Air It Out **– Electronic Version. Vol. 15, Issue 3 , #1 March 2008**
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EXERCISE INDUCED ASTHMA: DO YOU HAVE IT?

***** The majority of asthmatics (approximately 70%) have asthma that is triggered by allergies and 80-90% of asthmatics will also experience Exercise Induced Asthma while exercising, but some people **who don't have asthma can also experience the symptoms of asthma during or immediately after vigorous or prolonged physical activity.**

* How can that be? Our bodies are amazing. When we breathe normally 1) air enters the body through the nose and the mouth and travels down the airway passage to the lungs. 2) Nasal hairs and mucus (a slimy lubricating fluid) in the nose filter out dust particles and bacteria and also warm and moisten the air. 3) Air travels down the throat. 4) Air continues down the windpipe or trachea, which branches into right and left bronchi, (tubes that pass from the windpipe to the lungs). 5) The main bronchi divide into smaller bronchi or tubes, then into even smaller tubes called bronchioles. The bronchi contain hair-like projections called cilia that sweep debris out of the lungs, like a filter. 6) Once in the bronchioles, the smallest of the bronchial tubes, the air is at body temperature and 100% humidity, and is (hopefully), completely filtered of dust or other particles. 7) Air sacs called alveoli – (small, thin-walled "balloons" arranged in clusters like grapes) are at the end of the bronchioles in our lungs. During hard and/or prolonged exercise or strenuous activity like hard exercise, dancing, mowing the grass or moving furniture, we tend to breathe through our mouths and this means the air is colder and drier when it reaches our lungs because it misses the first few "stops" on the way to our lungs.
* The muscle bands around the **airways are sensitive to temperature and humidity changes**; they react by contracting or spasming if the incoming air is too cold or dry and this narrows the airways. **These contractions result in asthma symptoms such as coughing, tightness in the chest, wheezing, or unusual fatigue** while exercising or working strenuously, plus an accelerated heart rate and feeling a shortness of breath. If pollen counts, whether from grass, weeds, trees or flowers, are moderately high or high, or if the air is polluted with ozone, dust, exhaust, or smoke, or the air is cold or too dry, or if you have an upper respiratory infection, then the symptoms of exercise induced asthma could be worse.
* If you're affected by EIA (exercise induced asthma), symptoms will usually occur within 5 to 20 minutes after the start of physical activity or 5 to 10 minutes after you've stopped the strenuous activity.
* **Teens and young adults are most often affected with EIA;** an Ohio State University asthma center study discovered 1 in 10 university athletes who didn't have asthma had symptoms of EIA during or after sport activity, and neither gender nor type of sport had any impact on the study results. In other words, male or female athlete, football, track, tennis, baseball or soccer, 10% of these young athletes exhibited EIA symptoms without having asthma.
* Having EIA is not a reason to stop exercising or performing strenuous activity: an active lifestyle is important to both our physical and mental health. **EIA can be treated**. As always, the first step is to visit your physician for a proper diagnosis and then to develop a personal management plan tailored to your needs and activity preferences.
* Your physician **may prescribe** inhaled medications (short-acting $Beta_2$-Agonist or **albuterol**) 15-20 minutes **before** you do strenuous **exercises**.
* Select an activity or sport that works for you, one that fits your management plan. Many doctors feel all exercise or sports activities can work for most asthmatics if the proper management plan is followed; however there are **some sports** or **exercises** that have a greater **tendency to induce EIA** symptoms, exercise that forces your lungs to work hard over a long period of time or that expose your lungs to cold, dry air: running/jogging, soccer, ice hockey, bicycling, rollerblading, skiing, basketball or ice skating.
* **Many** physical activities are **less likely to trigger asthma symptoms**, those that require shorter bursts of energetic breathing. They include baseball, gymnastics, volleyball, football, swimming, climbing stairs, martial arts, walking or doubles tennis.
* **When and where you exercise will affect EIA**. Modify or reduce your level of activity or change locations if there is a high pollen count, if you're near exhaust from cars, you're in cold winter air, you're near strong chemical odors like paints or solvents, you're near cigarette smoke, or the air pollution (ozone levels) is in the orange or red zone, there is heavy wind, or you're not in the "green" zone of your peak flow meter reading.
* To be safe, whether you have exercise induced asthma or whether you're someone who experiences EIA symptoms but doesn't have asthma, **play it safe**. **Before beginning** any **strenuous activity**, if you have a medication plan, follow it; do warm-up or limbering exercises before you begin; check pollen counts and ozone levels – if they're high, stay indoors; if the air is cold and dry, wear a mask or a scarf to cover your nose and mouth; drink plenty of fluids; if you have asthma, keep it in control; if you have GERD, controlling that will reduce or eliminate symptoms; control sinusitis to avoid EIA symptoms; if you feel any signs of EIA symptoms, stop and rest and follow your doctor's directions; always practice a cool-down period after your activity and, if possible, work out with a buddy or friend who is aware of your EIA. Be smart, be safe and be healthy. For more information, contact AAFA-TX.

Upcoming Free AAFA-TX Programs: **1) NEW! Three Academic Scholarships** available for Texas students with asthma. **Application deadline: March 30, 2008**. For full details, criteria and application, please see www.aafatexas.org **2) April 17** "Asthma & Allergy Essentials for Childcare Providers" Better Beginnings Children's Center, Houston, Sarah Nelson, Instructor. For more information, contact AAFA-TX.