Healthy Environment

All for Allergics

Airfree® AIR PURIFIERS

The healthy way to treat allergies

Do you want to know if you are allergic or have an allergy related disease? Just answer the questions below[1]:

1) Have you noticed in the past 6 months symptoms such as: sneezing, nasal and sinus obstruction, or a runny nose as if you had a cold?
2) During these 6 months, have your nasal symptoms been followed by itchy and watery eyes?
3) For the past 12 months, have you had nasal secretions followed by jawbone and frontal headache?
4) Have you ever had trouble breathing during the past 12 months despite not having a cold?
5) Have you ever experienced breathlessness with an associated wheezing or whistling noise when you breathe?

In the event you have answered “yes” to questions 1 and 2, you may have respiratory symptoms[1] associated with allergic rhinitis[2];

In the case that you answered “yes” to question 3, you may have a sinusitis carrier;

If you answered “yes” to questions 4 and 5, you may be asthmatic.

This questionnaire is simply intended to indicate general symptoms and conditions and under no circumstance substitutes for medical consultation.

So do I have an allergy or flu?

Some symptoms such as obstructed nose, sneezing, itchy eyes, nose and throat, do not just originate from allergies, as they can also be a sign of flu. The flu is caused by viruses, and the symptoms usually disappear after a few days, different from the allergies. It is very common to see allergic patients that before identifying their disease, believed that they had a “constant flu”. Allergic reactions are triggered when a person is exposed to certain proteins. Other substances, such as strong odors, toxic ozone, and sometimes just cold air, can be so irritating that they instigate the inflammatory process. Toxic ozone is not only present in the atmospheric layer protecting Earth from the UV rays but also in the environment in which we live. In this case, toxic ozone can cause irreversible damage to the lungs, as well as causing asthmatic attacks[9].

Main airborne allergens in the air

Dust Mite allergens. House dust mites that are usually found in mattresses and couches. Their main food sources are fungus and shed human skin cells.
Dust mite allergens are found in the skeletons and especially in the fecal matter. Because they are so light-weight, these allergens are ejected into the air by any movement in the environment.

Mold. Mold is a kind of fungus that reproduces by ejecting spores into the air. They are invisible to the naked eye and when inhaled, these spores may be responsible for triggering allergic reactions and in some cases, even infections.

Pet Dander. Allergy causing substances are also found in the oil glands, skin and saliva of pets. These microscopic substances are proteins that may stay airborne for hours or even days. In addition, they are easily transported between environments, consequently, they can also be found in places where there are no animals present. Many researches relate asthmatic crisis to the presence of pet dander in homes.

Pollen Allergens. Pollen may cause seasonal rhinitis that occurs in a specific period of the year. Usually it appears in Springtime, when flowers bloom. The pollen is extremely light weighted and disperses itself through the air. When inhaled it can deposit on the nasal mucous, the existing proteins of the grains may trigger allergic reactions5

In other words, allergic rhinitis is characterized by nasal inflammation after exposure to the allergens[2]. On the other hand, asthma is a chronic inflammatory disease that leads to the obstruction of the respiratory airways[6]. Studies demonstrate that the allergic rhinitis usually precedes asthma and that about 38% of the people who have rhinitis also suffer from asthma[7].
In the case of sinusitis, it may be said that it is a disease characterized by inflammation of the nasal mucus, which leads to obstruction, pain and a sensation of pressure on the cheeks. It may also be the result of infections caused by viruses, bacterial infections, or allergic reactions[8].

Background Knowledge

Did you know that some dust mite and fungus are intimately related?

- Laboratory tests suggest that some dust mites species cannot survive in the absence of fungus[10]
- Fungus, in addition to being a food source for dust mites, are also responsible for pre-digesting human shed skin cells [11].

How to improve the quality of life of an person who is allergic.

Allergies and their irritating symptoms are responsible for a reduction the quality of life and even loss of productivity at school and work[2]. The main way to avoid allergies is to prevent the inhalation of allergens. For that to occur, two measures need to be taken: to treat contaminated air and to fight sources of contamination.

Some important tips:

1- When washing bed sheets, try to use hot water (131ºF) once a week, in order to eliminate dust mites.
2- If possible, use anti-dust mite covers on mattresses and pillows and avoid feather pillows and comforters.
3- If there is presence of mildew, use 1/4 of chlorine for each cleaning. Do not mix chlorine based products with ammonia based products. The mixture produces toxic gases.
4- Clean up all mildew stains that you find. If the material is too porous and cannot be totally cleaned, throw it away.
5- Wait until surfaces are completely dry before placing objects on them.
6- Use exhaust fans in kitchens and bathrooms. This measure will decrease humidity levels and reduces the spread of germs.
7- Ventilate closed spaces such as attics. In fact, the relative humidity of any environment should always be kept below 50%, because fungus, bacteria and dust mites will proliferate quickly in high levels of humidity.
8- Clean the air conditioning system and dehumidifiers on a regular basis, because these devices accumulate humidity and dirt inside, promoting fungus and bacteria growth.
9- When water damage occurs as during a flood, the contaminated materials should be cleaned and dried within 24 hours.
10- Do not vacuum or change bed sheets in the presence of individuals who are allergic since the quantity of dust mites, fungus and bacteria in the air increase during cleaning.
11- Allergic people should avoid carpets as vacuum cleaners cannot remove all dust mites and fungus from its fabric.
12- Use an Airfree air purifier to maintain an excellent air quality level in the environment.

Why Airfree®

Airfree quietly, continuously, and efficiently purifies the air that is the main means of transmitting contamination to an allergic person.
Airfree is a high efficiency air purifier that reduces up to 99% of airborne micro-organisms and allergens, in addition to reducing 26% of the amount of ozone, these is confirmed by many independent test reports performed by universities, certified laboratories, and institutions in several countries. For further information regarding Airfree, and to see copies of full test reports please access www.airfree.com.

Airfree® Products

Efficient: Airfree is tested in real working environments with people circulating by credible ISO 17025 independent laboratories and universities in several countries.Airfree destroys any microorganism such as mold spores, bacteria, viruses, and dust mite allergens when passing through its patented high efficiency thermodynamic sterilizing system known as TSS™ technology regardless of how hazardous and small they might be.

Faster performance: Microorganisms reduction starts in 15 minutes.

Silent: No sound emission.

Exclusive: Airfree uses only heat TSS™ technology to destroy and incinerate airborne microorganisms. No fiber glass filters, triclosan coated paper or any type of material that can be harmful to you or the enviroment when desposed of .

OzoneReduction: No other airpurifying device matches Airfree's exclusive TSS™ technology which both reduces ozone, while simultaneously destroying microorganisms.

Economic: Airfree's electric consumption is lower that a 50W light bulb. No replacement parts are required such as 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.

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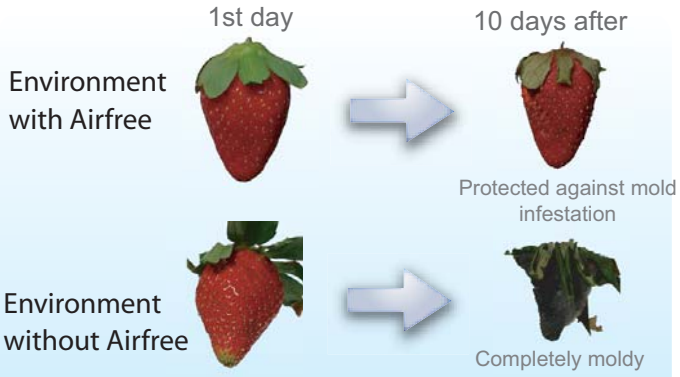
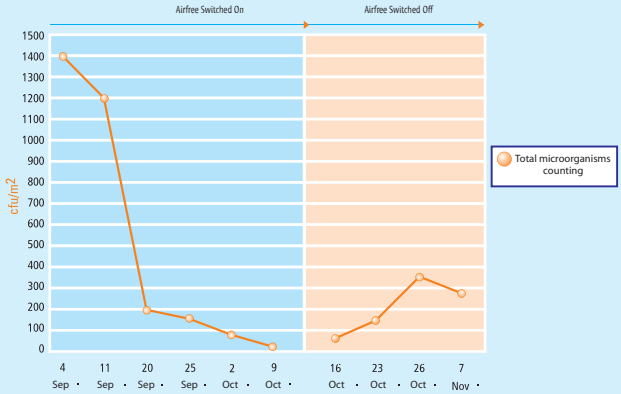
11- .BAGGIO, D. CROCE, J.,ÁCAROS CONTAMINANTES DE AMBIENTES E CAUSADORES DE DOENÇAS ALÉRGICAS NO HOMEM

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

This guide had Cristiane Minussi's collaboration, USP biologist professional responsible for the microbiological nature information.

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