

Allergy & Asthma News

CONNECTING CANADIANS WITH ANAPHYLAXIS, ALLERGIES AND ASTHMA

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Loss of our ancient friends: facing the consequences of our modern microbial phobia

Rozlyn C.T. Boutin, BSc., Year 2 UBC MD/PhD Student



In 2014, Rozlyn worked with researchers on the Peanut Project at Carleton University. Their group wanted to know what might be driving the recently observed increase in allergies, specifically peanut allergies, in Canada. Is it the toxins in the environment? Or is it our overzealous application of hygienic and other measures, such as antibiotic use, causing changes to the immune system-priming microbiota in the gut?

Rozlyn is currently an MD/PhD student at UBC and recently had a paper published about her graduate research on the microbiota and pediatric asthma. <http://link.springer.com/article/10.1007/s40521-016-0087-z>

Affluent countries such as Canada and the United States have recently seen an epidemic rise in the prevalence of asthma, food, and other allergies, many of which are currently incurable. This “allergy epidemic”¹ is now beginning to spread across the globe as underdeveloped countries gradually follow in the footsteps of developed countries, adopting their diets, sanitation practices, cultural norms, and economics. Food allergies, including peanut and tree nut allergies, represent an especially worrisome group of allergies increasingly threatening human health and burdening health care systems due to their potential fatality risk and persistence into adulthood.

Today, 6-8% of Canadians self-report having a food allergy, with the highest rates of allergy seen among pediatric populations under the age of 18². The latter is a particularly concerning statistic when we consider that the pediatric population is highly vulnerable to inadvertent exposure to allergens and may be less able or willing to self-administer a life-saving EpiPen® injection than the adult population during an anaphylactic attack.

The propensity or likelihood of an individual to develop a food allergy is influenced by several factors, including genetics and timing of food introduction to the diet. However, given the rapidity with which the prevalence of food and other allergies has risen over the past few decades, researchers have begun to focus primarily on investigating the role of various environmental factors in influencing the development of allergies. Through this work, it is becoming increasingly evident that early life environmental factors that alter the normal colonization of the body, by microorganisms that live in harmony with the body, are important etiological factors in the development and expression of food and other allergies. These microorganisms, collectively referred to as the “microbiota” and consisting primarily of bacteria, are in fact crucial to the normal development of the human immune system and to the maintenance of human health and physiology. Humans rely on their gut microbiota for important functions such as the production of vitamins and protection against harmful bacteria. Supporting what is known as the “hygiene hypothesis”, evidence suggests that these bacteria are also important for essentially ‘training’ the immune system to be able to correctly identify harmful from harmless substances in early infancy (continued on page 3)

Allergy/Asthma Information Association Mission Statement

The AAIA creates safer environments and improves quality of life for Canadians affected by allergy, asthma, and anaphylaxis by empowering individuals and providing education, leadership, and a national voice.

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Thank you to Dr. Antony Ham Pong, MB, BS, FRCP(C), a member of the CSACI, for reviewing this edition of the Allergy & Asthma News for medical accuracy.

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Contact Information:

AAIA National Office

17 Four Seasons Place
Suite 200
Toronto, Ontario M9B 6E6
Toll free 1-800-611-7011
Phone 416-621-4571
Fax 416-621-5034
E-mail: admin@aaia.ca
Website: www.aaia.ca

Sharon Lee, MA, CFRE

AAIA Executive Director

Tel: 1-800-611-7011
E-mail: slee@aaia.ca

AAIA BC/Yukon

4730 Redridge Road
Kelowna, BC V1W 3A6
Tel.: (250) 764-7507
Fax: (250) 764-7587
Toll free: 1-877-500-2242
E-mail: bc@aaia.ca

AAIA Prairies/NWT/Nunavut

16531-114 Street NW
Edmonton AB T5X 3V6
Tel./Fax: (780) 456-6651
Toll free: 1-866-456-6651
E-mail: prairies@aaia.ca

AAIA Ontario

Toll Free: 1-800-611-7011
E-mail: ontario@aaia.ca

AAIA Quebec

Toll free: 1-800-611-7011
E-mail: quebec@aaia.ca

AAIA Atlantic

Toll Free: 1-800-611-7011
E-mail: atlantic@aaia.ca



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(continued from page 1)

cy. The hygiene hypothesis suggests that the adoption of increased hygiene measures and practices aimed at reducing early life microbial exposure in affluent countries may be inadvertently limiting exposure to helpful bacteria essential to the normal development of the immune system. As a result, the body erroneously identifies harmless food or other products as harmful and initiates an overzealous inflammatory immune response against these products when it encounters them. In turn, this inflammatory response can damage healthy tissues and cause distress to the individual affected.

The founding community of healthy microbes that colonizes the human body is largely established at birth. This microbial community continues to grow and diversify until about three years of age, at which point the microbiota is considered to be “adult-like” and its composition remains relatively stable. Thus, during early life there is a window during which the microbiota is particularly susceptible to environmental influences capable of altering its composition. Incidentally, this window coincides with important developmental and cellular maturation processes occurring in the human immune system. It is therefore conceivable that early life factors capable of influencing microbial exposure, such as birth order, breastfeeding, birth method, having a family pet, living on a farm, and diet^{3,4}, may consequently have an effect on immune system development. Indeed, many epidemiological and mouse model studies have been published linking such factors to protection against or vulnerability to the later development of allergic and autoimmune diseases. Having an older sibling and/or pet, attending day care, being born vaginally, breastfeeding, and living on a farm are all factors that can contribute to the protection of an infant against the later development of an allergy.

One important practice used especially in western countries to limit or reduce bacterial exposure is the prescription and administration of antibiotics. There is no question that antibiotics save lives. However, their sometimes overzealous prescription and use for conditions that do not respond to antibiotics, especially in young children, have meant that we are now dealing with new health care problems such as antibiotic resistant bacteria. These over-prescription practices may also be contributing to the epidemic rise in allergic and autoimmune diseases we are now beginning to see across the globe. Research suggests that although cold and flu or flu-like symptoms originating from viral and allergic sources (such as cat dander, pollen, and dust) cannot be treated with antibiotics, physicians continue to prescribe them for ailments such as non-bacterial ear aches (otitis media), the common cold, bronchitis, and upper respiratory tract infections⁵. Even when their prescription is warranted, antibiotics not only kill the harmful bacteria for which they were prescribed but also have the unwanted side effect of killing off a huge proportion of the “good” bacteria throughout the body that help to train the immune system, prevent allergy, and promote the health of their host, especially early in life^{6,7}. While population-based studies have found conflicting results with regards to the associations between early life antibiotic exposure and the later development of allergy, it is clear that the early life microbiota plays a central role in determining allergic outcomes later in life. Thus, physicians and parents are faced with an important cost-benefit analysis when deciding whether to prescribe or administer an antibiotic. In the case of a true bacterial infection, the cost-benefit analysis between having a child suffer from a curable bacterial infection or slightly increasing their risk of developing an allergy later in life is heavily in favour of taking the antibiotic, but in cases where antibiotics are unnecessarily prescribed, physicians and parents may want to give pause. Moreover, the prescription of narrow-spectrum antibiotics, as often as possible when treating true bacterial infections, could help to reduce the risks of antibiotic use with regards to allergy development. Narrow-spectrum antibiotics target certain types of harmful bacteria rather than several types of good and bad bacteria simultaneously.

Given the emerging importance of the early life microbiome in influencing human health, it is imperative that physicians and the public alike take an interest in understanding the importance of judicious antibiotic prescription use and perhaps re-think the way we conceive of microbes and their effects on our health.

References

1. Prescott, S. & Allen, K. J. Food allergy: Riding the second wave of the allergy epidemic. *Pediatr. Allergy Immunol.* **22**, 155–160 (2011).
2. Soller, L. *et al.* Overall prevalence of self-reported food allergy in Canada. *J. Allergy Clin. Immunol.* **130**, 986–988 (2012).
3. Kuo, C.-H. *et al.* Early life exposure to antibiotics and the risk of childhood allergic diseases: an update from the perspective of the hygiene hypothesis. *J. Microbiol. Immunol. Infect.* **46**, 320–9 (2013).
4. Penders, J. *et al.* Factors influencing the composition of the intestinal microbiota in early infancy. *Pediatrics* **118**, 511–21 (2006).

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5. Nyquist, A. C., Gonzales, R., Steiner, J. F. & Sande, M. A. Antibiotic prescribing for children with colds, upper respiratory tract infections, and bronchitis. *JAMA* **279**, 875–7 (1998).
6. Cao, S., Feehley, T. J. & Nagler, C. R. The role of commensal bacteria in the regulation of sensitization to food allergens. *FEBS Lett.* **588**, 4258–66 (2014).
7. Stefka, A. T. et al. Commensal bacteria protect against food allergen sensitization. *Proc. Natl. Acad. Sci.* **111**, 13145–50 (2014).

For additional information on the topic of the microbiota of the gut, read “Let Them Eat Dirt – Saving your Child from an Oversanitized World” by B. Brett Finlay, PhD and Marie-Claire Arrieta, PhD. This book, directed mainly towards parents, is about the importance of the early life microbiome in childhood health and why an imbalance in those microbes can lead to obesity, diabetes, and asthma, among other chronic conditions; and how – from conception on – parents can take concrete steps to positively impact their child’s long-term health. <http://letthemeatdirt.com>

Health on the Net

By Lorraine Gosselin

Skin test for allergies to amoxicillin in children

“Researchers at Montreal’s McGill University Health Centre have found that the skin test used to check for allergies to one of the most commonly prescribed antibiotics in children, amoxicillin, is generally useless.” For more details:

<http://montrealgazette.com/news/local-news/skin-test-for-allergies-to-amoxicillin-in-children-is-useless-muhc-study>

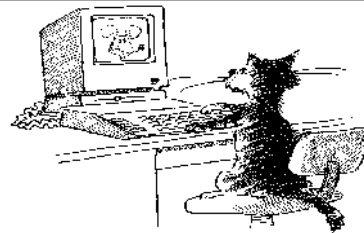
Are hazardous chemicals in your cosmetics?

From Berkeley University of California—which chemicals should worry us in cosmetics and personal care? They are interested in phthalates, parabens, triclosan, and oxybenzone as they can disrupt the normal hormones in our bodies. Some can cause respiratory problems, such as asthma. Their recent research has focused on teenage girls.

http://www.berkeleywellness.com/healthy-community/environmental-health/article/are-hazardous-chemicals-your-cosmetics?s=EFA_160414_AA1&st=email&ap=ed
(<http://tinyurl.com/jlnlzov>)

You might also like to consult Health Canada’s notice on risks related to certain preservatives in cosmetics, non-prescription and natural health products:

<http://healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2016/58290a-eng.php>



Are Online Doctors Any Good?

A mixed response—in some minor cases, it might prove useful. Read more here:

www.berkeleywellness.com/healthy-community/health-care-policy/article/are-online-doctors-any-good?s=EFA_160723_AA1&st=email&ap=ed

The safe use of cookware

A few recent concerns by some friends about the great “danger” of aluminum cookware prompted this search on Health Canada’s site, before they threw away all their pots and pans:

<http://healthycanadians.gc.ca/product-safety-secure-produits/consumer-consommation/education/household-menagers/cook-cuisinier-eng.php>

Are poinsettia plants poisonous?

From the Mayo Clinic: “Poinsettia plants are less toxic than once believed.” See what to do for mild discomfort here www.mayoclinic.org/healthy-lifestyle/infant-and-toddler-health/expert-answers/poinsettia-plants/faq-20058304

Disclaimer: although these sites have been reviewed, the AAIA does not guarantee the medical accuracy of their contents.

*On behalf of everyone at AAIA, we would like to wish you a very
Happy Holiday Season and best wishes for 2017!
May you enjoy good health and happiness.*

Asthma Care in Canada Study

The Allergy Asthma Information Association has been invited to participate in an Asthma Care in Canada study to determine asthma patients' experiences with asthma care across Canada.

University of Alberta asthma researcher, Dr. Dilini Vethanayagam, leads this important study. Data compiled from this study hopes to determine how Canada's health care system works for patients with asthma. Factors include how health care delivery across Canada impacts asthma management and quality of life. A positive outcome of this study would be that learning about health care delivery across Canada may help to improve asthma management over time.

The survey is taken online, and will require about ten minutes of your time. All data remains anonymous.

If you are an adult with asthma (18 years or older) and wish to participate in this important study, please send an e-mail to Kerri MacKay, research assistant to Dr. Vethanayagam. Kerri's e-mail is kerriontheprairies@gmail.com

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Educating family and friends about food allergies

By Darlene Llewellyn-Konency, National Administrator AAIA

Once you have received the diagnosis of food allergies, you then have to start trying to educate those around you about the challenges you are going to be facing. The word “try” is the best word because you are going to find that some people will get it very easily and then there are others, that no matter what you say, won't want to understand the issues you are going to be dealing with.

Some of the people around you will accept that there are going to be changes that need to be made and be extremely thankful for those people. You are also going to have to deal with the people that tell you that you will just have to deal with it and you need to do it yourself. Dealing with food allergies isn't something that you can deal with yourself because no matter where you go you are going to be faced with a possible issue of cross-contamination depending on your allergies. Having food allergies can mean that a missed step could result in an anaphylactic reaction.

Some of the challenges or hurtful comments you may face from friends and/or family are:

- Your allergies are all in your head.
- You really don't have food allergies, you just claim to have them.
- Other people have health issues as well so you need to just deal with it yourself and don't talk about it.
- You ate it before so why can't you eat it now. This comment is really true for someone that has adult on-set anaphylaxis. Yes, they have been able to eat the food before but have developed anaphylaxis to it later in life.
- Don't talk about your allergies in public because it just shows there is something wrong with you.
- You may find that someone will even try and feed you something you are allergic to so that they can prove to you that you aren't allergic to it.
- Someone may say, “No one really knows how you are going to react to that food.”

All of these comments just show that the person doesn't understand what you are dealing with. Being able to educate people on the issues of food allergies is very important as your life does depend on it. If you can't educate the people around you, it may be difficult but you may have to avoid being around them where food is involved. Not everyone is going to totally understand the issues and challenges that someone with food allergies deals with on a daily basis.

Possible responses to hurtful comments:

- I'm sorry that you don't understand my allergies but I would be more than willing to explain them to you so that you can have a better understanding of what it's like to have food allergies.
- I didn't ask to have food allergies.
- I would like to show you how to use my auto-injector so that if I do have a reaction when you are around you will understand how to administer it.
- It is true that I didn't have food allergies before and they have just appeared. Anyone can get them at any age.
- I understand other people have health issues and I still do need to talk about my food allergies so that my life isn't at risk by a simple mistake.
- If you have health issues that you would like to talk about, I am more than willing to listen to you in return for you listening to me.

Points to remember:

- Always have your un-expired auto-injector with you. (If you don't have it, you don't eat!)
- When you are out, remember to let servers know what you are allergic to even if you have told the server on a previous visit.
- If you are going to visit friends, make sure that they are aware of your allergies and don't be afraid of reminding them beforehand what your specific allergies are.
- Ensure that your family and friends understand what you are allergic to and that they know how to use your auto-injector.

Having food allergies can be a challenge at the best of times, but when people around you don't understand them or don't want to deal with them, it can make it even harder. Know who understands your allergies and value them, because they are the ones you need to spend your time with.

Best of Our Holiday Season Tips

By Lilly Byrtus, Regional Coordinator Prairies
/NWT/Nunavut

This list is a compilation of holiday season tips that have been shared with AAIA members in the past.

In an effort to stay healthy during the upcoming festive season, take control of the holidays!

- Choose which events to attend based on how safe or allergy-friendly the event will be.
- Is food being served?
- Do pets live there?
- Is there a real tree, or an artificial one? (each has the potential to cause allergic reactions so judge accordingly)
- What other potential allergens/irritants are in the environment (scented candles, perfumes, fire-place/wood smoke, cigarette smoke)?
- Always have all medications close to you – asthma rescue inhalers, epinephrine auto-injectors, antihistamines.
- Avoid eating food without an ingredient list – person who made the food may not recall the ingredients correctly, and may not be aware of cross-contamination concerns.
- Beware of holiday baking as nuts are used more frequently than at other times of the year.
- Don't be afraid to say "No thanks", and for children with food allergies, teach them to say "No thanks" rather than risk an allergic reaction.
- Always wash hands before and after eating.
- Beware of "allergy-laden" handshakes, kisses and hugs. Avoid them! (Other guests may have been eating peanuts, nuts, shrimp, etc.)
- Consider non-alcoholic beverages as alcohol may facilitate rapid absorption of food allergens, accelerating allergic reactions. *Also remember that some alcoholic beverages contain allergens, eg. nuts, eggs, milk, wheat/gluten or sulphites.
- Have a discussion with your doctor, or your child's doctor about the possibility of "pre-medicating" to prevent symptoms during the festive event (eg. asthma medication, antihistamine).
- Consider the common practise of eating at home prior to attending a dinner function, or bring your own 'safe' food to eat.

Above all, enjoy the holiday season and stay safe and healthy!

*AAIA Restaurant and Food Services Presentation—Slide 27—Alcoholic Beverages

AAIA Restaurant and Food Services Presentation

Supporting the restaurant and food service sector

The Allergy/Asthma Information Association (AAIA) wishes to inform you of their AAIA Restaurant and Food Services Presentation in support of the restaurant and food service sector. This is a PowerPoint slide presentation consisting of 36 slides which provide allergy awareness and training for management and staff in the restaurant and food service industry. Here is an example of one our PowerPoint slides from this presentation.

Alcoholic Beverages (Slide 27)

- **Alcohol with nuts:** eg. Amaretto (almond); Bombay Sapphire Gin (almond); Frangelico (hazelnut); Kahana Royale (macadamia); Nocino (walnut); Southern Comfort (nut derivative); some vodkas mixed with nut ingredients...
- **Alcohol with eggs:** Bols Advokat, some wines*...
- **Alcohol with milk:** creamy liqueurs, Baileys...
- **Alcohol with wheat/gluten:** beer, whiskey, gin...
- **Alcohol with sulphites:** beer, wine, cider...

Note: Ingredients can change and this is not a complete list!



For more information or to purchase this PowerPoint presentation contact AAIA at admin@aaia.ca . Cost \$150.

Be the Change and Make a Difference!

We know that parents today are frequently faced with a major predicament. So many children have food allergies and for many years, there was little understanding about why the number of children with food allergies was increasing, no idea about how to prevent them, and few options for treatment beyond avoiding the foods.

As the Holiday Season approaches, we ask that you remember the Allergy/Asthma Information Association (AAIA) in your holiday plans. While preparing for joyous holiday celebrations with your friends and family, it's important to stop and reflect on the joy and blessings in your own life while also being aware that not everyone is so fortunate.

AAIA's work has a powerful impact not only on the people that we work with and support directly, but also on the larger community as a whole in our education and awareness campaigns.

The Allergy/Asthma Information Association (AAIA) is pleased to announce two research partnership projects with Allied Health Professionals and prominent Researchers, which we believe will bring us closer in finding a cure or prevention of allergies and asthma.

- *The Economic Impact of Food Allergy in Canada.*
The purpose of this research is to understand the economic impact to the Canadian economy when time is taken away from productivity whenever someone experiences or is caring for someone who is recovering from an allergic or asthmatic attack. This project's aim is to encourage more research dollars in the pursuit of finding a cure for allergies and asthma.
- *Making Sense of Allergies.*
The purpose of this research is to educate Family Physicians on how to better diagnose an allergy before making a referral to a specialist, as Allergists specialize in different areas within the many allergic and asthmatic conditions experienced by individuals. This project's aim is to have Family Physicians utilize available tests and resources to assess an individual and direct them with a referral to an appropriate specialist. This will then eliminate the wait time that it takes in order to see a specialist and begin the journey of managing one's allergy and asthma.

We are completely reliant on charitable donations in order to be able to continue to provide these services. That is why we ask you to remember AAIA with a charitable gift in support of our work in order to be able to continue to provide services and to eventually find a cure. Any amount you can share will be greatly appreciated and put to good use.

AAIA has simplified the donation procedure, allowing supporters to donate online, by phone or by mail. Visit www.aaia.ca or fax 416-621-5034 to make a gift using a credit card, or send a cheque to 17 Four Seasons Place, Suite 200, Toronto, ON, M9B 6E6.

What better way to celebrate the upcoming Holiday Season, than by sharing what you have with neighbours who are in need of assistance in managing their allergies and asthma. Your generosity will have a positive impact on people who have to navigate their way during this festive season. Every gift matters.

Sincerely,



Sharon Lee
Executive Director

