M, Lo Russo L, Ciavarella D, *et al*. Aging and oral health: Effects in hard and soft tissues. *Curr Pharm Des* 2010;16:619-30.
4. Kossioni AE. The association of poor oral health parameters with malnutrition in older adults: A review considering the potential implications for cognitive impairment. *Nutrients* 2018;10:E1709. doi: 10.3390/nu10111709.
5. Prakash N, Kalavathy N, Sridevi J, Premnath K. Nutritional status assessment in complete denture wearers. *Gerodontology* 2012;29:224-30.
6. Franki J, Hayes MJ, Taylor JA. The provision of dietary advice by dental practitioners: A review of the literature. *Community Dent Health* 2014;31:9-14.
7. Sivakumar V, Jain J, Tikare S, Palliyal S, Kulangara SK, Patil P. Perception of diet counseling among dental students in India. *Saudi J Oral Sci* 2016;3:36-41.
8. Muller F, Marchini L. Oral Health Assessment in Primary and Institutional Care. In: Kossioni A. *Gerodontology Essentials for Health Care Professionals. Practical Issues in Geriatrics* 1st ed. Cham, Switzerland: Springer; 2020, Pg no.113-129.
9. Dietary Guidelines for Indians- A Manual. Available from: <http://ninindia.org/DietaryGuidelinesforNINwebsite.pdf>. [Last accessed on 2020 Jun 26].
10. Felton DA. Edentulism and comorbid factors. *J Prosthodont* 2009;18:88-96.
11. Guigoz Y, Vellas B, Lauque S. Identifying the elderly at risk for malnutrition. The Mini Nutritional Assessment. *Clin Geriatr Med* 2002;18:737-57.
12. Bandodkar KA, Aras M. Nutrition for geriatric denture patients. *J Indian Prosthodont Soc* 2006;6:22-8.
13. Mobley CC, Dounis G. Dietary guidance for people wearing removable prostheses. *J Am Dent Assoc* 2013;144:e11-5.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Received: 09-05-2020

Revised: 14-06-2020

Accepted: 27-06-2020

Published: 30-09-2020

Access this article online

Quick Response Code:



Website:
www.jfmpc.com

DOI:
10.4103/jfmpc.jfmpc_815_20

How to cite this article: Shigli K, Nayak SS, Menon K, Jirge VL, Gali S, Patil M, *et al*. Dietary counseling: A requisite in geriatric prosthodontics. *J Family Med Prim Care* 2020;9:5081-2.

© 2020 Journal of Family Medicine and Primary Care | Published by Wolters Kluwer - Medknow