

TOOTH DECAY AND GUM DISEASE

# Recommendations for non-dental health professionals



**Highlights of Perio Workshop 2016** on the Boundaries Between Dental Caries and Periodontal Diseases - jointly organised by the EFP and ORCA

Compiled by **Prof Nicola West**, from the consensus reports of the working groups chaired by **Prof Mariano Sanz**, **Prof Søren Jepsen**, **Prof Iain Chapple**, and **Prof Maurizio Tonetti**



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# Gum Disease and Tooth Decay

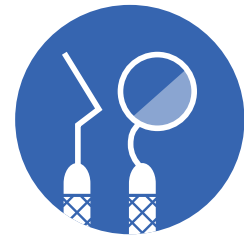
interactions and similarities between  
**the most** widespread oral conditions



Gum Disease and Tooth Decay (Caries) continue to be major public health problems worldwide.



Severe Periodontitis is a leading cause of tooth loss in adult population.



Untreated Caries and Periodontitis may have severe consequences and lead to tooth loss.

 **Perio  
& Caries**

Gum Disease and Caries  
are both  
preventable

**10%**

10% of the global population are affected by Severe Periodontitis.  
743 million people affected.



1 person in 3  
is affected by caries.

**6**

Severe Periodontitis is the sixth most common disease globally.

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# Teeth are **for a lifetime**

*Periodontal diseases and dental caries are the most common non-communicable diseases in mankind and the main cause of tooth loss. Both diseases can lead to nutritional compromise and negative impact on self-esteem and quality of life.*

*The dental biofilm is a major biological determinant common to development of both diseases.*

*They share common risk factors and social determinants, important for both prevention and control.*

*Most recent scientific discussion points out that similar preventive approaches, based around routinely-performed oral hygiene using a fluoride toothpaste, are effective with for both periodontal diseases and dental caries.*

*Due to worldwide population growth and increased tooth retention, the number of people affected by dental caries and periodontitis is growing, thus increasing the total burden of these diseases globally, particularly in the older population.*

*Fortunately, effective preventive and therapeutic interventions are available to manage both dental caries and periodontal diseases. There are numerous groups of healthcare professionals that need to know more about these diseases and to understand the ongoing balance between risk factors (e.g. smoking), protective factors (e.g. fluoride for dental caries, high levels of oral hygiene in periodontal diseases) and pathological factors.*

*This group of healthcare workers includes **physicians** (from paediatricians to general practitioners, to geriatricians), **nurses** (from public health nurses to community health visitors, to those working in oncology and geriatric settings), **pharmacists** (that are aware of the cariogenicity associated with salivary depletion and the dangers of medicines with added sugar and the importance of smoking cessation in periodontal diseases), **dietitians** (including those involved with diet and nutrition), **nursery care workers** and **midwives**.*

***Teeth are for a lifetime. Help your patients take action!***



# Recommendations on periodontal diseases and dental caries

## Periodontal diseases

### Periodontal diseases are inflammatory diseases of microbial origin.

There are different forms of periodontal disease (gum disease), but the most common are gingivitis and periodontitis. Gingivitis is a prerequisite for periodontitis. Whilst not all cases of gingivitis will progress to periodontitis, managing the former is a vital primary preventive strategy. If left untreated, periodontitis can cause tooth loss.

**In its more severe forms**, periodontitis is independently associated with higher mortality rates, with robust evidence showing an increased risk of atherogenic cardiovascular diseases, diabetes control and related complications.

**Periodontitis does not necessarily** mean that people have neglected proper oral self care. Susceptibility varies: the most highly susceptible individuals may acquire the disease even with relatively good oral hygiene.

**Risk of periodontitis has a strong heritability**, however lifestyle, environmental factors and behaviour are key to determining whether disease develops or progresses.

**Periodontitis is treatable to the extent that teeth can be retained for life**; however, early diagnosis is vital and the disease can start in adolescence or in later teenage years.

**Bleeding gums are not normal**, nor is the appearance of blood in saliva following tooth brushing is not normal. A dental care professional should be consulted to investigate further and provide suitable treatment.

**Whilst periodontitis is not a communicable disease**, the bacteria that initiate the disease can be transferred between individuals. If transferred to a susceptible individual, their immune response may start to trigger the signs and symptoms of periodontitis.

**Periodontitis should be regarded as a “signpost” condition** that may indicate malnutrition or that a patient has an underlying chronic non-communicable disease (e.g. undiagnosed diabetes). The advice of a dental care professional should be sought.

✓ **Encourage patients** with bleeding gums, bad breath, loose teeth, or with gaps between teeth **to visit a dental care professional** for an examination, diagnosis and advice.

✓ **Encourage anyone** with signs of periodontal disease to clean between their teeth once daily, as directed by a dental care professional.

✓ **Ensure that patients understand that unhealthy gums can be associated with other general health issues** and that the mouth is a vital part of the body, and not a separate organ.

✓ **Educate, motivate and support patients** to practice proper dental plaque control.

✓ **Encourage care workers to seek advice** on implementing individual oral hygiene for care home residents.

✓ **Advise smoking cessation.**



## Dental caries

**Dental caries is a biofilm-mediated, sugar-driven**, multifactorial, dynamic disease that results in the episodic demineralisation of dental hard tissues over time.

**Dental caries risk in individuals and groups** will vary considerably; the dental caries process produces lesions with a range of extent and severity; each stage can either be active or inactive.

**Lifestyle changes and dietary and behavioural** factors may influence both new disease and the progression of existing lesions that may, at the early stages, be arrested or reversed.

**A multifaceted approach that minimises all pathological** factors while focusing on diet and self care, including frequent tooth brushing with a fluoride, is the most likely to be effective in controlling this largely preventable disease.

**Apart from the common risk factors associated** with dental caries, such as obesity and links to hyposalivation and maternal smoking, there is little robust evidence for direct links to systemic disease and specific genetic factors.

✓ **Substitute medicines where reduced salivary** flow rate is a secondary effect

✓ **Educate and motivate patients** to reduce intake of free sugars.

✓ **Ensure foods and drinks distributed at schools** follow the latest health recommendations.

✓ **Promote absence of processed foods** for pre-school and school children.

✓ **Recommend toothpastes** containing fluoride agents.

## Retaining healthy teeth for life has multiple benefits



allows chewing, eating speaking and smiling to be optimal



reduces the risk of general health issues



improves the quality of life and wellbeing





positively impacts health economics

## Both dental caries and periodontal diseases are preventable

- **Preventive measures should be applied** to retain natural teeth and dentitions into older age.
- Wherever possible, provide interventions and advice that help the individual **link** the benefits of **preventing dental caries** and **periodontal diseases** with **systemic health**.
- Dental caries and periodontal diseases are **distinct diseases** with different pathological mechanisms but **share the same major determinant** – dental plaque.
- The **ongoing balance** between **risk factors** (e.g. smoking), **protective factors** (e.g. fluoride in dental caries, strong oral hygiene in periodontal diseases) and **pathological factors** need to be considered.
- Epidemiological evidence and analysis of trends in risk factors suggest that **the burden** of dental caries and periodontal diseases **will increase**, as ageing populations now tend to retain more teeth.
- Preserving a **functional dentition into old age is feasible** and may be associated with improved overall quality of life and delayed frailty and dependence.
- Oral health is a **critical component of healthy ageing** and requires the capacity to self care and access to preventive services and treatment.
- **The level of dependence**, rather than chronological age, **has to be considered** when developing individual preventive and treatment approaches for older people.
- ✓ Encourage mothers to instil **twice daily** tooth brushing in their children from the moment the **first baby tooth** appears.
- ✓ Encourage everyone to brush their teeth **twice daily** with a **fluoridated toothpaste**, each session should last at least two minutes. Additional effective agents to reduce plaque can be recommended for those with a full dentition.
- ✓ Encourage nursing mothers and other child carers **to favour sugar-free drinks from birth**.
- ✓ Advise on the **risks of diets high in sugar** and **medications containing sugar**, which could lead to dental caries and periodontal diseases, especially in the very young and the elderly.
- ✓ Encourage everyone to **limit the amount** and frequency **of sugar intake** - ideally only at mealtimes.
- ✓ **Include oral health** (dental caries and periodontal diseases) in **medical prevention programmes**, particularly for **diabetes, obesity, metabolic syndrome** and **cardiovascular disease** (periodontal diseases).

## Perio & Caries at a glance

-  Caries and periodontal diseases are the commonest human diseases - and both are preventable.
-  The burden of these diseases is high and is increasing as the population ages.
-  Dental professionals should be consulted regularly to prevent and treat caries and periodontal diseases effectively.
-  Bleeding gums are not normal. Dental professionals should be consulted immediately.
-  The oral healthcare team can advise on weight loss, smoking cessation, exercise, and controlling diabetes and glycaemia in general.
-  Periodontal disease should be seen as an indicator of general health issues.
-  Education for oral health should target children, mothers to be, new mothers, care home workers and other caregivers.
-  Oral health status in older individuals is influenced by their **level of dependence**, rather than by their chronological age.
-  Reducing sugar and starch intake levels and **frequency** is important in preventing periodontal disease and caries. Intake should be limited to mealtimes.
-  Brushing twice daily with fluoride toothpaste is essential and can also be supplemented with **additional effective agents that reduce plaque**, such as those found in mouthwash and toothpastes.

## Perio & Caries, a joint **EFP-Colgate** initiative

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*The **European Federation of Periodontology (EFP)** is the leading global voice on gum health and gum disease and the driving force behind EuroPerio – the most important international periodontal congress – and the European Workshop on periodontology, a world-leading meeting on periodontal science. The EFP also edits the Journal of Clinical Periodontology, one of the most authoritative scientific publications in this field.*

*The EFP comprises 30 national societies of periodontology in Europe, northern Africa, Caucasia, and the Middle East. Together this represents around 14,000 periodontists, dentists, researchers, and other members of the dental team focused on improving periodontal science and practice.*

[www.efp.org](http://www.efp.org)

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*Colgate-Palmolive continues to build success through innovation in oral care and stronger partnerships with dental profession and public health. Its core values, "caring", "global teamwork", and "continuous improvement", are reflected not only in the quality of its products and the reputation of the company, but also in its dedication to improve the quality of life of its consumers and serve the communities where it does business.*

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European  
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Periodontology

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