

Introduction

You can't have no risk at all you know, even if the child never leaves the house, so you have to deal with risk ... we just want a better way

(Mother of Carla, aged 10, US).

like sometimes you can't find the cause [of a reaction] ... it just happens, you know ... not knowing makes you worried and unsure of yourself ... when I have a first bite like, if I'm not at home, I think is this it?.... will I die? what can you do?

(Fran, aged 12, Ireland)

These statements from chapter 1 describe the reality of living with severe food allergy.

Managing food allergy on an individual level is the responsibility of the individual and those looking after that individual. In the modern world this is very, very difficult without help from society.

Food is an essential part of our lives. We eat approximately five times a day, very often away from home. Food allergic individuals have to rely on the information about the food they eat from the persons producing their food. They have to trust that food producers, both in industry and catering, know how crucial it is that the information they provide is correct. This means that, although the individual has to manage his or her food allergy, the food producers need to manage allergenic foods.

Food producers need to manage many different risks. This is costly, and an important driving force in prioritizing has been legal and regulatory requirements.

HISTORY OF 'ALLERGY' LABELING

In the eighties, international food labeling was extremely focused on food additives. This resulted in labeling rules where ingredients such as milk or wheat did not have to be declared on the label if they were constituents of compound ingredients (the so-called 25% rule), whereas food additives always had to be labeled. This rule could result in ingredient lists dominated by additives and made it almost impossible for food allergic individuals to get appropriate information from ingredient lists.

In order to change international food labeling rules to make them more helpful to food allergic individuals, a Nordic initiative led by Norway in 1993 presented a document (Consideration of Potential Allergens in Food) to the

Codex Committee on Food Labeling. The documents suggested changing the 25% rule on compound ingredients to a 5% rule and suggested a list of allergenic foods that should always be declared. The matter was discussed again in 1994 and 1995, and in November 1995 a FAO Technical Consultation on Food Allergens was held. The recommendations from this consultation were to change the 25% rule as suggested. The suggested list of allergenic foods was slightly modified. After several years of further discussion the Codex Alimentarius Commission adopted the proposal in June 1999.

Several countries changed their food labeling rules in accordance with the Codex. In the EU the 25% rule was totally abandoned in 2004.

The change in labeling rules and the increased focus on allergenic foods has been an advantage for the allergic consumer, but it also created unforeseen problems. These arise from insufficient scientific knowledge on safe levels of food allergens. The European Food Safety Authority concluded in 2004 that:

The doses of allergens capable of triggering food allergic reactions are variable and can be very small, i.e., in the milligram or microgram range. The information currently available is insufficient to draw firm conclusions regarding the lowest dose that could cause an adverse effect (threshold).

For this reason, the authorities were not able to advise industry on what amounts of food allergen could be considered effectively harmless and help them to develop operational standards.

This again led industry to develop various labels such as ‘may contain nuts’ or ‘manufactured in a facility that also handles nuts’, because they were not able to guarantee the total absence of allergenic food in their products and no one could tell them when their products were safe enough. A further consequence of the lack of guidance was that criteria for using such labeling varied across the food industry.

WHERE ARE WE NOW – THE BOOK

Unfortunately we have not solved all the questions that arise when dealing with allergenic food in food production, but much has happened. This book presents the newest knowledge on food allergy and food allergen management and includes suggestions for practical management of food allergens.

The book is organized in four sections. Section 1, *Food Allergy: Causes, Prevalence, and Impacts*, provides a background for understanding the context and rationale for food allergy as a problem in society. It gives an overview of how patients experience daily life with food allergy and how it impacts their lives. It describes food allergy as a disease and lists which foods cause allergy as well as the epidemiology of food allergy. Section 2, *Allergen Thresholds and Risk Assessment*, describes how clinicians determine the amount of allergenic food causing a reaction. It suggests quantities of different allergenic foods that can be considered to present minimal risk and describes how they are derived

and how these data are used in risk assessment, both theoretical and in practice. Section 3, *Risk Management of Gluten*, gives an overview of the gluten-induced disease celiac disease with emphasis on diagnosis, prevalence, prevention, and management. Section 4, *Practical Food Allergen Risk Management*, focuses on the practical aspects, including how allergenic food is managed in a factory and in catering businesses. It has stories illustrating how concrete problems with food allergens in production were handled and explains the role of health service professionals. It describes the analytical detection methods for food allergens and the ways that processing can alter the allergenicity of foods. It covers effective communication with consumers including the use of 'may contain' labeling. Lastly it gives a short overview of legislation and useful places to keep updated.

THE AUTHORS

The authors are clinicians, researchers, and public and industrial risk assessors and risk managers. Many of the authors have been partners of the EU-funded research project *The Prevalence, Cost and Basis of Food Allergy in Europe* (EuroPrevall) and present data from the project.

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