

# Newsletter

Winter 2013-2014



Thank you for participating in the WIND Study! Whether you've been a part of the study for two years or just joined recently, we thank you for your involvement. If this is your first newsletter, this is one in a series of newsletters that we send to update you with our progress and to share some information about respiratory health, allergies, and other related topics.

## Our Progress

On November 1<sup>st</sup>, 2013, we started enrolling our third and final group of families from six hospitals across the country. We've enrolled over 100 new participants so far and we continue to conduct long-term follow-up interviews with over 750 families across the country. We receive nasal swabs every day, including clearance swabs, healthcare swabs, and seasonal swabs—so keep them coming!

## In Depth: Acetaminophen

During follow-up interviews, we ask if your child has taken any medications with acetaminophen. Keep reading to learn why we're interested in this topic!

Acetaminophen is an ingredient used to reduce fever and treat mild to moderate pain. It is most commonly known by the brand name Tylenol but it also is found in many other medications. It is thought to work by affecting parts of the brain that receive pain messages and, unlike aspirin or ibuprofen, doesn't have to be taken with food because it is mild on the digestive tract.

Several studies have found an association between taking acetaminophen and future development of childhood asthma. For example, a study published last year showed that increased acetaminophen use in the first 12 months of life was associated with higher risk of asthma development and increased asthma severity in children when they were 5-9 years old.<sup>1</sup> One suggested explanation

is that taking medications with this ingredient increases inflammation in the airways and causes asthma; maternal use of acetaminophen during pregnancy may also have this possible effect.

On the other hand, other studies suggest that it isn't acetaminophen use that increases a child's risk for developing asthma. Instead, children experiencing a respiratory infection are more likely to be given pain relievers *and* it's the respiratory infection that makes the child more likely to develop asthma.<sup>2</sup>

We hope that the WIND study will help to resolve this controversy – and that is why we ask about your use of acetaminophen – and many other possible asthma risk factors!

1. Muc M, Padez C, et al. Exposure to paracetamol and antibiotics in early life and elevated risk of asthma in childhood. *Adv Exp Med Biol* 2013;788:393-400.
2. Sordillo JE, Scirica CV, et al. Prenatal and infant exposure to analgesics (acetaminophen and ibuprofen) and the risk for asthma-related outcomes [abstract]. *Am J Respir Crit Care Med* 187;2013:A3519.

## Contact Us

If you recently switched phone numbers or moved, please let us know so that we can stay in touch. Email or call us anytime!

855-815-WIND (9463)  
windstudy@partners.org  
[www.windstudy.org](http://www.windstudy.org)

We welcome your comments and suggestions about future newsletter topics. Thank you!



## Reminder: Winter Swabs

If we mailed you a Winter Seasonal Swab, please send it back to us soon! (Participants were randomly selected to take a winter swab; not everyone received a winter swab kit in the mail).

Remember to take it when your child **does not** have a breathing problem. If you need a reminder of how to take a nasal swab, please call 1-855-815-9463 or watch the video ([www.windstudy.org](http://www.windstudy.org)).

## Breathing Problem Reports

A major focus of the WIND Study is the breathing problems your child experiences. When your child first enrolled in the WIND study, we asked you to tell us about any breathing problems he/she had experienced in his/her life so far. Then, in follow-up phone interviews every 6 months, we ask about any breathing problems that have happened since the last time we spoke. We also ask you to take a Healthcare Nasal swab every time your child has a breathing problem that requires a healthcare visit.

The WIND Study "Breathing Problem Report" compiles all of these data into a timeline about your child. We hope you will find these reports helpful in keeping track of your child's breathing problems (if any). Please remember that some dates may be approximate and the report will only include breathing problems that you've reported to us, so the more you tell us, the more complete they will be.

We will send you an updated breathing problem report each year, after your child's birthday. Please feel free to share this with your child's primary care provider – and to call or email us if you have any questions!

## Get to Know...Charles Macias



*Dr. Macias believes we can help families know what to expect and how to prepare for the possibility of asthma.*

Charles Macias is one of the site principal investigators in the WIND Study. He is a pediatric emergency medicine physician at Texas Children's Hospital in Houston, one of the 17 hospitals where children have been enrolled in the WIND Study.

Dr. Macias believes that if the scientific

community could better predict the children who will develop asthma, we can collectively improve the patient-centered nature of care, helping families to know what to expect and how to prepare for the possibility of asthma.

In addition to practicing medicine, Dr. Macias serves as the Chief Clinical System Integration Officer at Texas Children's. He provides leadership and support for managing clinical data and data analyses, and works to improve health care processes.

In his free time, Dr. Macias enjoys being with his 2 year old twins. Dr. Macias's hobbies include playing piano, home renovation, wine tasting and theatre.

## Wintry Blast of News!



Last month, Dr. Camargo and his colleagues published a food allergy study in the journal *JAMA Pediatrics*. The study examined how maternal peanut or tree nut consumption during pregnancy is related to the child's risk of developing a peanut or tree nut allergy.

The participants in this large study are the children of female nurses who are part of the ongoing Nurses' Health Study II. The nurses answered questions about their medical history and diet (including information about their usual intake of peanuts, other nuts, and peanut butter) in 1989 and, every 2 years, they provide detailed updates on their health and many lifestyle factors. Recently, the investigators asked them about their children's health and to provide medical records of any doctor-diagnosed food allergies.

Briefly, the researchers found that among mothers without a peanut/tree nut allergy, those who consumed more peanuts/tree nuts during pregnancy were less likely to have children with a peanut/tree nut allergy. Previous research (from much smaller studies and animal models) had suggested the opposite. The good news? It's fine for most pregnant women to eat nuts during pregnancy – and it may even be helpful.

Frazier L, Camargo CA Jr, et al. Prospective study of peripregnancy consumption of peanuts or tree nuts by mothers and the risk of peanut or tree nut allergy in their offspring. *JAMA Pediatrics* Published online Dec 23 2013.