

# Dry Mouth

Dry mouth or the medical term xerostomia (zero-STO-me-uh) is a result of reduced or no saliva. The normal flow of saliva is about 1.5 litres per day, which is needed to keep the mouth moist and healthy. An unusually dry mouth can affect both the health of teeth and gums as well as the enjoyment and digestion of food. Left untreated, dry mouth could lead to serious oral complications and health problems.

Dental hygienists assess and evaluate signs and symptoms of dry mouth and provide treatment options. Depending on the cause and conditions, they may make referrals to other health-care professionals.

## HOW SALIVA FUNCTIONS

Dry mouth can happen to anyone – for example, when nervous or stressed. However, when the condition persists, it can affect a person's oral health and overall health. Saliva serves many important roles such as limiting the number of harmful bacteria living in the mouth, controlling the pH balance, washing away food and maintaining healthy gums. Saliva is necessary for:

- Lubricating the mouth and teeth
- Tasting, chewing and swallowing
- Digesting food
- Speaking
- Protecting against infection
- Neutralizing acids in the mouth
- Remineralizing teeth to help prevent cavities

## SIGNS AND SYMPTOMS

Without proper salivary flow, an individual may experience:

- Dryness in the mouth
- Saliva that appears stringy, thick or foamy
- Sores or split skin at the corners of the mouth
- Dry, cracked lips
- Bad breath
- Difficulty speaking
- Sore throat



- An altered sense of taste
- A fungal infection in the mouth such as thrush
- Increased plaque, tooth decay and gum disease
- Painful tongue with inflammation or ulcers
- Difficulty chewing and swallowing
- Malnutrition, especially among the elderly

## CAUSES AND RISK FACTORS

There are many causes of dry mouth ranging from excessive breathing through the mouth to little or no production of saliva. Not having enough saliva may be a sign of an underlying disease, such as Sjögren's syndrome or poorly controlled diabetes. Some of the more familiar causes and risks include:

**Medications** – Dry mouth is a very common side effect of many medications. The condition may improve with an adjusted dosage or a new prescription.

**Aging** – Dry mouth is not a normal part of aging, however, older people are more likely to be taking medications that may cause dry mouth. Also, as people get older they are more likely to have other health conditions that may cause dry mouth.

**Chemotherapy** – Chemotherapy drugs can change the nature of saliva and the amount produced.

**Radiation therapy** – Radiation treatment to the head and neck can damage salivary glands, causing a marked decrease in saliva production.

**Physical trauma** – An injury could block or damage salivary glands.

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**Certain health conditions** – Conditions such as Sjögren’s syndrome, diabetes and depression can cause dry mouth.

**Aggravating factors** – These include snoring, breathing with the mouth open, dehydration, tobacco use and drinking alcohol.

## PREVENTION AND TREATMENT

Dry mouth is a condition that is carefully considered during the dental hygiene appointment. Clients may not know they have dry mouth and may lose as much as half of their saliva production before feeling the side effects. Diagnosis of xerostomia is based on client history and oral examination. When appropriate, dental hygienists will make referrals.

In many cases it is not possible to correct the xerostomia itself, and treatment focuses on relieving the symptoms and preventing tooth decay and gum disease.

For severe xerostomia, fluoride trays or brush-on fluoride gel may be recommended to protect natural teeth.

Dental hygienists advise on ways to alleviate the discomfort of dry mouth:

- Sip water throughout the day and use ice chips for sucking only. Avoid beverages such as soft drinks, juice or sports drinks, which contribute to tooth decay.
- Use xylitol gum/lozenges or sugar-free hard candies.
- Eat raw carrots or celery to help activate salivary glands.
- Avoid sugary or acidic foods and candies, because they increase the risk of tooth decay.
- Use over-the-counter saliva substitutes (lubricants). At nighttime consider using a xylitol time-released oral disk that keeps the mouth moist.



- Choose alcohol-free mouthwashes because alcohol can be drying.
- Recognize that over-the-counter antihistamines and decongestants can make symptoms worse.
  - Limit caffeine and alcohol intake.
  - Eliminate the use of tobacco products.
  - Breathe through the nose rather than the mouth.
  - Add moisture to the air at night with a humidifier.
- Remove dentures when sleeping.

## MAINTAINING GOOD ORAL HEALTH

Regular and effective oral care is important for controlling the symptoms of dry mouth and reducing the risk of cavities and gum disease. Dental hygienists work with their clients to customize homecare programs. For relief from the discomfort of dry mouth and to prevent oral infections or disease, follow these procedures:

- Make regular visits to a dental hygienist.
- Check gums/mouth regularly and report any changes or signs of gum disease to a dental hygienist.
- Brush twice a day for two minutes using a soft toothbrush and fluoridated toothpaste. Rinse with water after meals to remove food particles.
- Floss or clean between teeth once a day to remove food and plaque.
- Gently brush the tongue daily.
- Use an alcohol-free fluoridated mouth rinse. Do not eat or drink for at least 30 minutes after rinsing.
- Try over-the-counter saliva substitutes such as lubricants, disks or oral relief sprays.
- Ensure candies, gum and oral relief lozenges are sugar-free or contain xylitol.

*As professional health-care providers, dental hygienists are primarily concerned with promoting good oral health. Dental hygiene is among the largest of the regulated health-care professions in the province. In Ontario all dental hygienists are registered with the College of Dental Hygienists of Ontario, which regulates the profession to ensure the public receives safe and ongoing comprehensive oral care.*

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