

BASICS OF FOOD ALLERGY

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American College of Allergists

Consultant in Allergy to Veterans Administration

Member, Annals of Allergy Council

Illustrated by

PAT KENT

*Kent Graphics
Mansfield, Ohio*

Written for general physicians, nonallergist specialists and medical students, this volume examines a wide range of topics in food allergy and immunology, including the latest theoretical developments, applications and techniques. Such diverse aspects of the subject as elimination diets, allergic arthritis and allergy in mental disorders are discussed. While always realistic in his assessment of the role food allergy plays in medicine, the author clearly demonstrates that the application of allergic concepts could extend far beyond its commonly accepted boundaries.

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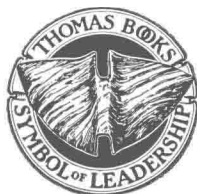
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**BASICS OF
FOOD ALLERGY**

**To Grant Wayne Breneman
May 1, 1953 to August 26, 1973
Our son for twenty years and now our memory.**

Preface

IN 1959, I WAS first impressed with the importance of food allergy in illnesses not always considered as allergic diseases. A thirty-nine-year-old male was seen with a ten-year history of so-called “intractable duodenal ulcer.” His diagnosis had been well established in the conventional way and his treatment schedule had also been conventional in that he was regularly placed on a milk toast-antacid regimen. While observing his prescribed ulcer regimen, he would characteristically experience gradual worsening of the pain, and frequently he would develop hemorrhaging from his duodenal ulcer. One of the interesting features of this history was that no treatment ever seemed effective in relieving a semiannual recurrence.

The treatment for possible food allergy had never been tried though his history suggested specific food intolerance. There was little to lose by trying it. He, therefore, was placed on an elimination diet—a trial of therapy which was a distinct departure from conventional peptic ulcer therapy. Within three days his symptoms of pain, hematemesis, melena, and malaise disappeared. They did not reappear until milk was added as a test food, whereupon he was seized by abdominal pain, vomiting, and malaise. After the milk was again removed, his symptoms subsided and did not recur until wheat was added. After wheat was added, he went through the same duodenal ulcer symptom sequence. When wheat was removed, his symptoms subsided and he was free of all evidence of duodenal ulcer until pork was added to the diet. Pork produced the characteristic duodenal ulcer symptoms again, and when pork was removed, his symptoms subsided.

The patient has now abstained from eating milk, wheat, and pork for sixteen years. He continues to be free of all evidence of duodenal ulcer and still retains the fundus of his stomach *inside* his abdominal cavity—rather than having it preserved in a jar in a surgical specimen laboratory.

It is interesting to note that this patient’s history was typical of duodenal ulcer—not of food allergy—by most accepted standards. The application of food allergy principles was a desperation measure—not a conventional measure.

I have since found that among physicians in general, there exists widespread lack of appreciation that food allergy might cause such symptoms. Medical school curricula have rarely emphasized the importance of food allergy in the etiology of many disorders, including duodenal ulcer. There-

fore, there is little reason to hope that physicians of the future are to be any more appreciative of the importance of food allergy.

The word “intractable” has become a part of the “duodenal ulcer” vocabulary because conventional therapy fails so often. Such “intractable” patients would be ideal candidates with whom to institute food allergy programs. Many would respond dramatically.

The same can be said for many other disorders that afflict man. Food allergy has replaced syphilis as “the great imitator.” Food intolerance and sensitivity mimic symptoms of almost any disease. Some¹⁴⁹ now estimate that 60 percent of human illness involves food intolerance. These patients could become “cures” if you just think of it.

I hope this text will serve to point out to physicians that food allergy is often *overlooked*. I also hope that it will remind physicians that any patient with confusing symptoms, prolonged complaints, or poor treatment response might recover amazingly on a week of diagnostic elimination diet. It's harmless and it can be astonishingly effective.

Food allergy is *not* the cause of *all* disease. The purpose here is to show that food allergy *might* be the cause or aggravation of almost any disorder. And, often enough, it is *the* cause. Therefore, try your problem patient on at least a week of diagnostic elimination diet. It can serve as both a diagnostic and therapeutic procedure while other clinical studies are being carried out.

The concept of food allergy is generally accepted by most physicians. There exist, however, many differences of opinion as to the mechanisms, frequency, and manifestations of the disorder. It has been shown that food idiosyncrasies and food intolerances are different from food allergies. This concept is primarily academic since *the patient suffers as much regardless of the basic mechanism involved*.

One of the main purposes of this text is to provide the physician with up-to-date information on the basics of food allergy. There is also information on useless food faddist ideas. Some chapters are written to serve as models of day-to-day instructions for the physician to copy and give to the patient. Some chapters are devoted to discussion of controversial techniques of food allergy diagnosis and treatment. Evaluations of these methods by the prestigious American College of Allergists are also included. Detailed recipes and special diets are provided in the back. A glossary is provided to define unfamiliar allergy terms.

In some way, I hope this text will eventually benefit the patients we are dedicated to serve.

J.C.B.

Introduction

T.V. AND OUR DRUG CULTURE ERA

TREATMENT OF FOOD ALLERGY involves a concept differing from conventional medical therapy. Medical treatment characteristically consists of *giving* a chemical to relieve, cover up, or resolve the disease process. The principal treatment of food allergy consists of *removing* the offending agent.

Modern television promotes the philosophy that human disease and suffering must be treated (or can best be relieved) by administering something to the individual. As an example, if a patient cannot sleep at night, little thought is given to the possibility that he might be suffering excessive stimulation from some food reaction, e.g. coffee.* The typical remedy suggested is to give a soporific drug, a sleeping tablet. Then, the patient's next morning fatigue, confusion, and hangover feeling, though due already to drug effect, is treated with a stimulant, coffee, or perhaps even a stronger stimulant like amphetamine, ephedrine, or additional caffeine. This stimulation and the nervousness it causes during the day might be treated with tranquilizers. Thus, the circle continues of treating one reaction with a drug that causes another reaction, which is treated with yet another. The obvious remedy for the whole affair would have been to eliminate the original cause.

Modern television suggests that there are numerous illnesses not being satisfactorily treated by physicians. Besides insomnia, many other human afflictions exist that are grist for the T.V. huckster.

The vast number of antacid preparations recommended on commercial T.V. are moot testimony to the prevalence of "heartburn" and "acid" stomach.³⁵ Numerous proprietary measures are offered for colds, coughs, stuffy noses, bowel complaints, skin blemishes—and most of all—headaches.

We should teach our patients not to blindly accept the promotions that "This drug is good for your bones," or "This food is good for your muscles." We should be ready to instruct an alternate philosophy that "There is nothing harmful for you in this drug or this food," or "This food or

* Insomnia from coffee is usually a pharmacologic reaction to caffeine, not an allergy to coffee. It is used as an example here merely to demonstrate a commonly observed phenomenon.

drug will not cause a reaction,” or “It will not combine with some other product to form another dangerous by-product.”

Our drug-culture society should begin to appreciate that not all human misery can be alleviated by “taking something.” Sometimes it is better to remove the “something” that initiates the suffering.

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**BASICS OF
FOOD ALLERGY**

CHAPTER I

Food Allergy: The Plague of Our Times

PREDISPOSING FACTORS

FOOD INTOLERANCE and allergy (*see* Glossary) have become an increasingly serious problem in recent decades. Two basic reasons exist: (1) Americans are experiencing increased exposure to possible food allergy, and (2) they are suffering from decreasing tolerance to foods. These two general categories of etiologies of the increased occurrence of food allergy may be outlined as follows.

Etiology of Increased Food Allergy

<i>Increasing Exposure Due to:</i>	<i>Decreasing Tolerance Due to:</i>
<ol style="list-style-type: none">1. Affluence.2. Modern technology.3. Ready-prepared foods.4. Transportation.5. Refrigeration.	<ol style="list-style-type: none">1. Hereditary racial intolerance.2. Environmental exposure to new additives, new varieties, and complex ready-prepared foods.3. Iatrogenic causes from too few allergists to teach methods of recognition and control.

In the early part of this century, it was customary for the father to butcher a steer or hog. This served as the source of meat for the entire family for the whole winter. Whatever vegetables could be raised and canned made up the rest of the diet for the family. The average family lived on a limited variety of foods, probably no more than forty different items for the entire winter.

By contrast, our present-day diet is amazingly diversified. Coincident with rising living standards and technical advances is a tremendous expansion in food varieties and food additives. Refrigeration, quick freezing, and modern modes of refrigerated transportation make available to the average family an almost unlimited variety of food.

It is a modern luxury to have Florida oranges, Texas grapefruit, California grapes, and Washington apples available to a North Dakota farmer in midwinter. But the penalty for this luxury involves an increased exposure to possible food allergy and food intolerance.

A simple comparison shows how complicated our food world has be-

come. A loaf of homemade bread fifty years ago consisted of salt (non-allergic), wheat flower, yeast, and water. Butter was from pure cream and salt, making a total of four allergenic ingredients in Grandma's slice of bread and butter. By contrast, an ordinary slice of bread and butter available from a modern supermarket has evolved into a complicated potpourri of ingredients.

The Possible Content of a "Modern" Slice of Bread

BUTTER (Milk):

Hormones	Synthetic (5)
Dyes	Butter dye (Yellow)
Antibiotics	Penicillin
Vitamins	Vitamins (4)
	Minerals (5)
Additives	Fish oil (5)
	Citrus
	Alcohol solvent

BREAD:

	Milk
	Wheat
	Egg
	Yeast
	Preservatives (10)
Shortening	Lard (Pork)
	Peanut, Corn, etc. (10)
Flavoring	Salt (Iodine)
	Sugar (2)
	Coloring agents (Numerous)
	Preservatives (Numerous)
Contaminants	Herbicides (4)
	Insect parts (Numerous)
	Insecticides (4)

CARTON (Milk):

Paper
 Paper-making chemicals (2)
 Paraffin
 Cellulose
 Hydrocarbon
 Wax

CARTON (Bread):

Cellophane
 Ink ingredients (5)
 Volatile solvents (5)

BAKING UTENSILS:

Soap ingredients (4)
 Detergents (Numerous)
 Silicones (Numerous)
 Vegetable oils

WATER:²⁰

(10)

.....
100+

DECREASING TOLERANCE

To add to the complex picture of food intolerance in the United States, one must remember that the population is made up of a potpourri of races and people from all over the world. Each of these individual national groups originated as a single food (or primary food) society. American aboriginal single food societies were the various Indian tribes dependent upon different single foods as their primary nutritional source. The plains Indians were largely dependent on the buffalo as a source of meat and simple vegetables or berries from the woods or plains. The Southwest Indian had as his staple food corn and its by-products. The Indians of the Northwest were largely dependent on salmon fishing; the Indians of the North lived on venison and wild rice. Thus, several single food societies existed in what is now the United States.

Into these native single food societies moved the European immigrant. The Irish immigrant was mainly dependent upon the potato as his single food. The Laplander was dependent upon the reindeer for his source of food. The Norwegian immigrant was a fish eater.

Each of these individual societies had developed its own tolerance to its single food and by natural selection was able to thrive on this single food. The members of a single food society either adapted to live with this single food or they did not thrive and, therefore, did not reproduce as efficiently as did those who were able to thrive on the food of that society. As a result of natural selection, the weak died out and did not reproduce. From those who thrived evolved a so-called single food society.

Thus, the United States is a melting pot of single food societies, each inheriting or passing on to the future generations of Americans the tolerances of its single foods plus the intolerances of the many foods provided by our American affluence and technology.

INCREASING EXPOSURE

The average winter selection of food varieties is no longer forty as it was a half century ago, but now stands in the thousands. When one considers that a single slice of bread and butter usually contains at least one hundred separate ingredients, one begins to appreciate the magnitude of our

exposure to a vast array of preservatives, flavoring agents, coloring agents, and imported foreign and exotic foods.

Food allergy, food intolerance, and food idiosyncracies technically are forms of malnutrition. They often lead to food fads and dietary restrictions that no doubt predispose many people to still other forms of malnutrition.

In spite of the land of plenty, this type of malnutrition has become an overwhelming problem appropriately called *the plague of our times*.

IATROGENIC CAUSES

During the last several decades, the problem of food intolerance, allergy and idiosyncrasy has increased manyfold. The recognition and treatment by qualified physicians and food allergists has not kept pace with the incidence of food intolerance. Therefore, a society has developed that suffers increasingly from food allergy and intolerance while inadequate numbers of professional people have been educated to cope with the problem. Medical school curricula usually offer studies in allergy as elective courses. The student is taught allergy, not as a primary science, but as an art subordinate to the Departments of Internal Medicine or Pediatrics.

The problem of allergy in general and food allergy in particular has therefore not only been largely unrecognized, but has also been without adequate treatment. This has provided an ideal opportunity for the food faddist, the dietary fanatic, and others who promote pseudoscientific methods.

Methods of newborn infant feeding actually foster food allergy. The prescribing of cow's milk has been promoted for the past half century, to the discouragement of breast-feeding. A segment of society has been created that has never tasted the food of our species—human milk. The highest incidence of lifetime milk allergy is found in this iatrogenically conditioned group. In this instance, true wisdom would have lain in *not* trying to manipulate nature.

Food laws have not helped the situation. Those individuals who might already know which foods make them sick are not protected by the food labeling laws. Food product manufacturers can be in compliance with the law even with very misleading labeling. "All Beef Wieners" for example, are *never all beef* as the label implies. "Preservatives" can include chemical compounds that are poisons (as allergens) to some individuals. "Flavoring" can also cover a score of unlisted additives. "Non-Dairy Coffee Creamer"* is not truly free of dairy products as it implies. It contains so-

* Carnation Coffee-mate®, Los Angeles, California 90036.