

ADA News Releases

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Regular Dental Care Essential for Proper Nutrition of the Aged, Study Says

CHICAGO – Regular dental care to replace missing teeth or preserve denture function may be critical for the very old in maintaining a balanced diet and consuming adequate amounts of nutrients, say University of Iowa researchers in a study of 220 persons, averaging 79 years of age.

According to the study, published in this month's *Journal of the American Dental Association*, very old persons with fewer functional teeth or wearing ill-fitting dentures consumed fewer nutrients than subjects with more teeth or without denture problems.

"Reduced consumption of needed nutrients may increase the risk of morbidity and hasten death in the oldest old," warns lead investigator Teresa A. Marshall, Ph.D., R.D., assistant professor, College of Dentistry, University of Iowa.

For example, deficiencies in such nutrients as protein and zinc decrease immune function and increase an elderly person's susceptibility to infection. Low vitamin C intakes have been associated with decreased cognitive function and increased peripheral arterial disease, according to the study.

Results from the study revealed that average daily intake of protein, vitamin C, calcium, phosphorous and zinc was associated with both the number of teeth and number of functional teeth. Subjects with denture problems had lower average intakes of such nutrients as protein, thiamin, riboflavin, vitamin D, iron and magnesium than those subjects without denture problems.

In the study, trained examiners conducted dental examinations, and trained interviewers completed standardized interviews in subjects' homes. Participants then completed three-day dietary records. The Dietary Reference Intakes of the Food and Nutrition Board of the National Academy of Sciences defined adequate nutrient intakes.

Study results also revealed that average daily nutrient intakes did not differ between subjects with well-fitting dentures and subjects with natural teeth. Neither average daily intake nor adequacy of intake was associated with subjects' perception of oral health problems, chewing difficulties or temperature sensitivity.

The researchers concluded that the presence of natural teeth and well-fitting dentures was associated with higher and more varied nutrient intakes and greater dietary quality in the oldest old lowans sampled.

"Aggressive preventive oral health care to maintain natural teeth and regular dental care to ensure adequate denture fit and function may decrease nutritional risk in elderly people," concludes Dr. Marshall.

Note: Although published in the *Journal of the American Dental Association*, the study does not necessarily reflect the policies or opinions of the ADA.