

A Timely **K.I.S.S.** For Palliative Oral Care

(Keep it Simple Solutions)

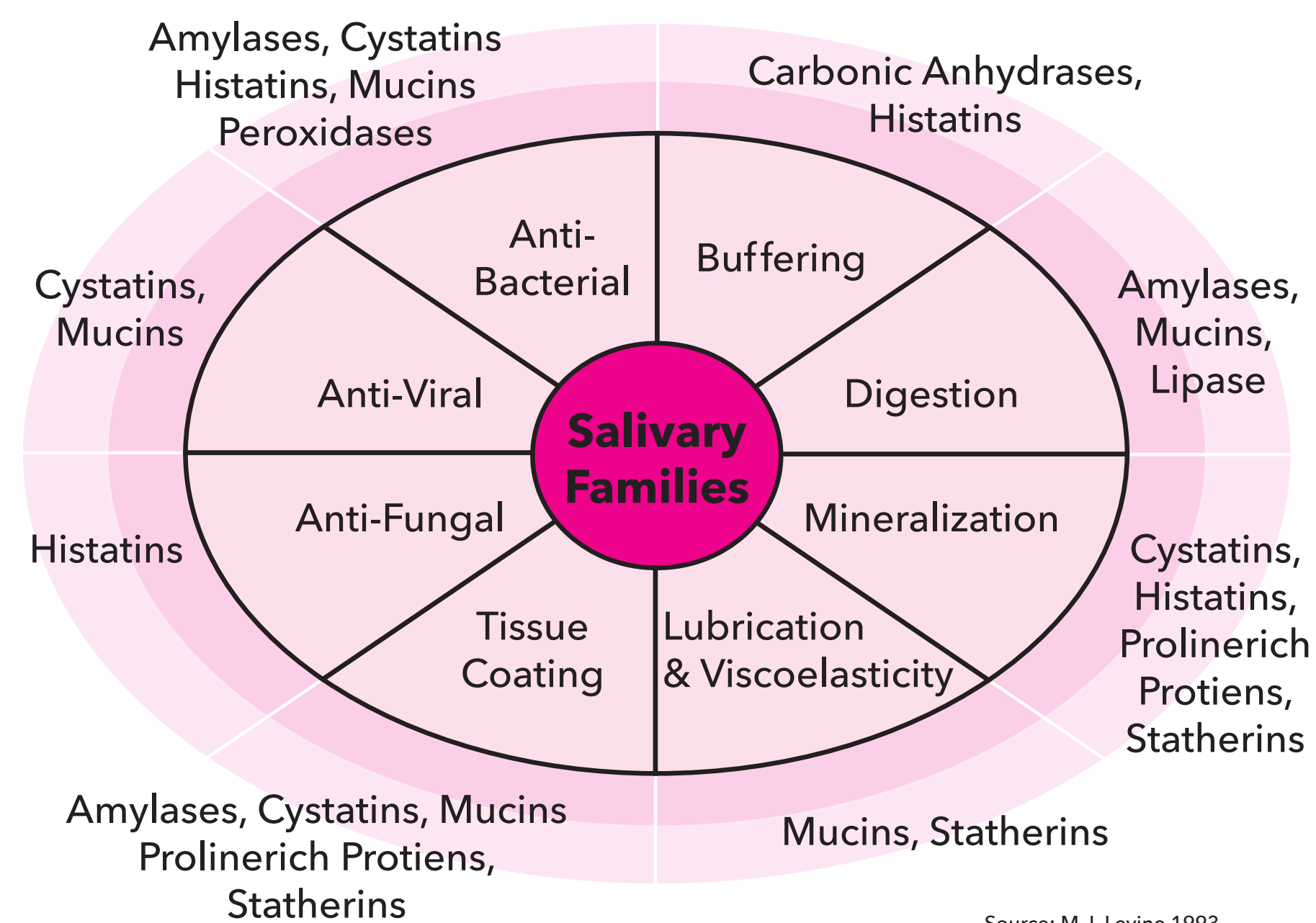


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Need a K.I.S.S.

Active chemotherapy and/or radiation; multiple medications including opiates, antiemetics, and anticholinergics; and frequent periods of nausea and vomiting readily lead to diminished saliva and alteration of the oral biome. Alterations in oral biome cause patient suffering with mouth infections, mouth sores, and dental caries.

Multifunctionality of Saliva



Source: M.J. Levine 1993

Review of Literature

A study conducted regarding dehydration and parotid salivary gland function in young and older healthy adults concluded abstaining from food and liquids for 24 hours, unstimulated salivary flow was reduced by approximately 90 percent (Ship and Fischer, 1997). Individuals with Diabetes commonly have complaints of dry mouth and 30-40 percent of patients with HIV have moderate to severe xerostomia (Ship, 2003). In Palliative care patients, candidiasis is primarily the result of xerostoma (Wiseman, 2006). Salivary gland dysfunction is the most common discomfort associated with head and neck radiation (Kielbassa, et al, 2006). Five hundred plus drugs are known to cause dry mouth, including anticholinergics, antihistamines, antihypertensives, opioids, psychotropic agents, and skeletal muscle relaxants (Scully, 2003). Xerostomia has had little scientific research and conclusive evidence for specifying treatment strategies outside of consistent oral hygiene with nonalcoholic rinses. Salivary stimulants are recommended in patients with preserved salivary gland function over saliva substitutes (American Dental Association of Scientific Affairs, 2013). Oxygenated glycerol triester (OGT) saliva substitute has been shown to be more effective than water based electrolyte spray (Furness, et al, 2013). Patients with hyposalivary function are at higher risk for dental caries and can benefit from higher concentrations of fluoride. Prescription strength gels such as 1.1 percent sodium fluoride can be applied with tooth brush or delivered in a tray to increase tooth exposure time (American Dental Association on Scientific Affairs, 2015). Sialogogues such as pilocarpine and cevimeline are approved for use in patients with salivary hypo function due radiation but may not be effective if there is severe salivary gland damage and should not be used in patients with narrow angle glaucoma, uncontrolled asthma, and wearily along with beta blockers.(American Dental Association on Scientific Affairs, 2015).

Steps of the K.I.S.S.

- 1** Identified problem: Palliative patients are significantly vulnerable to xerostoma due to medications, vomiting, head and neck radiation, chemotherapy, and thus decreased quality of life.
- 2** Conducted a literature review: of academic journals and surveyed best products and practices endorsed by American Dental Association Council on Scientific Affairs.
- 3** Developed: recommendations for early intervention with Oral Care K.I.S.S. Tool Kit and protocol for palliative patients based on current evidence.
- 4** Researched available oral products, reviewed hospital formulary, and contacted area dental provider and vendors to discuss access to gels and solutions.
- 5** Pucker up: Initiate oral care/hygiene education and K.I.S.S. Tool Kit with palliative patients in oncology units, at palliative care clinic, and in the skilled nursing facilities affiliated with Lee Health palliative program.

Future K.I.S.S.

Execute Oral Care K.I.S.S. Tool Kit
 Education of Hem/Onc staff and palliative care team as to the salivary components and the ADA recommendations for oral hygiene protocol and available solutions to reduce dry mouth and improve oral health and function. Make standard practice of an oral assessment with every initial palliative care assessment.

In services for Hem/Onc nursing staff on units regarding the importance of assessing for and improving oral moisture. Educational presentations scheduled for palliative team meetings.

Implement pilot study of oral care and hygiene bundle protocol on Lee Health 2 West/ 6 North Hem/Onc units, with ultimate expansion to Lee Health palliative outpatient clinic, and Lee Health palliative care affiliated skilled nursing facilities.

Proposal for addition of dentist to palliative care team to participate in care of all head and neck cancer patients and patients with complicated oral health needs. Intervening with patients well before a radiation treatment to reduce the severity of mucositis and improve overall health.

Offering trial of acupuncture in our palliative outpatient clinic for refractory reduced salivary gland production, as two out of four systemic reviews showed some increase in saliva stimulation (American Dental Association of Scientific Affairs, 2015).

Researchers are currently evaluating gene therapy and transplantation into human salivary glands, which has shown success in increasing salivary secretion.

Oral Care K.I.S.S. Tool Kit



Contents of Oral Care K.I.S.S. Tool Kit

- Do's & Dont's
- pH dietary chart
- Patient resource card
- Biotene gel
- Extra soft toothbrush
- Baking soda rinse recipe
- XyliMelts
- Xylitol gum
- Fluoride gel
- Atomizer (for moisture)

Do's <ul style="list-style-type: none"> • Xylitol products gum, melts, or lozenges • Use bedside atomizer with water • Rinse mouth before / after meals / bedtime • Salt/Baking Soda Solution • Biotene Mouthwash • Soda Water • Use Soft toothbrush (brush in circles) • Apply fluoride gel nightly or every other night for several minutes... then spit, spit, spit! • Toothpaste SLS-free : Biotene, Sensodyne, 	Dont's <ul style="list-style-type: none"> • No Mouthwash with alcohol • No Petroleum based products for lip care (promote infection) • No spicy products • No medium/hard bristled tooth brushes • No lemon or glycerine swabs • No hard candies • No toothpaste with sodium lauryl sulfate
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Conclusion

Give each palliative patient a K.I.S.S., and maintain the oral biome with improved oral care and saliva production.



Alfred Eisenstadt

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