

# DRY MOUTH

## Understanding Dry Mouth (Xerostomia)

Dry mouth, or xerostomia, is a common issue that can happen for several reasons. Let's explore why this might be happening to you:

- **Cancer Treatment:** If you're undergoing radiotherapy, chemotherapy, or surgery involving your salivary glands, these treatments can reduce your saliva production.
- **Radiation Therapy:** When you receive radiation to your head and neck, it can damage your salivary glands. This might affect your saliva production in the short term or even long term.
- **Chemotherapy Drugs:** These medications can alter how your body produces saliva, leading to a dry mouth.
- **Medications:** Did you know that most prescribed medications can cause dry mouth as a side effect?
- **Mouth Breathing:** Breathing through your mouth instead of your nose can also contribute to dryness.
- **Lifestyle Factors:** Your lifestyle and habits, including your age, can impact how much saliva you produce.
- **Smoking and Alcohol:** Smoking, drinking alcohol excessively, and experiencing anxiety can also cause your mouth to feel dry.

## Understanding Saliva and Its Importance

Saliva is produced by several salivary glands, including the major glands (parotid, submandibular, and sublingual) and minor glands located in the lips and palate. Here's a quick guide to where these glands are found:

- **Parotid Glands:** Just in front of and below each ear.
- **Submandibular Glands:** Under the angle of the lower jaw.
- **Sublingual Glands:** Under the tongue.

Saliva plays several crucial roles in maintaining oral health. Let's explore some of them:

- **Lubrication** Saliva coats the tissues of your mouth, helping to protect them from irritation. It also makes it easier to swallow food and keeps your mouth moist, which is essential for clear speech.
- **Cleansing** Saliva helps to clear away food particles from your teeth and mouth, which helps to prevent tooth decay.
- **Remineralisation** When bacteria in your mouth feed on sugars, they produce acids that can damage your teeth. Dietary acids from foods like fruit juices, carbonated drinks, and wine can also harm your teeth. Saliva contains ions, such as calcium and phosphate, that help to repair early stages of dental decay and neutralize these harmful acids.

In conclusion, saliva has natural antibacterial properties. Without enough saliva, your mouth is more prone to tooth decay, gum disease, and infections like oral thrush. Dry mouth can also cause cracked lips, mouth soreness, and can affect your ability to taste, chew, swallow, and speak. You might even wake up at night due to dry mouth.

## **Complications Associated with Xerostomia and Radiotherapy**

Understanding the challenges that come with xerostomia (dry mouth) and radiotherapy can help us manage and address these issues more effectively.

### **Lack of Lubrication**

When there's not enough saliva, you might find it hard to speak, chew, and swallow food. A dry mouth can also reduce your ability to taste food. If you wear partial or full dentures, you may notice that they feel loose and make eating difficult.

### **Increased Risk of Dental Caries**

Saliva has antibacterial and buffering properties that protect your teeth. When saliva production decreases, these protective effects are reduced. In a dry mouth, plaque (clusters of bacteria attached to the tooth surface) forms more easily, producing acids that attack your tooth structure and start the process of dental decay. Without the antibacterial and neutralizing effects of saliva, this process speeds up significantly.

### **Difficulties in Wearing Dentures**

A lack of saliva can make dentures less secure. Mechanical trauma from ill-fitting dentures can lead to gum ulcers. In severe cases, this could lead to osteoradionecrosis.

### **Osteoradionecrosis**

Radiotherapy significantly impairs the tissue's ability to heal after trauma, such as a tooth extraction. It's important to extract decayed or broken teeth before starting radiotherapy. After radiotherapy, further extractions in the treated areas should be avoided, as the bone and surrounding tissues may not heal properly. This is a permanent effect of radiotherapy.

### **Trismus (Difficulty in Mouth Opening)**

Trismus makes it hard for patients to maintain their oral hygiene and for dentists to perform any dental procedures due to the difficult access. This condition can significantly impact daily activities like eating and speaking.

## How to Manage a Dry Mouth

Managing dry mouth can significantly improve your comfort and oral health. Here are some tips that may help:

1. **Stay Hydrated:** Take sips of plain water regularly throughout the day to keep your mouth moist. Aim to drink 6-8 glasses (or equivalent) of water per day but beware sport drinks may contain high amounts of acid/sugar. You can also use grapeseed or rice bran oil rinsed around the mouth as a lubricant. Alternately make a 'mouth spray' using a clean plastic spray bottle filled with water.
2. **Avoid or Minimise Sweet and Acidic Drinks:**  
Avoid sweet/acidic drinks like wines, juices, fizzy drinks, and hot drinks with sugar or honey. Avoid sweet or sticky foods, or only eat them around main mealtimes.
3. **Be Mindful of Your Diet:** Avoid spicy, crunchy foods that might irritate your mouth's lining. Also, avoid alcohol and alcohol-containing mouthwash. Minimize the frequency and amount of sugar in your diet.
4. **Rinse At Least 3 Times Daily With Salt and Baking Soda Mouth Rinse**

### SALT AND BAKING SODA Mouth Rinse:

Measure ½ teaspoon into a full glass of warm water OR 2 teaspoons into a litre jug of water. Swish the rinse in your mouth, gargle if able, for 30-60secs, then spit. Use x 3-4/day

5. **Rinse After Snacks:** If you snack often, rinse your mouth with salt and baking soda mouth rinse afterwards. This mouth rinse is very helpful to rinse away thick sticky saliva and to lower mouth acidity.
6. **Maintain Good Oral Hygiene:** Regularly remove plaque after meals with a **soft** manual or electric toothbrush and fluoride toothpaste. Use floss or interdental brushes to clean between your teeth.
7. **Use Water Picks:** These can provide additional mechanical cleaning and help you reach the back teeth more effectively.



8. **Sugar-Free Chewing Gum or Lozenges:** Chewing sugar-free gum, especially those containing xylitol (a natural sugar alcohol found in plants), can also help stimulate any remaining functional salivary glands.



9. **Home Care Product Recommendation:**

- a. Use a high fluoride containing toothpaste (e.g. **Neutrafluor 5000 Plus**) or similar product like **GC Tooth Mousse Plus** to help protect the teeth once a day (available from pharmacist without prescription)



- b. **Xerostom® toothpaste** contains Fluoride and has the added benefit that it does not have the usual soaping agents of other toothpastes (sodium lauryl sulphate or SLS) which can make it more comfortable for mouths that are sore due to dryness.

c. **Mouthwashes**

Many people find mouthwashes comforting. Examples include: Biotene Dry Mouth Oral Rinse, Colgate Dry Mouth Relief, Oral 7 Mouthwash



**10. Artificial Saliva Substitutes** These are designed to provide a coating, like saliva, over the mouth surfaces. Example products include: GC Dry Mouth Gel, Xerostom Saliva Substitute Gel, Xerostom Mouth Spray, Biotene Oral Balance Dry Mouth Moisturising Gel,



- a. **Oral 7** products contain all the enzymes found naturally in healthy saliva that neutralise too-decaying acids and provide relief of dry mouth.



- b. **XyliMelts®** are slow-release oral discs that adhere to your gum and coat and moisturise your mouth for a few hours. These products can be found at Belmont Pharmacy in Auckland or online at [www.nz-online-pharmacy.com](http://www.nz-online-pharmacy.com).