## Welcome to Module 5

Impacts of Dry Mouth





### IMPACTS OF DRY MOUTH

According to Oralieve® research, nearly 90% of Dental Professionals believe that the incidence of the cases of dry mouth is on the rise.¹\* Living with a dry mouth can be extremely uncomfortable and make everyday events such as eating and speaking difficult. Dry mouth exposes your oral health to a number of threats. For older patients it can impact their ability to socialise and ultimately their nutritional intake. Take a look at some of the examples below;

### Physical impacts of dry mouth

- Changes in speech patterns
- Dry soft tissues allow dentures to rub and can lead to soreness
- Dry mouth can contribute to dental caries as saliva plays an important role in buffering acids
- Change dietary preferences who would want to eat peanut butter or crackers with a dry mouth?
- Changes in appearance dry mouth can mean lipstick on the teeth or dryness of lips
- There is an increased susceptibility to oral candidiasis.<sup>2</sup> It also causes increased accumulation of bacterial plaque resulting in gingival inflammation, periodontal disease and halitosis.<sup>2</sup>







### Subjective symptoms of dry mouth<sup>3</sup>

Things patients may mention include:

- 'Dry mouth' feeling or xerostomia
- Frequent thirst increased intake of liquid
- Difficulty in swallowing
- Difficulty in speaking
- Difficulty in eating dry foods because they stick to the roof of the mouth
- The need to drink water frequently
- Difficulty in wearing dentures
- Pain and irritation of the mucosa
- A burning feeling in the tongue
- A distorted sense of taste (disgeusia)
- Tongue sticking to the roof of the mouth particularly at night
- Needing to put a glass of water on the bed stand to drink at night (and resulting in nocturia)
- Sensitivity to spicy foods
- Lack of or diminished taste perception
- Altered salty and metallic taste
- Malodour
- Development of hoarseness
- Coughing episodes
- Painful salivary glands





### Potential impacts of dry mouth on nutrition

Xerostomia has been shown to be a contributing factor to the high prevalence of geriatric malnutrition in the United States.<sup>4</sup>

Oral problems that frequently effect older people such as missing teeth, dry mouth and mastication limitations were found to be correlated with reductions in quality of life after controlling for other influences such as general health, income and marital status.<sup>5</sup> Poor oral health status is one of the most frequent causes of malnutrition due to its effect on mastication and swallowing which can lead to severe deficiencies in energy and nutrient intake.<sup>5</sup>

A study by Sheiham et al. reported that patients with dry mouth were significantly more likely to avoid crunchy foods like vegetables, dry foods like bread and sticky foods such as peanut butter. They also found associations with statistical significance between xerostomia and food avoidance.<sup>4</sup>







## What to look for in patient examinations<sup>3,6</sup>

- Loss of glossiness of the oral mucosa
- Dryness of the mucosa which becomes thin and cracked
- Fissures in the dorsum of the tongue
- Angular cheilitis
- Thick saliva
- Increased frequency of oral infection especially by candida
- Presence of caries in atypical locations cervical margins, incisal margins or tips of teeth<sup>4</sup>
- Increased size of major salivary glands



Thick saliva as a result of radiotherapy



Oral infection





## The oral health impacts of dry mouth

Loss of the lubricating, buffering and antimicrobial properties of saliva results in an increased risk of the following conditions:<sup>7</sup>

- Dental erosion
- Dental caries specifically root and incisal caries<sup>6</sup>
- Mucosal friability
- Dry cracked or peeling lips
- Angular cheilitis
- Dry, plaque laden coarse tongue
- Erythematous tongue
- Mucositis
- Ulcers
- Oral candidiasis
- Halitosis
- Oral/dental infection











### Advice for patients with dry mouth

Early diagnosis and treatment is necessary to effectively manage dry mouth, prevent progression and promote comfort and oral function.<sup>8</sup>

Patients with dry mouth should be counselled to avoid anything that can contribute to oral dryness or irritation.<sup>5</sup>

- Alcohol has a drying effect and should be avoided in both beverages and in oral products such as mouthwashes
- Caffeine acts as a mild diuretic which promotes fluid loss and may worsen dry mouth
- The dry air of modern homes contributes to the sensation of dryness - use of a humidifier, especially at night, may help
- Consumption of carbohydrate-containing foods and drinks between meals should be minimised – especially sticky foods and also acidic foods
- Avoid irritating toothpastes,<sup>9</sup> such as those containing SLS and strong flavours







### What's wrong with water?

Many patients keep a bottle of water handy to take sips from throughout the day. Please note this is only a temporary solution and not a cure as water does not effectively replace the other desirable constituents of saliva. To remind yourself of the functions of saliva. see Module 1 - The Role of Saliva.

Excessive sipping of water not only increases urination but it can also reduce the oral mucus film lining in the mouth and worsen dry mouth symptoms. <sup>10</sup> In addition it is important to note that dry mouth is rarely associated with systemic dehydration and, although it may ease symptoms, consuming large quantities of water will not overcome the condition. <sup>4</sup>

If patients like to drink fluids throughout the day for temporary dry mouth relief, ensure they are drinking water and not drinks containing sugar or caffeine such as juices, fizzy drinks or coffee. The oral cavity is already vulnerable to oral disease, such as caries, due to an insufficient quantity of saliva and drinking sugary drinks will only increase the patients susceptibility to the development of oral diseases.





### References

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# Well done for completing Module 5!

Fancy a challenge?

