If air purifiers work, why does my doctor not recommend an air purifier to me?

There can be little doubt that most doctors and pulmonologists would agree with the following two statements:

1. Breathing polluted air can be harmful to health and even shorten life expectancy
2. The less pollutants we breathe, the better for our health

Yet many doctors are still reluctant to recommend air purifiers to allergy sufferers or for the protection of vulnerable individuals (such as patients with lung diseases or babies) from the harmful effects of indoor air pollution.

The reluctance of the medical profession to recommend air purifiers per se is understandable in view of the fact that the performance of most devices that are available in the market are not independently or scientifically tested and verified. Moreover, as the air purifier market is not regulated, it is difficult for a doctor to select a "good one" out of the myriad of devices that are being offered, all making similar performance claims. As a result there is still a preference within the medical profession to prescribe traditional medication to alleviate allergy symptoms, in spite of the fact that most allergy experts agree that an "allergen avoidance strategy" is one of the most effective ways to deal with respiratory allergies.

Still, at IQAir we firmly believe that "prevention is better than cure" and that a truly effective air purifier can significantly reduce one's exposure to allergens and harmful pollutants, thus contributing to a healthier lifestyle (without any of the side effects which many prescription drugs have). And although there is no scientific evidence available at present that the use of an air purifier reduces the risk of developing a respiratory allergy, there is plenty of evidence that breathing clean air is better for our health and wellbeing than breathing polluted air.

Unfortunately many (if not most) air purifiers which are currently available in the market are low-cost, mass-produced devices which use inferior components and filtration media or questionable "air cleaning" technologies. The vast majority of these products are simply not capable of cleaning the air effectively over longer periods due to the small amount of room air they circulate or the lack of actual filtration efficiency they offer.

In a market where most air purifiers do not live up to their exaggerated marketing claims, the IQAir Group takes a very different approach to ensure that its products can make a real difference on people's lives. The unique 50-year track record in the filtration industry enables IQAir not only to design and build superior air cleaning systems, but also to offer air cleaning solutions that go far beyond what other brands offer in terms of

a) *actual* performance and
b) *proof* of actual performance

IQAir offers a unique 3-step approach to scientific testing and independent verification of air cleaning performance:

1. Individual Testing

We believe that individual testing is the ultimate quality control and the very best way to ensure that every IQAir room air purifier we manufacture actually meets the advertised performance targets. For that reason IQAir individually tests and certifies every unit's air cleaning performance in terms of:

a) actual filtration efficiency for airborne particulates ≥ 0.3 µm at maximum fan speed and
b) actual airflow at each fan speed

A hand-signed *Certificate of Performance* provides details of the unit's individual test performance. To our knowledge IQAir is currently the only manufacturer worldwide to test 100% of its room air purifiers before they are cleared for sale.

We also equip our authorised IQAir Partners with precision measuring instruments (laser particle counters) which can objectively verify the filtration efficiency of effective air cleaning measures (or the lack of filtration efficiency of ineffective air purifiers).

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2. Independent Testing
IQAir has its air cleaners regularly tested by independent laboratories in accordance with applicable test standards and also in real-life applications. Here are some examples:

Filter Tests in accordance with European Norm EN1822 *by Fiatec GmbH, Germany*. In this test the IQAir HealthPro 250's HyperHEPA filter passes the HEPA class 12/13 filter classification which means that even the smallest airborne particles and microorganisms are removed with an absolute minimum efficiency of 99.5%.

Filter Tests in accordance with ASHRAE 52.2 by *RTI (Research Triangle Institute)* a U.S. government accredited test lab. The institute confirmed that the filtration efficiency of the entire IQAir system is virtually 100% for fine particles (between 0.3 and 10 µm) and also for ultrafine particles (between 0.02 and 0.3 µm).

Research Study in Schools. Over the past decades, the IQAir Group has gained extensive experience in working with government agencies to provide air cleaning technology that significantly improves the air quality in hospitals and schools. A research study published at the *Indoor Air* conference in 2012 confirmed that IQAir filtration systems are able to protect classrooms from up to 96% of outdoor diesel soot, PM 2.5 and ultrafine particles.

3. Scientific Evidence of Actual Benefit
Although individual and independent testing can ensure that IQAir systems perform as advertised and that they can remove pollutants effectively from the air, such tests are not able to show how well IQAir can protect individuals from the harmful effects of contaminated air. Therefore, an air purifier's real benefit can be best measured in terms of the actual protection it offers to the user.

In an independent research study which was published in 2010 by the *American Journal of Infection Control*, it was shown that the use of IQAir systems in hospital wards resulted in a drop of 50% in the number of life-threatening infections (nosocomial invasive apergillosis). The study was conducted at *Singapore General Hospital*, the largest acute tertiary-care teaching hospital in Singapore, over a 2.5 year period with 48 IQAir HealthPro units featuring the unique HyperHEPA technology. The study concluded:

> "…. the installation of portable (IQAir) HEPA filtration units in certain wards as an adjunct infection control measure resulted in a significant drop in the number cases of nosocomial invasive aspergillosis in these wards."
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> "Our findings support the effectiveness of portable (IQAir) HEPA filters in preventing invasive aspergillosis in hospitals."

In view of these research findings, the elaborate tests that were performed on IQAir by independent institutes and the extensive tests which we perform on IQAir systems every day, we can assure our customers that every IQAir system will truly be effective in what it is supposed to do — cleaning the air you breathe.

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