Uncovering the Dry Mouth Dilemma

Risk Factors for Dry Mouth

- Medications: (over 700 Rx and OTC cause dry mouth) and some medications such as antipsychotics cause cravings of carbohydrates. So they reach for sugary drinks to keep their mouth comfortable which leads to more oral health issues.
  - Antihistamines
  - Decongestants
  - Anti-Acne
  - Antihistamine
  - Antidepressant
  - Antipsychotic
  - Antianxiety
  - Antihypertensive
  - Antianorexiant
  - Anticholinergic
  - Antiparkinsonian
  - Anti-inflammatory
  - Anticonvulsant
  - Antidiarrheal
  - Bronchodilator
  - Diuretic
  - Mood Stabilizing
  - Muscle Relaxants
  - Stimulants
  - Sedatives

- Auto Immune Disease
  - Sjorgren’s Syndrome
  - Aids

- Chemotherapy
- Radiation Therapy
- Kidney Dialysis
- Transplant Patients
- End of Life Care
- Acidic foods/beverages/Caffeine
- Constantly Sipping Water
- GERD
- Elder Care
- Drug Abuse
- Alcohol Abuse
Did You Know Dry Mouth Victims...

- Cannot taste their food?
- Have cheek biting issues?
- Cannot eat without food particles breaking up and sticking to soft tissue?
- Must cough to unstick the nasopharynx?
- Wake up every hour in the night due to the tongue sticking to the palate?
- Rely on sipping much water which only dries out soft tissues?
- Cannot use peppermint or cinnamon flavored foods?
- Have increased caries, mucosal, and lip infections?
- Need an array of products to choose from throughout the day and night?

Dry Mouth Affects Quality of Life

- Taste is altered because without saliva we do not have the first step in digestion which we need to break down Fats, Proteins and Complex Carbohydrates which facilitates our taste buds to taste the food. Therefore those without saliva may only taste sweet, bitter and sour with varying degrees. Certain flavors actually burn the mouth such as Cinnamon and Peppermint is drying.
- Digestion is impaired from swallowing undigested food and we need the secretions from saliva we normally swallow throughout the day to help with intestinal digestion.
- People are worried they have bad breath.
- Eating food is difficult as the food particles stick to the gums, tongue and inside the cheeks making it difficult to create a bolus and swallow comfortably.
- Talking is difficult as the words are hard to pronounce when the tongue is dry and sticking to the palate.
- People with dry mouth tend to not attend public events that involve eating and conversation because of their debilitation and become very self-conscious. So their social life changes and psychologically this affects their well-being.
- Their overall comfort level is dramatically diminished.
- Oral health is impaired as the pH of the mouth is acidic resulting in increased caries and tooth sensitivity as well as an imbalance of natural flora leading to mouth infections.
- The tongue becomes desensitized and cannot feel all the minute areas in the mouth.
- The Nasopharyngeal area is dry and sticks together create a chronic cough.
- Sleeping is very difficult for the dry mouth victim and they wakes up every hour on the hour with their tongue stuck to the roof of their mouth. They need to get water or another moistening agent to lubricate the area.
Because they sip on water or other liquids all day they end up getting up throughout the night using the bathroom.

People that have severe Dry Mouth feel isolated and feel they are on their own to find remedies and many times choose items that are actually more detrimental to their teeth rather than helping them such as using sugar lozenges, cough drops and sipping on water or sugary drinks constantly. Often times they lose hope and feel like nobody understands their suffering. The usual recommendation from dental and medical health care professionals have been, “Drink more water.”

Most people equate dry mouth with being thirsty so the patients, caregivers and professionals automatically think to that Drinking More Water is the answer. A person needs to hydrate appropriately and so it needs to be recommended that a person drink a glass of water at each sitting to get the appropriate fluids and not to sip constantly. This just dries out the tissues and dilutes the mucins needed and washes away what little saliva that is being formed. We wouldn’t recommend to put our dry chapped hands under water…instead we use oils and lotions to preserve and increase the oils in our hands…not wash them away. So instead offer products that increase saliva such as products that have 100% sweetened xylitol.

Why is Water No Substitute for Saliva?

- Water thins the mucins, enzymes, and healing properties of saliva.
- People with dry mouth equate that with being thirsty and sip on water which dilutes the saliva and dries the soft tissues more.
- Water does not have buffering capacities. The calcium and phosphate ions leached from the hydroxyapatite through the action of water and acids would not be replaced. The dental enamel would be demineralized and become porous.
- Water usually has a low pH
- We would choke much more often on food because the cohesive bolus would not form.
- Nutrients such as proteins, complex carbs and fats would have a neutral taste. We would only be able to taste pre-digested food that already contains individual amino acids and sugars.
- Does not support a balanced natural flora therefore bacteria could spread undisturbed and would cause caries through increased production of acids.
- Increased Cheek Biting and Mouth Sores

Where Would We Be Without Saliva?

- Our teeth would be destroyed in 6 months after eruption.

The Dry Mouth Tongue
Healthy Tongue

Dry Mouth and Soft Tissue

Enter Xylitol

Why Does Xylitol Help With Dry Mouth?

- Causes salivation from the cooling effect that brings moisture to the environment
- Neutralizes oral pH within minutes
- Stops S. mutans from replicating = reduction in sticky acid secretions
- Provides environment for increased remineralization
- Balances natural flora and reduces infection from:
  - All Strep bacteria
  - Candida albicans

Because Xylitol Has these properties:

- Cooling effect
- pH of 6.5-7
- Non fermentable molecule that bacteria and candidiasis cannot metabolize
- Increases Remineralization

What Can Patients Do For Relief?

- Xlear Nasal Spray: Spray 1-2 times into each nostril before bedtime and as needed during the day to moisturize the throat and nasal passages
- Oral Mist: Spray into mouth as often as needed to moisturize tissues.
- Tooth Gel: Finger swipe onto tongue and inside cheeks before meals and bedtime, or as often as needed.

Patients are often told what NOT to do and need coaching on what WILL help. The Spry Dry Mouth Relief System includes take home instructions on how and when to use the products for maximum benefit. By using these 3 items together it will increase the ability to swallow and keep the tongue from sticking to the roof of the mouth for about 3 hours. Use them as often as necessary together especially upon waking, before each meal and before bedtime.

Adjunctive Dry Mouth Relief Products

- **Spry Gum**: Spearmint, Fruit, Green Tea
- Chew 2 Pieces after each meal, 3-5 minutes
- **Spry Mints**: Lemon, Berry, Spearmint
• **Dissolve 3 pieces after each meal**  
• **SparX Candies**: Berry, Fruit  
• **Dissolve 6 pieces after every meal**  
• **XyloSweet**: One 4 gram packet in 16 oz water  
• **Sip during meal**

Other Helpful Hints:

• Dip food in milk or sip on milk between bites of food  
• Avoid carbonated drinks  
• Use Humidifiers at bedtime

Preparing Your Patient for Oncology Treatment

• Start using the xylitol regiment 2-6 weeks prior to treatment  
• To prevent candida infections  
• To promote healthy flora.  
• To keep sinuses and nasal passages healthy – their immune systems become depressed.  
• Systemic xylitol as sweetener alternative to keep blood sugars/insulin under control.

Benefits of Gum Chewing

• Many orthodontists encourage Gum Chewing which helps enhance movement of the teeth.  
• Settles the Brain and enhances blood flow and allows for clearer thinking.  
• Increases Memory  
• Reduces Stress  
• Helps with Digestion  
• Helps to manage weight  
• Improves Oral Health

Disclaimer: Harmful to Dogs

In Conclusion:

• **Minimize Water Intake**...only necessary for hydration.  
• Dip food in milk for added wetness, proteins and mucins to create a bolus.  
• Recommend an armamentarium of products such as:  
  • Xylitol products: Gum, Sparx, Rain Spray, Xlear Nasal Spray, Tooth Gel  
• Xerostomia is transient depending upon:  
  • sleep deprivation, foods, salt intake, physical activity, medications.