Summary of: Attitudes and practices of dentists with respect to nutrition and periodontal health

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FULL PAPER DETAILS

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Objective To determine the opinions and attitudes of general dental practitioners and hygienists towards the role of nutrition in periodontal health. **Setting** The study was completed by general dental practitioners and dental hygienists throughout the UK. **Method** A questionnaire was sent out with the *British Dental Journal* and *BDA News* together with explanatory information about the study. Postage was pre-paid for replies. **Results** Eight hundred and seventy-nine questionnaires were completed. Sixty-six percent of respondents believed nutrition plays a role in periodontal health. Dietary factors that were considered most important were vitamin C (70%), fruit and vegetables (64%) and antioxidant vitamins (45%). Forty-four percent had recommended nutrition supplements to their patients, with multivitamin and mineral supplements (37%) and vitamin C (30%) the most popular. Eighty-two percent of respondents sourced information from dental journals. Qualitative data highlighted uncertainty amongst respondents about the evidence base around nutrition and periodontal health and a lack of training opportunities. **Conclusions** A majority of dentists consider that nutrition and dietary factors play a role in maintaining periodontal health. However, there was a need to increase awareness of the current state of the evidence for a role of nutrition in maintaining periodontal health. Concern regarding lack of an evidence base for the role of nutrition in the treatment of periodontal diseases suggests a need for further research into the therapeutic role of nutrition in periodontal disease management.

EDITOR'S SUMMARY

In examining the dentists' attitudes to nutrition and periodontal disease, this paper spans two areas that are currently highly topical. The emerging evidence for links between periodontal disease and cardiovascular disease and type 2 diabetes, among others, is increasingly focusing attention on periodontal health, at least in the dental community. Nutrition, on the other hand, is very much in the public eye, with the increasing levels of obesity in the UK and elsewhere rarely out of the news.

As the risks associated with being obese and eating an unhealthy diet (heart disease, type 2 diabetes, stroke) also appear to be linked to periodontal disease, it might be expected that there would be proven evidence for a role of nutrition in periodontal disease. However, as the authors point out, there is currently only limited evidence suggesting such a link, mainly from

observational studies. It is clear that there is a need for more well-designed clinical trials to investigate the role of nutritional interventions in periodontal disease, as highlighted in the paper by the authors and by the commentator on the paper, J. Reeves (see commentary, right). That this need for evidence is also felt by dentists is clear from this paper: uncertainty about the evidence base was the strongest theme arising from the qualitative data collected, compounded by the perceived lack of education on the relationship between nutrition and periodontal disease, both at dental schools and on CPD courses.

With the public becoming more aware of the links between diet and systemic and oral health, it is likely that dentists will be called upon to provide nutritional advice increasingly in the future. While dentists have always provided some nutritional advice, particularly in relation to the prevention of caries, if

they are to be able to provide more complex advice with confidence then both evidence about the relationship between nutrition and periodontal disease, and access to that evidence, need to improve. The complex inter-relationships between oral and systemic health are, in all probability, only just beginning to be elucidated; as a result, the future is likely to hold an increasingly important role for the dentist in helping patients maintain good overall health.

The full paper can be accessed from the *BDJ* website (www.bdj.co.uk), under 'Research' in the table of contents for Volume 205 issue 4.

Rowena Milan,
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IN BRIEF

- Highlights the uncertainty among dentists about the current state of evidence for a therapeutic role of diet and nutrition in periodontal diseases.
- Summarises the current state of the evidence for the relationship between nutrition and periodontal health.
- There is a need for clinical guidance on what nutritional advice should be offered to patients.

COMMENT

As the link between systemic and oral health is becoming increasingly more clear, the role of nutrition as an adjunct to the clinical treatment of periodontal disease is also receiving more attention. As a result more patients are seeking nutritional advice with regard to their oral health. Little is known, however, of the opinions and current practice of dentists in the UK towards nutrition as a risk factor for periodontal disease.

The results of this research reveal that although most of the respondents (66%) believed nutrition plays a role in periodontal health, very few respondents (14%) indicated that they talk to patients about the role of nutrition and periodontal health on a regular basis. With regards to recommending supplementation, 44% of respondents recommended their patients take a nutritional supplement, however only 7% did so 'frequently', with multivitamin and mineral supplements and vitamin C being the most popular.

The overriding concerns appear to be an uncertainty about the evidence base for nutrition and periodontal health and a lack of access to training in this area, with some respondents expressing a lack of confidence in discussing the subject with patients. Many dentists would like more evidence-based information published in dental journals, and easy access to information to give to patients. There was concern amongst NHS dentists that the current NHS contract allows inadequate time to provide nutritional advice to patients and that plaque control

and smoking cessation were far more important factors.

The area of nutrition and periodontal health is considered to be little taught in dental schools in the UK with few continuing professional development courses available. These findings suggest there is a need for increased access to the current state of the evidence for the role of nutrition in maintaining periodontal health. In order to strengthen opinion, there is a need for more randomised controlled trials to clarify the evidence base in this area. With more access to training and clear clinical guidelines on nutrition, we as a profession will be more confident that we are giving reliable and appropriate nutritional advice.

J. Reeves, Nutritionist and Dental Hygienist, Primrose Hill Dental Practice, London

AUTHOR QUESTIONS AND ANSWERS**1. Why did you undertake this research?**

There is increasing interest in the published literature about the links between oral health and general health and specifically there have been a number of recent studies that suggest an association between periodontal disease and other diseases which are known to be related to nutrition such as obesity, diabetes and cerebrovascular disease. Furthermore, there are recent studies which show a potential mechanistic link between nutrition and periodontal health. While nutritional factors are commonly considered for the prevention of caries, little was known about the attitude and practices of dentists with regards to nutrition and periodontal disease.

2. What would you like to do next in this area to follow on from this work?

In response to the comments from dentists highlighting uncertainty about the evidence base for a relationship between nutrition and periodontal health the paper summarises the existing evidence for a link between nutrition and periodontal health. It is clear that there is a need for well-conducted randomised controlled trials to further elucidate the extent to which nutrition has a therapeutic and preventive role in periodontal health.