



## Nova Breath Patented innovation for Halitosis (bad breath)

Mucoadhesive tablets for prevention and treatment of Halitosis (bad breath). Bad breath is a common problem that can cause significant psychological distress. Halitosis is the third most common reason that people seek dental care, after tooth decay and gum disease and it is estimated that 1 in 4 people suffer from bad breath on a regular basis.

The **Nova Breath** new mucoadesive tablets are based on a world-class innovation that includes a unique and patented herbal formulation of Echinacea, Lavender, Mastic gum and Salvia extracts, which act synergistically to reduce bad breath. All Nova Breath products are enriched with mucoadhesive components facilitating their attachment to the oral

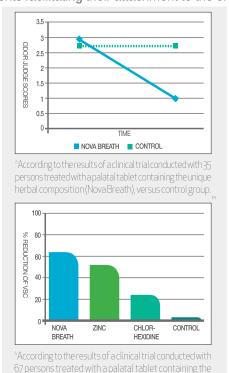
cavity. This ensures a long-lasting pleasant and fresh odor all day long.

The mechanism underlying Nova Breath's action was studied in a series of scientific experiments conducted by a team of researchers from the Tel Aviv University headed by renowned Halitosis researcher, Dr. Nir Sterer, and has been found to include all stages of the bad breath-formation cascade:

- 1. Selective antibacterial action against Gram negative anaerobic odor-causing bacteria and alteration of oral bacterial population in favor of Gram positive bacteria, which do not cause bad breath.
- 2. Reduction in the level of protein breakdown in the saliva.
- 3. Reduction in volatile sulfide compounds (VSC) levels in the saliva.

The efficacy of the unique herbal formulation and its potency to prevent bad breath for a daylong period was proven in controlled clinical studies that were performed under the professional and clinical supervision of research dentists and professors.

The targeting of the oral mucosa takes in account that in contrary to the public's general beliefs, over 90% of malodors are of oral source origin. The invention has been registered and approved as a global patent (European patent registration # EP 2066304B1 and an American Patent US # 9480641B2).



group or conventional treatments.

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In a clinical study, 56 volunteers participated in 3 experiments to test the effectiveness of different mucoadhesive tablets in the prevention of bad breath. The treatment tablets were comprised of herbal ingredients (Echinacea, Lavender, Mastic gum and Sage) and were compared with Zinc and Chlorhexidine.

Application of the palatal mucoadhesive tablets containing herbal formulation resulted in a significant reduction in both oral malodor scores and VSC levels. Sage, Lavender and Mastic gum showed antimicrobial activity against all three oral pathogens<sup>[2,3]</sup>.

In another clinical study, fourty young healthy subjects with oral malodor were randomly assigned to use one of the three tested products: herbal mucoadhesive tablets, placebo mucoadhesive tablets and a commercial mouthwash.

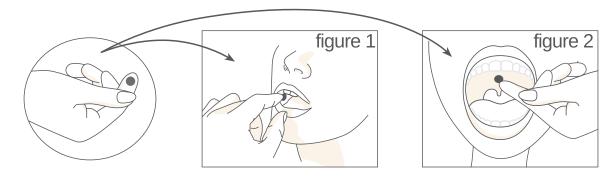
The herbal mucoadhesive tablet caused a significant reduction in malodor scores, VSC levels and β-galactosidase assay in saliva as compared to the placebo. These results demonstrate the efficacy of the herbal formulation delivered using a mucoadhesive tablet for day-long prevention of oral malodors<sup>[4]</sup>.

- 1. PEREZ-DAVIDI, Michael Moshe STERER, Nir, WEISS, Ervin Itzchak and DOMB, Avraham Jacob. (2014). Echinacea, lavender, mastic gum and sage for treating halitosis. EP2066304B1.
- 2. Nir Sterer et al, Oral malodor reduction by a palatal mucoadhesive tablet containing herbal formulation., J Dent. 2008 Jul;36(7):535-9. doi: 10.1016/j. jdent.2008.04.001. Epub 2008 May 12.
- 3. Nir Sterer et al, Effect of palatal mucoadhesive tablet containing herbal formulation on oral malodor in dogs, J Dent. 2008 Jul;36(7):535-9. doi: 10.1016/j. jdent.2008.04.001. Epub 2008 May 12.
- 4. Nir Sterer et al, Day-long reduction of oral malodor by a palatal mucoadhesive tablet containing herbal formulation, J Breath Res. 2013 Jun;7(2):026004. doi: 10.1088/1752-7155/7/2/026004. Epub 2013 Mar 22.

## Nova Breath How do they work?

Thanks to their slow release formulation and mucoadhesive properties, Nova Breath tablets stick to the soft tissue in the mouth, which ensures that the active ingredients are slowly released into the oral cavity until the tablet is completely dissolved.

The tablets also release a fresh minty scent, that grant up to 24 hour protection from bad breath.



The claims / indications may vary from country to country according to local regulations

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