

THE FOOD ALLERGY CONSUMER JOURNEY

Defining Challenges,
Overcoming Obstacles,
Creating a Blueprint
for Food Allergen
Labeling Success



Living *Teal*
brought to you by
FARE®



FARE (Food Allergy Research & Education) is the world's leading food allergy advocacy organization and the largest private funder of food allergy research.

Research and analysis provided by:

McKinsey & Company
Northwestern University
Global Strategy Group

Introduction

Did you know one in every four — or **85 million Americans** — avoid buying food products that contain the top nine food allergens? Unfortunately, they may even be avoiding foods they could eat because of confusing food allergy labels on packaged food.

Food allergies are a serious health threat to 32 million Americans. They can take a significant toll on the quality of life as well as trigger serious emotional and mental health challenges in addition to the life-threatening event, anaphylaxis. The recent relaxation of U.S. Food and Drug Administration (FDA) guidance on labeling increased anxiety that the bond of trust between the consumer and their favorite brand might be broken.

The most common proteins (food allergens) that trigger anaphylaxis are milk, egg, wheat, fish, shellfish, peanut, tree nut, soy and sesame. These are also referred to as the “top nine allergens.”

Clinical research is exploring new and exciting diagnostic tools, treatments and solutions that may reduce or eliminate anaphylaxis as well as improve the quality of life for food allergy patients. Until then, food avoidance and emergency medical treatments are the current standard for people with food allergies.

Avoiding one or more food allergens — for years or for life — to protect one’s health is no easy task. It takes an incredible amount of dedication, time and research by food allergy patients and their care providers to ensure they are making the right food choices when they shop, as well as when they eat away from home. The hurdles are even greater for socioeconomically disadvantaged households.

85 million Food Allergy Consumers in the U.S. spend more than \$19 billion annually on food products that keep them healthy and avoid an adverse food-related event.



Back at the beginning, I sold a lot of my belongings along with receiving food stamps and WIC just to afford food, as you can’t use food banks when you have allergies. They think it’s a luxury. For us, it’s life.”

– MOTHER OF CHILD WITH FOOD ALLERGY & ANNUAL INCOME <\$50K

That means food labels and other disclosure platforms used by food manufactures are critically important tools for food allergy consumers. And that is why FARE decided to launch an initiative to investigate and better understand the complete universe of food allergy consumers, their shopping habits and the challenges they face when they shop — we call it the ***Food Allergy Consumer Journey***.

As part of the initiative, research was undertaken to gain a baseline understanding of the food allergen labeling landscape. The findings are part of FARE's *Food Allergy Consumer Journey Study*, a series of research projects on food allergy consumers, their shopping habits, and the challenges they face when accessing safe and affordable foods. The initiative includes three distinct studies in partnership with three research organizations:

- 1. McKinsey & Company:** Characterization of the food allergy marketplace and its economic impact (the number of consumers impacted by food allergies and intolerances and their shopping habits), and perspectives on improving food allergen labeling practices for manufacturers.
- 2. Global Strategy Group (GSG):** Measurement of the impact of food allergies on the budgets of socioeconomically disadvantaged individuals and families, and characterization of their experiences with accessing safe food.
- 3. The Northwestern University Feinberg School of Medicine and Ann & Robert H. Lurie Children's Hospital of Chicago:** Assessment of food allergy consumer preferences regarding precautionary allergen labeling (PAL), known as "may contain" labeling, used on packaged food, and recommendations for improvement. Partial funding was provided by the National Confectioners Association.

Taken as a whole, the research and findings are principally designed to analyze allergen labeling information on food packages with the goal of providing consumers with improved products, tools and information needed to:

- Avoid anaphylaxis and other serious health and emotional problems.
- Make it easier to quickly identify, access and use packaged food products they can safely consume.
- Optimize individual and family grocery budgets while conforming with personal food shopping and health needs.

The primary goal of the FARE Food Allergy Consumer Journey Initiative is to work collaboratively with food manufacturers and food allergy advocacy organizations to develop a new, standardized voluntary food allergen precautionary labeling system, institute consistent nomenclature across all points of customer contact and to support the new label with an informational and educational campaign geared to individuals and families from diverse socioeconomic backgrounds that helps consumers make informed decisions when they shop.

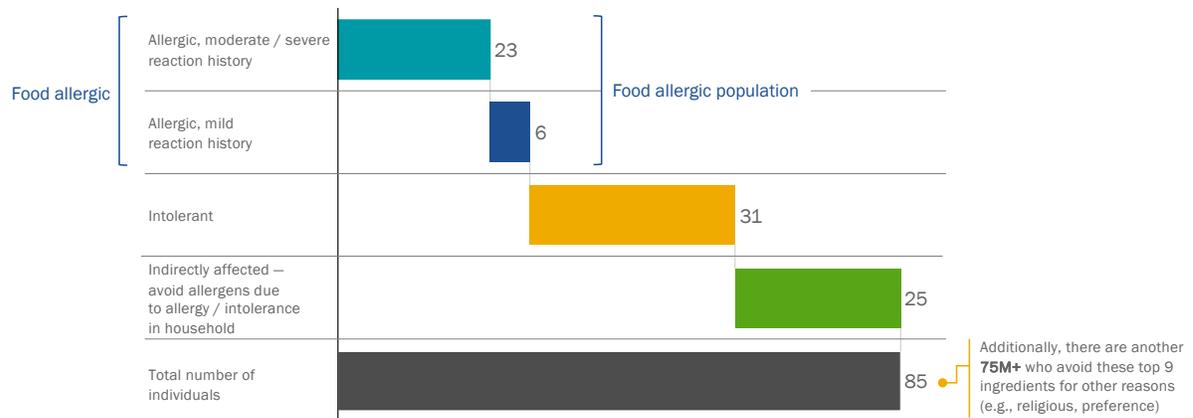
Top Line Research Findings / Executive Summary

- 85 million **Food Allergy Consumers** in the U.S. spend more than \$19 billion annually on food products that keep them healthy and avoid an adverse food-related event.
- **Food Allergy Consumers** is a term that captures the total packaged food purchasing power of everyone in the U.S. who is impacted by food allergies. This includes:
 - **29 million Americans** have one or more food allergy to a top nine allergen.
 - **31 million people** that have one or more food intolerance to a top nine allergen.
 - **25 million individuals** whose food purchases are impacted due to allergies or intolerances to a top nine allergen in the same household.
- While their reactions to a top nine allergen vary, their consumer habits are the same — they avoid purchasing foods that contain that allergen.
- Top nine allergen alternative products are growing rapidly at a 27 percent compound annual growth rate (CAGR) for the past four years. This growth has been primarily driven by small or allergy-friendly brands.
- 64 percent of consumers repeatedly purchase the same foods every time they shop to save time and know they are buying safe products.
- Food Allergy Consumers tend to trust smaller allergy-friendly products versus large brands, which presents an opportunity for large manufacturers to better market, educate and engage this community about their commitment to food safety and gain their trust.
- There is no standardization around PAL in terms of wording and appearance. This is confusing for consumers, so they spend extra, valuable time reading labels or avoid entire food categories. This can make grocery shopping a stressful experience.
- **Food Allergy Consumers find labels confusing and want food companies to develop a single, standardized PAL for food packages and point of sale, and to support the new label with an education campaign that helps them understand the label and empowers them to quickly and safely use it to make informed choices when they shop.**

The Allergen Avoidant Consumer Marketplace

More than 500 million people in the world today behave like they are allergic to more than 160 identified food allergens. To better understand the food purchasing patterns of individuals impacted by the top nine food allergens in the United States, we conducted research on American **Food Allergy Consumers**.

NUMBER OF PEOPLE IN US WHO AVOID A TOP 9 ALLERGEN, M



Food Allergy Consumers is a term that captures the total packaged food purchasing power of the 85 million people in the U.S. who are impacted by the top nine food allergens — milk, egg, wheat, fish, shellfish, peanut, tree nut, soy and sesame. They include:

- 29 million Americans have one or more food allergy to a top nine allergen.
- 31 million people that have one or more food intolerance to a top nine allergen.
- 25 million individuals whose food purchases are impacted due to allergies or intolerances to a top nine allergen in the same household.

In total, these consumers represent one of every four people in the United States. While their reaction to a top nine allergen varies, their consumer habits are the same — they avoid purchasing foods that contain that allergen. Those who do not buy foods or beverages that contain an allergen impacting someone else in their household is considered the indirectly affected group.

The total number of American **Food Allergy Consumers** keeps rising, as the number of food allergic children has grown four percent annually since 1997, significantly outpacing population growth of one percent annually. In addition, hospital emergency room visits for food-induced anaphylaxis has more than tripled in the last 10 years.

Who are Food Allergy Consumers?

Food Allergy Consumers are highly engaged and valuable. Since food safety is so important to this group, they tend to be premium buyers and loyal to products they trust. They are also understandably cautious, as trying new foods could be dangerous for them or their families, but also indicate they are always looking for new products that are safe.

Premium buyers / They spend more

Food Allergy Consumers are premium buyers, spending five percent more on average for groceries per month than the average surveyed consumer, with 32 percent indicating they are willing to spend more on the highest quality ingredients.

Loyal, yet always looking

Food Allergy Consumers are loyal, yet “always looking,” consider many brands but ultimately have a high repurchase rate of the exact same product of the exact same brand. This could indicate they may not be satisfied with repeatedly purchased product offerings. Finding a product that is safe for their families can be time consuming and stressful, so once they find a product that they know is safe, they continue to return to that product. This presents an opportunity for manufacturers to introduce new products to this specific consumer group.

CONSUMER DECISION JOURNEY



Trust is important to them

Food Allergy Consumers care deeply about trust — citing it as a top three factor for buying a product and the top reason for repurchasing that exact same product. They tend to trust smaller allergy-friendly products versus large brands, which presents an opportunity for large manufacturers to better educate and engage this community and gain their trust.

TRUST IN ALLERGY-FRIENDLY PACKAGED PRODUCTS

% allergic consumers who agree / strongly agree



They represent a large market opportunity

Food Allergy Consumers represent a \$19 billion market opportunity for manufacturers. That market is comprised of two main categories: incremental spend from food allergic consumers who avoid entire categories of foods (e.g., bread, snacks and frozen foods) due to allergens and a \$9 billion allergen alternative products market.

OPPORTUNITY:

\$19B MARKET BASED ON CONSUMERS AVOIDING CATEGORIES / SUBSTITUTING PRODUCTS



Incremental spend from consumers that avoid categories due to allergen

- 6% of food allergic households avoid an entire food category (e.g. bread, snacks, frozen food) specifically due to an allergen that someone in the family is allergic to
- These consumers would likely spend in the category if they knew there were products that are safe for them and their families

Estimated size of allergen alternative product market

- Gluten and dairy dominate allergen alternatives and make up 97% of the market, in large part due to associated health halo
- Predominantly occupied by smaller brands, especially non dairy and gluten alternatives

Incremental spend from Food Allergy Consumers who avoid entire categories

- Six percent of food allergic or intolerant households avoid entire categories of foods, specifically due to an allergen.
- If these consumers were to enter the category at the spend rate of an average consumer, this represents a \$10 billion market opportunity for manufacturers.

Allergen alternative products market

- Allergen alternative products represent a \$9 billion market.
- Allergen alternative products are direct substitutes for products that typically would contain an allergen (e.g., soy milk, gluten-free pasta).
- Though the allergen alternative market is dominated by dairy and gluten alternatives, other top nine allergen alternative products are growing rapidly at a 27 percent CAGR for the past four years. This growth has been primarily driven by small or allergy-friendly brands.

Allergen Alternative Brands
27% CAGR Growth

Food Allergy Consumers Face Unique Challenges



There are no clear requirements in place for how to communicate the risk of potential presence of allergens in products, resulting in inconsistent labeling practices and confusion among those working in the food industry, food allergic consumers, and government agencies in determining best practices to govern this issue.”

– UNDERSTANDING PRECAUTIONARY ALLERGEN LABELING (PAL) PREFERENCES AMONG FOOD ALLERGY STAKEHOLDERS, NORTHWESTERN UNIVERSITY, APRIL 2020

Although the FDA requires that companies disclose when they use one of the top eight allergens (all but sesame) in their products, there is no standardization around labeling in terms of wording and appearance. This is confusing for consumers and as a result they spend three to five minutes reading labels or avoiding entire categories of packaged food to ensure the product is safe for them or their families to eat. This makes grocery shopping a stressful experience for the food allergic consumer.



We are moms and busy. We don't have time to be at the grocery stores, going on Web sites for all the things we need.”

– MOTHER OF AN ALLERGIC CHILD, WITH INCOME <\$25K

Opportunities for Food Manufacturers to Address This Untapped Consumer Group

Food manufacturers, particularly large manufacturers, have an opportunity to better serve the needs of **Food Allergy Consumers** by:

- Instituting clearer / more consistent labeling across manufacturers.
- Improving consumer education and engagement, particularly around manufacturing safety.
- Introducing new allergy-friendly products, via merger & acquisition (M&A) or enhanced innovation process.



Pursuing these options presents significant market opportunity for food manufacturers and ultimately will help improve the lives of millions of people in the U.S.

Food allergic consumers want to see improvements in allergen labeling, product information, and availability of allergy-friendly products. They find allergy labeling confusing, with 55 percent spending a few minutes or more reading labels to understand if a product is safe for them or their families. They would like to be able to quickly understand if a product is safe while also having the ability to get more detailed product information. They would also like to see greater availability of safe products with many feeling like they are constrained by their allergen.

Through actions ranging from standardizing labeling across food manufacturers, improving product education and consumer engagement, or launching more allergy-friendly products, there is a great opportunity for food manufacturers to gain a new consumer market and improve people's lives.

Create a Standardized Labeling Hierarchy Across Food Manufacturers

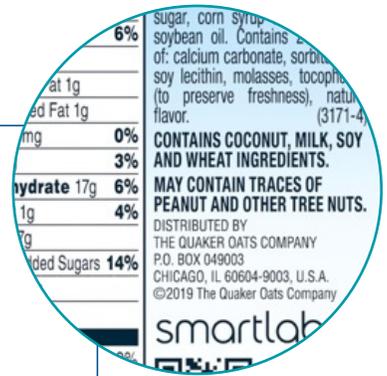
When it comes to PAL, 53 percent of **Food Allergy Consumers** indicated current labels are problematic and interfere with their daily lives and 71 percent say they spend time reading the labels of every single food item they purchase.

Clearly, the right label helps the product overcome the **Food Allergy Consumers'** biggest objection — that the product could harm them or their family — and begin to build trust between brands and consumers.



I would find this information (“May Contain”) extremely important. Any ingredient my family is allergic to, I am not going to purchase period. The label is easy to understand.”

– FATHER OF A FOOD ALLERGIC CHILD, INCOME \$25–\$50K



I still need words. The icons or pictures may get my attention, but I want to read it as well.”

– MOTHER OF CHILD WITH A FOOD ALLERGY, \$75-100K INCOME

To empower **Food Allergy Consumers**, food manufacturers could create a standardized labeling structure for the top nine allergens to make it easier and faster to understand if a product is safe for food allergic consumers to eat.

There are five steps manufacturers can take to address the labeling opportunity.

1. **Evaluate your portfolio and existing labels:** Assess the allergy-related labels that exist across your portfolio today to identify inconsistencies or areas of “over labeling;” compare vs. industry benchmarks.
2. **Define hierarchy options:** Evaluate labeling hierarchy and wording, leveraging labeling research from FARE and other sources, to create a proposed labeling regime.
3. **Determine coordination approach:** Decide if you want to act as a ‘first mover’ or build a coalition with other manufacturers, retailers and regulators.
4. **Test with consumers:** Engage diverse food allergic consumers, potentially leveraging the FARE Patient Registry, to get feedback on structures, language and design of labeling, making sure new labeling structure is easy to understand and will drive consumer purchasing decisions. Ensure that Food Allergy Consumers with varying socioeconomic backgrounds are captured for the full picture.
5. **Educate:** Work with FARE / trade associations, advocacy groups (e.g., Academy of Nutrition and Dietetics), and public health organizations to educate food allergic consumers on the new labeling structure. This could work similarly to how the industry worked with these advocacy and public health groups to educate consumers on the “used by” language to signify when foods are safe to consume. Remain mindful of cultural differences and potential disparities (i.e., food deserts) when building education campaigns, working with groups who understand these needs. Our research indicates that the 85 million Americans derive the most benefit from a label that includes an icon and an easy to understand statement.

Improve Consumer Education and Engagement

Food manufacturers, particularly large manufacturers, have an opportunity to improve consumer education and engagement on current safety precautions taken to reduce the risk of cross-contact. Large manufacturers go through great lengths to ensure their products are safe, but they still have much lower trust scores than small and allergy-friendly brands. By better engaging the food allergic community and by using plain, direct language to describe allergen safety, these large manufacturers have an opportunity to build trust and transparency with the food allergic consumer.

There are five steps manufacturers can take to address the labeling opportunity.

- 1. Improve consumer understanding:** Work with advocacy groups like FARE, potentially leveraging their highly engaged Patient Registry, to better understand how to build trust with food allergic consumers.
- 2. Assess the language used to discuss allergens:** Review places that your brand discusses food allergies (e.g., websites) and revise language, as needed, to use simple, “plain English” or visual cues to describe food allergy information. MadeGood® and other allergy-friendly brands use plain language to describe who their foods are safe for, reducing confusion and building transparency and trust with the food allergic community.
- 3. Highlight safety procedures:** Better publicize the stringent safety protocols surrounding your manufacturing practices to demonstrate safety and build trust (e.g., showing how lines are cleaned, where products are made).
- 4. Improve digital engagement:** Engage consumers (e.g., through social media) and try to emulate the intimacy of smaller brands (e.g., “founder’s story”), which food allergic consumers find relatable. Chewy.com, for example, sends loyal customers’ pets birthday cards, which improves loyalty and affinity for the brand.
- 5. Work with retailers:** Partner with retailers and restaurants to reinforce messaging and safety in store / on shelves (given food allergic consumers state frustration with selection and labeling in stores).

Introduce New Allergy-friendly Products, Via M&A or Enhanced Innovation Process

Food allergic consumers indicate they are excited to try new brands and are always or often searching for new brands. This presents an opportunity for food manufacturers to introduce new allergy-friendly products that taste great to an open consumer group who has high product repurchase rates.

There are several steps manufacturers can take to address the labeling opportunity.

Organic approach

- 1. Conduct additional consumer research:** Launch detailed research to better understand specific product opportunities by allergen and category (e.g., peanut alternatives and snacks), tailoring product offering to high growth or underserved areas.
- 2. Consider consumers during innovation:** Ensure diverse food allergic consumers are factored early in the innovation process, using allergen alternatives where possible.
- 3. Invest in R&D:** Evaluate the feasibility of creating new allergen alternative ingredients that could be used across many products in your portfolio.

M&A approach

- 1. Acquire assets:** Identify and acquire complimentary, strategically aligned assets in high growth areas to build out allergy-friendly portfolio. Several allergy-friendly brands have experienced significant growth over the past four years, significantly outpacing the categories they are in.
- 2. Scale assets:** Seek to scale assets through better consumer education and engagement efforts.
- 3. Increased access:** Leverage partnerships to ensure products have greater access to under-resourced communities.

Through these three actions, food manufacturers have an opportunity to better serve the food allergic community, capture a large market opportunity, and ultimately improve the lives of millions of people in the United States.

About FARE

FARE (Food Allergy Research & Education) is the world's leading food allergy advocacy organization and the largest private funder of food allergy research. Our mission is to improve the quality of life and the health of individuals with food allergies, and to provide them hope through the promise of new treatments. FARE is transforming the future of food allergy through innovative initiatives that will lead to increased awareness, new and improved treatments and prevention strategies, effective policies and legislation and novel approaches to managing the disease. For more information, please visit www.foodallergy.org. To join FARE's transformative five-year fundraising and awareness campaign, Contains: Courage®, supporting families living with food allergies and educating ALL communities about the disease, visit www.foodallergy.org/containscourage.