

## Researchers study efficacy of 3M™ Xerostomia Relief Spray.



**Many dry mouth patients suffer in silence. Chewing, swallowing, tasting and speaking are difficult and uncomfortable for them, but dentists have a new treatment option for their patients: 3M Xerostomia Relief Spray.**

The need for effective xerostomia relief solutions cannot be overstated. Up to 65 percent of the population suffers from dry mouth, according to the American Dental Association Science Institute,<sup>1</sup> and in moderate to severe cases, patients' discomfort can be unbearable.

Fortunately for dry mouth patients, they don't have to suffer in silence. 3M has introduced a new treatment solution that dentists and hygienists can feel confident recommending: 3M Xerostomia Relief Spray with oxygenated glycerol triester (OGT) technology is clinically proven to provide convenient relief of xerostomia symptoms.

OGT technology moistens and lubricates the mucosa of the mouth, tongue and throat, and provides lubricating and protective qualities that improve the feeling of dry mouth and many quality-of-life factors like chewing, tasting and speaking. OGT technology is also patient-friendly. OGT spray can be used at any time, can be safely swallowed and has no adverse or unpleasant effects.

Multiple research studies have proven the benefits of OGT technology for dry mouth patients. Below is a quick recap of their findings.

### **1. Has OGT technology been evaluated in clinical studies?**

To date, multiple clinical studies have evaluated the effectiveness of OGT spray, which is an oromucosal lubricant, versus an aqueous-based saliva substitute. Each study focused on a different patient demographic. Two of these trials — one focused on patients with medication-induced xerostomia<sup>2</sup> and one on geriatric patients<sup>3</sup> — showed that OGT spray was statistically better than the aqueous-based solution. The third trial, which included cancer patients, also found that OGT spray demonstrated generally better performance.<sup>4</sup>

### **2. During these clinical studies, in what specific areas did patients see improvement?**

Overall, the studies found that OGT spray improved patients' dry mouth symptoms and quality of life. Specifically, the researchers who studied xerostomia caused by medications found that the lubricating and protective qualities of OGT spray lessen the symptoms of dry mouth. For example, 92 percent of patients with medication-induced xerostomia said OGT spray improved their dry mouth, and 84 percent said it improved their quality of life.<sup>2</sup>

The studies also found OGT spray improved patients' ability to eat, chew and swallow. For instance, 73 percent of the patients with medication-induced xerostomia said OGT spray enhanced their ability to chew. Similarly, 65 percent said OGT spray enhanced their ability to swallow.<sup>2</sup>

### 3. How long did patients need to use the product before feeling relief?

3M Xerostomia Relief Spray provides rapid relief. In the geriatric study, 81 percent of OGT users said their mouth started feeling comfortable two days after starting the spray. Of these patients, 52 percent reported that OGT spray made their mouth feel comfortable during the first day of use.<sup>3</sup>

It is important for patients to use 3M Xerostomia Relief Spray regularly for the best results, and it may take up to three days to fully experience relief from xerostomia.

In general, patients report that 3M Xerostomia Relief Spray is easy to use and can be applied at any time of day.

### 4. What do clinical study participants say about OGT spray?

Overall, patients reported that OGT spray provided favorable results in key quality-of-life metrics. In one study, a majority of patients said OGT spray improved their feeling of dry mouth, chewing, swallowing, speech and sense of taste. Furthermore, 78 percent of patients wanted to keep using it. And 87 percent said it was easy to use.<sup>2</sup>

### 5. Has OGT technology been evaluated with laboratory testing?

Researchers at 3M and the University of Minnesota School of Dentistry have studied the lubricity and moisture retention of OGT technology, using novel *in vitro* test methods. Researchers at 3M found that in experiments using biopsy specimens, OGT spray was the best product at preventing water loss when tested against several competitive dry mouth products. The University of Minnesota researchers found that OGT spray, compared to other dry mouth products, was the most efficient at lubricating the hard tissues tested. In one experiment, the mean coefficients of friction, or lubricity, were significantly different between all tested groups, with the mean coefficient of the OGT spray being four times lower than if the hard tissues were left dry.<sup>5</sup>

When compared with aqueous-based products, OGT spray had significantly better lubricity and lower water loss in laboratory tests.<sup>5</sup>

**In a clinical study, the effectiveness of 3M Xerostomia Relief Spray was clear:**



**92%**

of patients saw an improvement in their dry mouth symptoms.<sup>2</sup>

## SUMMARY

The clinical research shows that 3M Xerostomia Relief Spray can perform as well as or better than saliva substitutes. This is vital for the large percentage of the population that suffers from dry mouth. 3M Xerostomia Relief Spray improves patients' feeling of dry mouth and improves many quality-of-life factors, such as chewing, tasting, swallowing and speaking. Overall, the clinical studies found that most patients find 3M Xerostomia Relief Spray easy to use and would like to continue using the product.

3M Xerostomia Relief Spray provides rapid, effective, professional-grade relief of xerostomia symptoms and is available in a convenient, discreet spray.

- Relieves symptoms of dry mouth for up to four hours
- Lipid-based spray moistens and lubricates the mucosa
- Provides rapid relief
- Improves patients' ability to chew, taste, swallow and speak
- Easy and convenient application
- Available only by prescription through a dental professional

3M Xerostomia Relief Spray can help your patients who are suffering from dry mouth and improve their quality of life.

To read a complete summary of research findings, visit [3M.com/XerostomiaResearch](https://www.3M.com/XerostomiaResearch).

<sup>1</sup>ADA Science Institute, C. (2017). Oral Health Topics: Xerostomia (Dry Mouth). JADA. [www.ada.org/en/member-center/oral-health-topics/xerostomia](http://www.ada.org/en/member-center/oral-health-topics/xerostomia).

<sup>2</sup>Mouly, S., Orlor, J. B., Tillet, Y., Coudert, A. C., Oberli, F., Preshaw, P., Bergmann, J. F. Efficacy of a new oral lubricant solution in the management of psychotropic drug-induced xerostomia, *Journal of Clinical Psychopharmacology* 2007; Volume 27, No 5.

<sup>3</sup>Mouly, S., Salom, M., Tillet, Y., Coudert, A. C., Oberli, F., Preshaw, P., Bergman, J. F. Management of xerostomia in older patients: A randomized controlled trial evaluating the efficacy of a new oral lubricant solution. *Drugs and Aging*; Volume 24, No 11: 957-965.

<sup>4</sup>Preshaw, P. (2004). A positive control, one centre, parallel group study to evaluate the efficacy of TGO lubricant versus reference product in the management of xerostomia. School of Dental Sciences, University of Newcastle, UK.

<sup>5</sup>Heo, Y. C., Olivares Treviño, J. A. (2), Lan, T. H., Holmes, B. N., Chew, H. P., & Fok, A. S. L. (2018). Method for measuring friction between simulated soft and hard oral tissues in response to xerostomia treatment. All University of Minnesota School of Dentistry, except (2) Universidad Autónoma de Nuevo León, Mexico.



Learn more: [3M.com/XerostomiaReliefSpray](https://www.3M.com/XerostomiaReliefSpray)



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