

Table 4: Recommended nutrient intakes for older persons (WHO, 2002).

Energy	1.41.8 Multiples of the Basal Metabolic Rate (BMR) to maintain body weight at different levels of physical activity
Protein	0.91.1g/kg per day
Fat	30% in sedentary older persons and 35% for active older persons. Saturated fats should not exceed 8% of energy.
Calcium	800-1200mg/day
Iron	10mg/day assuming no excessive iron losses
Selenium	50-70ug/day
zinc	Moderate Zn availability (30%) Men 7.0mg/day, Women 4.9mg/day
Riboflavin	1.3mg for men and 1.1mg for women.
Folate	400ug/day
Vitamin B12	2.5ug/day
Vitamin C	60-100mg/day
Vitamin A	600-700ug retinol equivalents/day
Vitamin D	10-15ug/day
Vitamin E	100-400IU/day

Foods recommended for the elderly

The five food groups

All the nutrients needed for optimal health in the desired amount can be obtained by eating sufficiently varied foods from the following five food groups: 1) Four servings of vegetables and fruits, divided into 3 categories: 2 servings of good sources of vitamin C, citrus fruits and Raw cabbage serve as a good source, such as green eggs, green and yellow vegetables or fruits and potatoes and a collection of other vegetables and fruits. 2. Four servings of rich bread, cereal, and flour products.

Four servings of rich bread, cereal, and flour products.

Two servings of milk and milk-based foods like cheese.

Two servings of meat, fish, poultry, eggs, dried beans, peas, and almonds.

Extra casual foods including fats, oils, and sugars, as well as alcohol.

The only serving recommended is for about 2-4 teaspoons of polyunsaturated fats, which provide essential fatty acids.

Diet recommended for new denture wearer

The correct order of eating food is to bite, chew and swallow, and it is much easier for a new denture wearer to master this complex of masticatory movements in reverse order. Consequently, consistent foods that only need to be swallowed, such as liquids, should be prescribed for the first few days after the denture is inserted. The use of soft foods is advocated for the next few days and a pa or regular diet can be eaten by the end of the week [26].

First post-insertion day

Vegetable-fruit group: Juice

Bread-cereal group: Gruels Boiled in both milk and water.

Milk group: Liquid milk can be taken in any form.

Meat group: Eggs in egg-nogs, pureed meat, meat broth or soup.

The sample menu should include a glass of milk at least once a day.

Second and third post insertion day

Vegetable-fruit group: juice; Tender cooked fruits and vegetables (seedless and without skin).

Bread-cereal group: cooked cereals, boiled softened bread, rice, noodles and macaroni.

Milk group: liquid milk and cottage cheese.

Meat group: chopped meat, ground liver, tender chicken / fish in cream sauce, scrambled eggs, thick soup, etc.

The sample menu must include butter or margarine, a glass of milk at least once a day.

Fourth day and after

On the fourth day, or as soon as the sore spots heal, hard foods can be eaten in addition to soft foods. Ideally it should be cut into small pieces before eating. The sample menu must include butter or margarine and a glass of milk.

The current study suggests that dentists are guiding the patients to improve their overall well-being as a person by enquiring about a patient's nutrition and overall well-being, by setting goals for overall health, dietary

improvement, adopting follow-ups, and enquiring whether someone is swallowing. Most participants are familiar with RDA recommendations and related diseases.

When the data related to the 1st day post insertion, in the vegetable group, prosthodontist has chosen the maximum percentage (27.4%) of the recommended diet (juices). Followed by postgraduates. In the bread and cereal group, prosthodontists have chosen the recommended diet and among postgraduates, the highest percentage was recorded for cooked cereals, softened bread, followed by boiled rice and then gruels cooked in milk or water. In the milk group, maximum participants have chosen milk. In the meat group, prosthodontists have chosen the recommended diet (egg in egg-nogs, meat soup) and among postgraduates, the highest percentage was recorded for egg in egg-nogs followed by meat soup and thick soup. Among practicing dentists, maximum response was recorded for egg in egg-nogs and thick soup.

In the second- and third-day post insertion, in the vegetable group, maximum responses were seen for tender cooked fruits and vegetables in all the groups. In the bread and cereals group, postgraduates and prosthodontists have chosen cooked cereals, a softened bread followed by boiled rice. Whereas among practicing dentists, the choice of recommendation was cooked cereals, a softened bread followed by boiled noodles and macaroni. In the meat group, the highest percentage of responses was seen for pureed meat in all the groups followed by thick soups in practicing dentists and postgraduates.

CONCLUSION

Within the limitations of the study, we can say that dentists are guiding the patients to improve their nutritional and overall wellbeing as an individual. Among all the dentists, prosthodontists have shown good awareness of nutritional counselling when compared to other dentists and care must be taken to educate all the dentists about the diet recommended after denture insertion.

REFERENCES

- Dolan TA. Identification of appropriate outcomes for an aging population. *Spec Care Dent* 1993; 13:35-9.
- Kimura Y, Ogawa H, Yoshihara A, et al. Evaluation of chewing ability and its relationship with activities of daily living, depression, cognitive status, and food intake in the community-dwelling elderly. *Geriatr Gerontol Int* 2013; 13:718-25.
- Ranawana V, Clegg ME, Shafat A, et al. Postmastication digestion factors influence glycemic variability in humans. *Nutr Res* 2011; 31:452-9.
- Toffanello ED, Inelmen EM, Imoscopi A, et al. Taste loss in hospitalized multimorbid elderly subjects. *Clin Interv Aging* 2013; 8:167-74.
- Parker BA, Chapman IM. Food intake and ageing—the role of the gut. *Mech Ageing Develop* 2004; 125:859-66.
- Cabrera MAS, Mesas AE, Garcia ARL, et al. Malnutrition and depression among community-dwelling elderly people. *J Am Med Dir Assoc* 2007; 8:582-584.
- Sheiham A, Steele JG, Marcenes W, et al. The relationship among dental status, nutrient intake, and nutritional status in older people. *J Dent Res* 2001; 80:408-413.
- Houston DK, Nicklas BJ, Ding J, et al. Dietary protein intake is associated with lean mass change in older, community-dwelling adults: The health, aging, and body composition (Health ABC) study. *Am J Clin Nutr* 2008; 87:150-5.
- Rajaraman V, Ariga P, Dhanraj M, et al. Effect of edentulism on general health and quality of life. *Drug Invention Today* 2018.
- Evans RW. The aging dental patient: myth and reality. *Gerodontology* 1984; 3:271-2.
- Kapur KK, Soman SD. Masticatory performance and efficiency in denture wearers. *J Prosthet Dent* 1964; 14:687-94.
- Wayler AH, Chauncey HH. Impact of complete dentures and impaired natural dentition on masticatory performance and food choice in healthy aging men. *J Prosthetic Dent* 1983; 49:427-33.
- Chauncey HH, Muench ME, Kapur KK, et al. The effect of the loss of teeth on diet and nutrition. *Int Dent J* 1984; 34:98-104.
- Gunne HS. Masticatory efficiency and dental state. A comparison between two methods. *Acta Odontol Scand* 1985; 43:139-46.
- Fontijn-Tekamp FA, Slagter AP, Van Der Bilt A, et al. Biting and chewing in overdentures, full dentures, and natural dentitions. *J Dent Res* 2000; 79:1519-24.
- Papas AS, Palmer CA, Rounds MC, et al. The effects of denture status on nutrition. *Special Care Dent* 1998; 18:17-25.
- Olivier M, Laurin D, Brodeur JM, et al. Prosthetic relining and dietary counselling in elderly women. *J Can Dent Assoc* 1995; 61:882-6.
- Joshiyura KJ, Willett WC, Douglass CW. The impact of edentulousness on food and nutrient intake. *J Am Dent Assoc* 1996; 127:459-67.
- Krall E, Hayes C, Garcia R. How dentition status and masticatory function affect nutrient intake. *J Am Dent Assoc* 1998; 129:1261-9.
- Brodeur JM, Laurin D, Vallee R, et al. Nutrient intake and gastrointestinal disorders related to masticatory performance in the edentulous elderly. *J Prosthet Dent* 1993; 70:468-73.
- Ramsey WO. The role of nutrition in conditioning edentulous patients. *J Prosthet Dent* 1970; 23:130-5.
- Kreher JM, Mitchell Kreher J, Graser GN, et al. The relationship of drug use to denture function and saliva flow rate in a geriatric population. *J Prosthet Dent* 1987; 57:631-8.

23. N’Gom PI, Woda A. Influence of impaired mastication on nutrition. *J Prosthet Dent* 2002; 87:667-73.
24. Marshall TA, Warren JJ, Hand JS, et al. Oral health, nutrient intake and dietary quality in the very old. *J Am Dent Assoc* 2002; 1369-79.
25. Boisvert WA, Mendoza I, Castañeda C, et al. Riboflavin requirement of healthy elderly humans and its relationship to macronutrient composition of the diet. *J Nutr* 1993; 123:915-25.
26. [https://www.thejpd.org/article/0022-3913\(60\)90089-5/pdf](https://www.thejpd.org/article/0022-3913(60)90089-5/pdf)