

Healthy Environment

Hayfever Guide



Hayfever under control

Rhinitis, the most common type of respiratory allergies, affects 10 to 25% of the world population¹. The symptoms include nasal obstruction, nasal discharge, sneezing (often more than 20 times in sequence), itching in the nose, throat and eyes^{1,2}.

There are two types of rhinitis: perennial and seasonal³. The perennial is deflagrated by different environment allergens while the seasonal is associated to allergens in special seasons of the year.

Hay Fever affects 15 to 20 % of the population in Britain being a seasonal rhinitis triggered by pollens^{2,3,4}. Therefore, it is more frequent in the spring (march to may), when plants blossom. There are plants like perennial rye and timothy grass (very common in England) that release pollens in different seasons, in that case, symptom peak occurs during June and July².

Pollens are extremely lightweight and disperse trough the air and when inhaled it deposits in the mucous provoking inflammatory allergic reactions. The warm, sunny, dry, and windy days are the worst days for the allergic to pollen because pollen spores are more easily spread.

Hay Fever is prevalent in North Hemisphere⁵ countries and it has been increasing over the past two decades⁶. That is in part due to the high emission levels of nitrogen dioxide, and ozone from vehicles in the industrialized countries. Exposure to air pollution and pollen exacerbates the symptoms of Hay Fever^{2,7}.

Quality of Life

Besides being uncomfortable rhinitis symptoms affect the quality of life of patients. Amid several symptoms the most common are:

Nose symptoms

- Sneezing
- Runny nose
- Blocked nose
- Nose, throat, and deep ear itching
- Headache due to sinusitis caused by swelling

Eye symptoms

- Watering
- Redness
- Itching
- Gritty feeling
- Swelling of the white portion

Chest symptoms

● Wheezing or tightness feeling. In fact those are asthma symptoms and should be treated as such

In order to minimize symptoms and allergic crisis, medicines are necessary. Some medicines are quite expensive and bring unpleasant side effects like making people sleepy and tired, and may also have a dangerous effect on driving and a poor concentration effect in school, at work and other activities.

In 1997, the Health System in the United States of America spent about USD 7.9 billions just with rhinitis.

Preventing allergic crisis is far better than taking medicines therefore allergic people should avoid whenever possible contact with pollens.

How to avoid contact with pollen?

Mainly in spring time, some preventive measures should be taken:

- Maintain car windows and windows at home closed to avoid pollens from outside to get in.
- Use glasses or sunglasses to partially avoid direct contact with eyes;
- Avoid open areas with lawns mainly at dawn and at night (periods with more pollen dispersion);
- Use pollen filters in cars;
- Do not cut grass;
- Always clean with an humid cloth furniture where pollens most commonly accumulate



Airfree[®] Role

On top of those measures, in order to control allergies, it is essential that remaining pollen airborne particles be destroyed.

Airfree silently and efficiently incinerates airborne organic particles like pollens. Pollens are essentially made of protein and because of that, when submitted to high temperatures suffer a denaturing process resulting in alteration of its original form and consequently being destroyed.

Airfree[®]

Efficient: Airfree is tested in real working environments with people in them by credible ISO 17025 independent laboratories and universities in several countries. Airfree destroys any microorganism such as mould spores, bacteria, viruses, and dust mite allergens when passing through its patented high efficiency thermodynamic sterilising ceramic core regardless of how hazardous and small they might be.

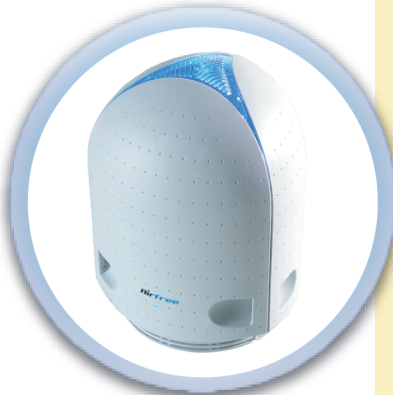
Silent: No sound emission.

Exclusive: Airfree uses just heat Thermodynamic technology to destroy and incinerate airborne microorganisms. No fiber glass filters, triclosan coated paper or any kind of material that can be harmful to those operating or wasting it.

Ozone Reduction: Airfree exclusive Thermodynamic technology is the only one reducing ozone while destroying microorganisms.

Economic: Airfree model electric consumption is lower than a 50W light bulb. No replacement parts required like filters that may cost hundreds of dollars a year.

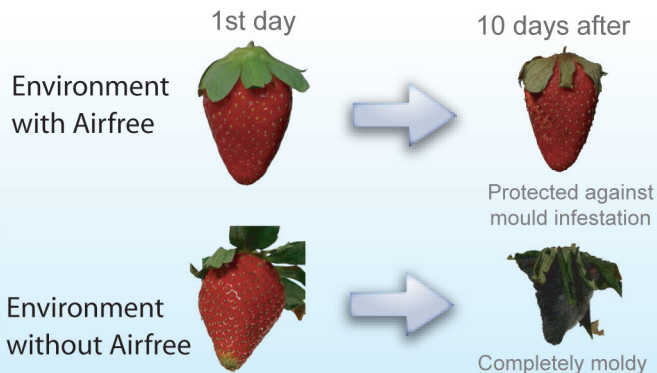
Easy Installation: Just place Airfree on the floor and plug it into the nearest electric outlet. No need for maintenance or special cleaning.



Bibliographical References

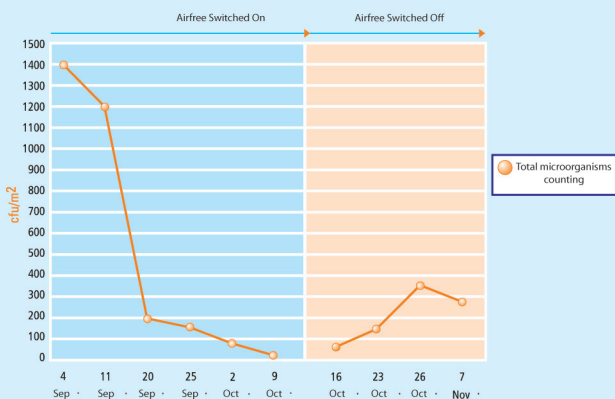
- 1- Ferreira de Melo J, 2003. Rinite alérgica. Sociedade Brasileira de Alergia e Imunopatologia. <http://www.sbai.org.br/publico2.htm>
 - 2- DurhanS, 1998. Summer hay fever. Clinical review. ABC of allergies, BMJ 316:843.
 - 3- Esteves PC, Rosário Filho NA, Tripia SG, Caleffe LG, 2000. Prevalence of Perennial and Seasonal Allergic Rhinitis with Atopic Sensitization to Dermatophagoides pteronyssinus and Lolium multiflorum in Schoolchildren and adults in Curitiba. Rev Bras Alerg e Imuno, 23(6):249-259.
 - 4- Viera F, 2—3. Polinose. Sociedade Brasileira de Alergia e Imunopatologia. <http://www.sbai.org.br/publico4.htm>
 - 5- Abhi Parikh & Glenis K.Scadding, ,1997. Fortnightly review:seasonal allergic rhinitis. BMJ 314:1392
 - 6- International Consensus Report on the Diagnosis and Management of Rhinitis, Allergy, ,1994, 49:5-34.
 - 7- D'Amato G, Liccardi G, D'Amato M, Cazzola M, 2002. Outdoor air pollution, climatic changes and allergic bronchial asthma. Eur Respir J. Sep;20(3):763-76.
- All the microbiological information contained herein was reviewed by Dr. Cristiane Minussi, biologist from the University of Sao Paulo.

See the strawberries 10 day test*:



*test made in two separated closed chambers

Efficiency Test: microorganism reduction



Test realized by SGS Natec - Germany - Test M00-4990
Independent Laboratory ISO 17025

See the complete list of test reports at:
www.airfree.com

All the microbiological informations herein contained is reviewed by Cristiane Minussi, biologist from University of São Paulo.