**Studies**

Published

Schneider, R. (2016) There Is Something in the Air: Testing the Efficacy of a new Olfactory Stress Relief Method (AromaStick®). Stress Health, 32: 411–426

Summary: In recent years, aromatherapy has become increasingly popular for clinical treatment and therapeutic management of both acute and chronic stress. It targets distinct and unique neurobiological characteristics of the olfactory system, which is tightly linked to emotions and information processing as well as the autonomous nervous system. Yet, depending on the mode of application, aromatherapeutic interventions show varying degrees of therapeutic effectiveness. In a series of five experiments, the effects of a new mode of aromatherapeutic application (inhaler) was investigated, which is specifically designed to directly stimulate the olfactory system and to reduce the activity of the sympathetic nervous system. Overall, the application of the inhaler showed consistent and large psychological and physiological effects. It also clearly outperformed other stress management techniques, like progressive muscle relaxation, Bach flowers or passive resting periods (natural control). The effects occurred shortly after very few inhalations, drastically reduced stress related biomarkers (i.e. blood pressure, heart rate and cortisol) and considerably enhanced well-being.

Schneider, R. (2016) Direct Application of Specially Formulated Scent Compositions (AromaStick®) Prolongs Attention and Enhances Visual Scanning Speed. Applied Cognitive Psychology, 30 (4): 650– 654

Summary: Recently, a series of experiments demonstrated that direct stimulation of the olfactory system by means of an odor inhaler targets brain areas associated with stress reduction and pain relief. This paper follows up on these findings and investigates whether such effects can also be found for inhalers specially designed to increase attention and concentration. In a three-armed, randomized, controlled experiment participants’ cognitive ability to discriminate between similar visual stimuli was tested either with or without the use of an odor inhaler. Concentration, visual scanning speed, and accuracy were assessed to gauge differential effects. Both odor inhalers outperformed the control condition where no odor was used. The effects were large and showed in all parameters. The direct application of specially designed essential oil compositions enhances attention and concentration when used during short-term breaks in a stressful and attention-demanding cognitive task.

Singer, N. & Schneider, R. (2017). Practically Relevant Stress Relieving Effects of Olfactory Stimuli Delivered by a Specially Formulated Odour Inhaler (AromaStick®): Overview of an Initial Series of Studies Testing Different Boundary Conditions. International Journal of Clinical Aromatherapy, 11: 48-58.

Summary: A series of studies was designed to investigate the effects of direct application of odours (using a nasal inhaler) in relieving stress. In order to see whether odour inhalers had any practical use, this method was compared to popular stress-relieving interventions. Results showed a consistent pattern of success with a pronounced, measurable impact on stress-related physiological parameters (heart rate, blood pressure and cortisol levels) and mood, pointing to the practical relevance of this method of aromatherapy.

Schneider, R. (2017). From Pain to Pleasure: A Newly Developed Essential Oil Inhaler (AromaStick®) Alters Pain Dynamics and Increases Well-being. Results from Two Randomized, Controlled Documentation Studies. Current Psychopharmacology, 6, August.

Summary: Two prospective randomized, controlled cross-over documentary studies were conducted comparing participants’ individual pain management (menstrual pain and chronic lower back pain) with an odor inhaler used as an adjuvant. Results: The odor inhaler improved pain dynamics like onset of pain and pain duration for both menstrual and lower back pain in a natural setting. In individuals suffering from chronic lower back pain, the inhaler also increased the pain alleviating effect of the individual pain management method. In both studies, mood and well-being were considerably increased when the inhaler was applied. No side effects were reported.

Unpublished or under review

Meissner W. & Baumbach P. (2017, under review). Impact of Scents from a Nasal Inhaler (AromaStick®) on Somatosensory Function of Healthy Test Persons.

Schneider, R. (2017, under review). A Breath of Fresh Air: Blood Oxygen Saturation is Strongly Increased Upon the Use of an Essential Oil Inhaler (AromaStick®). Results from a Prospective, Controlled, Measurement Repeated Experimental Study Involving Healthy Individuals.

Singer, N. & Schneider, R. (2017, under review). Investigating the Use of a Specially Formulated Odour Inhaler (AromaStick®) On Weight Loss. Results Show a Positive Impact.

Schneider, R. (2017, under review). Seasonal Allergic Rhinitis is Effectively Assuaged with an Essential Oil Inhaler (AromaStick®): Results from a Randomized, Controlled, Double-Blind Effectiveness Trial.

RECON (2013). Placebo controlled, randomized, six armed explorative study regarding the psychological and physiological short-term effects of scents from a nasal inhaler (AromaStick®) on chronic stress.

RECON (2013). Placebo controlled, randomized, three armed, conceptual replication study on psychological and physiological short-term effects of scents from a nasal inhaler (AromaStick®) on chronic stress.

RECON (2013). Placebo controlled, prospective, randomized documentation study on the effects of scents from a nasal inhaler (AromaStick®) on weight loss.

RECON (2013). Randomized, prospective documentation study with crossover design on the effects of scents from a nasal inhaler (AromaStick®) on menstruation pain and discomfort.

BIOEXAM (2013). Tests comparing the anti-microbial action of the volatile compounds from AromaStick and Vicks nasal inhalers on staphylococcus aureus, streptococcus pneumoniae, Bacteroides fragilis no. 10 and hemophilic influenzae no. 8.

RECON (2014). Placebo controlled, randomized, three armed, conceptual replication study on psychological and physiological short-term effects of a scent from a nasal inhaler (AromaStick®) vs the same scent in ambient air on chronic stress.

RECON (2014). Prospective, randomized, long-term crossover documentation study to test the effects of scents from a nasal inhaler (AromaStick®) on borderline hypertension.

RECON (2014). Randomized, three armed, double blind, exploration study on the effects of scents from a nasal inhaler (AromaStick®) on concentrative attention.

RECON (2014). Randomized, long-term, documentation study with crossover design on the effects of scents from a nasal inhaler (AromaStick®) on chronic back pain.

RECON (2014). Placebo controlled, randomized, five armed, double-blind study with repetitive reading on the effects of scents from a nasal inhaler (AromaStick®) on relaxation compared to Bach flowers.

RECON (2017). Controlled, experimental study with repetitive readings on the effects of scents from a nasal inhaler (AromaStick®) on the saturation of oxygen in blood.

RECON (2017). Controlled, double-blind effectiveness trial with an essential oil inhaler (AromaStick®) on seasonal allergic rhinitis.