What is Dry Mouth?

Dry mouth, usually called “xerostomia” (zeer-oh-stomia), is a common symptom most often caused by a decrease in the amount or quality of saliva. Almost every Sjögren’s syndrome patient experiences some degree of dry mouth.

Dry mouth has many causes including:
• prolonged use of many prescription drugs including certain antihistamines, antihypertensives, and antidepressants
• chronic diseases such as Sjögren’s syndrome, sarcoidosis, hepatitis C, diabetes, or depression
• medical treatments such as radiation therapy to the head and neck or bone marrow transplantation

About Saliva

Saliva is an essential body fluid for protection and preservation of the oral cavity and oral functions. It is produced by the three pairs of major salivary glands and hundreds of minor salivary glands. Its value is seldom appreciated until there is not enough. Saliva is mostly water, but it also contains over 60 substances, which:
• protect, lubricate and cleanse the oral mucosa
• aid chewing, swallowing and talking
• protect the teeth against decay
• protect the mouth, teeth, and throat from infection by bacteria, yeasts, and viruses
• support and facilitate our sense of taste
Major salivary glands are palpated for the presence of tenderness, firmness, or enlargement. The amount and quality of saliva coming from the ducts inside the mouth are assessed, and the absence of saliva or presence of dry or reddish oral mucosa is noted. Active dental decay is evaluated.

Salivary flow rate

The amount of saliva produced during a specified amount of time may be measured. The test is non-invasive and painless.

Scintigraphy

Performed in the hospital, this test measures the rate at which a small amount of injected radioactive material is taken up from the blood by the salivary glands and secreted into the mouth. It is another method to measure salivary flow rate.

Biopsy of minor salivary glands

A small, shallow incision is made inside the lower lip to remove at least four of these glands. A pathologist then evaluates the material taken up from the blood by the salivary glands and secreted into the mouth. It is another method to measure salivary flow rate.

TREATING DRY MOUTH

Reduce oral symptoms and increase salivary secretion:

Two prescription drugs (pilocarpine/Salagen™ and cevimeline/Evoxac™) reduce symptoms of dry mouth and increase salivary secretion for a few hours in most patients taking them. Both drugs have side effects; they may not prevent tooth decay and are not suitable for everyone. Consult with your doctor before using these prescription medications.

Treat and prevent dental decay:

Brush after every meal and floss your teeth daily; use a fluoride-containing toothpaste. When brushing is not possible, chewing gum (containing no sugar) after eating will stimulate saliva and may decrease your risk of tooth decay. It will also help to wash away food debris. At a minimum, rinsing your mouth with water immediately will also help. Decrease your risk of tooth decay by decreasing your amount and frequency of fermentable carbohydrate intake, especially sticky foods such as cookies, bread, potato chips and candy.

Ask your dentist:

- how frequently you need to be checked for early decay.
- for specific instructions regarding your oral hygiene.
- about the possible need for home - and/or professionally-applied topical fluoride (in addition to the fluoride contained in your daily toothpaste). Topical fluoride gels usually require a personalized “trag” for best delivery to your teeth. In some cases, a fluoride varnish may be applied by your dentist.
- if you should use a remineralizing agent.

Treat oral candidiasis (thrush) when necessary:

A red appearance of the oral mucosa and/or a burning sensation in your mouth may indicate you have an oral infection by the yeast Candida. You should see your dentist or physician to make a definite diagnosis and prescribe an appropriate drug(s). These infections often recur but can be successfully treated as often as necessary.

COPING WITH DRY MOUTH

Keep your mouth moist by sipping small amounts of water during the day (carry a small water bottle when away from home). However, excessive sips of water can reduce the oral mucous film and increase symptoms.

Avoid frequent intake of acidic beverages (such as most carbonated and sports replenishment drinks). Drink water while eating to aid chewing and swallowing. Caffeine can increase the sensation of oral dryness; be aware that many soft drinks contain caffeine.

Salivary secretion can be increased by chewing gum containing no sugar or sucking sugarfree hard candies or a cherry pit. Xylitol is a desirable sweetener present in some chewing gums and hard candies which has been shown to help prevent dental decay.

Many over-the-counter saliva substitutes are available. Their effects are temporary but helpful to those with very dry mouth. Using a saliva substitute instead of drinking water prior to sleep, and if awakened, prevents excessive urination that causes sleep disruption.

Dry cracked lips may be soothed by an oil-based balm or lipstick placed over previously moistened lips. The use of vitamin E-containing ointments may be helpful.

Increase the humidity in your home, particularly at night, by using a room humidifier.

GLOSSARY

Dental caries: Tooth decay (caries). Caries are caused by particular bacteria that adhere to the teeth (dental plaque) causing progressive demineralization (loss of calcium and phosphorus) of the teeth.

Fermentable carbohydrates: Sugars and simple starches (starch, bread and corn) that oral bacteria can easily break down into sugar.

Fluoride: A naturally occurring chemical used topically and in drinking water to reduce dental decay by decreasing demineralization and increasing remineralization of the teeth.

Oral mucosa: The lining of the mouth.

Palpation: A physical-examination method using light finger touch to identify the character of organs beneath the surface being touched.

Remineralizing: The process of repairing “early” carious lesions by replacing lost mineral components, especially calcium and phosphate, of the tooth. The process is enhanced by fluoride and by products containing an active remineralizing agent.

Salivary glands: Three pairs of major salivary glands produce the majority of saliva: parotid glands, located in the cheek in front of the ears; submandibular glands, located under the lower jaw; and sublingual glands, located under the tongue. In addition, the hundreds of minor salivary glands located throughout the mouth are uniquely important for their lubricating function. All salivary glands are affected in Sjögren’s syndrome.

Classes of Medications That Commonly Cause Dry Mouth (not a comprehensive list):

- Any drug with anticholinergic properties
- Antihypertensives
- Antidepressants/Antihistamines/Antiemetics
- Antipsychotics
- Decongestants
- Diuretics
- Pain medications