

Dear Readers: This is the free newsletter of the Asthma & Allergy Foundation of America, Texas Chapter. If you do not wish to receive other newsletters from AAFA-TX, please request we remove your address. To subscribe, email your request to [info@aafatexas.org](mailto:info@aafatexas.org). Addresses are never shared. Thank you. Please add new sender's email ([joanhart@aafatexas.org](mailto:joanhart@aafatexas.org)) to your address book to ensure delivery.

**Air It Out – Electronic Version. Vol. 17, Issue 1, #2 January 2010**

Asthma & Allergy Foundation of America, Texas Chapter, 9101 Quarter Horse Lane

Ft. Worth, TX 76123 817-297-3132 888-933-2232 [info@aafatexas.org](mailto:info@aafatexas.org) [www.aafatexas.org](http://www.aafatexas.org)

## WHY IS THERE NO CURE FOR ASTHMA?

\* *Air It Out* asked Dr. Neil Singhanian, MD, who is board-certified in Internal Medicine and Allergy and Immunology, with experience in Biomedical research and now in practice in Arlington and Keller (Allergy & Asthma Centres of the Metroplex, 817-460-7447) for his insight on the **causes of asthma and research toward a cure.**

\* ***Air It Out:*** Dr. Singhanian, many think asthma is a new disease, something that developed in our own lifetime. Yet history tells us asthma has been around for a long time. Many celebrities we're familiar with such as John F. Kennedy, Teddy Roosevelt, Billy Joel, Liza Minnelli, Bob Hope, Coolio, Elizabeth Taylor, Wynonna Judd, Kenny G., Dennis Rodman, Greg Louganis, Jackie Joyner and Jerome Bettis have (had) asthma. We have documented proof that **asthma existed throughout written history.** Notables like Charles Dickens, Oliver Wendell Holmes, King William III of England, Peter the Great of Russia and Lucius Seneca, a Roman orator in the 4<sup>th</sup> century BC, had asthma. What causes asthma? If asthma has been around for thousands of years, **WHY can't our doctors and scientists, with all their resources, cure asthma?**

\* ***Dr. Singhanian:*** Although asthma patients tend to experience similar symptoms such as coughing, wheezing, and shortness of breath, the **cause of these symptoms can vary from person to person.** The inflammation and broncho-spasm (narrowing of the lung airways) that characterize asthma can be **affected by "host" factors**, qualities that are **unique to you** such as genetics/family history, and/or by environmental factors including infections early in life, allergens, air pollution, or other factors. Thus, your own asthma may be very different from your friend or neighbor's asthma in terms of its triggers and response to various treatments. The diverse causes of asthma have made finding a cure challenging.

\* ***Air It Out:*** In your experience, **what causes asthma, the disease?** Many of these celebrities with asthma lived in polluted cities, especially those who lived during or after the Industrial Revolution. Is asthma inherited or is it caused by environmental factors?

\* ***Dr. Singhanian:*** Asthma is **caused by a combination of factors, host and environmental.** Pollution can certainly contribute, but it's not the only factor. Otherwise, asthma would only affect people living in polluted cities and we know that's not the case! We believe that **genetic/host factors predispose** the development of **asthma.** In other words, genetically susceptible individuals develop asthma when exposed to certain environmental factors (such as allergens, pollution and certain infections) over the course of their lifetime.

\* ***Air It Out:*** All indications are that asthma rates are increasing worldwide. Why do you think this is?

\* ***Dr. Singhanian:*** Yes, a variety of studies have shown that asthma and allergic disease are becoming more common. Recently, the National Health and Nutrition Examination Surveys (NHANES) examined this issue and revealed a near-**doubling of asthma prevalence.** Although many explanations for this increase are being considered, one possibility is the **"Hygiene Hypothesis":** increased cleanliness and reduced infection in our modern world have led to unbalanced development of the immune system making us more susceptible to allergies/asthma.

\* ***Air It Out:*** Dr. Singhanian, you have first-hand experience in biomedical research. What do you think are the most **important current research studies** concerning asthma?

\* ***Dr. Singhanian:*** There are a variety of treatments already available that complement standard inhalers (inhaled steroids, albuterol) for the treatment of asthma including allergen immunotherapy and Xolair (Xolair captures IgE, the allergy antibody that can play an important role in asthma). More recent research has tended to focus on **"immunomodulators," medicines** that attack asthma **on a genetic/immune system level** (transcription factor blockers, signaling molecule blockers and enhancers). In other words, they **alter or change the immune system response in asthma.** These medicines are "targeted" in the sense that they focus on certain genetic/immune system components thought to be key in generating asthma. We hope that immunomodulators will ultimately yield better symptom control with fewer side effects than the current generation of asthma medications. This is a very exciting area of research that will hopefully yield benefits in the near future.

\* ***Air It Out:*** Do you think there will be a cure for asthma in the immediate future?

\* ***Dr. Singhanian:*** Although there are no immediate cures on the horizon, I am hopeful that the research mentioned above will ultimately lead to better symptom control and perhaps even a "cure" for the many asthmatics that have to deal with this disease.

For more information about asthma and allergies including the Hygiene Hypothesis, contact [info@aafatexas.org](mailto:info@aafatexas.org) or visit [www.aafatexas.org](http://www.aafatexas.org)

**Upcoming AAFA-TX programs:** 1) Applications and qualifications for the AAFA-TX Kareem Bacchus Merit Scholarships are available on our website [www.aafatexas.org](http://www.aafatexas.org). Completed applications MUST be returned to AAFA-TX before March 15, 2010. 2) **Feb. 15** "Asthma Management & Education" a continuing education program for nurses, respiratory therapists and educators worth 3 CEU. Houston, TX. Instructor: Gwen Carlton, FNP, DNP-BC, AE-C. Pre-registration required. 3) **April 9** "Asthma Management & Education" a continuing education program for nurses, respiratory therapists and educators worth 3 CEU. Chicago, IL. Instructor to be announced. 4) **May 15** "Manage Adolescent and Adult Asthma with a Team Approach: Apply NHLBI Guideline to Your Practice" a CME symposium worth 4.5 category 1 credits (4.5 AOA category 1-B credits and 4.5 ACPE contact hours) for physicians, nurse practitioners, physician assistants, pharmacists, nurses and respiratory therapists. Arlington, TX. Faculty: William Lumry, MD, Robert Rogers, MD, Eric Schmitt, MD, Richard Herrscher, MD. Pre-registration required. Questions? Contact [info@aafatexas.org](mailto:info@aafatexas.org)

Information contained in this publication should not be used as a substitute for responsible professional care to diagnose and treat specific symptoms and illness. Any reference to products and procedures is not an endorsement. AAFA-TX and all parties associated with this Bulletin will not be held responsible for any action taken by readers as a result of this Newsletter.