

# Investment in research saves lives and money



facts about:

## Food Allergy

A food allergy occurs when the body's immune system mistakenly attacks a food protein. The most severe reactions, called anaphylaxis, can result in swelling, difficulty breathing, heart failure or even death. The only way to prevent an allergic reaction is by strictly avoiding the food.

### Today:

- 12 million Americans have a food allergy.
- Americans make 30,000 visits to the emergency room for food allergy each year.
- The number of children with peanut allergies recently doubled over a 5-year period.
- 90% of food allergies are caused by peanuts, eggs, milk, shellfish, wheat, tree nuts, soy and fish.

SOURCE: FOOD ALLERGY AND ANAPHYLAXIS NETWORK (WWW.FOODALLERGY.ORG)  
NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASE (WWW.NIAID.NIH.GOV)

SAVING LIVES  
SAVING MONEY

### HOW RESEARCH SAVES LIVES:

- Research has demonstrated that immediately injecting epinephrine, a hormone which suppresses the immune system, into the thigh muscle is the best treatment for anaphylaxis.\*
- Teens and young adults are at highest risk for fatal allergic reactions to food. By studying teens' behaviors, researchers have identified ways to decrease their risk, such as teaching them to identify the signs of anaphylaxis, to carry epinephrine at all times and to properly inject it.\*\*
- In an NIH-funded study, children allergic to eggs who ate gradually increasing amounts of egg protein were protected against reactions caused by unintentional ingestion.\*\*\*

SOURCE: \*SAMPSON, H.A. ET AL. ANNALS OF EMERGENCY MEDICINE. 2006; 47:373-380.  
\*\*SAMPSON, M.A. ET AL. JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY. 2006; 117:1440-1445.  
\*\*\*BUCHANAN, A.D. ET AL. JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY. 2007; 119: 199-205.

### HOW RESEARCH SAVES MONEY:

- Current research has not yet provided enough information to assess the cost-saving benefits of food allergy treatment and prevention. More robust research budgets are needed to study all aspects of food allergies.

*"If you think research is expensive, try disease."*  
— Mary Lasker 1901–1994

### The Cost:

- In a single year, 236 food products were recalled because they contained an allergen not listed on the label or were contaminated with an allergen.\* U.S. companies spend millions of dollars each year to advertise recalls and collect the products.
- Elementary school nurses are responsible for an average of 10 students with food allergies, requiring significant time and effort to prevent and treat reactions.\*\*

SOURCE: \*VIERK, K. ET AL. JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY. 2002; 109:1022-1026.  
\*\* WEISS, C. ET AL. THE JOURNAL OF SCHOOL NURSING. 2004; 20:21-31.

## survivor



NAME: MICHELLE RISINGER  
AGE: 22  
CONDITION: FOOD ALLERGY

Michelle Risinger, a student at American University, was diagnosed with a severe allergy to tree nuts and a milder allergy to peanuts when she was 2 years old. She prevented an allergic reaction for 10 years by diligently reading ingredient lists and avoiding any food that might contain nuts.

One afternoon, Michelle's mother brought home a package of cookies that did not list nuts in the ingredients. She asked for one, but her mom said not until after dinner. After reading the ingredients herself, Michelle snuck a cookie. Immediately her throat and eyes swelled, she got very hot and itchy and her skin turned reddish-purple. It hurt to breathe. Michelle felt so guilty, she couldn't tell her mom before she left to run errands. Michelle knew she was having an anaphylactic reaction and finally told her dad to call 911. She then gave herself a shot of epinephrine and passed out.

Although Michelle tries to balance the influence of her food allergy on her life, she lives with the constant threat of anaphylaxis. Michelle prepared for college by talking with her school's public safety and kitchen staffs. Eating in the dining hall is important since Michelle is captain of the swim team, which eats together after practice.

Michelle also promotes awareness and research with the Food Allergy and Anaphylaxis Network. "I want to understand how and when food allergies develop, and I think genetic research could provide the answers. I hope some day we can identify food allergies even before you are born."

# facts about: } Food Allergy

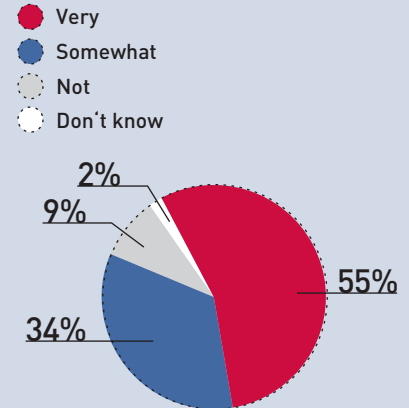
## Hope for the Future:

- ⚡ A new screening technology is being developed to determine what foods patients are allergic to, gauge how severe their reactions will be and predict whether they will outgrow their allergy.\*
- ⚡ The Food Allergy Research Consortium, supported by NIH, is organizing clinical trials on a peanut allergy therapy. The researchers hope that shots containing increasing amounts of modified peanut proteins will protect against future allergic reactions.\*\*
- ⚡ An epinephrine tablet is in development, which would be less expensive to produce and easier to carry and administer than injections.\*\*\*

SOURCE: \* SAMPSON, HA. JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY. 2004; 113:805-819.  
 \*\* NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASE  
 \*\*\*RAWAS-QALAJI, M.M. ET AL. JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY. 2006; 117:398-403.

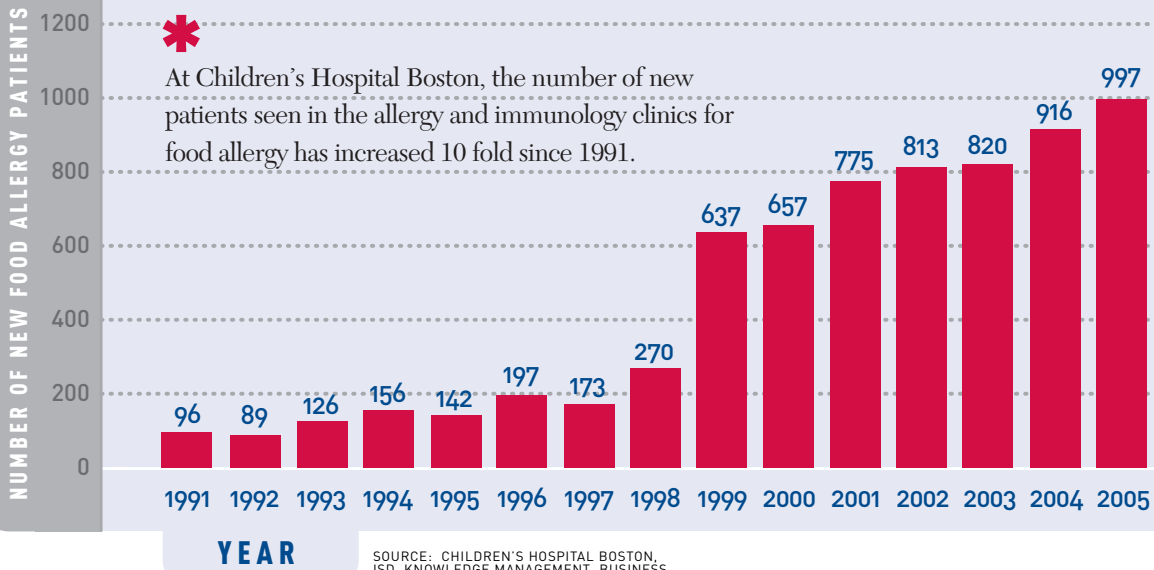
## Very Valuable to Invest in Research

*How valuable is it for the U.S. to invest in medical and health research that allows us to predict a person's chance of developing a disease?*



SOURCE: TAKING OUR PULSE: THE PARADE/RESEARCH!AMERICA HEALTH POLL CHARLTON RESEARCH COMPANY, 2006

## More American Children Visiting the Hospital for Food Allergy



## The Bottom Line:

*Food allergies are a growing health problem in the United States for which there is no cure. To help the increasing number of Americans with food allergies, greater investment in research to understand, treat and prevent food allergies is needed now.*

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For additional information, contact the Food Allergy & Anaphylaxis Network at 800.929.4040, [faan@foodallergy.org](mailto:faan@foodallergy.org) or [www.foodallergy.org](http://www.foodallergy.org)  
 OR The Food Allergy Project at [foodallergyinfo@foodallergyproject.org](mailto:foodallergyinfo@foodallergyproject.org) or [www.foodallergyproject.org](http://www.foodallergyproject.org).

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