AromaStick Breathe







A soothing scent for a feeling of fresh and clear breathing

<u>Ingredients</u>: Organic Eucalyptus Oil, Organic Peppermint Oil, Organic Thyme Oil.

Whether it is due to seasonal allergies or cold and flu symptoms, the nose is one of the first organs to be affected. Nasal sprays, medicated inhalers, sedating and non-sedating antihistamines, and/or corticosteroids are among the most popular treatments. They are chemical-based drugs that often come with undesirable side-effects. For people who want a natural solution, the AromaStick Breathe, which contains 100% essential oils only, offers an answer. Essential oils are naturally antibacterial (Swamy et al. 2016) with several oils having the additional benefit of acting in an anti-inflammatory manner (Bastos, 2010). This makes the vapors of essential oils well suited to dealing with nasal symptoms caused by seasonal rhinitis, (which is the result of allergens such as pollen) and cold and flu (which is the result of bacteria).

The blend of oils in an AromaStick Breathe have been carefully selected for their positive effects on airflow and their known antibacterial properties.

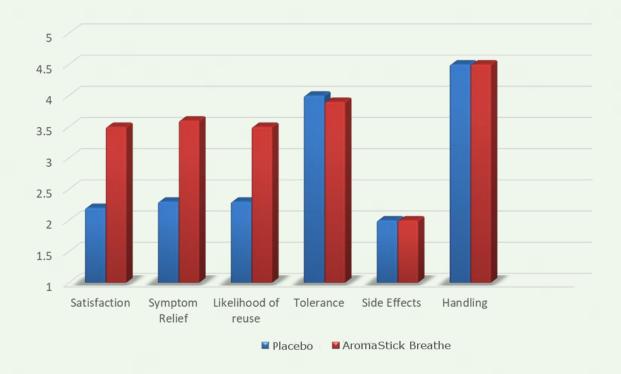
Eucalyptus oil is popularly used for sore throats, cough, and seasonal allergies. Its benefits are due to its immune-modifying and antimicrobial effects (Sadlon 2010), as well as for its antioxidant protection (Lee, 2001). Eucalyptus oil has been shown to relax bronchial and vascular smooth muscle and its main ingredient eucalyptol (1.8-cineol) is frequently used as a nasal decongestant and anticough agent (Laude 1994) as well as to treat bronchitis, sinusitis and chronic rhinitis (Juergens 1998). Prolonged exposure to inhalation has been shown to increase cerebral (brain) blood flow which correlated with eucalyptol concentration in blood (Stimpfl 1995). Inhalation of eucalyptol in sensitized guinea-pigs showed reduced inflammatory parameters in airways (Bastos, 2010).

Peppermint oil, and its primary component of menthol are traditionally used to treat symptoms of the common cold such as nasal congestion, and headaches (Briggs 1993). Peppermint oil eases breathing via its pronounced cooling effect and is also known for its antimicrobial effect, inhibiting the growth of both gram-positive and gram-negative bacteria (Diaz et al. 1988, McKay & Blumberg 2006, Ramos et al 2017, Singh et al. 2015). Some studies even suggest peppermint oil has antiviral properties (Chaumont & Sennet 1978). Menthol, which occurs naturally in peppermint oil has shown to improve patency in the nose and trachea (Kenia 2008) and be beneficial in reducing respiratory symptoms by acting on the airway smooth muscles (Ito 2008). It reduces the sensation of respiratory discomfort by stimulating cold receptors in the nose (Nishino 1997) and has gained wide acceptance in treatments for the relief of nasal congestion associated with rhinitis (Eccles 2003)

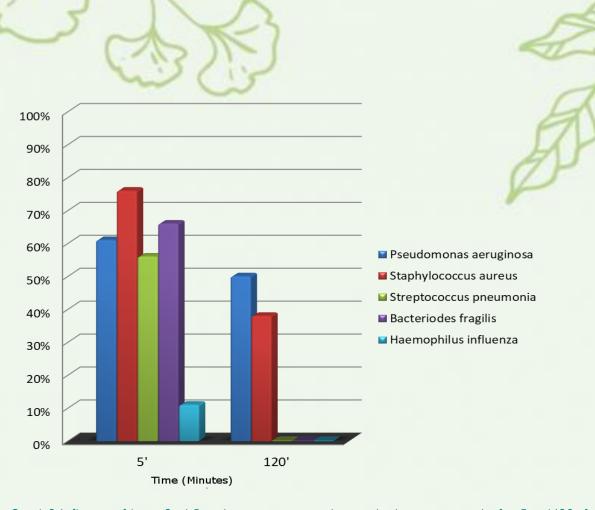
Thyme oil in its vapor form has strong antibacterial effects (Dorman & Deans 2000) and along with its powerful antibiotic, anti-inflammatory and anti-spasmodic properties, has a long history of use in treating respiratory tract infections as well as sinusitis (Demirci et al. 2018, Salehi et al. 2018, Zuzarte et al. 2018).

The effectiveness of scents, however, is not just down to the essential oils used. In fact, effectiveness highly depends on molecular concentration in the inhaled air (Buchbauer et al., 1995). The release of odors into ambient air via a diffuser will lead not only to a small amount of therapeutic odor molecules being inhaled, but also to rapid habituation due to constant exposure. As a result, any positive effects there might be are lost or greatly reduced (Chaudhury 2010). When working with scents therefore, an important aspect lies in the delivery method. This is where the AromaStick comes in: it delivers scents in a high molecular concentration directly to the nose. This has the additional advantage in that it forces the user to sniff, which is important for transporting scent molecules to the epithelium in the nose, the region where we "smell". At the same time the exposure time is kept to a minimum to avoid habituation. This makes AromaSticks 300% more effective than a scent released into ambient air (Schneider 2016).

The combination of these oils, delivered in vapor form, has been shown to have a direct, positive impact on allergic rhinitis (AR), with the AromaStick Breathe effectively alleviating nasal symptoms associated with it in all 40 study participants (Schneider, 2018). In addition, *in vitro* studies have shown that the essential oil blend in the AromaStick Breathe inhibits the growth of numerous bacteria associated with cold and flu.



Graph 1. Mean scores for different effectiveness parameters in treating Allergic Rhinitis symptoms in Placebo and Breathe groups; scale values: 1 = not at all 2 = a little, 3 = moderate, 4 = pretty much, 5 = very much. [Schneider 2018]



Graph 2. Influence of AromaStick Breathe vapor on various bacterial colonies at intervals after 5 and 120 of exposure. Bacterial levels at the start of testing was 100% (Bioexam 2014).

Thanks to the unique blend of antibacterial and anti-inflammatory essential oils delivered directly to the nose, the AromaStick Breathe soothes the nose, and provides a feeling of cool and clear breathing.

AromaStick natural inhalers are not medicines and are not intended to be used in place of medicines to treat, alleviate or prevent a health problem or an illness. The purpose of this product information leaflet is solely to provide an introduction to the AromaStick and the essential oils it contains. AromaStick natural inhalers are intended to improve wellbeing in healthy individuals.



References:

Bastos Vasco PD, Gomes Antoniella S., Lima Francisco JB, Brito Teresinha S., Soares Pedro MG, Pinho Joao PM, Silva Claudijane S., Santos Armenio A., Souza Marcellus HLP, Magalhaes Pedro JC (2010). Inhaled 1,8-Cineole Reduces Inflammatory Parameters in Airways of Ovalbumin-Challenged Guinea Pigs. *Basic Clin Pharmacol*, 16

Bioexam (unpublished, 2014) The antimicrobial properties of the AromaStick Breathe

Briggs, C., 1993. Peppermint: medicinal herb and flavouring agent. CPJ 126, 89–92

Buchbauer G, Jirovetz L, Jäger W, Dietrich H, Plank C. (1995) Aromatherapy: evidence for sedative effects of the essential oil of lavender after inhalation. *Z Naturforsch* 46(11-12):1067-72.

Chaudhury Dipesh, Manella Laura, Arellanos Adolfo, Escanilla Olga, Cleland Thomas A., Linster Christine (2010). Olfactory bulb habituation to odor stimuli. *Behav Neurosci* 124(4), 490–499

Chaumont, J.P., Senet, J.M., 1978. Antagonistic properties of higherplants against fungal parasites of man from food contaminants:screening of 200 fungi. *Plant Med. Phytother.* 12, 186–196

Demirci F, Karaca N, Tekin M, Demirci B. (2018) Anti-inflammatory and antibacterial evaluation of Thymus sipyleus Boiss. subsp. sipyleus var. sipyleus essential oil against rhinosinusitis pathogens. *Microb Pathog.* 122:117–121

Diaz R, Quevedo-Sarmiento J, Ramos-Cormenzana A, Cabo P, Cabo J (1988) Phytochemical and antibacterial screening of some species of Spanish Lamiaceae. *Fitoterapia*, 59: 330–333

Dorman HJD, Deans SG (2000) Antimicrobial agents from plants: antibacterial activity of plant volatile oils *J App Microbiol* 88: 308–316

Eccles R., 2003. Menthol: Effects on nasal sensation of airflow and the drive to breathe. *Current Allergy and Asthma Reports*. 3(3): 210–214

Ito Satoru, Kume Hiroaki, Shiraki Akira, Kondo Masashi, Makino Yasushi, Kamiya Kaichiro, Hasegawa Yoshinori (2008). Inhibition by the cold receptor agonists menthol and icilin of airway smooth muscle contraction. *Pul Pharmacol Ther* 21(5):812–817

Juergens UR, Stöber M, Schmidt-Schilling L, Kleuver T & Vetter H (1998). Antiinflammatory effects of eucalyptol (1.8-cineole) in bronchial asthma: inhibition of arachidonic acid metabolism in human blood monocytes ex vivo. *Eur J Med Res*, 3:407-412

Kenia Priti, Houghton Tom, Beardsmore Caroline (2008) Does inhaling menthol affect nasal patency or cough? *Pediatr Pul* 24

Laude EA, Morice AH & Grattan TJ (1994), The antitussive effects of menthol, camphor and cineole in conscious guineapigs. *Pul Pharmacol*, 7:179–184

McKay DL, Blumberg JB (2006) A review of the bioactivity and potential health benefits of peppermint tea (Mentha piperita L.) *Phytother Res* 20(8):619–33

Nishino T, Tagaito Y., Sakurai Y. (1997). Nasal inhalation of l-menthol reduces respiratory discomfort associated with loaded breathing. *Am J Resp Crit Care* 156(1):309-13

Ramos RS, Rodrigues ABL, Farias ALF (2017) Chemical Composition and In Vitro Antioxidant, Cytotoxic, Antimicrobial, and Larvicidal Activities of the Essential Oil of Mentha piperita L. (Lamiaceae) *The Scientific World Journal*, 4927214.

Sadlon AE, Lamson DW. (2010) Immune-modifying and antimicrobial effects of Eucalyptus oil and simple inhalation devices. *Alt Med Rev* 15(1):33-47

Salehi B, Mishra AP, Shukla I, Sharifi-Rad M, Contreras MDM, Segura-Carretero A, Fathi H, Nasrabadi NN, Kobarfard F, Sharifi-Rad J (2018) Thymol, thyme, and other plant sources: Health and potential uses. *Phytother Res.* 32(9):1688–1706

Schneider R (2016), There is something in the air: Testing the efficacy of a new olfactory stress relief method (AromaStick®). Stress Health 32(4): 411–426

Schneider, R. (2018). Seasonal allergic rhinitis is effectively assuaged with an essential oil inhaler (AromaStick®): Results from a randomized, controlled, double-blind effectiveness trial. *The Nat Prod J*

Singh R, Shushni MAM, Belkheir A (2015) Antibacterial and antioxidant activities of Mentha piperita L., *Arab J Chem* 8(3): 322–328

Stimpfl T, Nasel B, Nasel C, Binder R, Vycudilik W & Buchbauer G (1995). Concentration of 1,8 cineole in blood during prolonged inhalation. *Chem Senses*, 20:349–350

Swamy MK, Akhta MS, Sinniah UR (2016) Antimicrobial Properties of Plant Essential Oils against Human Pathogens and Their Mode of Action: An Updated Review. *Evid Based Complement Alternat Med*.

Zuzarte M, Alves-Silva JM, Alves M, Cavaleiro C, Salgueiro L, Cruz MT (2018) New insights on the anti-inflammatory potential and safety profile of Thymus carnosus and Thymus camphoratus essential oils and their main compounds *J Ethnopharmacol.* 225:10–17