

Investment in research saves lives and money



facts about:

Food Allergies

"If you think research is expensive, try disease."

- Mary Lasker 1901-1994

Today:

- An estimated 15 million Americans suffer from food allergies.*
- In 2012, 5.6% of Americans under the age of 18, or 4.1 million children, reported having a food allergy.*
- Among children with food allergies, 38.7% suffer from severe reactions annually and 30.4% have allergies to multiple foods.†
- An estimated 90% of children and 50% of adults with asthma also have food allergies.‡
- Food allergies among children increased by almost 50% between 1997 and 2011.*

* CENTERS FOR DISEASE CONTROL AND PREVENTION <WWW.CDC.GOV>
 † GUPTA, R., ET. AL. JAMA PEDIATR, 2013. 167(11):1083.
 ‡ GUPTA, R., ET. AL. PEDIATRICS, 2011. 128(1):E9-E17.
 ^ ASTHMA AND ALLERGY FOUNDATION OF AMERICA <WWW.AAFA.ORG>

The Cost:

- The total economic burden of childhood food allergies in the U.S. was estimated to be \$24.8 billion in 2012.°
- The out-of-pocket costs for families with a child with food allergies totaled \$5.5 billion in 2012. On average, 31% of this amount was due to the increased cost of specialized food.°
- The direct medical costs of children with food allergies, including emergency department (ED) visits, hospitalizations, and clinician appointments, was over \$4 billion in 2012.°
- The majority of the economic burden of food allergies falls on the afflicted families. In 2012, families were responsible for \$20.5 billion in direct and indirect costs.°

SAVING LIVES
SAVING MONEY

HOW RESEARCH SAVES LIVES:

- A National Institute of Allergy and Infectious Diseases (NIAID) study found an 81% reduction in the prevalence of peanut allergies for children who consumed peanuts early and often in life. The results from this LEAP study, co-funded by Food Allergy Research & Education (FARE), has led to interim guidance on early introduction of peanuts to help prevent the development of peanut allergy.*
- Food allergies are the most common cause of anaphylaxis outside of a hospital setting. These severe allergic reactions can include loss of consciousness, facial and windpipe swelling, difficulty breathing, confusion, and chest pain. Anaphylaxis can become fatal within minutes if untreated. Epinephrine, often administered using an epinephrine auto-injector, can be used to reverse the symptoms of anaphylaxis, providing time to seek medical attention for this life-threatening event.‡

HOW RESEARCH SAVES MONEY:

- Every three minutes, a food reaction sends someone to the ED in the U.S. In 2011, there were 388,000 ED visits due to food allergies. Children account for 38%, or 77,000 visits. Reducing the needed medical care for children with food allergies by just 10% could save as much as \$400 million per year in direct medical costs.°°
- According to research published in 2014, 43% of individuals who received epinephrine for anaphylaxis when they arrived at the emergency department (ED) were admitted. However, only 17% of individuals who received epinephrine *before* their arrival to the ED were admitted. The cost of hospitalizations for severe food allergy reactions was more than \$25.5 million in 2007. Immediate injection of epinephrine in response to anaphylaxis will not only save lives, but also greatly reduce costly hospitalizations.†‡

patient advocate:

Name: Trish and Marysa Gavankar
 Age: 46 and 13
 Condition: Food Allergies



Trish Gavankar, a registered nurse from North Carolina, got her first introduction to food allergies when her daughter Marysa was born. At 4 months, Trish noticed that her daughter was not gaining weight and would react negatively to all food- even new food introduced via breast milk. After many frustrating, sleepless months of limited answers from the doctors, she decided to try and feed her daughter yogurt in an attempt to give her some nutrition and protein. That's when things got even worse. Immediately upon eating the yogurt, Marysa started rubbing her eyes and screaming and blisters broke out all over her face. "Even with my extensive medical training, it was like a waking nightmare," Trish remembers. After more tests and agonizing doctor visits, Marysa was diagnosed with nearly 20 food allergies.

That was 13 years ago. Although food labeling laws and awareness have improved the lives of those with life-threatening food allergies, the Gavankar family, and many like them, still live in constant fear of the next allergen exposure. Her family is prepared to immediately inject epinephrine at all times and even takes their own food with them everywhere to reduce the risk of reactions.

Trish has become a very passionate advocate for research. She says, "Hope is the best gift I can give my child, and research gives us hope." Trish, who advises individuals and families with food allergies and sensitivities, is very active with Food Allergy Research and Education (FARE) and hopes that over time, families with food allergies will no longer have to suffer. Her message for those without food allergies looking for a way to help is to listen to those involved in the food allergy community and what their needs are, "It doesn't take much to be a hero."

* NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES <WWW.NIH.NIAID.GOV>
 † FOOD ALLERGY RESEARCH & EDUCATION <WWW.FOODALLERGY.ORG>
 ‡ GUPTA, R., ET. AL. JAMA PEDIATR, 2013. 167(11):1083.
 ° CLARK, S., ET. AL. J ALLERGY CLIN IMMUN, 2011. 127(3):682-883.
 ° PATEL, D.A. ET. AL. J ALLERGY CLIN IMMUN, 2011. 128(1):110-115.
 † AMERICAN ACADEMY OF ALLERGY ASTHMA & IMMUNOLOGY <WWW.AAAAI.ORG>

facts about: } Food Allergies

Hope for the Future:

- ❑ Researchers have discovered the cause of eosinophilic esophagitis (EoE), a food allergy that has been traditionally difficult to treat. In a National Institutes of Health funded study, researchers conducted a genomic analysis of DNA collected from afflicted individuals. Utilizing this information, researchers and scientists will be able to make a directed approach to developing a cure for EoE.*
- ❑ Currently, there are no diagnostic tests available to analyze the severity of an individual's food allergy. An "oral food challenge," where an individual ingests allergens under medical observation, is the gold standard for diagnosing a clinical food allergy, but conducting this procedure may not always be feasible. Researchers at Mount Sinai in New York have produced promising results while assessing a new type of blood test in the developmental stages- basophil activation testing (BAT). In the research, setting scientists have found that BAT can not only tell doctors the type of allergy, but also the severity of the allergy, greatly increasing diagnostic capabilities.^
- ❑ A recent study identified gut bacteria that protects against food allergy. In this study, funded by FARE, scientists identified a common bacteria found in the digestive system, which when introduced into a mouse model, successfully prevented the allergens from entering the blood stream. This would prevent individuals with food allergies from having reactions when they ingest their allergen, which could lead to a promising new treatment path through probiotic therapy.*

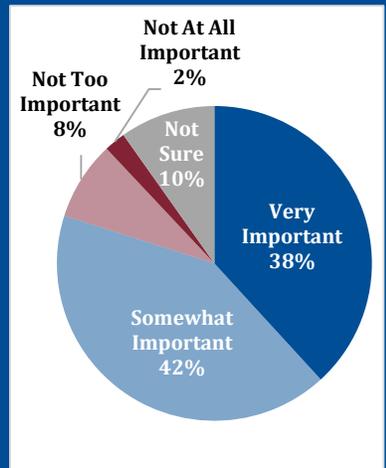
* KOTTYAN, L. NATURE GEN, 2014. 46:895-900.

^ SONG, Y., ET. AL. ANN ALLERGASTHMA IM, 2015. 114(4):319-326.

+ FOOD ALLERGY RESEARCH & EDUCATION <WWW.FOODALLERGY.ORG>

National Poll: Americans Believe Scientists Should Have a Voice in Policy

How important is it that elected officials at all levels listen to the advice from scientists?

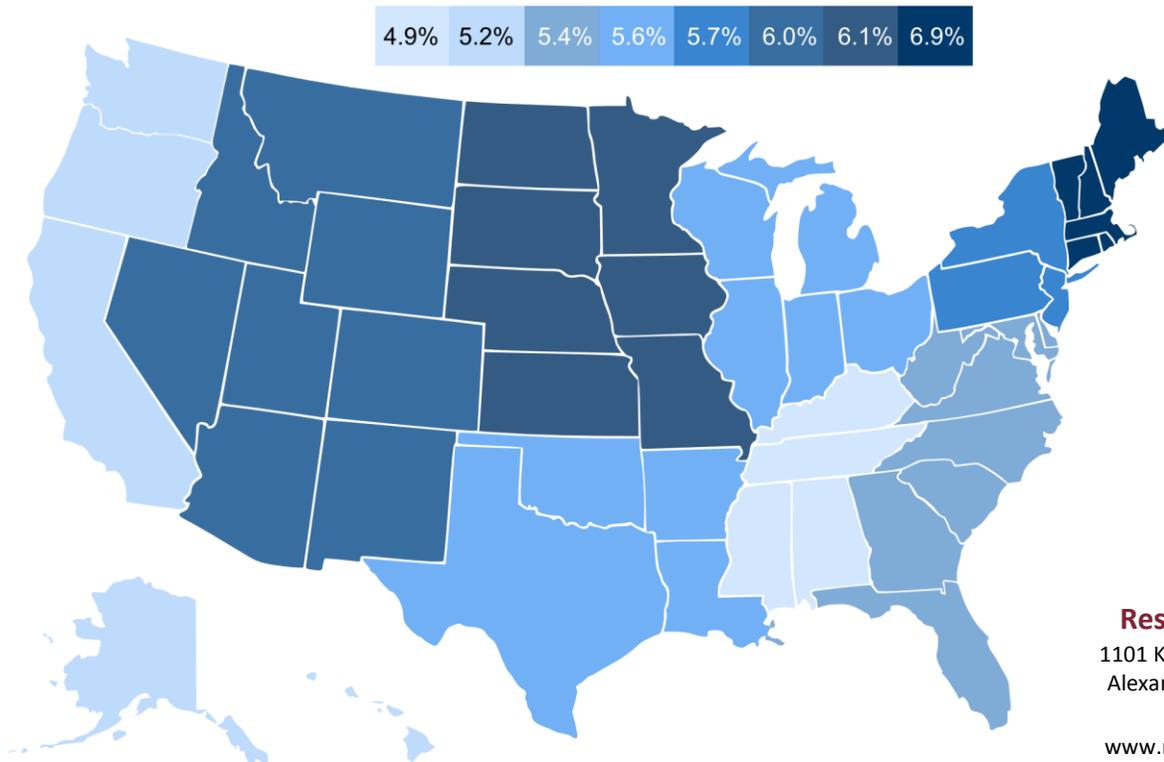


RESEARCH!AMERICA POLL
CONDUCTED IN PARTNERSHIP
WITH ZOGBY ANALYTICS IN
JANUARY 2015

The Bottom Line:

Food allergies are a growing health concern in the U.S., yet it is denied much of the funding and attention it deserves. With researchers and scientists making consistent breakthroughs in this condition, increased funding will only produce more promising results for the millions of people with food allergies.

Percentage (%) of Americans 17 and Younger with a Food Allergy, by Region 2011-2013



SOURCE: CENTERS FOR DISEASE CONTROL AND PREVENTION

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