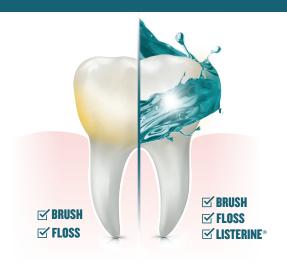
### 

as an adjunct to the at-home daily routine. Some patients brush & floss rigorously, yet many may not have the dexterity to master mechanical plaque control.



#### FLOSSING REMOVES DEBRIS AND CLEANS BELOW THE GUMLINE

Mechanical measures like flossing are key in the removal of plaque and food particles and can reach below the gumline.

#### LISTERINE<sup>®</sup> OFFERS 5x BETTER PREVENTION OF PLAQUE BUILDUP<sup>®</sup>

Over time, plaque accumulates. Regular use of LISTERINE® offers patients superior plaque reduction above the gumline in between dental visits.

#### KILLS 99.9% OF GERMS THAT CAUSE BAD BREATH, PLAQUE, AND GUM PROBLEMS

LISTERINE<sup>®</sup> is a broad-spectrum antimicrobial rinse with a fixed combination of 4 essential oils that effectively penetrates plaque biofilm, killing bacteria for 12-hour germ protection, and reducing plaque regrowth over time. Its liquid form can reach virtually every surface of the mouth, even hard-to-reach areas of the teeth that patients may miss while brushing and flossing.

Creative interpretation of tooth and gumline for illustration purposes. "Sustained plaque reduction above the gumline when used as directed. This rinse is not intended to replace brushing or flossing.

# LISTERINE<sup>®</sup> CLINICAL TRIAL DETAILS

#### **CLINICAL I**: Efficacy of Supervised Mouth Rinsing and Flossing on Plaque and Gingivitis<sup>1</sup>

**OBJECTIVE:** To evaluate the efficacy of twice-daily rinsing with Listerine<sup>®</sup> Antiseptic and brushing vs. flossing and brushing under once-daily supervision for the prevention and reduction of plaque and gingivitis.

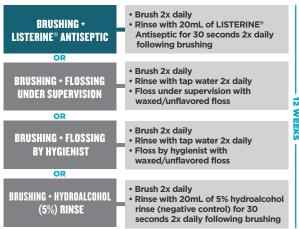
#### **STUDY DESIGN**

- Single center, randomized, supervised, examiner blind, controlled clinical trial conducted at ADA-Qualified site.
- Following a complete prophylaxis, subjects were examined for oral soft tissue status, plaque, gingivitis, and gingival bleeding at Baseline, 4 weeks, and 12 weeks.
- If assigned to a flossing group, subjects were given flossing instructions and demonstrated competency.
- Product use was supervised once daily in person on weekdays with second daily and weekend product use unsupervised.

#### **STUDY PARTICIPANTS**

- 156 subjects (18 years of age and older) with mild-to-severe gingivitis and no severe periodontitis, with no entry criteria on Modified Gingival Index (MGI)/plaque, but must have minimum of 10 gingival bleeding sites.
- The efficacy outcomes included interproximal and whole-mouth mean modified Turesky Plaque Index (TPI), mean MGI, gingival bleeding, bleeding on probing depth, and probing depth.

#### TREATMENT ARMS



Clinical 1: Bosma, M. L., McGuire, J. A., Sunkara, A., Sullivan, P., Yoder, A., Milleman, J., & Milleman, K. (2022). Efficacy of Flossing and Mouthrinsing Regimens on Plaque and Gingivitis: A randomized clinical trial. American Dental Hygienists' Association, 96(3), 8-20. https://jdh.adha.org/content/96/3/8

#### **CLINICAL 2: Effects of Essential Oil Mouthwash** in Oral Hygiene Regimens

**OBJECTIVE:** To evaluate the efficacy of various oral hygiene regimens in the prevention and reduction of plaque and gingivitis.

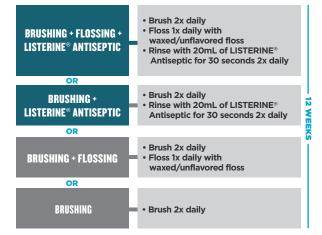
#### **STUDY DESIGN**

- Single center, randomized, supervised, examiner blind, controlled clinical trial conducted at ADA-Qualified site.
- Following a complete prophylaxis, subjects were examined for oral soft tissue status, plaque, gingivitis, and gingival bleeding at Baseline, 4 weeks, and 12 weeks.
- If assigned to a flossing group, subjects were given flossing instructions and demonstrated competency.
- Product use was supervised once daily virtually on weekdays with second daily and weekend product use unsupervised.

#### **STUDY PARTICIPANTS**

- 213 subjects (18-60 years of age due to COVIDrelated health restrictions) with mild-to-severe gingivitis and no severe periodontitis, with no entry criteria on MGI/plaque, but must have a minimum of 10% gingival bleeding sites.
- The efficacy outcomes included interproximal and whole-mouth mean modified TPI, mean MGI, gingival bleeding, bleeding on probing depth, and probing depth.

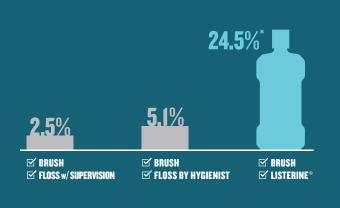
#### **TREATMENT ARMS**



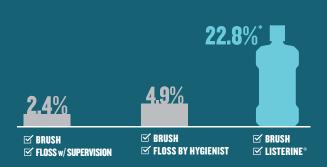
# LISTERINE® CLINICAL TRIAL RESULTS

**CLINICAL I:** Efficacy of Supervised Mouth Rinsing and Flossing on Plaque and Gingivitis

**REDUCTION IN WHOLE MOUTH PLAQUE AT 12 WEEKS VS. CONTROL<sup>1</sup>** 



#### **REDUCTION IN INTERPROXIMAL TPI AT 12 WEEKS VS. CONTROL<sup>1</sup>**



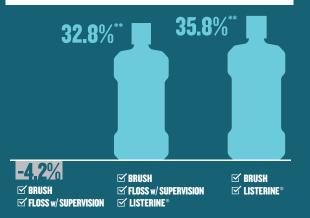
#### **ADDITIONAL RESULTS**

This study also demonstrated that adding Listerine® Antiseptic Cool Mint to twice-daily brushing provided statistically significant reductions in gingivitis, gingival bleeding and bleeding on probing depth and probing depth compared to brushing and using a negative control rinse.

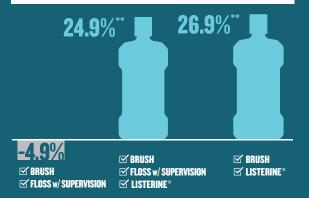
Clinical 1: Bosma, M, L., McGuire, J. A., Sunkara, A., Sullivan, P., Yoder, A., Milleman, J., & Milleman, K. (2022). Efficacy of Flossing and Mouthrinsing Regimens on Plaque and Gingivitis: A randomized clinical trial. American Dental Hygienists' Association, 96(3). 8-20. https://jdh.adha.org/content/96/3/8

1. Mean Turesky Plaque Index (TPI) \* P<0.001; comparing each investigational product vs. Control. . Clinical 1 control = Brush + 5% Hydroalcohol Mouth Rinse. CLINICAL 2: Effects of Essential Oil Mouthwash in Oral Hygiene Regimens

#### **REDUCTION IN WHOLE MOUTH PLAQUE AT 12 WEEKS VS. CONTROL<sup>1</sup>**



#### **REDUCTION IN INTERPROXIMAL TPI AT 12 WEEKS VS. CONTROL<sup>1</sup>**



#### **ADDITIONAL RESULTS**

This study also demonstrated that adding Listerine® Antiseptic Cool Mint to twice-daily brushing provided statistically significant reductions in gingivitis, gingival bleeding and probing depth compared to brushing.

Clinical 2: Milleman, J., Bosma, M. L., McGuire, J. A., Sunkara, A., McAdoo, K., DelSasso, A., Wills, K., & Milleman, K. (2022). Comparative Effectiveness of Toothbrushing, Flossing and Mouthrinse Regimens on Plaque and Gingivitis: A 12-week virtually supervised clinical trial. American Dental Hygienists' Association, 96(3), 21-34. https://jdh.adha.org/content/96/3/21

1. Mean Turesky Plaque Index (TPI) \*\*P<0.025 superiority vs. Brushing only. P<0.0125 superiority vs. Brush/Floss. Clinical 2 control = Brush only.

### NEW RESEARCH REVEALS: **POWERFUL PROTECTION** BETWEEN VISITS

