Optimizing Metabolism
by Ingrid Kohlstadt MD, MPH
www.INGRIDients.com

Preparing for the Food Allergy Storm

Introduction
The view from my office window was white. No one had pulled a blind separating me from historic Annapolis; pearl, dove, and ivory were the visual symphony conducted by the winter storm, clouds hung low, rich with promise of more snow, and icicles clung to the awning like fangs in the mouth of Winter herself. So here I was, marveling at the storm that exceeded my collective childhood memories, grateful to have been prepared for it thus far, and questioning the influence of global climate change.

I was also writing this column, urging readers to prepare for a different kind of storm: the unexplained epidemic of severe, sometimes fatal food allergies.

Epidemiology
The population is becoming more allergic. The UK National Health Service’s recent release reported a sharp rise in the number of people with fatal allergies amidst a 15-year annual rise in allergy reporting. Greater general awareness of allergies increases reporting, but cannot explain these numbers, especially the rise in fatalities.

There are more data. Prescriptions for epinephrine injectors (EpiPens) increased by 700% in 13 years, and hospital admission in the UK increased by a quarter. The demographics have changed: no longer is allergy a childhood condition. An increased number of adults, especially women in their early 50s, are developing allergies for the first time. Foods they had eaten for their entire lives are now causing them severe allergic reactions.

The trend is also occurring in the US. The food allergy epidemic is not limited to IgE-mediated (type 1) reactions, those associated with anaphylaxis. Prevalence of celiac disease, mediated by IgG and other immune reactions, is also increasing. This food allergy, unlike most, can be evaluated with a blood test.

Probing the Biologic Basis
There are likely to be many predisposing factors in our environment. Mercury as a pollutant has been shown to be a factor, and its presence in our environment is increasing. Diets of poor quality have trans fats, woefully inadequate fiber, excessive refined carbohydrates, insufficient antioxidants, and few polyphenolic compounds. Changes in agricultural practices can make the same whole foods more allergenic than they were before. The high usage of ever-stronger heartburn medications is likely to contribute, because immunogenic proteins are only properly digested with a low gastric pH.

Ten Practical Prevention Steps
The UK data reports the most common food triggers for IgE-mediated allergies to be eggs, nuts, fish, dairy products, fruits, and vegetables. An established allergy to a food, preferably confirmed by diagnostic testing, requires long-term, often lifelong, avoidance of that food.

Prevention does not involve eliminating potentially allergenic, often healthful foods. However, people who do not have established food allergies and want to protect against them can take several reasonable steps with high benefits and low cost of time, health risk, and money.

• Optimize vitamin D, which has been shown to be immunomodulating.
• Eat sufficient omega-3 fats to protect intestinal cells. Eliminate trans fats.
• Incorporate prebiotics and probiotics into the diet itself; and if that is not possible, supplement with fiber and probiotic supplements. Healthful microorganisms work in several ways to protect the integrity of the gastrointestinal tract and its large immune system.
• Eat lots of carbohydrates, which should be all the colors of the rainbow. Eliminate refined carbohydrates such as added sugar and white breads. The naturally occurring colorful components of foods, many of them bioactive
polyphenolic compounds, can stabilize the mast cells associated with allergies. In contrast, starches in high quantities prime the intestine for allergenic responses.

- Optimize mineral intake. As a rule of thumb, the body replete with minerals absorbs fewer metal toxins. Since mercury promotes food allergies and selenium can block its both its absorption and its actions in the body, selenium supplementation may be especially beneficial.
- Stay hydrated so that linings throughout the body are hydrated. In addition to drinking fluids, breathe them: use a room humidifier at night to humidify the air, but be careful not to encourage mildew.
- Avoid breathing pollutants indoors and out. The lungs respond differently to potential allergen exposures than the intestines do. Scientists determine which of the millions of synthetic chemicals are detrimental to human health in part by studying their effects in the marine ecosystem, where chemicals travel through water rather than air and many species have gills instead of lungs. I recommend a high-end HEPA filter for those with even the slightest allergies to indoor air pollutants.
- Do not take antihistamines (H1 blockers), even over-the-counter medications, without considering the side effects. Two frequently overlooked side effects are that (1) these medications are drying, and drying out the body’s tissues makes allergies of all kinds worse long-term; (2) antihistamines block the satiety hormone leptin, thereby increasing appetite and promoting weight gain, which may also make allergies worse.
- Don’t take medication for heartburn such as H2 blockers and proton pump inhibitors with any frequency without first considering the potential side effects. Stomach acid is essential for digestion, and blocking it reduces the absorption of several nutrients, among them protein. While protein insufficiency can be a consideration for some people, the primary concern is the poorly digested protein then entering the immune-cell-rich small intestines and promoting food allergies.
- Early detection of food allergies, especially gluten sensitivity, can help prompt treatment.

Conclusion

More people across continents are developing allergies, and the onset is not just in childhood. The 15-year trend is unexplained. However, there are steps to take to reduce sensitization to healthful foods and prepare for the coming “allergenic” blizzard.

Ingrid Kohlstadt, MD, MPH, is an FDA Commissioner’s Fellow, using diet to improve drug safety. She has been elected a Fellow of the American College of Nutrition and is an associate at the Johns Hopkins School of Public Health. She is the founder and chief medical officer of INGRIDients Inc., editing Food and Nutrients in Disease Management (CRC Press, 2009) and Scientific Evidence for Musculoskeletal, Bariatric and Sports Nutrition (CRC Press, 2006).

Disclaimer: The views expressed in this article are her own and do not necessarily reflect the views of the FDA.

---

College Pharmacy


In an industry that has evolved continuously over the last few decades, College Pharmacy has made it our mission to develop and provide high quality formulations and services to healthcare professionals and their patients. Since 1974, we have been dedicated to making this mission a reality...every day, every time.

Learn More About College Pharmacy’s Professional Compounding Services.
Request a Compounding Quick Guide & Packet Tailored to Your Practice Needs.
Toll-Free Tel: (800) 888-9358, ext. 182 Email: drhotline@collegepharmacy.com

Comprehensive Environmental Medicine Formulations

From compounded sterile formulations to pharmaceutical-grade commercial supplements, College Pharmacy is your complete health & wellness resource

✈ Low Dose Allergens (LDA)
✈ Custom Allergens (Injectable & SL Drops)
✈ Chelation & Heavy Metal Detox
✈ Mineral Replacement Formulas
✈ Specialty Injectables & IV Protocols
✈ Myers’ Cocktail, Gaby Formula
✈ Vitamin C, Alpha-Lipoic Acid
✈ Nutritional Supplement Support

15% Off Your Next Compounded Order. ALL Compounded Formulas!
Limit 1x Use. Code: TL0030 Exp: 7/31/10

Why Choose College Pharmacy?
Over 35 Years of Experience
Comprehensive Compounding
State-of-the-Art Facilities
USP 795 & 797 Compliant
Pcetency & Sterility Testing
Endotoxin & Fungal Testing

TOWNSEND LETTER – JUNE 2010