

AROMASTICK

AromaStick – Research

AromaStick has been the subject of various research,

Eleven investigations were conducted by RECON, Freiburg i.Br., Germany

<http://www.recon-freiburg.biz/>

One investigation was conducted by Bioexam, Lucerne, Switzerland

<https://www.bioexam.ch/>

One investigation was conducted by the University of Jena, Germany

AromaSticks were tested against placebo, zero control and alternative methods. All studies were randomized. Some studies were crossover documentation studies where subjects tested themselves with and without the use of an AromaStick (e.g. pain studies). In total, over 600 individuals have been included. Several peer-reviewed studies have been published.

- Schneider, R. (in press). Seasonal allergic rhinitis is effectively assuaged with an essential oil inhaler (AromaStick®): Results from a randomized, controlled, double-blind effectiveness trial. The Natural Products Journal.

- Schneider, R. (2017). A breath of fresh air: Arterial blood oxygen saturation is increased upon the use of an essential oil inhaler (AromaStick®). Results from a prospective, controlled, experimental study involving healthy individuals. Current Respiratory Medicine Reviews, 13, 213-220.

- Singer, N. & Schneider, R. (2017). Investigating the use of a specially formulated odour inhaler (AromaStick®) on weight loss: Overview of the results of a two-armed, randomised, controlled effectiveness study. International Journal of Clinical Aromatherapy, 12, 16-24.

- 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, 136-147.

- 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.

- Schneider, R. (2016). Direct application of specially formulated scent compositions (AromaStick®) prolongs attention and enhances visual scanning speed. Applied Cognitive Psychology, 30, 650-654.

- 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.

- The in-vitro investigation conducted by Bioexam tested the efficacy of the volatile substances in the 100% botanical inhaler of AromaStick vs the industry standard Vicks Inhaler against a number of gram-negative and gram-positive bacteria incl. haemophilus influenza.

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Study 1 with AromaStick Alert and Relax

- Question:** Is the effect of AromaStick Alert and Relax specific?
- Sample:** 90 persons
- Type:** Randomized, placebo controlled, 6 arms (including a group practicing Progressive Muscle Relaxation), repeated measurement of blood pressure, heart rate, wellbeing
- Intervention:** 10 minutes
- Findings:** AromaStick Alert and AromaStick Relax act specifically and thus are not placebo.

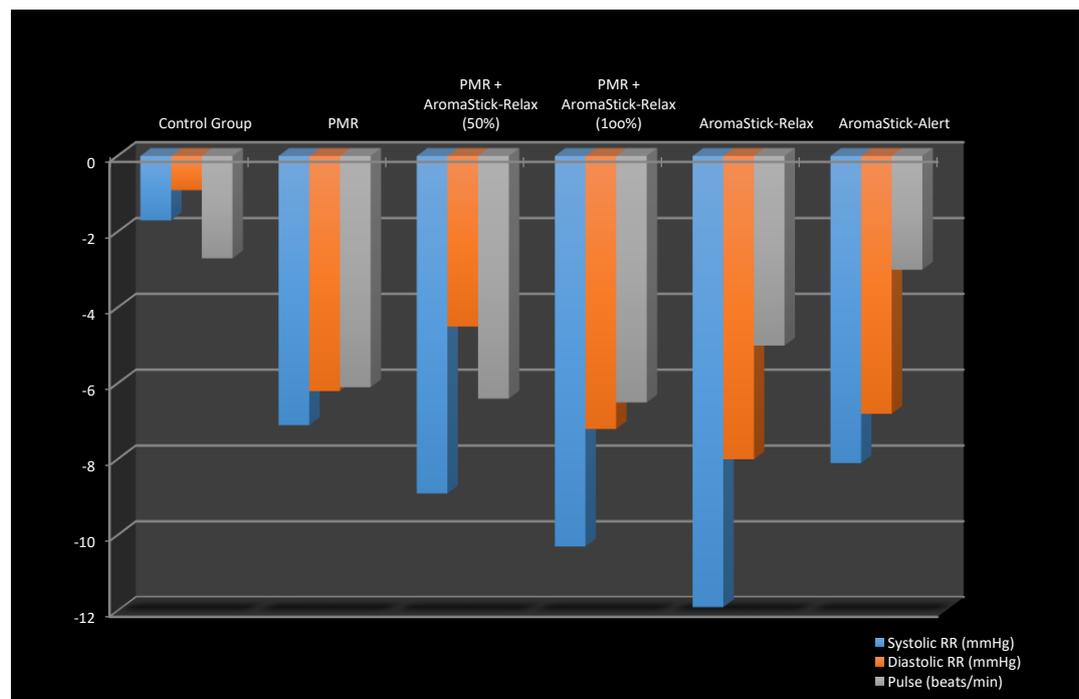
AromaStick Alert lowers systolic blood pressure by 8 mmHg, diastolic blood pressure by 7 mmHg and heart rate by 6 beats per minute. It improves wellbeing by 9%.

AromaStick Relax lowers systolic blood pressure by 12 mmHg, diastolic blood pressure by 8 mmHg and heart rate by 5 beats per minute. It improves wellbeing by 20%.

The difference in wellbeing between the two AromaSticks is explained by the two products' active profiles: The AromaStick Alert is intended to calm and yet to keep vigilant.

Progressive Muscle Relaxation lowers systolic blood pressure by 7 mmHg, diastolic blood pressure by 6 mmHg and heart rate by 6 beats per minute. Wellbeing is improved by 7%. The respective numbers for the control group (passive resting) are -2 mmHg, blood pressure -1 mmHg, and heart rate -3 beats per minute. Wellbeing improves by 6%.

AromaStick Alert and Relax are superior to the widely used stress relieving technique Progressive Muscle Relaxation.



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Study 2 with AromaStick Calm

Question: Is the effect of the AromaStick Calm specific?

Sample: 45 persons

Type: Randomized, placebo controlled, 3 arms (including a group practicing Progressive Muscle Relaxation), repeated measurement of blood pressure, heart rate, and cortisol (saliva)

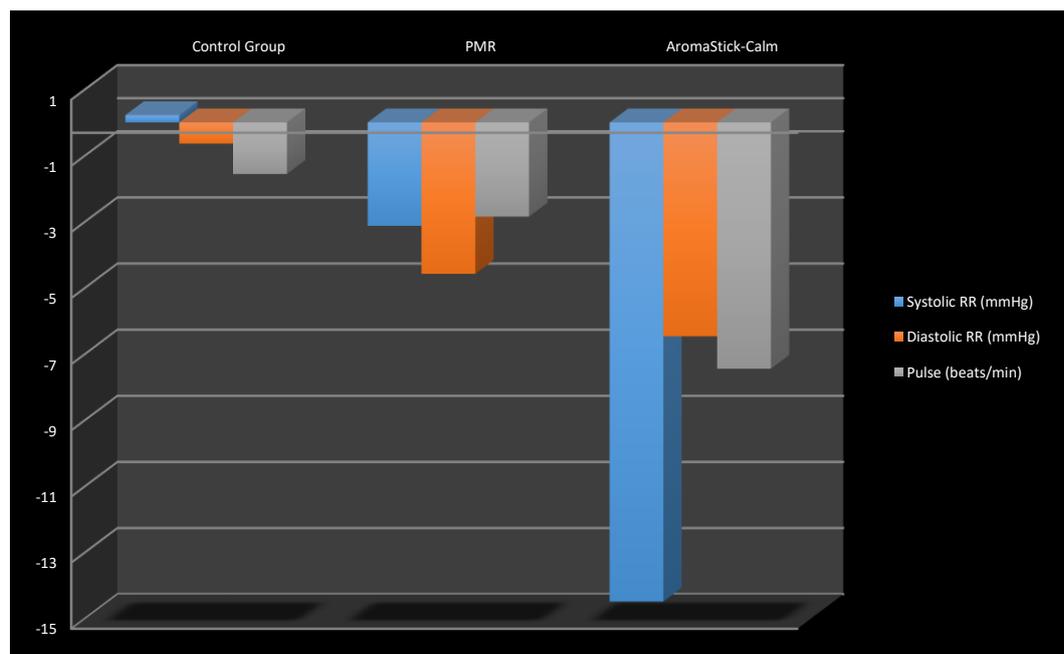
Intervention: 10 minutes

Findings: AromaStick Calm acts specifically on different physiological parameters

AromaStick Calm drastically lowers both systolic and diastolic blood pressure by 15 mmHg and 6 mmHg respectively and heart rate by more than 7 beats per minute. Wellbeing is improved by 12%. The release of the stress hormone cortisol is reduced by 17%.

Progressive Muscle Relaxation lowers systolic blood pressure by 3 mmHg, diastolic blood pressure by 5mmHg and heart rate by 3 beats per minute. Wellbeing is increased by 12%. The release of cortisol is reduced by 7%. The respective numbers for the control group are negligible (systolic blood pressure: 0 mmHg, diastolic blood pressure: -1 mmHg, heart rate: -2 beats per minute). Wellbeing is improved by 7%. There was no change in cortisol levels for the control group.

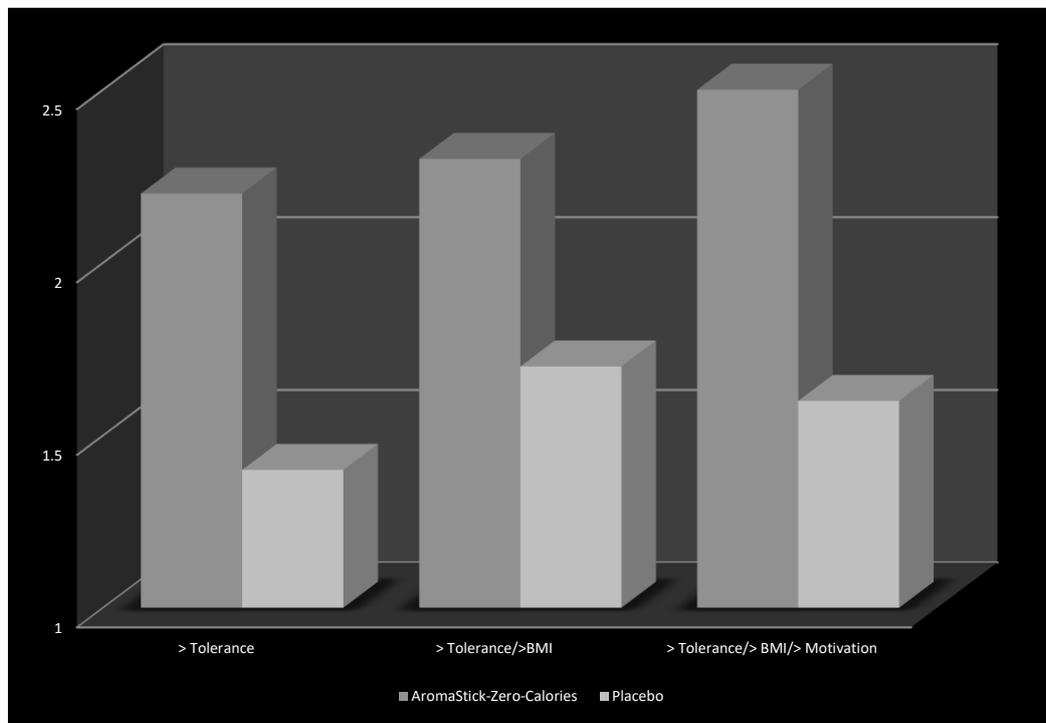
AromaStick Calm is superior to the widely used stress reduction technique Progressive Muscle Relaxation



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Study 3 with AromaStick Zero Calories

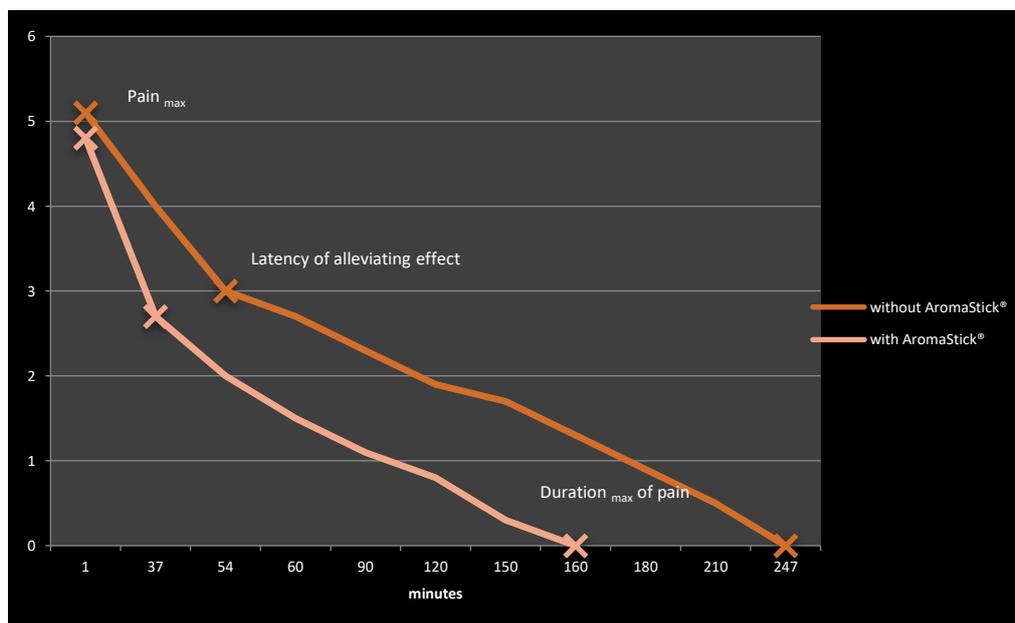
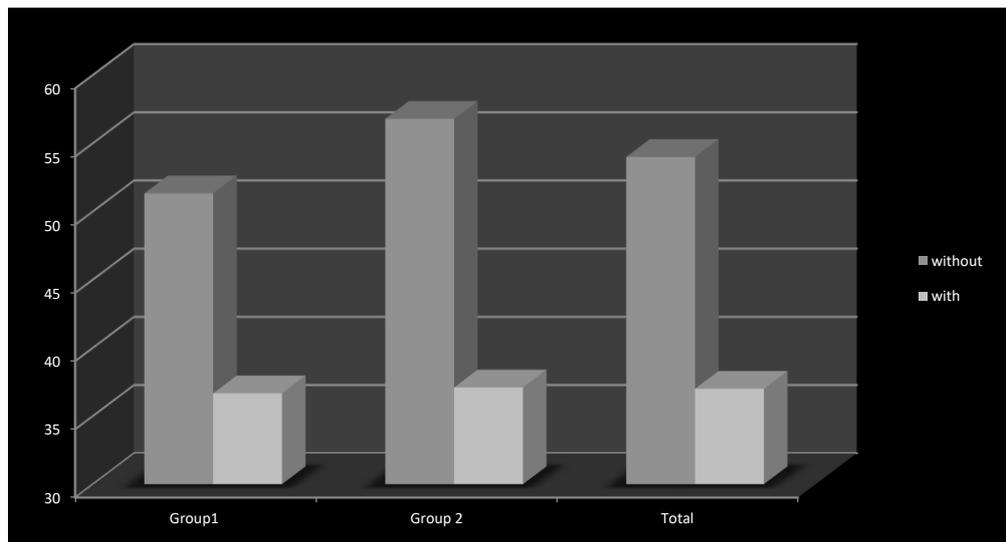
- Question:** Does the sole use of AromaStick Zero Calories reduce body weight?
- Sample:** 40 persons with a Body Mass Index of 20-35
- Type:** Randomized, placebo controlled, prospective, documentation study; parameter: weight loss in kg
- Intervention:** 30 days, inhalation every 2 hours, without active calorie reduction (diet, sport)
- Findings:** AromaStick Zero Calories was most effective in persons with a higher initial weight (BMI > 25)
Subjects achieved an average weight loss of 1.7 kg, responders lost 2.5 kg



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Study 4 with AromaStick Dolo Mint (Pain I)

- Question:** Does AromaStick Dolo Mint alleviate menstrual ailment and pain?
- Sample:** 30 women
- Type:** Randomized, prospective, crossover-documentation study; parameters: pain intensity, latency of pain, duration of pain, wellbeing
- Intervention:** 2 monthly cycles, one month with/one month without AromaStick Dolo Mint, documentation on day of maximal pain and discomfort
- Findings:** AromaStick Dolo Mint improves the effectiveness of the individual pain killing method by 14%
AromaStick Dolo Mint reduces the onset of pain relief from 54 minutes to 37 minutes (reduction: 30%) and total pain time from 247 minutes to 159 minutes (reduction: 36%)
AromaStick Dolo Mint also improves wellbeing by 14%.



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Study 5 with AromaStick Relax

Question: Does the effect of the AromaStick Relax scent depend on the method of application?

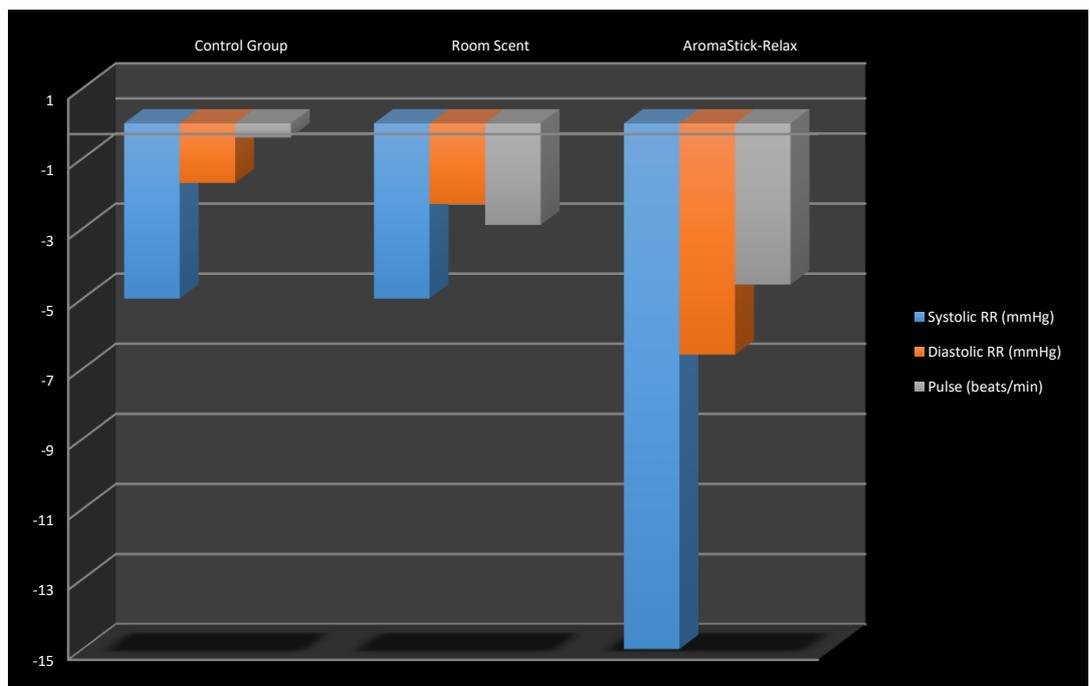
Sample: 45 persons

Type: Randomized, placebo controlled, three arms, repeated measurement of blood pressure, heart rate, wellbeing

Intervention: 10 minutes, control, Relax as room scent, Relax from the AromaStick

Findings: The Relax scent applied from the AromaStick is approximately three times more potent in reducing cardiovascular parameters than when diffused in the room.

The inhaler lowers systolic blood pressure by 16.5 mmHg (room scent: 5 mmHg), diastolic blood pressure by 6.6 mmHg (room scent: 2.3 mmHg), and heart rate by 6.6 beats per minute (room scent: 2.9 beats per minute).



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Study 6 with AromaStick Relax

Question: Does the AromaStick Relax lower blood pressure when used for several weeks on a daily basis?

Sample: 20 borderline hypertonic individuals (WHO definition)

Type: Randomized, prospective, crossover-documentation study; parameters: Twelve blood pressure and heart rate measurements per person

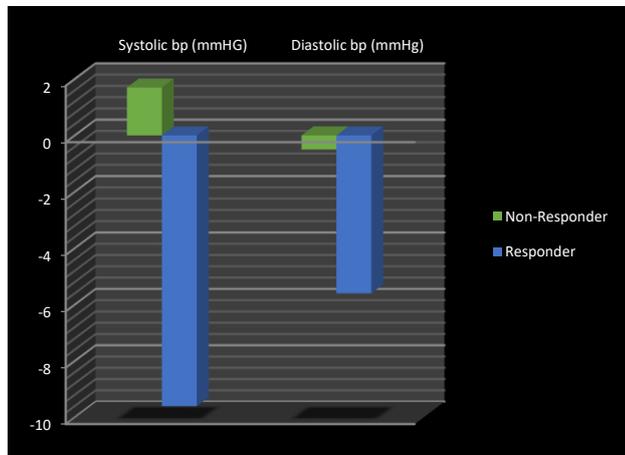
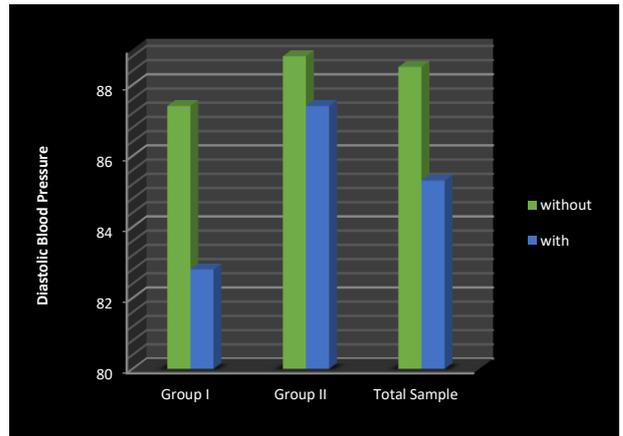
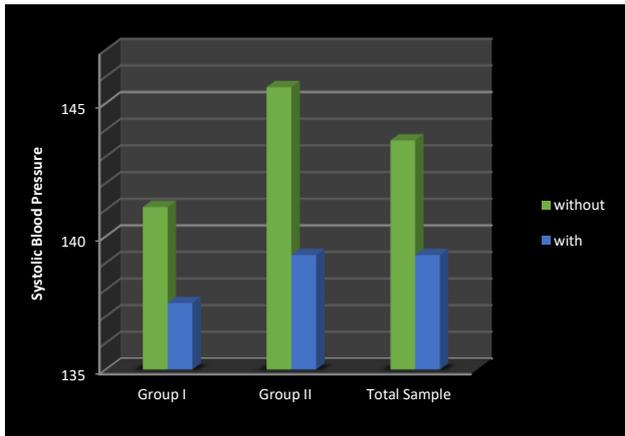
Intervention: 60 days, 30 days with/30 days without AromaStick Relax, inhalation every 2-3h

Findings: AromaStick Relax lowers blood pressure across the total sample by 3 to 5 mmHg depending on psychosocial stress

AromaStick Relax lowers blood pressure in responders (about 50% of subjects in the study) by 10 mmHg

In individuals using the AromaStick Relax during the first month values stayed reduced after discontinuation for a couple of days before gradually rising again

All subjects showed good tolerance with the AromaStick Relax



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Study 7 with AromaStick Alert and Focus

Question: Do the AromaSticks Alert and Focus improve concentration?

Sample: 45 persons

Type: Randomized, placebo controlled, double blind, three arms; parameter: processing speed and quality of cognitive performance as measured by the psycho-diagnostic test d2

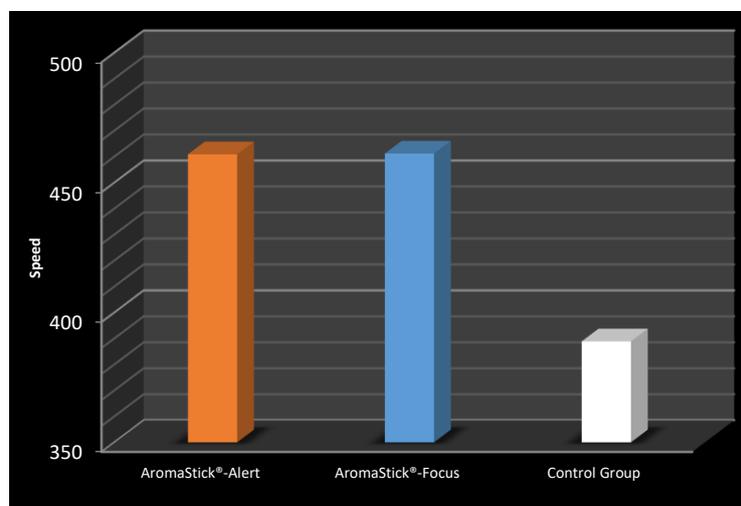
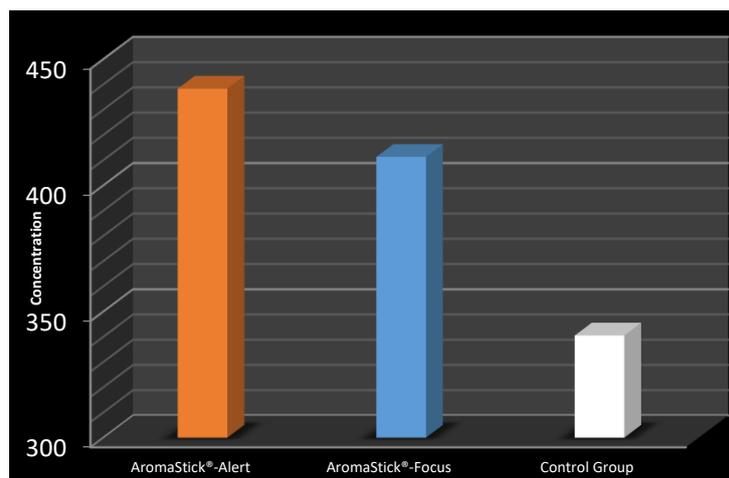
Intervention: Sniffing vs. natural relaxation during interspersed one minute breaks

Findings: The AromaStick Alert improves concentrated attention by 29%; the AromaStick Focus by 21%.

Processing speed improved with both AromaSticks by 19%.

The error rate was reduced with both AromaSticks.

Overall performance enhancement for the AromaStick Alert group was 92% and for the AromaStick Focus group 84% vs for the control group 62%.



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Study 8 with AromaStick Dolo Mint (Pain II)

Question: Does the AromaStick Dolo Mint enhance the effectiveness of individuals' management of chronic back pain?

Sample: 30 persons with chronic back pain, 16 women, average age: 36

Type: Randomized, prospective, crossover-documentation study; parameters: pain intensity, latency of pain, duration of pain, wellbeing

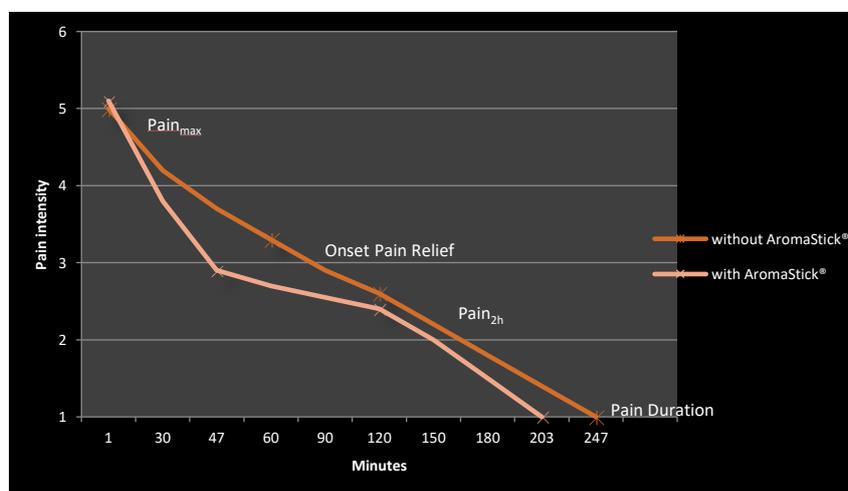
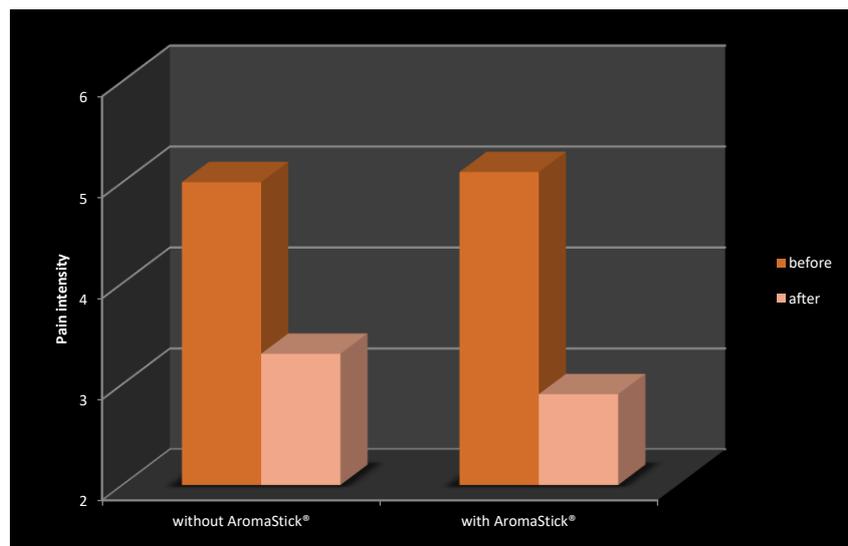
Intervention: 28 days (14 days with/14 days without AromaStick Dolo Mint); intervention and documentation on days with pain

Findings: AromaStick Dolo Mint improves the efficacy of the individual measures by 32%.

AromaStick Dolo Mint reduces the onset of pain relief from 60 minutes to 47 minutes (reduction: 22%)

AromaStick Dolo Mint reduces the time until complete pain relief from 248 minutes to 203 minutes (reduction: 18%)

AromaStick Dolo Mint improves overall wellbeing by 17 % (without AromaStick: 10%)



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Study 9 with AromaStick Balance and Calm vs Nelsons Original Bach Flower Rescue Remedy

Question: Is the effectiveness of AromaStick Balance and Calm better than Nelsons Original Bach Flower Rescue Remedy?

Sample: 100 persons

Type: Randomized, placebo controlled, five arms, repeated measurements. Parameters: blood pressure, heart rate, wellbeing

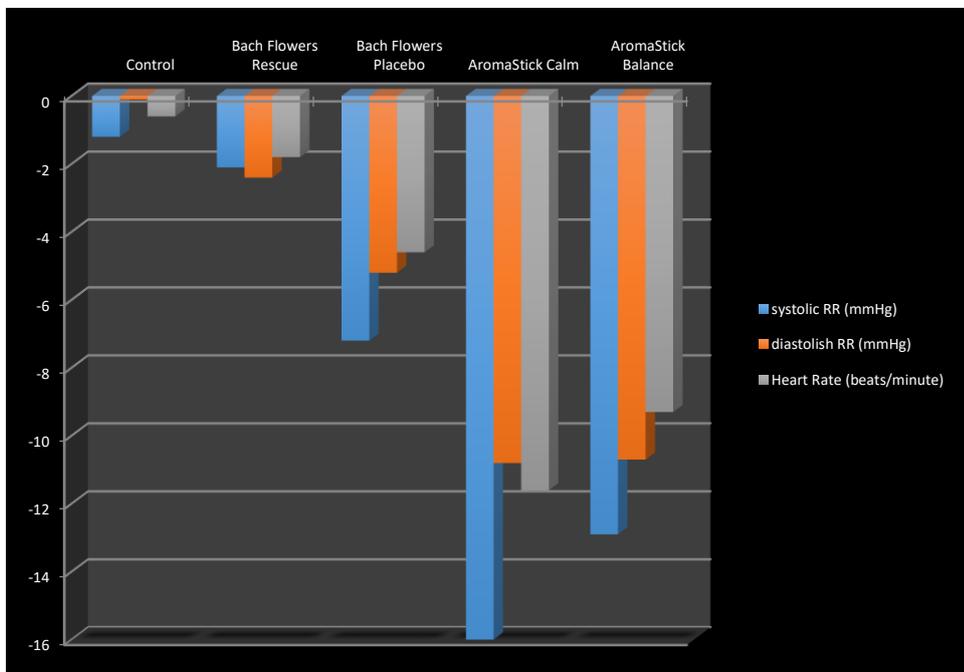
Intervention: 10 minutes

Findings: AromaStick Calm reduces the systolic and the diastolic blood pressure by 16 mmHg and 11 mmHg. Heart rate is reduced by 12 beats per minute and wellbeing is improved by 9%.

AromaStick Balance reduces the systolic and the diastolic blood pressure by 13 mmHg and 11 mmHg. Heart rate is reduced by 9 beats per minute and wellbeing is improved by 7%.

Nelsons Original Bach Flower Rescue Remedy reduces the systolic and the diastolic blood pressure by 2 mmHg each. Heart rate is reduced by 2 beats per minutes. Wellbeing is improved by 3%.

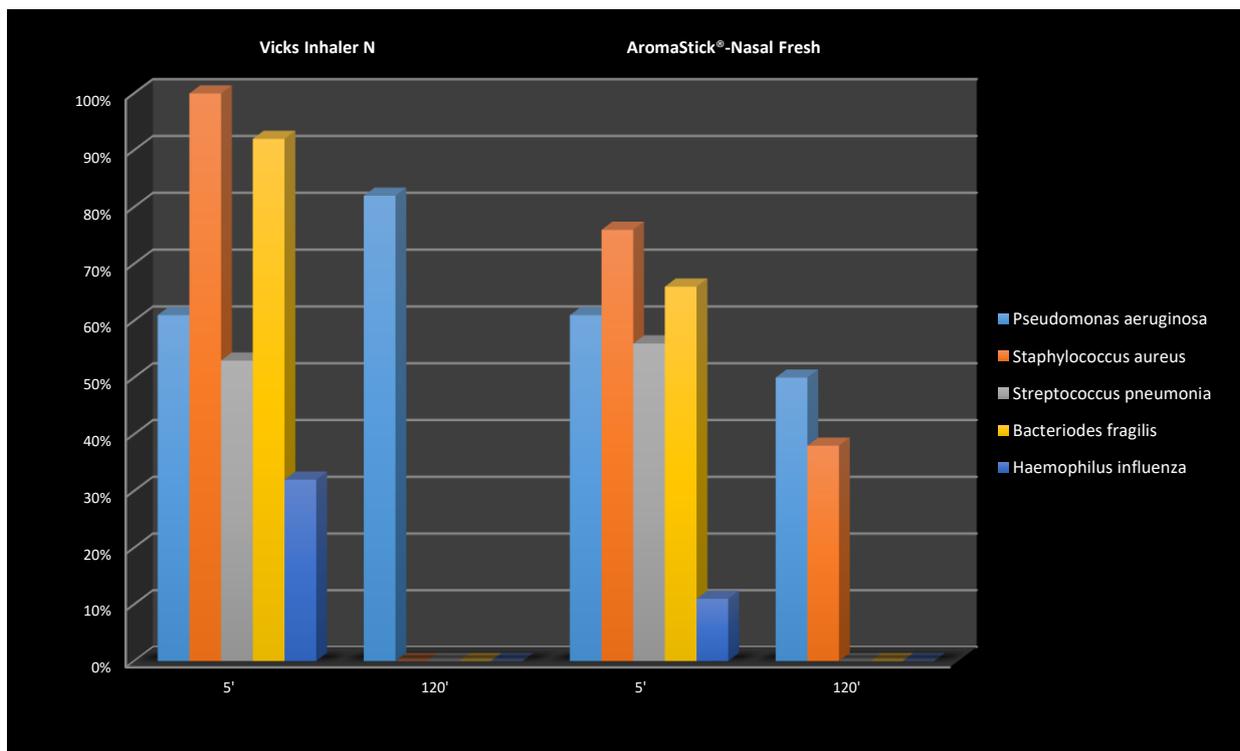
Nelsons Original Bach Flower Rescue Remedy acts as a placebo and does not perform better than natural (zero) control.



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Study 10 with AromaStick Nasal Fresh

- Question:** Does the AromaStick Nasal Fresh have antibacterial properties?
Is its effect comparable to that of a market leader?
- Sample:** *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Streptococcus pneumonia*, *Bacteriodes fragilis*, *Haemophilus influenza*
- Type:** AromaStick Nasal Fresh, Vicks Inhaler N (CH-product)
- Intervention:** On an agar medium a certain amount of pathogens are pasted and exposed to the vapors of the test solution. The growth of pathogens is compared with the exit values after 5 minutes and 120 minutes. Parameters: speed and recovery findings
- Findings:** Vicks Inhaler N has a better long term effect only on *Staphylococcus aureus*.
Vicks Inhaler N und AromaStick Nasal Fresh have the same effect on *Streptococcus pneumonia*.
AromaStick Nasal Fresh acts faster on *Pseudomonas aeruginosa*, *Bacteriodes fragilis*, and *Haemophilus influenza*.



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Study 11 with AromaStick Energy

Question: What effect does deep breathing through the AromaStick Energy inhaler have on blood oxygen levels?

Sample: 40 persons (18 females), mean age: 36.4 years

Type Controlled, measurement repeated, two-armed study. Parameters: SpO₂ values (pulse oximetry), heart rate

Intervention: Two arms: regular deep breathing through the nose and inhalation with an AromaStick Energy held under one nostril. Three cycles of deep breathing. Each cycle consisting of three standardized inhalations

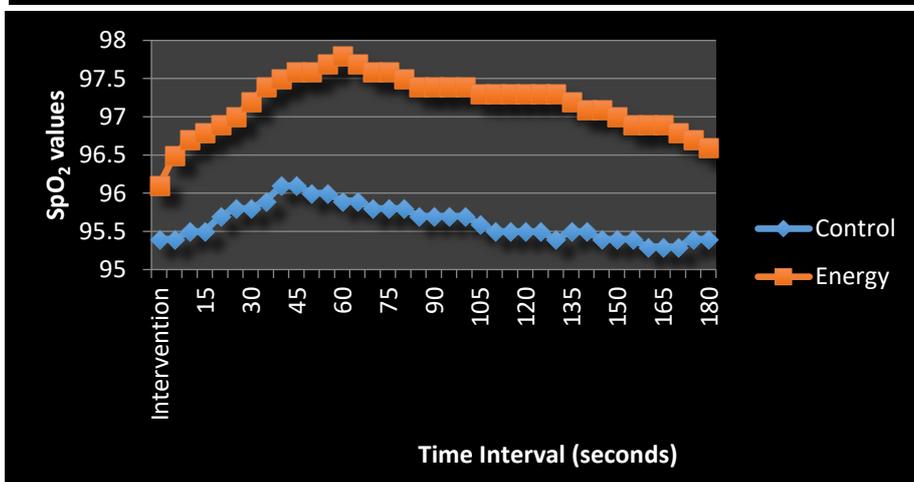
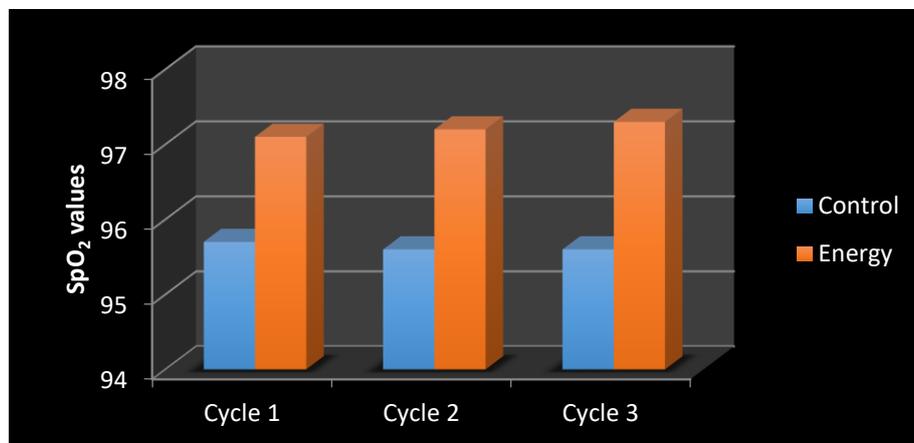
Findings: The AromaStick Energy inhaler amplifies normal deep breathing by 1.6 per cent.

The AromaStick Energy inhaler oxygenates the blood for almost 180 seconds vs 65 seconds in normal deep breathing

The AromaStick Energy increases normal breathing (baseline) blood oxygenation by 2.4%

The effects show consistently in all individuals and after every cycle of inhalation.

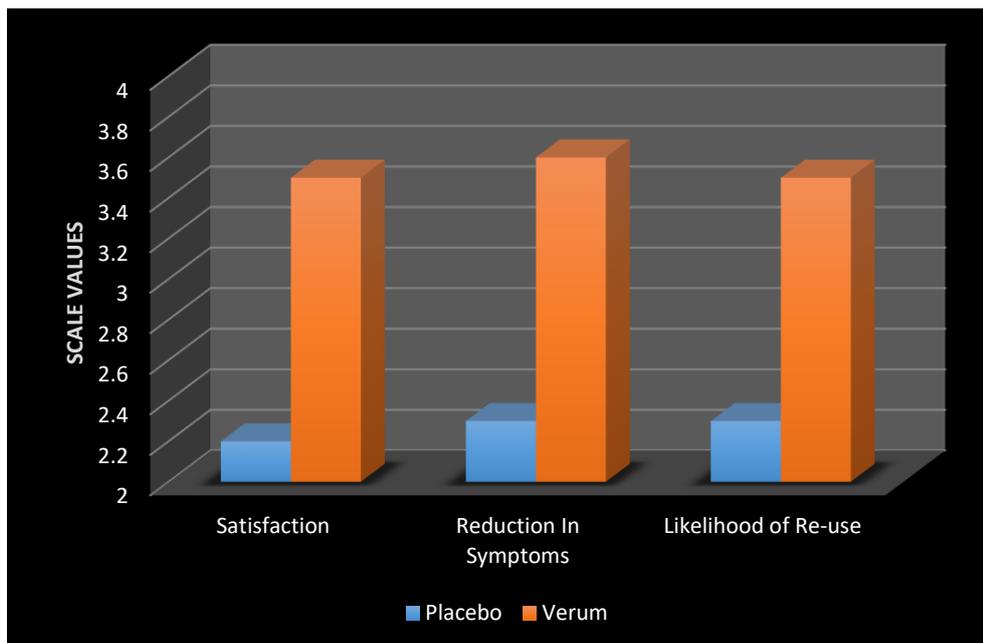
The effect is not attributed to an increase of heart rate.



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Study 12 with AromaStick Nasal Fresh

- Question:** Does the use of the inhaler Nasal Fresh decrease Allergic Rhinitis (AR) symptoms?
- Sample:** 40 persons, mean age of 41.2 years. Persons had suffered from AR for an average of 32.1 years.
- Type:** Two-armed, prospective, controlled, double-blind effectiveness study. Parameters: Reduction in AR associated symptoms (using 5-point Likert Scale).
- Intervention:** Two arms: Verum group (AromaStick® Nasal Fresh) and pseudo-placebo group (AromaStick® Calm). Minimum usage of 6-8 times per day over two weeks after symptoms first appear, with recording of symptoms every Monday, Wednesday, Friday and Sunday.
- Findings:** The use of the AromaStick Nasal Fresh effectively reduces the AR burden in individuals, based on self-reported scores.
- The effects of the AromaStick Nasal Fresh are largest when treating nasal AR symptoms;
- The AromaStick Nasal Fresh cannot treat associated symptoms of the eyes, throat or skin



Graph represents mean scores for different effectiveness parameters; scale values: 1 = not at all 2 = a little, 3 = moderate, 4 = pretty much, 5 = very much.