

ClōSYS® Oral Rinse vs. Chlorhexidine Rinse: The Practiced Standard has a Challenger

Although the well-known truism holds that if it tastes good it cannot be good for you there is an exception to this rule. ClōSYS® oral rinses are very gentle, pleasant testing and highly effective at improving oral health. Research and clinical studies have proven that ClōSYS® Ultra Sensitive and Fresh Breath oral rinses are preferred over chlorhexidine (CHX) rinse for both post-procedure oral hygiene and for achieving better oral health.

Summary:

| ClōSYS® Rinse | Chlorhexidine Rinse |
|--|--|
| ✓ OTC cosmetic product | ✗ Prescription product |
| ✓ Proven safe for long term daily use for oral care | ✗ Prescribed for short term systemic treatment |
| ✓ High patient compliance; gentle and pleasant taste | ✗ Poor patient compliance; unpleasant taste |
| ✓ Does not stain teeth | ✗ Stains teeth |
| ✓ Kills pathogenic (bad) bacteria at higher rate compared to good bacteria | ✗ Broad spectrum antibacterial activity; kills good and bad bacteria |
| ✓ Does not kill fibroblasts | ✗ Kills fibroblasts |
| ✓ Efficacy proven by clinical studies | ✓ Efficacy proven by clinical studies |

Laboratory Study:

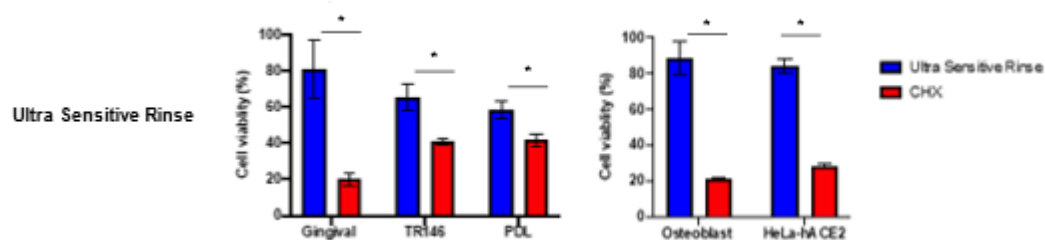
Laboratory study¹ demonstrates that the kill rate for ClōSYS® oral rinse surpassed that of CHX in the first minute for *Actinomyces naeslundii* (involved in periodontal disease and endodontic infections) and *Mocromonas (Peptostreptococcus) micros* (found in periodontal disease). The kill rate for *Streptococcus mutans* (causes caries) and *Actinomyces viscosus* (involved in infections) were identical at 100 percent kill for both rinses after five minutes of contact.

Clinical Studies:

Clinical studies done by different investigators show that stabilized chlorine dioxide containing ClōSYS® oral rinse is equally effective as CHX rinse in improving periodontal health (plaque index and gingival index)^{2,3}. However, patient compliance was higher for the ClōSYS® oral rinse because of its taste, gentleness, and user experiences.

Cytotoxicity:

Cytotoxicity studies show that, unlike CHX, ClōSYS® oral rinse does not kill fibroblasts^{4,5}. Recent *in vitro* study shows that the ClōSYS® Ultra Sensitive Rinse had insignificant effect on the viability of three oral epithelial cell types; oral buccal epithelial cells (TR146), periodontal ligament (PDL) cells, and human gingival fibroblasts after 1 min treatment. In contrast, chlorhexidine gluconate (0.12%) rinse exhibited cytotoxicity in all tested cell types. Similar results were observed for osteoblast and HeLa cell lines.



Conclusion:

Considering multiple beneficial functions including antibacterial activities, the lack of cytotoxicity on oral epithelial cells and the favorable results of clinical studies support that ClōSYS[®] oral rinses containing stabilized chlorine dioxide are superior to chlorhexidine gluconate (0.12%) rinse for improving oral health.

Note: Results for ClōSYS[®] oral rinse are supported by clinical and research studies. The products are not indicated by the FDA for this treatment.

References:

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