

4-1-1979

Foods, Moods, and Allergies Too a Handbook for the Human Services

Barbara A. R. Keppel
University of Nebraska at Omaha

Follow this and additional works at: <https://digitalcommons.unomaha.edu/studentwork>

Recommended Citation

Keppel, Barbara A. R., "Foods, Moods, and Allergies Too a Handbook for the Human Services" (1979). *Student Work*. 2096.
<https://digitalcommons.unomaha.edu/studentwork/2096>

This Thesis is brought to you for free and open access by DigitalCommons@UNO. It has been accepted for inclusion in Student Work by an authorized administrator of DigitalCommons@UNO. For more information, please contact unodigitalcommons@unomaha.edu.



Foods, Moods, and Allergies Too
A Handbook For The Human Services

A Thesis
Presented to the
School of Social Work
and the
Faculty of the Graduate College
University of Nebraska

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work
University of Nebraska at Omaha

by
Barbara A. R. Keppel

April 1979

Copyright © 1976 Barbara A. Keppel

UMI Number: EP73636

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP73636

Published by ProQuest LLC (2015). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

THESIS ACCEPTANCE

Accepted for the faculty of the Graduate College,
University of Nebraska, in partial fulfillment of the require-
ments for the degree of Master of Social Work, University of
Nebraska at Omaha.

Thesis Committee Naomi Brill Social Work
(Name Department)
Judith Ramaley Physiology
Ronald H. Ozaki
Chairman
April 23, 1979
Date

TABLE OF CONTENTS

INTRODUCTION.	1
Footnotes.	11
Chapter	
I. SETTING THE SCENE.	12
How Food and Allergy Problems Affect Human Services Practice	12
Incidence of These Problems.	13
Philosophy of This Book.	14
Description of the Book Contents	19
Cautionary Note.	20
Footnotes.	21
II. TYPICAL FOOD AND ALLERGY RELATED PROBLEMS.	22
Overview	22
Common Presenting Problems	22
"Sensitivity" vs. "Allergy".	23
Typical Cases.	24
Guidelines for Identifying Food and Allergy Related Problems.	34
Footnotes.	38
III. BACKGROUND INFORMATION ABOUT FOOD SENSITIVITIES, ALLERGIES, LOW BLOOD SUGAR, STRESS, AND BIO- RHYTHMS	40
Overview	40
Speaking Science	40
Food Intolerance/Food Sensitivity/Food Allergy Definitions.	41
Causes of Food Intolerance	41
Tests for Food Intolerance	42
Symptoms of Food Intolerance	43
Treatment of Food Intolerance.	46
Allergies.	46
Definitions.	46
Causes of Allergies.	47
Special Problems With Allergies.	47
Common Allergic Substances	49
Symptoms of Allergies.	54
Caffeine and Allergies	58
Low Blood Sugar/Hypoglycemia	58

Definitions	58
Kinds of Hypoglycemia	59
Symptoms of Hypoglycemia	59
Causes of Hypoglycemia	61
Hypoglycemia and Allergies	64
Hypoglycemia, Addictions, and Allergies	65
Hypoglycemia and Obesity	66
Hypoglycemia and Smoking	66
Special Problems Associated With High Sugar Intake	67
Handling a Sugar Load	67
Replacing Essential Nutrients With Sugar	69
Hypoglycemia Detection	69
Hypoglycemia Correction	71
Hypoglycemia Prevention	71
Stress	72
Biorhythms	72
The Ramaley Rectangle	73
Summary	79
Footnotes	81
IV. WORKING WITH CLIENTS	86
Overview	86
The Therapeutic Model	86
Contracts	91
Special Issues in Working With Foods	92
Screening For Diet and Allergy Related Problems	96
Discussion of Questionnaire	104
Screening For Diet and Allergy Related Problems	104
Medical History	108
Allergy Signs and Symptoms	108
Beverages	110
Smoking	112
Food Cravings, Binges, and Addictions	113
Moods and Thinking	113
Menstrual History	114
Stress	115
Family Allergy History	115
Daily Patterns of Eating	116
Testing for Diet and Allergy Related Problems	117
Food/Mood Diary	117
Pulse Test	119
Diagnostic Elimination (Rare Food) Diet	120
Single Food (Modified) Elimination Diet	121
Provocative Sublingual Test	123
Allergy Scratch Test	123
Allergy Intradermal Test	123
Allergy Patch Test	124
Provocative Test	124

Glucose Tolerance Test.	124
Footnotes	129
V. MAKING THE CHANGE	132
Overview.	132
Figuring Out The Diet	132
General Guidelines.	132
Hunting the Problem Food(s)	138
Trial Elimination of Possible Allergic Foods	144
Hypoglycemia Prevention and Control	151
Reed Diet	155
Allergy Control	157
Stress Control.	161
Exercise.	162
Relapses, Crashes, and "Great Falls".	163
After the Diet is Fixed and the Allergies	
Controlled	167
Footnotes.	170
VI. GETTING AND GIVING MORE INFORMATION	172
Overview.	172
References.	172
General Guidelines.	172
Cookbooks and Diets for Special Problems.	176
Referrals	179
Health Care Teams	182
Footnotes	186
VII. WORKING WITH SPECIAL GROUPS	188
Overview.	188
The Aging	188
Preschools.	190
Primary and Secondary Schools	195
Residential Care.	197
Eating Appropriately On A Low Income.	200
Footnotes	202
GLOSSARY.	204
ANNOTATED BIBLIOGRAPHY.	206
BIBLIOGRAPHY OF SCIENTIFIC JOURNAL ARTICLES	216
BIBLIOGRAPHY.	218

LIST OF TABLES

1. Common Food Allergy Symptoms 140

2. Typical Symptoms and Complaints Related to Specific
Foods 142

3. Types of Diseases and Symptoms Caused by Particular
Foods 143

4. Frequent Physical Responses to Allergic Foods. . . . 148

LIST OF ILLUSTRATIONS

1. Ramaley Rectangle.	75
2. Diet and Allergy History.	97
3. Sample Food/Mood Diary	118

INTRODUCTION

I decided to write this book after my colleague, Dr. Judith Ramaley, and I spent a year giving presentations about diet and behavior to groups of our Omaha-Lincoln, Nebraska, area. These groups included human services agency staffs, abusive parents, psychotherapists, medical students, parents of newborns, social work students, preschool teachers, child development students and faculty, staff in a child assessment facility, and others.

About the middle of that year, I won the national student competition to give a paper at the Fifth Biennial National Professional Symposium of the National Association of Social Workers. Although warned that attendance would be scanty at best, I found myself in a large room talking to an overflow crowd. The listeners insisted on completing the session outdoors on the lawn after the building caught fire and had to be evacuated! A year later, I was still receiving letters of inquiry and requests for bibliographies from human services workers all over the country.

Gradually, I realized a book might solve the problems which now presented themselves. I had learned so much from my work with clients and from relevant medical materials that I couldn't squeeze enough into two hours of presentation and

questions. Every group gave feedback that the material was directly relevant to their professional work. Many people in every group, including the professionals, told me the material was relevant to their own lives. No group, however small, ever ran out of questions including questions about the science involved. Although our audiences were not trained in science, they could understand and use the necessary scientific material when we presented it in a way tailored to them--a way which by-passed their science anxiety. In the social service agency where I worked, most of my clients showed the kinds of problems I described. My colleagues there and my fellow social work students had the same experiences with their clients. As a result, more of my time was needed for answering questions than I had time to give. If we could keep busy lecturing just in the Omaha-Lincoln area, there must be people all over the country who were needing the same information and skills. There was no book available which combined medical information, given in non-medical terms, with information and skills for human services practice. Many human services workers were asking me when I would write a book they could use in their work.

I turned my hand to writing down what we were saying in our presentations plus what we felt we needed to say but had to leave out for lack of time. I also continued to give presentations, work with my own clients, read the popular and medical literature related to this topic, and receive feedback from colleagues I had trained.

Questions raised at presentations and by colleagues and clients directed me to search the medical literature with Dr. Ramaley. When I didn't understand, she explained the answers and helped me translate them into non-medical terms. I tried out different ways of presenting these answers to my clients and colleagues until they could understand.

The results are before you: a combination of information about diet, allergies, and behavior, and techniques for using this information with your clients in the human services.

I have high hopes for this book. If this whole subject is new to you, I want you to be able to understand it and then put it to use in your human services practice. If you already know something about diet, allergies, and behavior, I want this book to give you more useful information and skills. And, if you are reading this for your own life rather than your profession, I hope you find what you need or are directed to it. In any case, I want you to find this so relevant and useful that you will want to read more and learn more about it.

If I were reading this book, I would want to know what made the author think that there was some relationship between diet, allergies, and behavior. So, I'm going to use the rest of the introduction to tell you about the incidents which made me absolutely sure about the connection. If that doesn't interest you, please skip to Chapter I.

At the time of the first incident, my closest friend, Helen, had been telling me for a number of years that her moods were very much affected by her diet. She lived in Maine then, and I lived in Nebraska; but every summer, when we got together, she told me a little more about her observations of herself and her two children. All of them seemed to be affected by certain foods, especially sugar. I blush to admit that I hadn't been very receptive to those ideas at first, but I had watched the family in action enough by this time to know that there was some truth in what she said. Still, I thought theirs was a special case. "Normal" people like me didn't have those problems. Well, maybe a little...I was gradually cutting down on my family's sugar consumption.

At the time of which I write, I suffered the loss of someone who was very important in my life. In the jargon of our trade, I went into a situational depression. I was aware of what was going on but felt unable to control my feelings. I had an overwhelming sense of sadness and loss. I had problems sleeping---practically unheard of for me. I was also terribly fatigued.

So, at 3:00 A.M., I called Helen and said "Help! I'm having a terrible time." She listened to my account of what was going on and said, "You can't get back the loss. That person is gone. But I think you could feel better. These are the things I want you to do."

She told me what special things to eat. She told me not to eat any sugar. And she added twenty-five minutes of vigorous exercise to my daily regimen so that whatever physical tensions I had in my body would be relieved.

At 3:30 A.M. I was down in the kitchen eating a bowl of yogurt (B vitamins) and taking some calcium lactate (muscle soother and relaxer).¹ I was thinking it was crazy but deciding to do it anyhow. At 4:15 A.M. I was sound asleep.

The next day, I was eating things that contained B vitamins which are what people need when they are under stress, taking lots of vitamin C, eating yogurt, etc., and not eating anything with sugar in it. I was feeling somewhat better.

Forty-eight hours after the initial conversation, I woke up in the morning and peace had broken out. I just couldn't believe how the world had changed. Then I realized that the world hadn't changed. The loss was still there. That person was gone from my life forever. But I only had to deal with that loss; I didn't have to deal with the other feelings that had been filling up my mind. And I was energized again. I realized that the change must have something to do with what I was eating and the exercise I was getting.

Later I discovered that the presence or absence of B vitamins in the brain affects the way we think.² In times of stress, we use up B vitamins at such a high rate that we need much more of them than normal. By eating yogurt, I was providing my body with increased B vitamins. Nowadays, I take nutritional yeast daily as an even more concentrated source of the same vitamins.³

I also discovered the wonders of calcium as a muscle relaxant. As the matter of fact, I had calcium lactate on hand because Helen had shared with me that it relieved leg cramps which were a problem for me on long car trips.⁴ Now I know that a "charlie horse" is a muscle spasm which in me is a sign of insufficient calcium. I also know that some calcium before an exam or at bedtime relaxes me without impairing my thinking.

After this experience, I was more receptive to the information Helen was giving me about diet and behavior. I did discover that I was much less tired when I stopped eating sugar; and that I was very fatigued on the day after a birthday party. I also read some of the books which Helen lent to

me including one which described the condition she and her children had.⁵ From that book, I began to understand why she and the children were thinking more clearly and generally feeling better when they stopped eating sugar and refined flour and added many vitamins and minerals to their diets. Of course, I knew it couldn't really be making that much difference, but I was going along with what they said.

In the summer of 1976, I went to New Brunswick, Canada, to help Helen and the rest of the Brigham family build a house in the country. I had been doing a lot of cabinet making and remodeling on our house, so I was just good enough to be taken on for labor in return for room and board.

The design was completed and the foundations poured at the time of our arrival. We were starting from the ground up. So, every morning, after breakfast, the whole crew went off to the construction site for the carpentry of the day, supervised by Tom and Helen.

Periodically, a minor change required a small alteration in design. Helen consulted with me about the changes because both of us are interested in the use of space. On this particular morning, I tried to work with Helen in thinking through a problem and coming to a solution. No way. I could not communicate with her. I tried one path, and then another, and another. Literally, she couldn't seem to think straight.

She seemed to follow along through the logic of the problem, I thought. All of a sudden, her "reasoning" went someplace else. I couldn't figure out how she skipped around. We weren't getting the problem solved, and I was feeling very frustrated.

Suddenly, the light dawned. "Helen," I said, "Did you take your vitamin and mineral supplements this morning?" "No." "Well," I said, "I don't think you're going to be able to reason this through until you take them. I'd like you to take them and then try to work on this with me again in twenty-five minutes."

So, off she went for her supplements. And sure enough, twenty-five minutes later, we applied ourselves to the same problem, and she could think it through perfectly clearly.

Maybe you think I changed my line of reasoning, but I don't think so. That happened twice more the same month. Each time, it was in the morning after breakfast. Each time, we were working on solving some design and construction problem. Each time, Helen couldn't get through it logically. Each time, she could think it through logically twenty-five minutes after taking the forgotten supplements.

That is how I became a true believer in a direct relationship between what she was putting in her body through her mouth and her ability to think logically. She couldn't be a linear thinker without taking care of her body's needs for certain vitamins and minerals.⁶

The third incident occurred the following winter and is known as The Great Cappuchino Effect.

Nebraska was having one of its fabulous Friday nights: -10°F , strong winds, snow. Even the car heater couldn't affect the chill. My new friend, Judy, had eaten only a very light lunch around noon. It was 8:00 P.M. when we reached the restaurant. When a forty minute wait for dinner was announced, Judy decided what she needed was something warm and ordered a cappuchino. (For those of you who don't know, a cappuchino contains alcohol, sugar, and caffeine.)

Up until this time, Judy had been her usual witty, cheerful self, laughing and joking while discussing the day's events. Gradually, something strange began to happen. About twenty minutes after she had her drink, she began to lose her sense of humor. At the same time, she began to move away. She didn't actually move her chair, but I had the impression she was gradually moving to the other end of the room, speaking carefully, coolly, and logically, and as though from a great distance. She looked somewhat anxious too although we were talking about what seemed a relatively safe subject: how people react to sugar.

Finally, it dawned on her that we were talking about what was happening to her: she was having a sugar reaction from the cappuchino.

My response was great disappointment. Was she going to be like this all evening? A whole evening with nary a pun? Agh!

After she estimated that the reaction would last at least two to two and one-half hours, I asked her to try an experiment. On the basis of information I had from Helen, I gave Judy about 500 mg. of vitamin C to see if it would detoxify her system from the sugar. About twenty minutes later, she smiled and made a pun, so I knew she was on the road to recovery. She also seemed to come back from far away and to warm up.

When she didn't need to urinate after half an hour, I knew she needed more vitamin C, so I gave her another 500 mg. Her mood continued to improve.

That was a great learning experience for both of us. She told me that first she became anxious and then paranoid. For the first time since she had known me, she began to worry about whether or not I really liked her. In fact, she got into the kind of thinking which we characterize as paranoid.

She felt very distant and cold. In TA (Transactional Analysis) terms, she turned off her feelings (Parent and Child ego states) and stayed in her Adult. She had learned to do this some time earlier in her life. In her Adult, she was able to do linear thinking, like a computer. No doubt that had something to do with her choosing medical research for a career.

We found her anxiety was related to her eating and allergies. Initially, she found her lifelong anxiety was greatly reduced when she stayed off sugar and refined carbohydrates (white flour, white rice, etc.) She stopped worrying inappropriately and felt much better. When she ate a load of sugar or refined carbohydrate, or both, she was paranoid and started worrying again about whether or not people liked her. In the hay fever season, when her allergies were more active, less sugar or refined carbohydrate was required to trigger anxiety and paranoia.

When Judy and I checked the medical literature for information about her reaction to cappuchino, we found that all of it was described and explained.⁸ Alcohol, sugar, and caf-

feine have their own characteristic effects. A combination increases the effects, especially in someone who has low blood sugar (hypoglycemia) problems like Judy. (See Chapter 3.)

Imagine our surprise when we discovered, right there in a standard medical reference book on her office desk, the following description of the hypoglycemic: "...individuals tend to be...tense, anxious, and compulsive in personality."⁹

Each of these incidents illustrates a different kind of connection between diet and behavior. Helen seems to need amounts of certain nutrients beyond her regular dietary intake. Without large amounts of C and B vitamins, calcium, and choline, she doesn't think straight; that is, she can't do linear thinking, and she becomes confused.

In Judy's case, she has what I would now call a CNS (central nervous system) allergy or sensitivity to sugar and refined carbohydrate. The sensitivity is increased by alcohol and caffeine. Her response is anxiety and paranoia. She is not confused about facts. She does very good linear thinking.

In my own case, sugar and refined carbohydrate make me fatigued and depressed. Everything seems to take more effort and more energy than usual. I can still think linearly, although not as quickly. I can still experience the full range of emotions, although I tend to be more down than up.

By now, I hope I have whetted your appetite to want to know more about why these responses occur, what other responses occur, and what to do about them. If so, read on.

FOOTNOTES

INTRODUCTION

¹Carl C. Pfeiffer and the Publication Committee of the Brain Bio Center, Mental and Elemental Nutrients, (New Canaan, Connecticut: Keats Publishing, Inc., 1975), p. 201.

²Ibid., p. 199.

³Ibid., p. 177.

⁴Ibid., pp. 1-201.

⁵The Professional Committee of the Schizophrenia Foundation of New Jersey, The Schizophrenias: Yours and Mine, (New York, New York: Pyramid Books, 1970).

⁶Abram Hoffer, "Treatment of Schizophrenia," Orthomolecular Psychiatry, Vol. 3, #4 (1974):283.

⁷Helen Opie Brigham, Living High On The Sugarless Hog, (St. Stephen, N.B., Canada: Soupstone Enterprises, 1978), p. 19.

⁸Leonard J. Feinberg, Herschel Sandberg, Oscar De Castro, and Samuel Bellet, "Effects of Coffee on Oral Glucose Tolerance Curves in Human Subjects," Metabolism, 17 (1968): 916; Pfeiffer, Ibid., pp. 383-384.

⁹Robert H. Williams, Textbook of Endocrinology, 5th Ed., (Philadelphia, Pennsylvania: W. B. Saunders Co., 1974) p. 823.

CHAPTER I

SETTING THE SCENE

How Food and Allergy Problems
Affect Human Services Practice

Among the most common clinical problems which bring clients to human services workers are depression, anxiety, *Symptom* paranoia, fatigue, withdrawal, and hyperactivity. All of these, and many other emotional and behavioral problems, can be responses to what a person is eating; that is, the degree, or even the existence, of the problem may be related to foods and how they disturb the individual biochemically. Non-food allergies, like hay fever and asthma, can also disturb an individual's biochemistry, causing emotional and behavioral problems and adding to the effects of food-caused problems.

You may have read that food coloring and preservatives cause some children to be hyperactive. Or you may have observed people with hay fever being grouchy during their allergic season. Maybe you have known someone who was very depressed, then was discovered to be diabetic, and became quite cheerful after going on a special diet. All of these are examples of how substances that go into the body (foods or pollens, for example) can affect the ways people feel and behave.

When the problem is at least partially a response to food substances or allergies, therapeutic intervention is, at best, only partially successful without diet or allergy intervention. The biochemical disturbance caused by food sensitivities or allergies changes the individual's thinking in some way. Only when the thinking is changed back again, by removal of the disturbance, can the person "think straight" and enter into the rest of the problem-solving process. With diet and allergy intervention, sometimes the problems disappear. More frequently, the problems decrease enough so more traditional forms of intervention can be used successfully.

Incidence of These Problems

According to many experts, the incidence of non-food allergies in the U.S. and Canada, already higher than anywhere else in the world, is rising.¹ We also have an increasing incidence of food allergy because many foods which were previously regional and seasonal are now available all over the country throughout the year. Because of this increased availability, people everywhere have more opportunities to eat foods which disagree with them physically and emotionally.

For the average human services worker, the increase in food and non-food allergies means an increase in presenting problems resulting from these allergies. We will have increasing need, therefore, to know about these problems and be able to help our clients deal successfully with them.

Philosophy of This Book

Although human services workers are often the professionals working with people who have these problems, most of us have little or no knowledge of the interaction between foods and allergies and behaviors and emotions. However, there is a considerable body of medical knowledge about these relationships.

Perhaps you believe only medically trained people can understand food and allergy problems and use that information to help people. In fact, much of it can be understood and used effectively by human services workers. It is true that a certain amount of scientific training is necessary to understand the technicalities of these problems. Fortunately, however, many of the problems can be identified as food and allergy related and many of the appropriate changes made without a complete understanding of all the technicalities. Referrals can be made if more technical skill is needed.

Although there is a great deal published about the subject of diets, allergies, and behavior, very little of it appears in a form which is directly useful to human services workers with clients. Instead, it appears in two major forms. One is the do-it-yourself, this-is-the-one-true-answer-to-all-of-your-problems books. These assume that the person has already started the necessary detective work and can contend with it alone. Explanations as to causes and interactions

between diets and allergies are scanty. The other major source is medical books. These tell a great deal about how foods and allergies cause physical problems, with many references to relevant research, but are scanty in the psychological-behavioral realm. Generally, they contain few guidelines for working with patients/clients, and their medical terminology intimidates human services workers.

This book is intended to bridge the gap between the sources described above. It is client centered. It is process oriented. Where information is used from medical sources, it is not presented in medical language. Instead, you will find it in a form which you and your clients can understand without scientific training. Examples are simple. Many analogies are used.

This book has developed from the many workshops I have given and the many discussions I have had with my colleagues and clients. It is like those talks and like me: informal and simply said. The information is that which people have found most useful. It is expressed in the ways they have understood most easily. The language is the kind appropriate to use with clients. The examples are those which were most effective in explaining the problems and solutions to my clients and colleagues.

The tone of this book is set in part by my own experience with math and science anxiety. For many years, when someone said something "in science," I checked out; I didn't

hear; I stopped listening. It was as though someone were speaking a foreign language. I thought I couldn't understand. Now I am aware that much scientific language is a shorthand; that it is a fast and precise way of stating something or asking a question. But I haven't forgotten how difficult it was for me to learn that; and I still stop listening occasionally when someone throws me with a new term.

I have tried to write this in a way that doesn't trigger science anxiety. If you have that anxiety, I hope you won't have it triggered. (I'll clearly let you know when some "science" is coming up, in case you want to skip it and maybe come back later.) If you don't have science anxiety, I hope you'll enjoy reading this as another way of saying what you might be able to say more briefly. And if the material is new, and you speak science, I know you can translate at will and use the material in your own way.

The information about diet, allergies, and behavior is drawn from the extensive literature, most of it medical, which is currently available. Sources range from standard medical reference books to journal articles reporting the latest research. You will find an extensive bibliography enabling you to find out more about any particular problem. Note that the bibliography is annotated not only as to subject matter but also as to difficulty of reading. With it, you and your clients can find information which you can understand whether or not you have medical training.

There are conflicting ideas within the medical community about how allergies work, how food substances cause problems, how lack of certain foods causes problems, etc. In some areas, there is not enough information about how things work for anyone to make a definite statement. (Detailed information about allergy mechanisms is still lacking.) Nevertheless, there is enough information and enough agreement so that we have a basis from which to work and can help many people feel better and behave in more functional ways.

I have selected what has been most useful to me. In doing so, I am aware that not all of the information we would like is available. (It never is, when it comes to the workings of the human body.) More will be available in the future. You may need to look further to find the very latest information or theories.

Most of the techniques for working with clients have been drawn from my own experience and case studies. I have also used the experiences of many of my colleagues, some of whom have shared not only their ways of working with people who have these problems but also experiences with their own diets, allergies, feelings, and behaviors. Since my colleagues are in many different professions and work in a great variety of situations, you will find examples drawn from education, social service, alcoholism programs, medicine, home life, criminology, and gerontology.

This book is intended to be used as a tool for solving certain kinds of problems in human services. I want to make clear that I don't think this is the only tool, or the best tool. It is a tool. To me, it has been as valuable as learning about TA (Transactional Analysis) or systems theory, the alcoholic in treatment, psychodrama, or a number of other tools that I have in my repertoire as a clinical social worker.

I want to have as many tools available to me as I possibly can---as many ways to help people solve their problems as possible. The more tools I have, the more likely I am to find the ones that will work best for a particular job.

It is just like building a house. I used to use only one kind of hammer. Now that I've learned more about carpentry, I've learned that I need several sizes and styles of hammers to do different kinds of jobs. Each one has its best uses. No one does it all.

It will be important to remember when you have finished this book that I said information about food sensitivities and allergies is just one tool. You will still need all of your other tools. After the part of the problem is cleared up that is food or allergy induced, much may remain.

My experience has been that people with problem behavior and problem emotions have a lot of work to do even after the emotions and behaviors are no longer there. People who are used to interacting with them may continue to act as though no changes have been made. The clients themselves may

be so used to other people responding to them in certain ways that they continue to expect those responses. They may also be at a loss as to how to deal with new responses. You will need all of your usual interventions to help them through these changes.

Imagine for a moment that a hyperactive child you know suddenly becomes peaceful, or a depressed client you have suddenly becomes cheerful. Think about the adjustments you would have to make to those changes, and you will have an idea of what the person faces. If you multiply your reaction by the number of relationships each of your clients has, you will have some idea of the magnitude of the problems which may remain. Everyone has to shift gears. There are likely to be some clashes and grindings. Sometimes, a gear may strip. You are expected to be the mechanic and make it work right.

Description of the Book Contents

To help people with diet or allergy-related problems, you can use some skills you already have. You have been trained to observe people's behavior, listen to their feelings, identify changes in their feelings and behavior, and give feedback. Now, you can learn to use these skills in the task of identifying and changing adverse reactions to foods and allergic substances.

You will need some new information and some new skills for this work. For assessment, you can learn how to look for

patterns in food use, allergy exposure, and problem behavior. You can find out which allergies and foods are most likely to cause emotional and behavioral problems, and which kinds of problems they usually cause. You can learn which physical symptoms are also related to allergies and problem foods. A sample food-and-allergy history form will enable you to gather and evaluate necessary information. Complete explanations and instructions accompany the form. Tests for food and allergy sensitivity are listed and explained.

To make interventions, you will need to explain your assessments to your clients and teach them how and why foods and allergies affect their thinking. You will find simple explanations in this book--the kinds of explanations you can share with your clients.

You will also need to work with your clients in deciding what changes to make and how to make them. Techniques for making changes which are discussed here include keeping food/mood diaries, making contracts, using support groups, and evaluating results. Skills discussed include language choice, power sharing, and appropriate support. Sources are given for more information and referrals.

Cautionary Note

A variety of medical conditions can cause changes in feelings and behavior. Without exception, every client should have a thorough physical examination to screen for disease as a basis for emotional and behavioral problems.

FOOTNOTES

CHAPTER I.

¹ John C. Breneman, Basics of Food Allergy, (Springfield, Illinois: Charles C. Thomas, 1978), p. 5; Douglas E. Johnstone, "The Natural History of Allergic Disease in Children," Annals of Allergy, 38, #6 (June, 1977):387-393.

CHAPTER II

TYPICAL FOOD AND ALLERGY RELATED PROBLEMS

Overview

This chapter considers some of the most typical food and allergy related problems. A few cases are reviewed to see how these problems affected some clients. From these cases, some general approaches are developed to be used in screening for these problems.

Common Presenting Problems

In children, the most common problem presented is "hyperactivity."¹ In addition, the child is often described as quarrelsome, disorderly, and/or inattentive. S/he may also have an extended history of bed-wetting. Interestingly, fewer children are brought for help because of depression or fatigue. I believe that is because a quiet child is usually thought of as being good, even though that isn't normal behavior for a healthy child.

In adults, the typical presenting problems will be depression, fatigue, anxiety and/or paranoia, and confusion.² Often, these are accompanied by headaches or shaky spells. Couples often describe each other as quarrelsome, moody, picky, inattentive, or depressed.

Adults are not usually willing to describe themselves or other adults as "hyperactive" although the same behavior in a child would certainly receive that label. Hyperactivity has no age boundaries. To identify the hyperactive adult, look for "nervous habits" like foot tapping, nail biting, hair twiddling, and finger drumming. The body is restless: moving a lot in the chair, crossing and recrossing the legs. Notice the speech: fast, often almost breathless, and incessant. Chain smoking may accompany all of this, as may gum chewing. The conversation may jump suddenly and often from one topic to another.

I once had an office mate who could chew gum, chain smoke, and drink tea simultaneously---all socially acceptable adult nervous habits. Even though she sometimes had two cigarettes lit at the same time, no one labeled her "hyperactive." Twenty years later, when I saw her again, she was still hyperactive and still unlabeled. (If you fit the above description, read on. Help is on the way.)

"Sensitivity" vs. "Allergy"

Before we look at some typical cases, I need to say a little bit about the difference between "sensitivities" and "allergies." More will be said in Chapter III when the topics are taken up individually and described in more detail. Meanwhile, let me say that medical people usually separate "allergies" from "sensitivities," although they don't all separate them the same way.

Usually, "allergy" describes a particular set of body responses which can be measured by inspection of certain body tissues and certain substances in the blood. "Sensitivity" is less precise and is usually used medically when precise measurements can't be or aren't made. The terms will be used fairly interchangeably here.

For example, if a person has hay fever with symptoms of red, runny eyes; puffy cheeks; itchy, runny nose; and irritability, an allergist could take certain cells from the nose and the blood and label the condition as an allergy. On the other hand, if a person eats wheat and has symptoms of red, runny eyes; puffy cheeks; itchy and runny nose; and irritability, but the allergist can't find those same cells, s/he will label the condition as "allergic-type response" or "wheat sensitivity."

Typical Cases

Now, let's look at a couple of fairly typical cases from my files. In these cases, you will see the kind of patterns of presenting problems and the parts of the histories which led me to investigate the person's diet and allergies.

The first case is Dick, one of my earliest clients to be treated by diet. At the time, I didn't know very much about the subject so I didn't ask many of the questions I ask now. And I had less information to give my clients. Still, I was able to use the information I had to help them make substantial changes.

Dick came in with his wife who complained that he was periodically abusive with her. She was seek-

ing a legal separation which he didn't want.

Dick appeared to me to fit the stereotype of the typical systems analyst. He was calm and logical, and easily understood any work done within a systems framework.

The social history revealed that his family members were very abusive with one another: mother to father, father to mother, both parents to Dick. The father was also an alcoholic. Clearly, the pattern was established at home.

I didn't know to ask about sugar problems in the family although now I would ask about diabetes and low blood sugar. I also didn't know to ask about allergies. I did ask Dick about his eating patterns and discovered that he skipped breakfast and lunch and ate only dinner. The occasional exception was when he had a donut binge in mid-morning at the office.

Dick made a contract with me to try eating a high protein, low sugar breakfast every day for two weeks. At the end of that period, he told me in a rather embarrassed way that he was feeling incredibly better. However, he still refused to try lunch saying that eating in the middle of the day made him sluggish.

The therapy sessions continued weekly with concentration on the family dynamics of abuse, appropriate expression of anger, etc. Then, after about a month, Dick turned up looking very excited and told me the following story.

Although they were separated, he and his wife were seeing each other regularly. On his birthday, she made him a cake. He had a piece or two in the evening; and then, because it was there, he had a big piece of it for breakfast before he went to work. He managed to get through the morning fairly well although he was a little edgy. But, in the afternoon, he began to escalate into full-blown anger. Although there was no apparent cause, he felt angry with all of his working companions and realized that he was barely restraining himself from slugging one or two of them. This was so far from his usual behavior, that he realized he needed to leave work immediately. He knew the cake was the cause of his emotional change, and had already resolved to stay off cake and donuts.

I was able to give him some help with what to do if he should get sugared up again (See Chapter V: Relapses,

Crashes, and "Great Falls"). He told his wife what had happened. They made an agreement about their home diet, and went back to living together without fear.

Looking at Dick's history, even with the limited information I had at that time, certain features stood out. First of all, he only was eating one meal a day. This meant that his body was expected to get enough at one dinner to last until the next dinner, storing what was not used immediately. By distributing the food intake more evenly through the 24 hours, it was reasonable to suppose that the body would have less trouble maintaining reasonable blood sugar levels, (See Chapter V: Hypoglycemia Prevention and Control, p. 71). This change could be expected to put less stress on the body and help him feel better mentally. According to many authorities, the optimal eating pattern for human beings includes many small meals in a 24 hour period--often three small meals and three or four small snacks.³ One meal in 24 hours plus coffee at the office is the opposite of optimal.

Dick became angry and violent several hours after putting a lot of sugar into his empty stomach. His father became angry and violent the same way although his quick calorie intake was in alcohol rather than birthday cake and donuts. Their patterns of response suggest low blood sugar conditions (see Chapter 3). When there was no low blood sugar condition, Dick could be appropriately angry without becoming abusive.

The next case is 31 year old Mary. Mary asked to be seen in November for depression. She was married, a hospital social worker, and a part time graduate student.

Mary had lived in Nebraska for the last seven years. For the last four of those, she had been seriously depressed twice per year. It was always worst from late in September until about the end of October, and again in the spring. When her depression was at its worst, she also had colitis. Her physician had given her anti-depressants in the spring and fall and a medication to relieve the colitis symptoms when they occurred.

Mary was often irritable and sometimes shaky. She was also tense and anxious. She could hardly get out of bed in the morning and was tired and lethargic most of the day. She often felt very hungry. After dinner, she felt best.

Mary ate lots of sweets and chocolate and drank lots of coffee and tea. She used non-dairy creamer in her coffee and sugar in her tea. She had a sweet snack every afternoon about 3:30 P.M. and was "too tired to move" by 4:30. She snacked a lot and was at least 30 pounds overweight.

Once or twice a week, she had a period when her thinking was fuzzy and disjointed. At that time, she found it hard to focus her thoughts. She was physically uncoordinated and shaky. She had perceptual problems: she had trouble taking down phone numbers and names. Even after the person leaving the message repeated it several times, she found that she couldn't write the numbers or spell the name correctly.

Mary's mother and grandmother were diabetic. An uncle was alcoholic.

Looking at this much of her history, Mary seemed to be a person with two problems. The first was allergies. She had hay fever. She had many ear infections as a small child and now had colitis. Both of these can be allergy indications, frequently to milk. Her depression was worse during the fall and spring when outdoor molds are most common in Nebraska. Her fall depression lifted about the time that the rainy season ended and regular frosts began. Her spring depression lifted when the rains ended and drying up began. These are the times when there is a rapid decrease in the number of outdoor molds.

Mary had lived in Nebraska for seven years. Her depressions became serious after the first three years. Johnstone points out that when a person moves from one climate to another, allergies take about three years to reach their peak.⁴

Mary looked and acted allergic too. She had red, runny eyes and puffy cheeks. She was puffy around the eyes, especially at night. She was very lethargic and "slept too much." She was also irritable and anxious.

Mary's colitis was seasonal, being particularly bad in the fall. I suspected this was due to the added load on her system when she had both a food sensitivity and her seasonal allergies, probably hay fever and molds (see Ramaley Rectangle, Chapter III).

Mary's second problem appeared to be related to sugar and refined carbohydrates such as white flour and white rice. She might not have been allergic to them, but her history indicated that she has a sensitivity. She didn't eat breakfast until mid-morning because she was so tired when she got up. She was very lethargic and irritable all day. She got hungry frequently. She snacked on a lot of sweet foods all day. She used non-dairy creamer (very high in sugar) in her coffee and sugar in her tea.⁵ After her sweet 3:30 P.M. snack, she was "wiped out" within an hour. She had shaky periods. At times, she had perceptual problems.

Her family history shows both diabetes and alcoholism. These problems tend to run in families. Some genetically carried factor is believed responsible. Since both of these conditions are kinds of problems in handling quickly available calories, her body was more likely than normal to have some problem with dealing with sugar. She was probably abnormally responsive to it.

Caffeine makes sugar and allergy responses more extreme.⁶ Mary's caffeine intake was high. She drank a lot of coffee in the winter and iced tea in the summer. She ate many chocolate candy bars and ate chocolate ice cream. All of these contain caffeine. In people with problems handling sugar, this amount of caffeine often results in periods of shakiness, extreme lethargy and intense hunger.

She felt best in the evening after dinner, even though she had a long, stressful working day. Dinner was low in refined carbohydrates and sugar, high in

vegetables and high in proteins such as meat. She didn't drink coffee in the evening. I surmised that like other people with sugar problems, she responded very well to eating a low sugar, low carbohydrate, high protein meal and omitting caffeine.⁷

For a more precise record of Mary's foods and their effect, she kept a food-mood diary (see Chapter IV) for two weeks, noting what she ate, when she ate, and how she was feeling. The diary reflected her moodiness and depression. It also confirmed her eating habits in terms of amounts of sugar, caffeine, and refined flour.

I also found out that she had a history of low thyroid function (in science, "hypothyroidism"). In terms of her diet problems, this meant that her body was less able than normal to store food between meals.⁸

Mary tried a different diet for two weeks.⁹ She started by eating breakfast every day before she went to work. The breakfast included fruit, whole wheat toast or whole-grain cereal, and egg or meat. Whole wheat pancakes, whole wheat waffles, and whole wheat French toast were also allowed. At mid-morning, she had a high protein snack like cheese, milk, or nuts. Lunch included some protein, salad, and whole wheat toast or crackers. Her mid-afternoon snack was like the one in the morning. Dinner was similar to what she ate before but without refined flour or white rice. (Whole wheat pizza crust, brown rice, etc.) No coffee or tea were allowed. During the evening, she had a high-protein snack every two hours from dinner until bedtime.

Mary phoned several times during the first week to get information about foods she wanted to include in her diet. As often happens during a diet change, she didn't feel better until the sixth day. Until then, she was irritable, especially in the afternoon at work. The weekend wasn't as bad. (Diet change began on Thursday.)

After the fifth day, she said "it was like a veil was lifted from my whole life." Her thinking was clear and her work picked up. She started waking up before the alarm went off in the morning and getting up feeling cheerful and energetic.

After a week on the diet, she had some questions about problems she had noticed. She got a headache

and upset stomach after drinking milk although her cheese snacks did not have the same effect. This seemed to bear out her earlier history of childhood ear infections and adult colitis, both of which are common milk allergy responses.¹⁰ (Many people with milk intolerance can tolerate some fairly dry cheese because it has most of the milk sugar removed.)

When she ate an apple by itself as a snack, she became as weepy or shaky as she did with a donut and coffee. She did not get the same response if she ate an apple at the end of a meal. For people who are sensitive to sugar, the amount of sugar eaten in an apple alone may be too great for their bodies to handle appropriately. Eaten after protein and unrefined carbohydrate, the load is not too great (see Chapter III, Low Blood Sugar/Hypoglycemia for explanation, p. 58).

A dinner of pizza wiped her out. She became very sleepy, couldn't stay awake, and woke up at 4:00 A.M., ravenous and with a terrible headache. Next day, she felt like she had a hangover. There might be sugar in the tomato sauce and/or the pizza dough. She might also be allergic to dyes in the prepared pizza sauce.¹¹ She might have been allergic to some other ingredient as well.

After she was on the diet for several weeks, Mary reported an interesting difference in the way she got angry. She said that before she went on the diet, her anger was like a tantrum--out of her control. Now, she still got angry but could think and respond while she was angry and didn't feel out of control. This seemed to fit with her general improvement in thinking more clearly and quickly. Like many other people, including Dick, she might also have responded to some of her food sensitivities with anger. Many people show increased irritability as a symptom of allergy.¹²

At Christmas time, Mary took many liberties with her new diet. She discovered that when she stopped eating carefully, she became more anxious and sometimes, paranoid. She was more irritable and more tired, and often depressed. When she returned to the diet, she felt fine again.

Gradually, Mary found another pattern emerging. She was able to stay on her new diet except for periodic cravings for chocolate. When she paid attention

to those cravings, she found she was eating chocolate when she was upset or had feelings of depression and anger that she was not dealing with. She described this experience as "stuffing the chocolate in on top to keep the feelings down." After eating chocolate, she felt "drunk," light headed, giddy, and had double vision. Her pulse raced. The "drunk" was followed by a hangover with headache, grogginess, and disorganized thoughts. It took about 48 hours to get over the chocolate binge. Therapy turned to helping her learn to deal with her feelings appropriately.

Mary also volunteered that she was almost afraid to feel so good and think so clearly so much of the time. If she was feeling good, then she believed she was supposed to get on with solving her life problems. She said that she almost needed to crash so as not to feel so wonderful. This too was taken up in therapy.

The third case is Anne who came in for anxiety and problems in parenting her children. Anne was 36. She was in a high stress job doing research and teaching in a university. She had been divorced about a year and had joint custody of two sons ages 5 and 8. They were with her half of each week.

Anne said that she was not a good parent to her children. She didn't know what to do with them at times and often didn't feel very loving toward them. Her anxiety about parenting was only part of her general anxiety and paranoia. She didn't think that she knew much about getting along with people and didn't believe that people liked her.

Anne had the typical allergic appearance.¹³ She had dark circles under her eyes ("allergic shiners"), puffy cheeks, and a runny nose which she rubbed frequently. She reported being "allergic to everything." "Everything" included pollens, mold, dust, grasses, cigarette smoke, dogs, cats, and rats (on which, of course, she did research).

Like Mary, she ate highly sugared foods throughout the day and drank several cups of coffee. Her diet was also high in refined carbohydrates (white flour, white rice, spaghetti, etc.).

From her behavior, I would describe Anne as a hyperactive adult. She was fidgety, nervous, restless, and talked fast. Some of her restlessness probably was

caused by the itchiness of her allergies which were a constant bother.

The children also looked allergic with allergic shiners, puffy cheeks, and runny noses which they rubbed frequently. Both were overweight. Both were anxious in appearance and behavior. Both were hyperactive. They had short attention spans and were in constant motion, constantly interrupting, often bickering with each other. They were inattentive to questions and instructions from their mother. Neither child was doing well in school because both were disruptive in their classrooms.

Anne's family history showed that her father was diabetic and her mother had many allergies. Her mother's family had some alcoholism. Anne was considered "pre-diabetic" during her pregnancies.

The children's diet was high in sugar and refined carbohydrates and low in vegetables and fruits. Protein intake was somewhat low. They ate many fast foods: burgers, pizza, etc., and drank Pepsi which is high in caffeine as well as sugar. Breakfast was notable for its high sugar cereals and lack of protein other than the milk on the cereal. Weekend breakfasts featured pancakes and waffles with syrup and other sweets in response to which the children were particularly hyperactive.

From this amount of history and observation, this family seemed to have several problems. All three were allergic to something. (The father was also reported to have many allergies and be highly anxious.) The family history showed several problems with sugar. The amount of sugar in the diet suggested a real sugar addiction for all of them. All of them were hyperactive. Their restlessness and inattentiveness caused a lot of friction among them.

Anne appeared to have a limited knowledge of parenting. She was reluctant to set limits and inconsistent about enforcing the ones she did set. In her anxious state, she was somewhat threatened by discussion of better parenting tactics, assuming she was being criticized for her present parenting.

A gradual change in the family diet was instituted. Sugar was gradually eliminated. Honey was substituted as the sweetener. The total amount of sweetening was greatly reduced. Breakfast cereals were switched to those without sugar coating. Eggs were added. Waffles

and pancakes were made with whole wheat and soy flours (high in protein). Soft drinks and chocolate were eliminated. Whole and cracked wheat bread replaced white. Meats and vegetables were increased. Anne reduced her caffeine intake to one cup of tea per day.

As the diet changed, the hyperactivity decreased. The children stopped quarreling and began to play together, or they played separately more happily. As Anne and the children became less anxious, she was able to like the children better and be less critical of them. They were more likable because they were behaving better. They responded to her more positively and enjoyed many activities with her. She found she enjoyed being with them.

We also worked on parenting skills. When she was less anxious, she was able to discuss the particular problems she was having with the children and find skills to cope with them. Success breeds success. She found that the children responded positively to discipline and seemed calmer when she set limits and enforced them.

Periodically, there were "great falls." That is, someone had a sugar binge, such as an ice cream cone, and the resulting behavior was similar to what it had been before. At these times, Anne needed a lot of support to believe that they would "dry out" again and return to the new normal. When she became anxious, she found parenting difficult and was threatened again by discussion of change. However, after 48 hours, the sugar wore off and everyone felt better.

A pattern began to develop in response to allergies. Anne noticed that an amount of sugar or refined carbohydrate which would not ordinarily have caused anxiety or hyperactivity, could not be tolerated when their allergies were active. For the behavior of family members to be tolerable, the summer pollen allergies definitely required a diet with less of the offending substances. Similarly, Anne was more reactive to food substances, caffeine, and cigarette smoke when she was working with her experimental rats.

These case studies are fairly typical in a number of ways. The clients came for help because their emotions and behaviors were causing them some problems. Their individual

histories showed some factors indicating that their diets might be partial causes of their problems: diabetes and alcoholism among the relatives, headaches, and colitis. Often, the clients had allergy histories and were showing common allergic symptoms: headaches, runny noses, allergic shiners, etc. The diets were high in common troublemakers: sugar, refined carbohydrates, and caffeine.

Guidelines for Identifying Food and Allergy Related Problems

Going from these specific cases to a general picture, what would we look for in deciding whether or not to pursue foods and/or allergy as a possible cause of the presenting problem(s)? Chapter IV contains a food and allergy history form with directions for use and interpretation.

First, the presenting conditions.¹⁴ The problems presented by these clients were depression, anxiety, fatigue, irritability, paranoia, hyperactivity, quarrelsomeness, periodic violent outbursts, and short attention span. Other common problems are withdrawal, and non-specific fearfulness and confusion. (See Chapter III for a more complete list.)

Physical symptoms which often accompany the presenting conditions are hyperactivity, headaches, shakiness, and dizziness. Since alcoholism, diabetes, and low blood sugar are three different ways of having problems with rapidly available calories, the occurrence of any one of them in a family leads me to look first to sugar as a probable cause of

of the presenting problem. If there is more than one family member with alcoholism, diabetes, etc., or a combination like one of each, I'm almost certain that sugar is going to turn up as a problem. Of course, if the client is known to be diabetic, alcoholic, or to have a history of low blood sugar, the source of the problem is already established. A diet check then gives some idea of how well those problems may be under control. (See Chapter V for sample diet.) I also look at the eating pattern to see how much sugar is being taken in and at what times. I am particularly suspicious if there is frequent snacking on high sugar foods accompanied by emotional ups and downs.

Other common food offenders are wheat, egg, milk, and citrus fruit.¹⁵ When there is a sensitivity to a food, the person often has it regularly in the diet, so I look for the frequency with which these particular foods are eaten.¹⁶ If it is at least once a day, the food is likely to be a problem. As noted in the history section (Chapter IV), foods which the person describes as "just have to have _____ every day" are likely to be the offenders. (For Mary, these were chocolate, caffeine, and milk.)

The other pattern is a food aversion. The person who "just can't stand _____" is likely to find it a problem when eaten. It may be hidden in small amounts in the diet and causing the problem. For example, if corn is known to be the offender, it isn't eaten on the cob or whole kernel but might be taken in as cornstarch or corn syrup.

Where the presenting problem shows seasonal variation, a seasonal food change may be involved. For many, it is strawberries, melon, or citrus fruit.¹⁷ Hot chocolate/cocoa is a common wintertime problem. Other patterns may be weekly (high sugar weekend breakfasts) or daily (mid-morning blahs after coffee and a sweet roll for breakfast). Mary felt good after dinner. It was her only balanced meal.

Non-food allergies are the other big factor. Unfortunately, people can be allergic to just about anything. Fortunately, there are a few substances which turn up as the most frequent offenders: hay fever and asthma are caused by pollens and dust. They are complicated by caffeine which is found in coffee, tea, cola drinks, chocolate, cold remedies, and No-Doz type preparations.¹⁸ Other common allergy causes are dust, molds, cat and dog hairs, and feathers.

Allergies may turn up in forms which we recognize such as sneezing, runny noses, rashes, hives, itching eyes, etc. They also turn up in a variety of other forms such as acne, colitis, bed-wetting past age three, nervous stomach, gallbladder problems, arthritis, coughing, wheezing, and headaches.¹⁹ They are often accompanied by "allergic shiners" (dark shadows or circles under the eyes that don't go away even when a person gets enough sleep). Colds that "hang on all winter" are suspect, too, as it is the "allergic salute"--pushing the nose up with the hand.

Allergies tend to run in families--often, family history of allergies is the first indication that there may be

an allergy in the client.²⁰ For example, in my family, my father and brother have hay fever. I was "allergic" to milk as an infant and young child. Our children, therefore, were more likely than average to have allergies. As a preventive measure, they were not given the most common allergic foods during the first year of life, (see Chapter IV).

FOOTNOTES

CHAPTER II

¹Frederic Speer, "The Allergic Tension - Fatigue Syndrome," Pediatric Clinics of North America, 1(1954): 1036.

²James C. Breneman, Basics of Food Allergy, (Springfield, Illinois: Charles C. Thomas, 1968), pp. 41-42.

³Robert H. Williams, Textbook of Endocrinology, 5th. Ed., (Philadelphia, Pennsylvania: W. B. Saunders Co., 1974), p. 823.

⁴Douglas E. Johnstone, "The Natural History of Allergic Disease in Children," Annals of Allergy, 38, #6 (June, 1977):389.

⁵"Too Much Sugar?" Consumer Reports, 43, #3 (March, 1978):136.

⁶Emanuel M. Abrahamson, "A Dietary Treatment for Asthma and Hay Fever," U. S. Naval Medical Bulletin, 40, (1943):717.

⁷Ibid.

⁸Judith A. Ramaley, Ph. D., Professor, University of Nebraska Medical School, Department of Physiology and Biophysics, interview.

⁹Abrahamson, Ibid., pp. 717-718.

¹⁰William G. Crook, Are You Allergic?, (Jackson, Tennessee: Professional Books, 1978), p. 155; Breneman, Ibid., p. 45.

¹¹Leonard J. Feinberg, Herschel Sandberg, Oscar De Castro and Samuel Bellet, "Effects of Coffee Ingestion on Oral Glucose Tolerance Curves in Human Subjects," Metabolism, 17(1968).

¹²Crook, Ibid., p. 13.

¹³Ibid., p. 227.

¹⁴Harry M. Salzer, "Relative Hypoglycemia as a Cause of Neuropsychiatric Illness, "Journal of the National Medical Association, 58, #1 (January, 1976):12.

¹⁵Breneman, Ibid., p. 42.

¹⁶Crook, Ibid., p. 70.

¹⁷Breneman, Ibid., p. 45.

¹⁸Abrahamson, Ibid., p. 717.

¹⁹Crook, Ibid., pp. 11-14.

²⁰Johnstone, Ibid., p. 389.

CHAPTER III

BACKGROUND INFORMATION ABOUT FOOD SENSITIVITIES, ALLERGIES, LOW BLOOD SUGAR, STRESS, AND BIORHYTHMS

Overview

Chapter II presented a general view of the kinds of emotional and behavioral problems likely to be diet and allergy related and some case studies to illustrate typical presenting problems.

Chapter III gives you the background needed to understand how to work on diet and behavioral problems with clients. The ways in which food sensitivities, allergies, and low blood sugar can cause problem emotions and behavior are explained in some detail. The parts played by stress and biorhythms are discussed more briefly. Finally, a graphic device, the Ramaley Rectangle, is used to show how all of the factors can interact.

If you look at a client's presenting problem(s) as a jigsaw puzzle, then this section describes some of the pieces of that puzzle and explains how and why they contribute to the picture.

Speaking Science

There is some SCIENCE in this chapter. Don't panic. Scientific language is just a shorthand. In this book, every

scientific word or expression is accompanied by an explanation in simple, ordinary English. The glossary at the back of the book repeats the explanation.

Because I am not a scientist but a social worker and a former victim of acute science anxiety, my explanations tend to be quite simple. They are intended for you and your clients. I hope you will understand them. From my own experience, I know that good work can be done and many clients' food and allergy problems solved even if you don't have much information about why diet and behavior are related.

Food Intolerance/Food Sensitivity/Food Allergy

Definitions

Food intolerance is defined as unusual sensitivity to a food which doesn't bother most other people!¹ "Food allergy" and "food sensitivity" are other terms used to describe this condition. The terms are used here interchangeably.

Causes of Food Intolerance

Food sensitivities occur when there is interference in some part of a food's normal travel through the body.² That interference is somewhere in the paths of digestion, absorption, use, or elimination. One or more body mechanisms are involved. Sometimes it is the immune system. (You know that kind of interference as "allergy," whether it is to food or some other substance.) Sometimes, there are defects

in how the food is carried, used, or stored in tissues and body fluids. (These are defects of metabolic functions and hormone balance.) Sometimes the problem is a temporary interference with body chemistry (metabolism) induced by emotions or stress.

Tests for Food Intolerance

Traditionally, physicians have used skin tests to evaluate most allergies. The suspect substance is put on the skin or scratched or injected into it and the area observed for redness, welts, or wheals (raised, red, itchy areas). This test is very successful for many kinds of allergies; but because foods sometimes cause internal upsets without skin reactions, it isn't very useful for foods.³ However, some physicians do not consider a person truly food sensitive unless there is a skin response.

A newer measure of food sensitivity is the pulse test.⁴ (See Chapter IV for details.) An increase of 15% or more in the pulse rate in response to a particular food is taken as the sign of sensitivity response.

The most commonly used test for food sensitivities is the elimination diet.⁵ (See Chapter IV for details.) During the test period, the suspected food is eliminated from the diet for 8-10 days and then reintroduced to discover whether or not the symptoms are correspondingly eliminated and reintroduced. This test is very reliable but takes a long time

to perform if there are many foods to be tested. Also, the tester has to know what responses to look for and the probable elapsed time between reintroduction of the food and the response. (See Table 4, Chapter V for common response times.) Headache, for example, is likely to occur within one half hour, but aching joints come 48-96 hours later.

Symptoms of Food Intolerance

Food sensitivities show up in three major ways: physical, behavioral, and emotional.

Physical manifestations of food sensitivities may occur as some of the usual symptoms of allergy: runny nose, red and runny eyes, headaches, skin rashes, hives, wheezing, and sneezing.⁶ With food allergies, frequent responses may also be heartburn, upset stomach, gut pains, diarrhea, and cramps.⁷

If the sensitivity is to a rare or seasonal food, the sufferer may have identified some of the physical symptoms already because they occur only on the rare occasions when that particular food is eaten: strawberries in season, shellfish at the seashore, or cucumbers from the garden, may evoke hives, violent headaches, diarrhea, and stomach aches.⁸

More commonly, the sensitivity is to some common food(s) eaten everyday, and the physical responses tend to be frequent or chronic.⁹ The symptoms build up gradually and remain fairly constant; therefore, their incidence has not been connected with food. Sugar, wheat, eggs, corn, or citrus fruit,

for example, may evoke chronic stuffy nose, headache, heartburn, upset stomach, obesity, bed wetting, and colitis.¹⁰

Many people have emotional and behavioral responses to food intolerances instead of or in addition to their physical responses.¹¹ These emotional and behavioral responses are more difficult to observe and measure objectively and, therefore, are less likely to be noticed or accepted as related. These are the symptoms you are more likely to have presented to you.

Some people have their thinking affected. They are unclear or "fuzzy." Some are confused. Some are anxious or paranoid while others are depressed or sort of blurred. Some weep. Others are irritable.

Other people act overstimulated. They are tense, nervous, agitated, and can't sit still. They have short attention spans, moving from one activity to another and talking quickly, skipping from subject to subject. Kids call them "motor mouths." Some laugh nervously. If they are children, they may have short attention spans, race around, bounce off walls (literally or figuratively), and generally act wild and out of control. They seem to have motors in back and no steering mechanism in front. In children, this is called "hyperactivity." In adults, it isn't. Instead, it is called "nervous habits" or "tense" or "hyper" or "high strung."

Sometimes, people become violent. One spouse abuser attained real notoriety when he appeared on the front

page of the Wall Street Journal under the headline "Can Chocolate Turn You Into A Criminal? Some Experts Say So."¹² In another case, a 12-year-old took a stick to someone after eating a banana. This may sound bizarre, but it happened.

Some people slow down. They are lethargic and fatigued.¹³ I am one of these. My response to a birthday cake or a gorge of Christmas cookies is a day of absolute lethargy. Every movement is an effort. I'm content to sleep late and sit around the rest of the day.

Some people have perceptual distortions. For one of my friends, food coloring distorts time and place; minutes drag by, then hours race. Another acquaintance can't walk a straight line after only three raisins. Still another responds to chocolate candy bars by not being able to write down telephone numbers when they are dictated to her. She can't put the digits in order nor can she write down names as they are spelled out to her.

These responses take place through some sensitivity of the brain or nerves. (This is called sensitivity of the central nervous system, usually abbreviated CNS.) The results are changes in thinking or behavior.

We can't peep inside to see what is happening. We have to infer that something has happened because the thinking or behavior changes in response to a particular food. We have to guess what happens. Perhaps some tissues swell and press on other parts. Perhaps membranes are irritated.¹⁴

One allergy specialist, J. C. Breneman, says that we could imagine a hive sized swelling in the brain instead of on the skin, and then imagine what might happen.¹⁵ Most of us have read about small brain tumors which radically affected people's behavior long before the tumor could be detected. I think of this hypothetical hive on the brain like that. It could be pressing on something and pushing it out of place. It could be blocking a passage. It could be squeezing the tissue on which it had developed. Maybe it does the inside equivalent of itching. It might deactivate an area which normally inhibits some behavior, like aggression. Clearly, we could expect a change in that person, but we wouldn't see it as a red lump on the outside. Messages might not get through the brain, or they might get through in some mixed up fashion so the person isn't thinking straight.

Treatment of Food Intolerance

Treatment of food intolerance requires identifying problem food and removing it from the diet. After an extended period, sometimes the body will tolerate it occasionally.¹⁶ Reintroduction on a day-to-day basis will return the original symptoms.¹⁷

Allergies

Definitions

An allergy is defined as an exaggerated reaction to a specific substance which is harmless in the same amount to

most other people.¹⁸ While some physicians prefer a narrower definition, one requiring evidence of specific immune responses in the body or on the skin, this broader definition is more appropriate for our work because it includes a wide variety of responses to many substances.

Causes of Allergies

Most allergies are caused by sensitivity to things that are eaten, touched, or breathed in. The tendency to respond allergically is partly inherited but is also affected by age, environment, stress, general health, and previous exposure to the substance.¹⁹

Despite vast amounts of research, explanations of allergies are still very incomplete. Most explanations are theories with some evidence to support them. No one can announce the definitive explanation or present irrefutable evidence as to how the mechanisms work. However, some facts are available. The body has a variety of ways of handling allergic substances. It mobilizes an incredible array of defenses to isolate and/or expel each offending substance and thus minimize the damage it can do to the body.²⁰ Different mechanisms are used in different places and for different substances.²¹ All have the same objective: to protect the body from harm.

Special Problems With Allergies

Because each human is unique, each has slightly dif-

ferent body chemistry. These differences may explain why different people respond differently to the same substance. Changes in age also produce chemical changes in the body, which can affect allergic responses. (You are probably familiar with changes in sex hormones through the life cycle. Other hormones change too.) As a result, there are several things about allergies that are rather tricky.

First, despite the fact that many people say of a child with allergies, "Oh, s/he will outgrow it," the number of allergies tend to increase rather than decrease with age.²²

Second, an allergic person may have different allergies at different times in life. One may disappear completely to be replaced by another. The earlier one(s) may or may not reappear.²³

Third, environmental allergies tend to become progressively worse during the first three years in a new climate. After that, they tend to stay at the same level of severity as in the third year.

Fourth, a person may have different allergic responses to the same substance at different times. For example, a food may cause a stuffy nose in childhood but colitis in an adult. Or a food which causes hyperactivity in a child may cause a stuffy nose in an adult.

Fifth, the degree of allergic response may vary depending on other conditions and stresses in a person's life. (See the Ramaley Rectangle.) A food or pollen which caused

only a little upset at one time may trigger a strong reaction at another time.

All of these variations in allergies and responses can be very confusing. A client may tell you, in good faith, that s/he has been tested for allergies and doesn't have any even though you are quite convinced that s/he is now showing an allergic response. Another client may tell you that s/he had an allergy but it is gone. Still another client may tell you that this child's ear infection can't be related to milk because milk only causes an upset stomach. What they are telling you may be perfectly true. What they need to know now is that the picture can change.

Common Allergic Substances

When someone mentions allergies, most of us in North America think of pollens, ragweed, and hay fever. Allergic responses to ragweed are so severe and so widespread that the size of the crop and the progress of its blooms are reported on radio and television in some parts of the country. (The sufferers usually know exactly how the progression is going by the intensity of their responses.) States like Oregon, before it started discouraging immigration, used to boast about the advantages of living in a ragweed-free area. Whatever the problems of living outside of North America, they don't include ragweed.

Unfortunately, ragweed is only one of many allergic substances that we can breathe in. "Inhalant allergens," as

they are called, make up a gigantic list.²⁴ While no one is bothered by them all, someone is bothered by house dust, mold, feathers, animal danders, smoke from tobacco and pot, and chemicals of every kind. Recently, there have been many reports of housewives sensitive to cleaning compounds, and of school children sensitive to cleaning compounds, chalk dust, and inks. (I can only imagine the problems of a child who is really allergic to school.)

I know first hand that many aerosol cleaners and perfumes bring out the worst in my nose. Sizings do too. I once spent a month under a physician's supervision because I walked among hundreds of bolts of newly unwrapped materials in a brand new fabric store and inhaled a large dose of airborne sizing. Eye irritation and a month of coughing fits and lung congestion were an unpleasant lesson to me.

Inhaled plant allergens are not confined to ragweed. There are pollens from many other plants, the major problems being grasses and trees. Mowing grass or hay precipitates strong reactions in many people.

Molds are also blowing about in the air. Molds are tiny plants. You may know them best as mildew or fungus. Outdoors, they flourish in the wet seasons and love to grow in rotting leaves. Responses tend to be worst on windy days when more are blowing about. Indoors, they do well in basements, crawl spaces, and some attics, especially in damp climates or in houses with leaky foundations. A musty closet may

also be a prime source, usually discovered while rummaging for lost objects or doing the long postponed cleaning.

Animals produce their share of allergic responses too. Americans keep more hairy housepets than any other nationality.²⁵ Cats and dogs, of course, cause the most problems, but dander from other animals can too, like rabbits, goats, cows, horses, gerbils, guinea pigs, etc. Feathers can be a problem too, from pet canaries and parakeets to the loft or homing pigeons or the pen of ducks or chickens. Unfortunately, the animals may also cause trouble after they're dead. Feather pillows and animal fiber pads in rugs and upholstered furniture may produce the same effects.²⁶ So may cute bunny fur muffs and hats and angora sweaters. I suppose a bear rug can too, or a wall of handsome hunting trophies, especially when they are dusted. No doubt someone is allergic to moose or zebra dander.

House dust is another inhalant allergen, not just the "house moss," as my father calls the under-furniture fuzzies, but also the less obvious bits of lint. Some is cotton and linen. Others are from a variety of sources and may even include dust mites which are little creatures which blow around with the dust.²⁷ Naturally, the sufferers have more trouble when they are indoors, and when hot air furnaces or air conditioners are moving the air.

Inhaled chemicals can also be irritants and allergens.²⁸ The list, which is growing longer every day, includes paint,

perfume, tobacco and pot smoke, smog, plastics, fabric sizing, hair sprays, room fresheners, insect sprays, and newsprint. Spray deodorants make me gasp while my nose itches and my eyes water.

I am particularly bothered by paint which gives me splitting headaches, depression, appetite loss, and diarrhea. As a child, I experienced my annual depression when my mother insisted we should repaint part of the woodwork each winter. Now I am the mother and use oil based paints indoors only with open windows and/or an exhaust fan.

Special "hypoallergenic" (literally: less allergy producing) makeup may have alerted you to the fact that some people have problems with the regular products which may contain orris root, (in some face powders), perfumes, and dyes.²⁹ Rice and corn powders are also found in cosmetics.

Other problem inhalants include cereal grain dust, commonly found near grain elevators, some railroad cars, and bakeries, and insect dust, found in many of the same places and made up of the parts of dead insects.³⁰

Allergens coming in through the skin include poison oak and poison ivy which cause unpleasant rashes.³¹ A number of people turn out to be allergic to specific dye stuffs, often red or other bright colors.³² Enough men were bothered by the elastic bands on their underpants that articles appeared in medical and clothing trade journals. The offender was chemicals used in new synthetic fibers. Good old cotton and rubber

were not at fault. The chemicals weren't given up, but many major manufacturers include a special line for men affected, and there are fewer executive itchers.

Soaps and detergents are other trouble makers.³³ Unpleasant itching or rashes may accompany wearing of insufficiently rinsed clothing or aggravate the famous dishpan hands. Bubble bath, perfumed bath oils, and perfumed soaps sometimes cause all-over skin problems.³⁴

All kinds of insect stings can cause problems too. A few people are intensely allergic and must be rushed to the hospital, sometimes in shock. Others itch or burn a bit. In between is a range of uncomfortable reactions.

Many people are also allergic to drugs. Any drug can cause allergies.³⁵ Commonly associated with allergies, according to Dr. Crook, are aspirin and other pain relievers, penicillin and other antibiotics, tranquilizers and other sedatives.³⁶ As you can see, some of these are taken by mouth and others through injection. They can cause allergies either way.

Some people are actually allergic to extreme temperatures.³⁷ Localized reactions to cold may be seen as welts or swelling in response to contact with snow or ice. Weakness, fainting, or wheezing may be general responses to cold swims or showers.

Heat reactions are often seen as hives either in exposed areas or all over the body.³⁸ More general reactions

include wheezing, sneezing, headache, and digestive symptoms.

Allergy to sunlight is seen as hives and/or rashes.³⁹ Some people just turn red at lower exposure levels than usual. Some drugs temporarily cause increased sunlight sensitivity and are usually labeled to this effect.

Symptoms of Allergies

Now that you have looked at the kinds of substances which cause allergies, let's look at the range of allergic symptoms. This is a long list even though it doesn't include all of the possibilities. There is some comfort: a few common symptoms occur so frequently that they are helpful in identifying a great number of allergic people. Symptoms also often cluster. One common pattern includes circles under the eyes with puffy cheeks, sniffles, and colds that hang on. Another frequent cluster includes gut pain, sniffles, fatigue, irritability, and headache.

As you can see on the screening form in Chapter IV, the common signs and symptoms of allergies include: circles under the eyes (allergic shiners). These are sometimes very dark. (Some female clients cover them with makeup.) The cheeks beneath the eyes may be puffy too. The eyes may be red and runny. Sometimes the eyes swell at night.

Sniffles (allergic rhinitis) range from a periodic sniff and/or nose wipe to a runny, drippy nose even without a cold.⁴⁰ In children especially, the sniffles are accompanied by the

"allergic salute" which is an upward rub of the nose. Many nose-reacting allergy victims have a crease right across the nose from pushing it up so much.⁴¹

Another symptom is the chronically stuffy nose.⁴² Instead of dripping, these folks can't get anything out. They are often mouth breathers. Whether "drippers" or "stoppers," these people complain of having colds that hang on all winter. Miraculous "cold" cures are effected by removal of allergens. After that, they know when they have a real cold.

The tissues lining the nose, mouth, and throat are called mucus membranes. They swell when irritated by allergens. When swollen, they don't do their job adequately and often nurse rather than fight infections. Children especially tend to have a series of infections, and frequent respiratory infections are a sign of allergy.⁴³

Sometimes there is a drip down the back of the throat from the nose. This "postnasal drip" (literally, behind the nose) can tickle/irritate the throat. In response, the victim tries to scratch the site by coughing or clearing the throat frequently.⁴⁴ If the postnasal drip responds further to gravity, the stomach may raise some sort of objections too. I have one young friend who has frequent stomach aches, always when he has postnasal drip. Loss of appetite accompanies the problem.

Infections in the back of the nose and the throat enter the mouth too, and can easily spread into the tube which con-

nects the mouth with the middle ear (eustachean tube).⁴⁵ This problem is particularly frequent in children. The lower end of the tube swells shut, trapping the infection in the tube and middle ear. Middle ear infections (otitis media) commonly follow, leading to ear aches and sometimes to temporary or permanent hearing loss.⁴⁶ Sometimes, when the nose and throat get better, the ear continues to support the infection. It goes unnoticed. Other people may think the person is inattentive or hard of hearing.

Too much or too little activity is another symptom.⁴⁷ Some people can't sit still. Others can only sit still. They may be drowsy or sluggish.

While headaches are probably the most common allergy pain, other aches and pains afflict many.⁴⁸ Leg pains and leg cramps bother some. Children are often said to have "growing pains." Some people have low backache, stiff fingers, or sore feet.

Problems in the digestive tract extend from one end to the other. Mouth ulcers, heartburn, cramps, stomach and intestinal pains, ulcers, gas, and diarrhea are all common symptoms.⁴⁹

Sleep problems include difficulty in falling asleep, and frequent waking.⁵⁰ Often, allergic people are hot sleepers, sweating profusely.⁵¹ Parents often notice this in their children when they go in to check on them or cover them up for the night. One friend of mine says she doesn't worry

about the effect of power failures on her electric blanket as long as her little son has his allergies. She can always move him into her bed.

Bed wetting (enuresis) beyond the age of three is also a symptom.⁵² As the bladder walls swell, much like the lining of the stuffy nose, the bladder loses some of its ability to stretch and the capacity is decreased. When the muscles which control the opening swell, they can't contract tightly, tire easily, and allow urine spillage.

Fluid retention is another symptom.⁵³ Onset is sudden. The person is very thirsty, but urine output is decreased. Rings and shoes may feel tight. Eighteen to twenty-four hours after the allergen is removed, the weight gain disappears. Breneman believes this to be such an important symptom that he asks patients to weigh themselves daily.⁵⁴

Irritability and moodiness are common symptoms too.⁵⁵ They wax and wane with the allergens, and may be particularly noticeable with seasonal allergies. I have one friend who has a short temper in the ragweed season although he is usually patient the rest of the year. Breneman reports his studies of bedwetters who lost their "irritable personality" when they had the allergen removed, whether or not they controlled the wetting.⁵⁶

Another common symptom is asthma about which whole books are written.⁵⁷ Because it often has an allergic base, it could constitute a part of the picture in a client you might see.

Hives and skin rashes can cause problems.⁵⁸ I have been interested in observing that friends of mine who have sensitivities to citrus fruits and some other foods develop rashes and sore spots at the corners of their mouths, and sores inside their mouths as well as having digestive problems of various kinds.

Caffeine and Allergies

Caffeine exaggerates allergic responses.⁵⁹ Hay fever and asthma victims are particularly responsive to its effects; however, other allergies can also be made worse.⁶⁰

Caffeine can also produce symptoms of its own. According to Greden, caffeinism can be mistaken for anxiety neurosis.⁶¹ Because it is a powerful stimulant to most of the body systems, it can produce symptoms of nervousness, irritability, tremulousness, insomnia, palpitations, flushing, and sensory disturbances. To add to the confusion, caffeine withdrawal syndrome, with its accompanying headache, also mimics anxiety.

All of the common sources of caffeine need to be checked: coffee, tea, cocoa, chocolate, cola drinks, candy bars, aspirin, over-the-counter cold remedies, and No-Doz tablets.

Low Blood Sugar/Hypoglycemia

Definitions

"Glucose" is the scientific name for a particular form of sugar. "Hypoglycemia" means a low supply of this sugar in

the blood. Because glucose is the main fuel for cells of the brain and central nervous system, these cells malfunction when the glucose supply falls short.⁶² They have run too low on fuel.

Kinds of Hypoglycemia

There are several kinds of hypoglycemia, most of them rare.⁶³ In this book, you are reading only about the most common variety: functional hypoglycemia. "Functional" is medical jargon for unknown origin. (As you will see, we know what happens, but not exactly why; therefore, the origin is unknown.)

You are also reading about "relative" hypoglycemia. "Relative" means "in relation to something else."⁶⁴ In this case, the something else is the blood sugar level before the person ate. Thus, relative hypoglycemia means the blood sugar level falls relatively low after eating when compared with the level before eating. (Further explanation follows in "Causes" section.)

Symptoms of Hypoglycemia

Low blood sugar produces a great variety of mental and physical symptoms. In part, the variety is due to the difference between one person and another.⁶⁵ Everybody differs in biochemical makeup and personality; therefore, everybody is likely to differ in response to low blood sugar depending on where and how cells are affected.

Many of the symptoms can be confused with those of other medical conditions. Several physicians now writing about this disorder first became interested in it when they were misdiagnosed in a variety of ways and were later found to have hypoglycemia instead.⁶⁶ (Of course, every client should have a medical examination to screen for other physical causes for his/her symptoms.)

Now, look at the variety of symptoms reported. Many of them are commonly reported in human services practice. Williams states "Patients with hypoglycemia are frequently misdiagnosed as being 'neurotic' or 'psychotic...'"⁶⁷ He describes the hypoglycemic's behavior as often "emotionally unstable, tense, anxious, and very conscientious," with symptoms including faintness, nervous anxiety, headache, lethargy, confusion, motor incoordination, and inappropriate affect.⁶⁸ Salzer goes further, stating that hypoglycemia can mimic any mental disorder connected with nerve disease (neuro-psychiatric disorder).⁶⁹ Among the possibilities, he lists manic-depressive psychosis, schizophrenia, crying spells, phobias, irritability, psycho-neurotic anxiety, and psycho-neurotic depression. Hypoglycemia has also been diagnosed as brain tumor, diabetes, and cerebral arteriosclerosis (hardening of the brain's arteries)!⁷⁰ Physical symptoms include exhaustion, sweating, irregular heartbeat, dizziness, tremor, numbness, blurred vision, muscle cramps, and blackouts.⁷¹

Causes of Hypoglycemia

What is it that can cause this variety of symptoms and be mistaken for so many other conditions? What happens in the body to cause all of these problems?

To understand hypoglycemia, you need to understand the importance of blood sugar (glucose) highs and lows. Glucose is a body fuel, carried to the cells by the blood and used there for energy and heating. As mentioned earlier, although glucose isn't the only body fuel, it is the most common, important one, and is the preferred fuel for brain and nerve cells. When the fuel supply falls too low, the cells cannot function appropriately.

Every kind of food we eat can be made into glucose. The body absorbs nutrients by digestion, breaking down food as it passes through the digestive tract. Some foods are broken down and converted into glucose quickly. These are sugars and starches. Other foods are digested more slowly and then converted to glucose in the liver. These are proteins and fats.

Since we don't eat continuously (well, some of us appear to), and different foods are converted to glucose at different rates, the body needs some mechanisms to help maintain fairly constant blood sugar levels. These mechanisms control blood sugar levels like a thermostat, pushing levels down when they rise too fast, or are too high, and up when they fall too quickly or are too low.

When glucose levels rise, messages go to the pancreas to send out insulin to help store the excess. Part of the glucose is used immediately by cells. The rest is carried to storage where it will be available between meals and during physical and emotional stress. Prime storage sites are the liver, muscles, and fat.

Sugar stored in the liver can be retrieved fairly quickly. Sugar stored in the muscles is used there but is not available to the rest of the body. Sugar stored in fat tissue can be retrieved, but only very slowly.

Diabetics do not produce enough insulin or are insensitive to the insulin they do produce; therefore, they have control problems when glucose levels rise too fast or too high. Some take supplementary insulin. All of them need to follow low sugar, low starch diets to prevent sudden, sharp blood sugar rises.

When glucose levels fall too low, messages go to the liver to raise the levels again. These messages come from two different places and receive two different responses. On a day-to-day basis, the message comes from the pancreas (as the hormone glucagon) to stimulate the liver to manufacture glucose from proteins and parts of fats called glycerol. In times of stress, the message comes from the adrenal glands (as the hormone adrenalin) and stimulates the liver to release its stored sugar quickly.

The amount of glucose available and the time it is available depends on eating. The body breaks down food and converts and absorbs it from the stomach and the intestine. (The whole, complicated process of breaking down food and using it is called metabolism.)

As long as glucose is being absorbed into the blood stream after a meal, blood sugar levels stay up. If a food is quickly broken down and converted into glucose, the blood sugar level rises quickly and then goes down again quickly. On the other hand, if a food is digested slowly, the glucose level rises slowly and stays up until that food has been completely absorbed.

After the absorption of a meal is over, the liver releases glucose into the bloodstream to keep the glucose level up until the next meal. Some of this glucose comes from storage in the liver. The rest is new glucose which the liver makes by converting proteins and the glycerol part of fat.

A body becomes hypoglycemic when more glucose is being put into storage in the liver and muscles than is being released into the bloodstream by the liver.

I like William Crook's analogy of building a fire.⁷² Alcohol, sugar, and refined starches are like kindling. They burn quickly and brightly and have a fast yield. Proteins and fats are like the back logs. They are slower to ignite and burn over a long period. To get warm and stay warm, we need a balance of the two. Otherwise, we either can't get the fire going, or we run out of heat quickly.

A body can become hypoglycemic when too much glucose is put into storage at a time when no new glucose supply is coming in. As a result, the glucose level in the blood goes down, and some cells begin to run out of fuel. When the cells lack fuel, hypoglycemia occurs and symptoms appear.

The regulating mechanisms can be asked to work beyond their capacities, or they can malfunction. If there is a sudden sharp rise in glucose, the pancreas may respond by pumping too much insulin into the blood. When this happens, too much glucose is put into storage. Result: hypoglycemia. If the diet is deficient, not enough glucose is stored to maintain the body until the next meal. When stored supplies have been used up, generally a few hours after a meal, the glucose level drops. Result: hypoglycemia. When there is a lot of stress, especially strong or continuous stress, too much adrenalin is pumped out, releasing so much stored sugar that it exhausts the storage facilities. As in the previous case, when the stored supply is used up, the glucose levels drops again. Result: hypoglycemia.

Hypoglycemia and Allergies

Low blood sugar is commonly associated with allergies.⁷³

As mentioned earlier, in the section on allergies, when an allergic substance enters the body, the body reacts as it does to any stress and mobilizes its defenses to control that substance. Part of the defense system involves pumping out adrena-

lin, which, you will remember, helps to raise blood sugar levels. The body revs up, getting ready to deal with trouble. (You are probably familiar with this response when the stimulus is fear or anger instead of allergy. The body pumps out adrenalin in preparation for "fight or flight;" that is, defending itself in a way which requires a vast use of energy.) Eventually, the body discovers that it isn't going to need as much energy as it has prepared to use. In response, then, the pancreas pumps out insulin to put the sugar back in storage, but the pancreas tends to respond with an oversupply of insulin because the adrenalin rise is quick and sharp. If insulin is oversupplied, too much glucose is put into storage leaving the blood level too low. Once again, hypoglycemia is the result.

Hypoglycemia tends to aggravate allergic reactions,
perhaps because cells lack adequate fuel to perform optimally.⁷⁴
The person with hypoglycemia and allergies is then caught in a vicious cycle.

Hypoglycemia, Addictions, and Allergies

The pattern described in the preceding section is that of addiction: the "fix" speeds up the body, giving a sense of well being; as the "fix" wears off, the body slows down again, often going into a slump period. Naturally, the addict wants another "fix" to return the feeling of well being.⁷⁵

This pattern explains why people are likely to be addicted to allergic substances, especially foods. When they eat the allergic food, they feel better temporarily. As the allergic response wears off, they go into a slump from which they try to escape by eating more of that food; thus, the candy bar freak (usually chocolate), the Frito freak (corn), or the pastry freak (wheat and/or sugar). Because caffeine is a stimulant which speeds up the system temporarily, interfering with glucose regulation, it is a common addictive substance; hence, the perennial coffee drinker, the cola freak, and the traditional English tea addict.

Hypoglycemia and Obesity

Typically, hypoglycemics try to keep blood sugar levels up between meals by eating sweet snacks frequently-- the equivalent of throwing more kindling on the fire as each batch burns out. Because these sweet snacks alleviate symptoms temporarily, hypoglycemics come to crave these snacks-- the addictive pattern. Naturally, frequent eating of high calorie food can lead to weight gain. People on a hypoglycemia diet often find they lose unwanted weight because they eat less high calorie food.

Hypoglycemia and Smoking

Smoking interferes with maintenance of normal blood sugar levels although the mechanisms are not clear.⁷⁶ In a

person who has difficulty maintaining appropriate blood sugar levels, heavy smoking may be causing at least part of the difficulty.

All U. S. tobacco is sugar-cured, and all U. S. cigarette papers are sugar dipped. These amounts of sugar may contribute to hypoglycemia.

Special Problems Associated With High Sugar Intake

Sugar here refers mostly to common table sugar--those white granules which come from sugar cane or sugar beets (sucrose). Brown sugar is actually white sugar with molasses added for coloring and flavor. Other forms of this sugar are corn syrup and molasses which are somewhat less refined.

To identify sugars when reading labels, look for words ending in "ose" like sucrose (common white sugar), dextrose, lactose, levulose, etc. They are all kinds of sugar.

Honey produces fewer problems because it is three times as sweet as sugar (less is needed) and because half of its sweetening powers come from fructose (see "ose"), a kind of sugar the body can use without help from the pancreas. People can overdose on honey too, but it is harder to do so.

Handling a Sugar Load

As you discovered earlier in this section, the body has mechanisms for regulating blood sugar levels. The control capabilities of these mechanisms can be exceeded by an overload. Sugars and refined starches (like white bread, spaghetti,

and white rice) are quickly converted into glucose causing a sudden, sharp rise in the blood sugar level. The body's response to this sudden, sharp rise is often an overproduction of insulin, resulting in low blood sugar. (See explanation, p. 61.)

Some of the chemicals we use in breaking down sugar, (like table sugar or molasses) and starches into glucose are the B vitamins.⁷⁷ Our bodies must use B vitamins to make the conversion. Our bodies also need B vitamins for many vital brain functions. Without these vitamins, messages either don't get through, or don't get through in the same way. (In "science," this is referred to as "interference with brain neuro-transmitters.")

If there aren't enough B vitamins to convert sugar and transmit nerve impulses in the brain, the brain may not be able to think straight. If that's the case, then people who don't have enough B vitamins to go around may periodically or chronically appear to be fuzzy or confused thinkers, be anxious or depressed, or even have hallucinations.⁷⁸

Knowing about this relationship between sugar and B vitamins, you may think that the problem can be taken care of by giving people enough B vitamins; but, like most things about the body, it isn't that simple. Adding B vitamins seems to work for some people, but only up to a point. Apparently the body can't take in enough pure B vitamins to deal with a large amount of sugar. In part, that is because

the breakdown products of the sugar are causing problems as well.⁷⁹ As the amount of sugar and refined starch in the diet goes up, the amount of these harmful breakdown products increases too.

Replacing Essential Nutrients With Sugar

Bodies need many nutrients for optimal functioning. When a large proportion of the diet consists of sugar and refined starches, then a smaller proportion of the diet must supply all of the nutrients for growth, maintenance, and repair. Because a diet containing only the necessary nutrients for optimal functioning is very filling, a person eating 10-20% of his/her diet as sugar and refined starches is unlikely to have adequate nutrition. See Chapter V for sample diet.) On a high sugar diet, the essential nutrients needed to break down sugar in the body may actually be displaced by sugar itself.⁸⁰ These nutrients will have to be taken away from some other vital work.

Certain groups of people have problems maintaining adequate nutrition. For them, high sugar and starch intake can be a serious health threat. The very young, the very old, and those with absorption problems of the gut, like colitis and chronic diarrhea, are particularly at risk.

Hypoglycemia Detection

As mentioned at the beginning of this section, low blood sugar can masquerade as practically any sort of psycho-

logical dysfunction. It can also produce an incredible range of physical symptoms which even the best diagnosticians have confused with liver disease, brain tumor, and other serious health problems.⁸¹ Naturally, you want to be sure that your client has had a physical examination which has screened for these dire possibilities.

After that, the following should be explored:

1. There are certain symptoms which are very common and should most easily excite your suspicion.⁸² Physical symptoms: weakness, faintness, sweating, fatigue, headaches, dizziness, palpitations. Emotional symptoms: depression, anxiety, confusion, anger, irritability, loss of concentration, moodiness.

2. Symptoms wax and wane, and are often most severe 2½ to 3½ hours after a meal or sweet snack.⁸³

3. The client's diet usually will provide many of the necessary clues.⁸⁴ Particular patterns of eating and types of diet are most often associated with hypoglycemia. (See section on taking diet history for details.) The diet is high in sugars and refined starches and low in protein and fat. Frequent snacking on high sugar foods is also a tip off.

4. Clients complain of being particularly tired a few hours after a meal and/or when awakening in the morning.⁸⁵

5. High caffeine intake complicates glucose regulation in the body.⁸⁶ Therefore, a diet high in coffee, tea, chocolate, or cola drinks is often associated with hypoglycemia.

Aspirin, and over-the-counter cold remedies also contain enough caffeine to interfere with regulation in some people.

6. Where alcohol is a problem, hypoglycemia is usually present.⁸⁷

7. Allergies and low blood sugar often go together, so a history of allergies should be taken as a clue.⁸⁸

8. Smoking can produce hypoglycemia.⁸⁹ Heavy smokers particularly should be checked.

Hypoglycemia Correction

Hypoglycemia is corrected by eating. The temptation is to eat a food which is nearly 100% sugar, like a candy bar, so that digestion will be rapid and glucose levels will rise quickly. Many hypoglycemics report strong cravings for sweets when their blood sugar is low. Instead, an orange plus some protein food will correct the immediate problem. The orange provides natural sugar (as fructose and sucrose) which can be used quickly. The protein keeps glucose levels up until the next meal. Possibilities include meat, cheese, milk, nuts, and whole grains.

Hypoglycemia Prevention

Hypoglycemia prevention requires a balanced diet.⁹⁰ One aim is to eat a combination of foods which digest at various speeds so that glucose is absorbed fairly steadily and does not exceed the body's regulatory ability. The other aim is to provide adequate protein and fat as energy sources.

Needs for energy are best met by a sustaining diet of adequate protein, some fat, and unrefined starches such as whole grains. Sugar needs are adequately met by fruits and vegetables. Some honey is usually acceptable.

In preventing hypoglycemia, between meal and late evening snacks of high protein foods are often very helpful. These snacks push up glucose levels before they get too low and thus prevent the hypoglycemia.

Stress

Stress can increase the body's responses to food sensitivities, allergies, and daily rhythms.⁹¹ The increased responses are likely to produce more intense emotional and/or behavioral symptoms. (See Ramaley Rectangle for graphic illustration.)

The usual idea of stress is increased tension or emotional upheaval. A less obvious stress is in the rhythm of a person's work: monthly reports, annual reports, or school vacations. Illnesses, especially metabolic diseases (like hepatitis, diabetes, and malnutrition), also create stress. Still other stresses are exposure to cold and higher altitude.

Biorhythms

Biorhythms are real cycles of body activities.⁹² (They are not those computer printouts predicting when you are more or less likely to have an auto accident.) Changes

during the cycles can affect body responses to food, allergies, and stress. Biorhythms are daily, weekly, monthly, and yearly features of each individual's life. Some, like pain and temperature, are daily. Some, like menstruation, are more or less monthly. In men, there is a mood cycle of 9 or 20-22 days. (See Ramaley Rectangle for further information.)

Probably you are familiar with much of the menstrual folklore which assumes that women are more or less irritable, moody, or weepy at different times in their cycles. Men follow much the same pattern on their 9 or 22 day cycles. There are also times of day when people are more and less allergic and more and less sensitive to pain. These physical changes during the cycles may be reflected in emotional and behavioral changes.

The Ramaley Rectangle

The Ramaley Rectangle shows how several factors may interact to increase and decrease emotional and behavioral symptoms. These factors are food sensitivities, allergies, stresses, and biorhythms. It was devised by my colleague, Dr. Judith A. Ramaley. We have found it particularly useful in explaining to clients and colleagues why an emotional or behavioral problem suddenly becomes worse even though the client is following a diet which has previously kept the problem under control.

The client's usual progression is like this: The new diet which omits the offending food(s) has been established.

The client has been doing well. The problem condition has improved or disappeared. Then, s/he notices an abrupt and/or intermittent change which is reported:

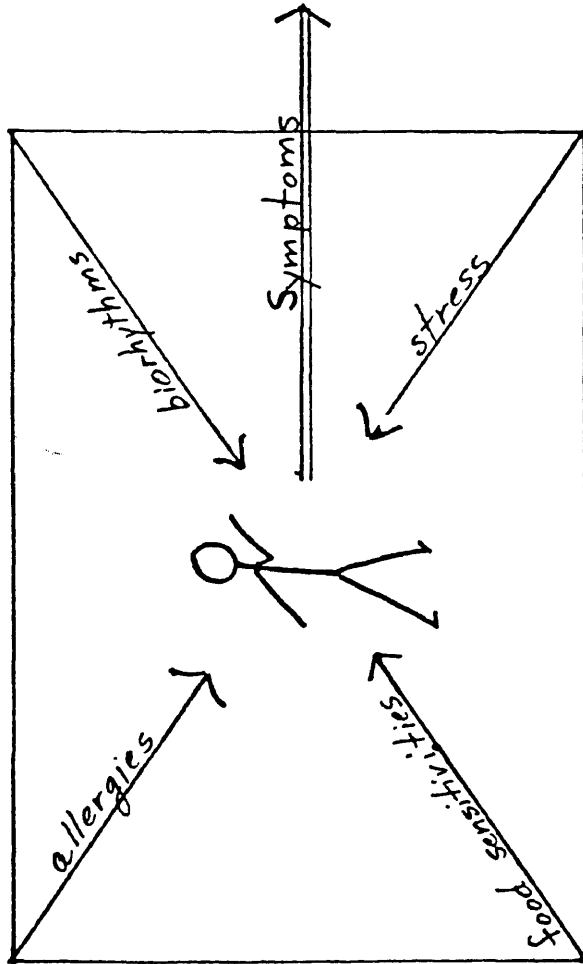
"I'm staying on the new diet. I haven't eaten any (wheat) for a week, but I'm having the same kind of (anxiety) I had when I came in to see you before. The diet isn't working," or "Obviously, my diet didn't really cause the (anxiety)."

What is happening, and what can be done? To understand, look at the diagram.

Ramaley Rectangle

hayfever, asthma,
animal hair, feathers,
pollens, molds, dust

♀ menstrual cycle
♂ 9 or 20-22 day cycles
daily (temperature, pain)



sugar, wheat, corn, egg, citrus,
refined carbohydrate (white flour, white rice, spaghetti),
alcohol, caffeine,

tension, emotions, job
cold, altitude
low blood sugar/hypoglycemia,
illness, especially metabolic disease

hyperactivity
anxiety → paranoia
depression
fatigue
confusion
withdrawal
sudden, violent episodes

What you see coming out (the yield) are symptoms: emotions and/or behaviors. They are different for different people. One person might have hyperactivity; another, fatigue. The symptom could be anxiety or depression; or the person who is anxious could have escalated to paranoia. Whatever the symptom, it seems to get worse again.

As you can see, there are four factors to consider. They are what goes into the situation to produce the symptoms.

1. Food Sensitivities

This is any food or combination of foods that appears to connect with the person's emotions and behavior.⁹³ The common ones are sugar, wheat, corn, citrus fruit, caffeine, and eggs. For many people, it is any kind of refined starch. For some, it is alcohol. Occasionally, it is something rarer, like cinnamon or cucumbers. But, the food is only one element of the problem.

2. Allergies

Does this person have allergies? If so, what are they? Are they increased at this time for some reason? The increase can cause the symptoms to reappear.

Since she invented this device to explain her own responses, let's look at the case of Dr. Ramaley. She has many allergies, including severe hay fever. Even though a large amount of sugar makes her anxious, a smaller amount, which wouldn't ordinarily affect her, makes her highly anxious during the hay fever season. (No ice cream cones in the pollen season.)

She also happens to be allergic to rats which are her experimental animals. Caffeine, to which she is sensitive, escalates her rat allergy. Caffeine on animal surgery day in the hay fever season causes emotional disaster.

Many people are allergic to other animals. They can feel worse at home because they have new, feather pillows. Or a child can feel worse after a trip to the zoo which exposed him/her to allergens, like hair and/or feathers, that aren't at home. Or maybe the parent is the one who feels worse--the worst s/he has felt, in fact, since the last trip to the zoo.

Since high humidity and wind both contribute to pollen problems, a muggy August zoo trip, out in the breezy open air, may be a disaster for the person who is allergic to some of the zoo animals and has hay fever.⁹⁴

Notice that asthma and hay fever are both made worse by caffeine. (See "Caffeine and Allergies.") The response is so extreme in a few asthmatics that they can be precipitated right into the hospital with one cup of coffee. Most are just made worse. Not just coffee is involved. It could be something like No Doz which they took to keep themselves awake for exams or a long distance trip, or a Coke drunk because the day is hot and no other beverage is available.

3. Biorhythms

The biorhythm most people know about is the female menstrual cycle. In working with women of reproductive age (about 12-50 years of age), you have to consider where

the woman is in her cycle. The big hormonal changes during her cycle can affect all of her other responses. During the week before menstruation, she is much more likely to experience food sensitivities and allergies than she is during the rest of her cycle.

In men, there is a 9 or 20-22 day cycle. The few men I know who have kept track of their mood changes have verified these cycles.

Other biorhythms affect everybody.⁹⁵ There are more than 200 daily changes. You are probably aware that the temperature tends to be highest in late afternoon. Pain sensitivity is too. (If pain were to only consideration, dental surgery should be performed at 2:00 A.M.)

4. Stress

Stress comes in many varieties. There are heavy stress jobs: supervising other workers, holding down administrative responsibilities, or writing a book. Parenting is a heavy stress job with long working hours and no vacations. A parent is under stress when s/he is at home all day with two or three preschool children - or five or six children all day during a vacation or a blizzard. Or maybe all the kids have chickenpox. That is really stressful!

Sometimes a person has regular periods of stress such as with monthly job reports. If a woman's monthly report due dates coincide with her monthly periods, she may be very stressed and therefore more reactive to her food sensi-

tivity at that time. An amount of an allergic food which would not otherwise bother her may overwhelm her then.

Another important stress is cold. Research is now available showing that exposure to cold produces the same symptoms as other, better known sources of stress.⁹⁶

Hypoglycemia is yet another form of stress which activates the same body defenses as emotional stress, or cold.

Another stress is tension. A family member may be under a lot of tension because there is some disagreement or bad feeling within the family. If that person has a history of asthma, s/he might even go into an asthma attack, partly in response to allergens and partly in response to extra stress.

Summary

In the Ramaley Rectangle, the effects are additive. Even though the problem can be kept under control with just food sensitivity or just allergy or just stress, it pops out again when several of these factors are involved at once. Common patterns look like this?

The client can't eat wheat every day but is all right with it once a week. She has been eating that way for several months and has been fine. Then she eats wheat and becomes highly anxious or highly depressed. What happened? This person has hay fever and the trees, weeds, and grasses are blooming (allergy). And, because she was extra anxious, she got into a fight with another family member or the boss, and the fight didn't get resolved. There is extra tension and extra stress.

or

A sugar sensitive teenager decides to have just one Coke with the gang after school (sugar and caffeine). He then goes to a friend's house to study for the big exam (stress). The teenager is allergic to the friend's dog. Maybe he wouldn't have triggered on the Coke or the dog or the exam stress, but with all three, disaster. He is depressed and weepy, picking fights with the whole family during dinner, or just can't sit still and has to run around the block.

If you and the clients run around the Ramaley Rectangle instead of the block, they can understand what happened and prevent a repetition.

FOOTNOTES

CHAPTER III

¹Ronald Finn and H. Newman Cohen, "Food Allergy: Fact or Fiction?" The Lancet 25 (February, 1978):428.

²James C. Breneman, Basics of Food Allergy, (Springfield, Illinois: Charles C. Thomas, 1978), pp. 2-3.

³William G. Crook, Are You Allergic?, (Jackson, Tennessee: Professional Books, 1978), p. 71.

⁴Arthur F. Coca, The Pulse Test (New York, New York: Arco Publishing Co., Inc., 1956), p. 11.

⁵Breneman, *Ibid.*, p. 11.

⁶William G. Crook, "Food Allergy--The Great Masquerader," Pediatrics Clinics of North America, 22, #1(February, 1975):227.

⁷Breneman, *Ibid.*, p. 21.

⁸Crook, Are You Allergic?, *Ibid.*, p. 70.

⁹*Ibid.*, p. 71.

¹⁰*Ibid.*, p. 72; Breneman, *Ibid.*, p. 42.

¹¹*Ibid.*, pp. 70-71; Breneman, *Ibid.*, p. 21.

¹²Timothy D. Schellhardt, "Can Chocolate Turn You Into A Criminal? Some Experts Say So." The Wall Street Journal, (October 2, 1977):1.

¹³Crook, Are You Allergic?, *Ibid.*, p. 71.

¹⁴Schellhardt, *Ibid.*, p. 1.

¹⁵Breneman, *Ibid.*, p. 51.

¹⁶Crook, Are You Allergic?, *Ibid.*, p. 77.

¹⁷*Ibid.*

¹⁸William G. Crook, Can Your Child Read? Is He Hyperactive? (Jackson, Tennessee: Professional Books, 1977), p. 47.

¹⁹Douglas E. Johnstone, "The Natural History of Allergic Disease in Children," Annals of Allergy, 38, #6(June, 1977):388-392.

²⁰Kjell Aas, "What Makes An allergen An Allergen," Allergy, 33, #1 (1978):3-13.

²¹Ibid.

²²Johnstone, Ibid., p. 392.

²³Ibid.

²⁴Ibid., p. 389-390; Crook, Are You Allergic?, Ibid., pp. 7-9.

²⁵Johnstone, Ibid., p. 390.

²⁶Crook, Are You Allergic?, Ibid., p. 8.

²⁷Ibid., pp. 8-9.

²⁸Ibid., p. 9.

²⁹Ibid.

³⁰Ibid.

³¹Ibid.

³²Ibid.

³³Ibid.

³⁴Crook, "Food Allergy...", Ibid., p. 234.

³⁵Crook, Are You Allergic?, Ibid., p. 7.

³⁶Ibid.

³⁷Ibid., p. 102.

³⁸Ibid., p. 103.

³⁹Ibid.

⁴⁰Crook, "Food Allergy...", Ibid., p. 234.

⁴¹Ibid.

⁴²Ibid.

- ⁴³Ibid.
- ⁴⁴Crook, Are You Allergic?, Ibid., p. 58.
- ⁴⁵Ibid., p. 55.
- ⁴⁶Ibid.
- ⁴⁷Crook, "Food Allergy...", Ibid., p. 231.
- ⁴⁸Ibid., pp. 233-234.
- ⁴⁹Breneman, Ibid., p. 21.
- ⁵⁰Carlton Fredericks and Herman Goodman, Low Blood Sugar and You, (New York, New York: Grosset and Dunlap, 1969), p. 2.
- ⁵¹Judith A. Ramaley, Ph. D., Professor, Department of Physiology and Biophysics, University of Nebraska Medical School.
- ⁵²Breneman, Ibid., p. 54.
- ⁵³Ibid., p. 41.
- ⁵⁴Ibid.
- ⁵⁵Crook, "Food Allergy...", Ibid., p. 231.
- ⁵⁶Breneman, Ibid., p. 56.
- ⁵⁷Ann J. Woolcock, "Why Are Asthmatics Allergic?" The Medical Journal of Australia Special Supplement on Allergy, 2, (1978):26.
- ⁵⁸John N. Burry, "Allergic Contact Dermatitis," The Medical Journal of Australia Special Supplement on Allergy, 2 (1978):9; Daniel Czarny, "Urticaria and Angio-oedema," The Medical Journal of Australia Special Supplement on Allergy, 2 (1978):10.
- ⁵⁹Harry M. Salzer, "Relative Hypoglycemia as a Cause of Neuropsychiatric Illness," Journal of the National Medical Association, 58, #1 (January, 1976):15.
- ⁶⁰Emmanuel M. Abrahamson, "A Dietary Treatment for Asthma and Hay Fever," U. S. Naval Medical Bulletin, 40 (1942): 717.
- ⁶¹John F. Greden, "Anxiety or Caffeinism: a Diagnostic Dilemma," American Journal of Psychiatry, 131, #10 (October, 1974):1089.

⁶²H. L. Newbold, Mega-Nutrients For Your Nerves, (New York, New York: Peter H. Wyden, 1975), p. 71.

⁶³Ibid., p. 70.

⁶⁴Salzer, Ibid., p. 12.

⁶⁵Newbold, Ibid., p. 71.

⁶⁶Salzer, Ibid., p. 12; Richard J. Wurtman, and John D. Fernstrom, "Effects of the Diet on Brain Neurotransmitters," Nutrition Reviews, 32, #7 (July, 1974):2-5; Fredericks, Ibid., pp. 16-19.

⁶⁷Robert H. Williams, Textbook of Endocrinology, 5th Ed., (Philadelphia: W. B. Saunders Co., 1974), p. 638.

⁶⁸Ibid., p. 641.

⁶⁹Salzer, Ibid., p. 12.

⁷⁰Fredericks, Ibid., pp. 16-19.

⁷¹Williams, Ibid., p. 638.

⁷²Crook, Can Your Child..., Ibid., p. 55.

⁷³Newbold, Ibid., p. 76.

⁷⁴Ibid.

⁷⁵Ibid., p. 44.

⁷⁶Fredericks, Ibid., p. 136.

⁷⁷Richard Passwater, Supernutrition, (New York, New York: Dial Press, 1975), pp. 47-48.

⁷⁸Ibid., p. 48.

⁷⁹Ibid.

⁸⁰Ibid.

⁸¹Newbold, Ibid., p. 72.

⁸²Salzer, Ibid., p. 12.

⁸³James R. Milam, The Emergent Comprehensive Concept of Alcoholism, (Kirkland, Washington: ACA Press, 1970), p. 16.

⁸⁴Ibid., p. 14.

⁸⁵Williams, Ibid., p. 823.

⁸⁶Milam, Ibid., p. 16.

⁸⁷Barron Health Clinic, Low Blood Sugar (Pamphlet)
(Cleveland, Ohio: Karpap Publishing Co., Inc., 1971), p. 16.

⁸⁸Newbold, Ibid., p. 76.

⁸⁹Fredericks, Ibid., p. 136.

⁹⁰Salzer, Ibid., p. 15.

⁹¹Crook, Are You Allergic?, Ibid., p. 93.

⁹²Ramaley, Ibid., information about biorhythm from
personal communication 1978.

⁹³Crook, "Food Allergy....," Ibid., pp. 227-236.

⁹⁴Ramaley, Ibid.

⁹⁵Ibid.

⁹⁶Ibid.

CHAPTER IV

WORKING WITH CLIENTS

Overview

Now you are equipped with background information about the interactions between diet, allergies, low blood sugar, stress, biorhythms, emotions, and behavior. You are ready to apply that information to your work with clients. This chapter tells how to set up a good atmosphere (the therapeutic model), describes the special issues involved in working with foods, suggests ways to talk with clients, explains how to make contracts, and then describes the actual analysis process: take a history, experiment with change, and evaluate results. Various tests are described.

The Therapeutic Model

The first step in working with a client is to set up a good atmosphere in which to do the work. Because I am a clinical social worker, the model I describe is for clinical social work. It may be somewhat different from the one you usually use; but whether or not you are in clinical social work, you will be able to adapt it to your own particular setting.

This model makes certain assumptions about the client's role and the success of the therapy. In some thera-

peutic situations, the therapist is seen as having the knowledge, skills, and power to do something for the client. This therapeutic situation is different. You cannot do for your clients. They must feel they have the power and can take responsibility for changes. Many will rise to the challenge and, strongly motivated by their initial success, will continue the changes.

Success in doing this work depends on two things: one is your teaching ability; that is, your ability to master the knowledge in this field and make it real and valid to your clients. The other is the clients' willingness to learn about the problems and work on solving them.

Sharing of power is absolutely necessary to the success of the work. The therapist needs to share information and give some instructions for gathering data. The client is assumed to have the answers and must gather the data. The therapist then helps to interpret the data. Together, they figure out how to correct the problem and plan the course of action which the client is willing to undertake.

Talk to your client as your equal. S/he is going to have to be responsible for most of the work, most of which will be done outside your office. Only a person who feels responsible will take responsibility. Your job is to set a model for sharing responsibility.

Keep the language simple. Don't use medical terms in the beginning unless the client has a medical vocabulary.

(My first client was a medical school professor. She taught me a term or two!) If you need to use a medical term, explain it. Use the English equivalent many times, explaining the equivalency each time. You can usually tell by the client's facial expression whether or not s/he has understood.

Many people think only physicians and college professors can talk science. Your job is to allay everybody's fears by using explanations which everyone can understand. Use ordinary language to make scientific ideas sound ordinary and, therefore, acceptable.

Whenever possible, use simple analogies: this is like that. You can compare the scientific idea to something less scary and more familiar. As you may have noticed, I have used thermostats and furnaces, in explaining blood sugar regulation.

Share the information you have. Don't keep the clients guessing. Tell them what you think is happening to them. Tell them how you decided for example, that the problem food might be chocolate or wheat instead of egg or citrus fruit. Point out every pattern and correlation you see in their history and problem. Success depends on your training them to look for patterns and correlations themselves. Let them know when you are puzzled or stumped. They may very well have the missing information or an explanation than hasn't occurred to you.

Be optimistic whenever you can. Every changer needs to feel others believe in the possibility of his/her change.

Always let clients know they are in charge and plan with them for what they are willing to do. Make this easier by setting up time-limited change periods. Forever is a long time. Two weeks is manageable and will probably give both the necessary information and a good idea of what the changes will feel like.

How would you feel if you were told today that you were a diabetic? To control your diabetes, you would have to adopt both a new diet and new eating patterns for the rest of your life? Overwhelmed? That is likely to be the response of anyone told his/her health depends on major changes in eating. People want to be healthy but fear the effort and the change. If you can stay in touch with the information and support you would need to carry out these changes, you will be able to give your clients the information and support they need for their changes.

Ideally, a therapist working in this field should be able to set up support groups for clients going through dietary change. Such a group would operate like any support group for chronic disease problems. Members would meet regularly to exchange information, tactics, complaints, recipes, helpful hints, etc., much as diabetics already do. Children would have a wonderful opportunity to commiserate with each other about their crazy families and their crazy diets. Misery loves company in kids too.

I haven't yet had a chance to set up a formal group. However, my own experience with the trials and tribulations

of changing my diet and reports from my friends and clients make me sure that such a group would certainly help. Everyone needs a place to ask "What did you do when...?" and "Does anyone know how to...?"

Besides the group meetings, members could help each other through the tough times by being available for help and support, rather like the buddy system of Alcoholics Anonymous or some weight watchers groups. "Call a friend before you feed," or "Have a talk instead of a taco."

For adolescents, in particular, eating outside the standard American model of hamburgers and Cokes sets them apart from their peers. Diabetic youngsters learn how to eat out with their friends but choose foods that will cause fewest problems. Hypoglycemic teenagers, and those with allergies, need the same sort of information and support.

Inevitably, there will be some "falls from grace" or crashes from the diet. To the client, that will feel like a permanent return to the starting line. (See Chapter V for aids to dealing with these relapses.) Don't be critical. Emphasize your willingness to give support through a difficult period and your optimism about how soon s/he will feel better.

Take the information part of the job seriously. Keep helpful supplementary materials on hand: diet sheets, no-no foods lists, reference books and papers (including allergy and low-sugar cook books and recipes), and lists of other resources and referrals.

Contracts

Contracts with clients are a helpful way of indicating responsibility for work to be done. Transactional Analysis (TA) offers a good model.¹ The contracts are specific as to the exact work to be done and the time limit for doing it. Contracts should be written down and read aloud to be sure client and therapist agree on the terms. Successive contracts can be very supportive in each stage of a change. Contracts of 1-2 weeks are usually best.

Here is an example of how to use contracts in working with a client:

If you suspect that food is a factor in the client's presenting problem, contract with the client to keep a food/mood diary for 1-2 weeks in order to gather data about how particular foods seem to relate to the client's moods. (See Food/Mood Diary for model.) At the end of the 1-2 weeks, evaluate the diary with the client, looking for patterns of responses which indicate which are the problem foods. (See Chapter V, Figuring Out The Diet.) Make a new contract with the client for one week, eliminating one or more suspected foods from the diet for that period. At the end of one week, contract with the client to reintroduce one eliminated food on a specific day and record all responses. (This series of contracts may have to be repeated several times.)

Sometimes, a client will need to try a standard elimination diet. (See Tests section for details.) Several

contracts may be necessary to carry this out. The first contract will be for the person to list the diet and stock all of the necessary foods. The next contract will cover the actual elimination diet period and may include daily telephone calls for information and support. The next contract will cover the period during which the eliminated foods are reintroduced one by one. Again, daily telephone calls for information and support are recommended. When the results are positive and a new diet is indicated, new contracts should cover diet revision in weekly or monthly periods. For example:

Client's diet history indicates that caffeine and wheat may be the problem foods. Client contracts to keep a food/mood diary for two weeks. At the end of two weeks, evaluation of the diary indicates that coffee and wheat are indeed suspect. New contract eliminates coffee and wheat from client's diet for one week. Daily calls for support are included in the contract. The next week, the contract extends for two more days (elimination period is usually 8-10 days). Contract then calls for wheat to be reintroduced into the diet on a schedule. (Details in Elimination Diet section.) After completion of wheat reintroduction, coffee is reintroduced on same schedule. Daily phone calls are continued as part of the contract. Final results show coffee to be the problem. Wheat is OK. New contract inates coffee for another two weeks as aid to changing food habits. Contract may be extended or not as necessary/desirable.

Special Issues In Working With Foods

In working with food, there are a number of special problems:

To begin with, most of your clients won't come in expecting to talk about food or allergies. Most of them have never heard of any behavior problem related to diet except,

perhaps, hyperactivity. If they have come for help with their behavior and emotions, they expect you to use some sort of established psychotherapeutic or counseling approach. You are going to have to explain, in a general way, how foods and allergies can affect behavior and feelings, and then link that explanation to taking the client's history. They may be absolutely incredulous when you start asking them what they eat.

Many clients have "science anxiety" and are afraid they can't understand how their bodies work. Your skill will be required to make it simple and give support for understanding. (See section on language.)

Relating problem behaviors and emotions to diet may seem improbable and/or scary. Some clients will have a history of allergy and will have had their physical symptoms treated for years without any reference to their emotions. They may find it hard to believe that their emotions are suffering too. Other clients will have noticed a correlation between their allergies and moods without realizing that allergy control could help them feel better emotionally. Often, they have hidden food sensitivities in addition to the allergies they know about. It is these sensitivities that are keeping their emotions out of control.

Another problem in this work is that food is loaded with meanings far beyond nutrition. Not only are we what we eat; we also eat because of whom we are. Ethnic background,

geographical area, race, color, religion, class, and sex all affect what and how we eat. Changing a diet is more than picking another food. Changing a diet interferes with the whole food part of a person's pattern of life.

If you have ever tried to lose or gain weight, you know exactly what I'm talking about; therefore, you know what your client is up against. Habits stay with us. To form new habits, we have to practice the new way a lot. Food habits are just like all the rest. The changes have to be practiced to become part of us.

Another food problem is addiction. As explained in Chapter III, many people are biochemically addicted to their allergic foods. Breaking the addictions is very difficult and requires will in the client and support from the therapist. If you have tried to stop smoking or drinking you have some idea of the power of addiction. The body has learned to crave the addictive substance. To break the addiction, the body must go through a withdrawal process.

One reason for doing this work in the human services is that you are trained to work with people. You are trained in observation and evaluation of emotional and behavioral problems and have had experience in making interventions for change. You are adding some new information and developing some new skills, but you already have the base on which to build: training and experience in the field.

Some clients wonder why they aren't doing diet changes with a physician because this is "science." Ideally, every human services worker in this area would be linked up with a physician in some way. (See Health Care Teams in Chapter VI.) The reality is that most physicians simply don't have the time to work so extensively with patients. Planning the change and carrying it out requires many hours and, often, many phone calls for information and support. Most physicians can't squeeze that amount of time for one patient into their schedules.

We live in a pill popping society. The idea of prevention is underplayed. Avid television fans and magazine readers are used to taking something that suppresses their symptoms: acid stomach, nervousness, headache, or sleeplessness. Your clients may be astounded at the idea of preventing their symptoms rather than alleviating them.

In many counseling/therapy situations, the people asking for help are discouraged because they have tried to solve their problems before and failed. Some of these "repeaters" are very pessimistic indeed. Sometimes, you will be able to see right away that a major part of previous failures was inability to think straight or pay attention. For clients like this, you can hold out a marvelous hope: changing what they eat may clear up their thinking so that they can cooperate in their own cure.

Screening For Diet and Allergy Related Problems

Taking a Diet and Allergy History

You will need some method to determine whether or not a client's problem(s) is related to diet and/or allergy. An excellent way to screen for this information is to take a systematic diet and allergy history.

A history form is invaluable. It allows you to standardize many questions and record answers systematically for evaluation and future use. If you plan any future case evaluation and/or research, the form is a necessity.

The form you see here is a collaboration effort which my colleague and I use in taking histories. It has been revised frequently.

There is nothing magic about the question progression except that it flows well for us. For our convenience, the first page contains general screening items. If some of these items have positive responses, then we complete the rest of the form. If all of the responses are negative on page 1, we assume the presenting problem is not diet and/or allergy related.

You can make up a form that fits your needs and flows in the way you find you want to ask the questions. Try this one out; then, revise it to fit you. Better still, collaborate with several colleagues to devise a form; then, try it out together. Re-evaluate and revise it before making final copies.

DIET AND ALLERGY HISTORY Date _____

SCREENING FOR DIET AND ALLERGY RELATED PROBLEMS

1. Presenting problem(s) _____
2. Duration of problem(s) _____
3. Presenting problem is one often associated with diet and/or allergies (hyperactivity, anxiety, fatigue, depression).
4. Presenting problem is seasonal intermittent fairly constant other (describe) _____
5. Client has history of allergies.
6. Some are seasonal (list) _____
7. Client shows physical signs and symptoms of allergies:
 - circles under eyes (allergic shiners)
 - sniffles (allergic rhinitis)
 - allergic salute (nose crease)
 - puffy cheeks
 - red, runny and/or itchy eyes
 - unusual movement lethargy or overactivity
 - sleep problems (specify) _____
 - stomach aches, abdominal pains, colitis (circle)
 - leg pains, leg cramps, "growing pains"
 - fluid retention, bloating
 - headaches
 - bed wetting past age 3
 - hot sleeper, profuse sweating
8. Client has food cravings and/or addictions.
9. Strong mood shifts are associated with these, usually $\frac{1}{2}$ or 2-4 hours after eating (circle).
10. Client often has mood shifts $\frac{1}{2}$ or 2-4 hours after eating.
11. Client has strong food aversions.
12. Response to eating avoided foods:
 - food _____ response _____
 - food _____ response _____
13. Eating pattern is high in sugar and refined carbohydrates:
 - generally
 - mostly one meal breakfast lunch dinner snack
 - weekends
 - seasonally, when eating patterns are different. (Check summer iced tea Kool Aid winter cocoa, etc.)
14. Family has history of allergies.
15. Family and/or client have history of sugar or alcohol problem(s):
 - a. If client, give birth weight _____
 - b. Diabetes family client
 - c. Alcoholism family client
 - d. Hypoglycemia family client

MEDICAL HISTORY

16. Date of last physical examination _____
 Results _____
17. ___ Has had a physical exam for the presenting condition.
 Results _____
18. List of drugs taken in past 2 years and reasons for each (include oral
 contraceptives) _____

19. List major illnesses _____

20. List all hospitalizations with reasons for each _____

ALLERGY SIGNS AND SYMPTOMS

21. ___ Hay fever
 22. ___ Asthma
 23. ___ Food sensitivities (specify) _____
 24. ___ Other allergies (specify) _____
 25. ___ Bronchitis
 26. ___ Eczema
27. ___ Rashes When? _____ Where? _____ Describe _____
28. ___ Heavy acne Duration _____
29. ___ Ear infections At what age? _____ How long? _____

BEVERAGES

30. ___ Do you drink soda pop? How much? _____
 a. ___ Sugared ___ Diet
 b. ___ Cola ___ Non Cola
31. ___ Do you drink alcoholic beverages? (If not currently drinking, indi-
 cate past pattern below.)
32. When do you drink? (Example: after work, weekends only, holiday, etc.)

33. How much alcohol do you use? _____
34. ___ Have you had treatment for an alcohol problem?
35. ___ Is drinking a current problem (includes AA)?
36. ___ Have you stopped drinking? When? _____
37. How many cups of coffee do you drink per day? ___ Tea? ___ Cocoa? ___

- 38. When do you drink them? _____
- 39. Do you drink a different daily amount of coffee tea cocoa on weekends? _____
- 40. Give weekend amounts per day coffee tea cocoa. _____

SMOKING

- 41. Smokes (specify substance) _____
- 42. How much per day? _____
- 43. Is there a pattern to your smoking? _____
- 44. If yes, give pattern (only after meals, etc.) _____
- _____
- 45. How do you feel right before you smoke? _____
- 46. How do you feel right after you smoke? _____
- 47. How soon do you want to smoke again? (time period) _____
- _____

FOOD CRAVINGS, BINGES, AND ADDICTIONS

- 48. Are there certain foods/drinks you feel you:
 - a. have to have?
 - b. have to have every day?
- 49. Those foods/drinks are: a. _____ b. _____
- 50. How do you feel just before you eat/drink them?
 - a. _____
 - b. _____
- 51. How do you feel just after you eat/drink them?
 - a. _____
 - b. _____
- 52. How soon do you want them again? (time period):
 - a. _____
 - b. _____
- 53. How do you feel when you can't get them?
 - a. _____
 - b. _____
- 54. Do you often go on food binges? _____
- 55. How often? _____
- 56. At a particular time of day, week, or month? (specify): _____
- _____
- 57. Eats (specify all binge foods and how often eaten):
 - a. food _____ frequency _____
 - b. food _____ frequency _____
- 58. Do you wolf the food down? _____
- 59. Do you feel like you just can't stop eating it/them? _____

MOODS AND THINKING

- 60. Do you have trouble thinking clearly? Are you confused? _____
- 61. If yes, is problem chronic or periodic? _____

- 62. If periodic, when? _____
- 63. Do you find it hard to concentrate? _____
- 64. Do you have a short attention span? _____
- 65. Are there times when you are especially disagreeable?
When? _____
- 66. Are there times when you are quarrelsome and pick fights?
When? _____
- 67. Are there times when you can't spell or can't write numbers correctly? _____
- 68. Are there times when space or time seems distorted?
When? _____

MENSTRUAL HISTORY

- 69. Do you menstruate?
a. Regularly b. Irregularly
- 70. If regularly, how long is it between the beginning of one period and the next? _____ days.
- 71. Do you experience fluid retention prior to your period?
- 72. Do you have mood changes related to menstruation?
- 73. Are they before during after menstrual days?

STRESS

- 74. How do you react to stress?
a. Emotional upsets _____
b. Fights with certain people _____
c. Sickness _____
d. Pressure to perform _____
e. Other stresses in your life (specify) _____
- 75. Is there a pattern of stress in your life? (monthly reports, school vacations, etc.)? (specify) _____
- 76. Do you crave certain foods/drinks at those times? (specify) _____

FAMILY ALLERGY HISTORY

- 77. Do you have a family history of allergy?
 - 78. If yes, indicate kin, kind of allergy, and symptoms below. (Check parents, siblings, aunts and uncles, and grandparents on both sides.)
- | Kinship | Type | Symptoms (How do you know?) |
|---------|-------|-----------------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

DAILY PATTERNS OF EATING

79. What do you eat for breakfast, lunch, dinner, snacks? (Use separate sheet to write out typical meals and moods. See Food/Mood Diary, p.).
80. Do you eat anything different on weekends? (Examples: pancakes with syrup/jelly, heavy sweets intake, junk food or high protein, low sugar and starch meals.) Specify what and when: _____
81. How do you feel? (Tired, shaky, nervous, fuzzyheaded, upset, depressed, "blue," unsettled, no energy, irritable, fearful, anxious, very active, high, etc.)
- a. when you get up in the morning? _____
- b. at midmorning? _____
- c. after lunch? _____
- d. at midafternoon? _____
- e. _____
82. Does that pattern change on weekends? How? _____
83. Do you feel different at certain times of day? When? _____
84. Certain times of the week? When? _____
85. Certain times of the month? When? _____
86. Certain times of the year? (During or after holidays like Halloween, Thanksgiving, Christmas, Easter, after my birthday _____
87. Are there times when you consume a lot of certain foods like beer, iced tea, Kool Aid, pastry? _____
88. What are the things you eat/drink then? _____
89. Do you feel different at those times? How? _____

Probably your original form will need to be revised frequently. Sometimes, the flow improves when the questions are in a different order. Other times, some marvelous new piece of information inspires a new question that needs to be added because the answer will be valuable. Moral: Don't make too many copies of your first questionnaire or enshrine it in your agency's form collection with three hundred copies.

As mentioned earlier, the average client coming in with an emotional or behavioral problems is not going to expect these kinds of questions. You will have to be specific about why you are asking these kinds of questions and what you know about the relationships between diet, allergy, and behavior. You will need to explain that you are asking them questions about other members of their families because these kinds of problems tend to run in families and are very common in families with a history of allergies.

You may feel that taking a complete history takes too much office time. In that case, devise a different kind of form which, with suitable instruction, can be filled out in the waiting room or at home and brought in for the next visit. Barbara Reed uses this approach in screening for hypoglycemia. (She also takes some medical history during the office visits.) You may find her forms useful models.²

If you work with groups, you can use any of several different approaches. You can give your form with instructions to each group member and ask all of them to return the

forms after filling them out at home. You can show how to answer the questions by using your form to take one group member's history during a meeting. Have the other members fill out the same form at home and bring it back to the next meeting along with their observations as to whether or not diet and allergy may relate to their problems. You can use your form to take each group member's history during his/her individual intake interview.

Whichever approach you take with a group, you will need to discuss the reasons for taking the history and give them some follow-up discussion of the results.

History form questions are reproduced below. Reading Chapter III before beginning will be helpful.

DISCUSSION OF QUESTIONNAIRE

Screening For Diet and Allergy Related Problems
(Items 1-15)

Page 1 is for general screening. If responses are negative, the client probably does not have diet and/or allergy related problems.

Items 1-4 are to identify and describe the presenting problem(s).

Item 3 identifies common diet and allergy related problems. (See Chapter III, Symptoms of Food Sensitivity; Allergy Symptoms.) Emotional/behavioral: hyperactivity, anxiety, paranoia, confusion, depression, irritability, bizarre and irrational behavior. Physical: headache, fatigue, overactivity, clumsiness, insomnia, bed wetting past age 3, short attention span, inability to concentrate, perceptual distortion, weakness, faintness, shakiness, and periods of rapid heartbeat.

Item 4 identifies patterns of occurrence. (See Chapter III, Causes of Food Intolerance; Causes of Allergy.) Seasonal symptoms are likely to be to strawberries, tomatoes, pollens, and molds. Intermittent symptoms often occur in response to weekend binges or high tension periods. (See Chapter III, Ramaley Rectangle.) If symptoms occur only on vacation, changes in eating habits or exposure to different allergens may be involved. If symptoms are relieved only on vacation, something in the home, school, and/or work environments (house dust, pets, cleaning compounds, or industrial

fumes) may be the cause. Fairly constant symptoms are often related to foods eaten every day like wheat, milk, coffee, and/or common allergens like house dust, pet hair, or feathers.

Other patterns of occurrence may reflect sensitivity to party foods, liquor use, special foods consumption, or ethnic family gatherings.

Items 5-7 describe the client's allergies. (See Chapter III, Symptoms of Allergy.) Item 5: A history of allergies is a good indication that part of the problem may relate to allergies. Item 6: If they are seasonal, the presenting problem is likely to intensify at those times. (See Chapter III, Ramaley Rectangle.)

Item 7 lists common allergy symptoms which can indicate that an allergic reaction is in progress and may be affecting the client's emotions and/or behavior.

Allergic shiners are dark circles under the eyes. The bluish tinge is reminiscent of a black eye recovery period. Puffy cheeks often accompany these shiners. Both are due to blood pooling in the area when swollen tissues obstruct drainage. Check your female allergy victims, they often use makeup to disguise these symptoms.

Sniffles come from allergens irritating the nose lining (nasal mucosa/mucous membranes). Be especially suspicious of allergies if a "cold has hung on for weeks/months at a time."

The allergic salute is an upward rub of the nose in response to itching and/or dripping or stuffiness. In child-

ren, chronic nose rubbing often produces a horizontal crease just above the flare.

Unusual movements often come shortly after exposure to an allergen. The overactive client may feel generally restless, be unable to sit still, and/or have restless arms and legs. Clumsiness may accompany the restlessness.

Common sleep problems are getting to sleep, waking at night, bad dreams, and/or waking early in the morning.

Stomach aches are often accompanied by heartburn, gas, and diarrhea. Stomach aches caused by postnasal drip are often accompanied by loss of appetite.

Fluid retention usually occurs 12-15 hours after the allergic food is eaten and lasts for 12-18 hours. If no more of that food is eaten, the weight gain is eliminated by frequent urination. In women of reproductive age, fluid retention often precedes menstrual periods and is not a response to food sensitivities.

Allergic headaches usually begin about one hour after eating.

When allergy causes bladder tissues to swell, their elasticity is reduced. The reduction in elasticity decreases the bladder's capacity. Swelling of the muscles of the opening keeps them from contracting tightly and makes them tire easily allowing urine spillage. Irritability often accompanies this symptom in older children and young adults. Wheat, egg, orange, and chocolate are somewhat less frequent causes.

Items 8-10 survey food cravings and addiction. (See Chapter III, Symptoms of Food Intolerance and Hypoglycemia, Addictions, and Allergies.) Mood shifts can be in response to blood sugar highs and lows. At the $\frac{1}{2}$ hour interval, when blood sugar is high, the mood is likely to be elevated with a feeling of well being or the person is overactive and tense. At the 2-4 hour interval with blood sugar falling or low, the person is likely to have a let down feeling which may be accompanied by physical and mental fatigue.

Items 11 and 12 are to identify food aversions which may protect the body from allergic foods. (See Chapter III, Symptoms of Food Intolerance.) Illness or upset (physical or emotional) is further evidence that the avoided food is not tolerated.

High intake of sugar and refined carbohydrates often cause hypoglycemia which can be accompanied by emotional and behavioral problems. (See Item 3.)

Items 13 and 14 survey the family because these problems tend to run in families. (See Chapter III, Causes of Allergy.) With allergies, members of the same family tend to be allergic but to different substances.

Sugar problems also tend to run in families. Check siblings, parents, aunts and uncles, and grandparents. Where two or more family members have these problems, expect the client to have a sugar problem, especially hypoglycemia.

If there is diabetes, check the client's birth weight. A weight of over ten pounds is a caution signal for later onset

of diabetes, particularly in a family with a sugar problem history. A medical checkup for diabetes is indicated if the birth weight was over ten pounds, and presenting symptoms include fatigue, depression, thirst, and/or frequent urination.

Medical History (Items 16-20)

These items give a picture of the client's general health and health care. Naturally, before you embark on a program which may alter a client's diet, you want to be sure s/he has had a recent medical exam.

Some diseases and disorders and some drugs create problems which might be mistaken for diet or allergic disorders. Fatigue can be caused by anemia, chronic infection, endocrine disorders, and rheumatic fever, for example.³ Some drugs can cause sugar problems; e.g. oral contraceptives can produce a diabetic-like state.⁴ Oral contraceptives also have behavioral and emotional side effects especially depression and anxiety.⁵ Other drugs have behavioral side effects too.⁶

Allergy Signs and Symptoms (Items 21-29)

These items are to gather more information about possible allergies, past and present. (See Chapter III, Symptoms of Allergy.) Keep in mind that a person with many allergies often experiences mood and/or behavior alterations, espe-

cially during periods of heavy allergy load (many active at one time) and/or when under other unusual stress. (See Chapter III, Ramaley Rectangle.)

Food sensitivities may be to hidden amounts of a known allergic food; for example, someone allergic to corn may not notice that it is in a prepared mix in the form of corn syrup or cornstarch.

Eczema is a common food allergy symptom but can also be from something inhaled.⁷ The rash most often appears behind the knees and in the elbow bend. In infants, cow's milk is most often the cause.

Many other rashes are responses to skin irritants. Their appearance, timing, and site may give clues to origin. Soaps, detergents, and fingernail polish are frequent agents.⁸ Other possibilities include fabric sizing (in new garments), fabric dyes, fabric treatment chemicals (like formaldehyde in stay press garments), wool, and nylon. Rashes may also appear in response to heat or cold. Seasonal food allergy rashes are usually from tomato or strawberry.

The most common food allergens causing acne are chocolate, cola, nuts, peanuts, and eggs.

Hearing loss often results from chronic ear infections and can often be corrected by removing the allergic food from diet. In minority children (Native Americans, Chicanos, Blacks, and Orientals), milk is the most common allergen connected with ear infections.

Beverages
(Items 30-40)

All of these beverages are the subject of inquiry because they affect blood sugar levels in some way. (See Chapter III, Handling A Sugar Load.)

First, the sugar load: soft drinks are a concentrated form of sugar which may set off hypoglycemic episodes. Sweetened coffee, tea, and cocoa may do the same. Even the artificial sweetener in diet pop affects some people like sugar.

Alcohol enters the blood stream more quickly than sugar, providing a source of calories.⁹ These calories are used up quickly. The drinker then feels depressed and/or shaky (hypoglycemic). Cravings for alcohol may be partly a response to this low. Research indicates most alcoholics are hypoglycemic. If the client has had treatment for an alcohol problem and is not drinking now, suspect hypoglycemia and check for a sugar source which may have been substituted for alcohol.

Examine how the drinking pattern relates to the presenting problem occurrence. See how the total sugar and alcohol intake adds up. Note that weekend drinking plus "junk" food and/or high sugar breakfasts can produce a huge calorie load compared with weekday eating. Or, the weekday pattern may be high in sugar and alcohol with less consumed on the weekend.

Because alcohol floods the body with readily available fuel, drinkers often feel little or no interest in food and

may be poorly nourished.

If drinking is currently a problem, I believe the client should go through alcoholism treatment before any other intervention.

Caffeine is a stimulant which affects blood sugar regulation.¹⁰ It is in cola drinks, coffee, tea, and cocoa. The total from these sources must be added to the intake from chocolate candy and medications to arrive at the average daily total. Three chocolate candy bars equal the caffeine content of one cup of coffee or one No Doz.¹¹ Some cold remedies and other medications also have substantial amounts.

Non-drinking (dry) alcoholics should be checked for caffeine and nicotine intake. (See Chapter III, Hypoglycemia and Smoking.) AA members are often drinking enough coffee and smoking enough cigarettes to interfere with their glucose regulation and contribute to hypoglycemic episodes, especially if their nutritional state is poor. These episodes actually add to their craving for alcohol because they want quickly available calories to raise their blood sugar again.

Recent research indicates that caffeinism is an actual disorder associated with high coffee, tea, and cola drink intake.¹² The presenting symptom is high anxiety. Because caffeine also is found in soft drinks, children should be checked for this as well as grownups. If caffeine

intake is high and the anxiety is substantially reduced when caffeine is removed from the diet, you have had a caffeineism case.

Each of these drinks contains potential allergens. (See Chapter III, Common Allergic Substances.) Some people are allergic to sugar. Some are allergic to coffee. (This is different from being caffeine sensitive.) Cola is a common allergen. There is some evidence that alcoholics may be allergic to the fermentation food base of their preferred drink (corn, barley, fruit, or molds on grapes, for example). Check for favorite beverages and determine whether or not that food base appears elsewhere in the client's allergic picture.

Smoking (Items 41-47)

Smoking causes problems in at least three ways. (See Chapter III, Causes of Allergy, Hypoglycemia and Smoking.) First, both tobacco and marijuana are allergic substances. The smoke is a lung irritant. Second, in the U.S., all tobacco is sugar cured, and all cigarette papers are sugar dipped. People may satisfy their sugar cravings through use of tobacco and cigarette paper. Third, nicotine interferes with glucose regulation, thus altering blood sugar levels. (Note appetite depressant effect reported by many users.) This alteration can contribute to allergy and hypoglycemia problems.

Check the smoking pattern against the pattern of

changes in emotions and behavior. When there is an addiction pattern, whether to nicotine or sugar, the client is usually shaky and depressed before smoking and feels better and calmer for a while afterward.

Food Cravings, Binges, and Addictions (Items 48-59)

People are often addicted to their allergic foods. (See Chapter III, Hypoglycemia, Addictions, and Allergies.) When they feed their addiction, they feed their allergy. Before eating an addictive allergic food, they may have carvings like a drug addict needing a fix. Often, they eat that craved food in an addictive way - wolfing it down and/or gorging on it. Afterward, they may have a sense of well being followed in a few hours by another let down, sometimes with more cravings. The list of foods gives some idea of the allergies involved.

When the listed foods are high in sugar, the binger may be raising blood sugar or feeding a sugar addiction. (See Chapter III, Hypoglycemia, Addictions, and Allergies.)

Moods and Thinking (Items 60-68)

These items describe changes in moods and thinking which often accompany hyperactivity, allergy, and hypoglycemic episodes. (See Chapter III, Symptoms of Hypoglycemia, Symptoms of Food Intolerance, Symptoms of Allergy.) They can be differentiated in this way: when they are associated with

hypoglycemia, they come at the beginning of an episode and disappear when blood sugar levels rise again, usually $\frac{1}{2}$ -1 hour after eating/drinking. When they accompany hyperactivity and/or chronic allergy, they are present much or all of the time. When they accompany specific allergic episodes, they last for several hours or more.

Menstrual History (Items 69-73)

During their cycles, women of reproductive age who are menstruating have large hormonal changes which can affect other responses.¹³ During about two weeks after ovulation, hormonal changes make blood sugar regulation more difficult. Especially during the second of those weeks, just before the period, asthma, hay fever, hives, and other allergies are likely to get worse. Fluid retention may also occur during this week, affecting moods and behavior. Fluid retention before menstruation indicates a change in hormone levels and is often a clue to ovulation. (Women can menstruate without ovulating.)

Mood changes are often associated with the hormonal changes that precede the onset of a period--the legendary Pre-menstrual Tension Syndrome.

The average cycle (time between beginnings of periods) is 29 days long. The normal range of cycle lengths in a group of normal women is 24-35 days, but each woman tends to have less variability than that, usually no more than 5-6 days

difference from one cycle to the next.

Women with cycles that are longer or shorter than normal are notably experiencing unusual hormonal patterns. These patterns may affect their blood sugar regulation or their responses to allergic substances.

When the time between cycles is extremely long (greater than 34 days), there is the suggestion that there has been a time of very low estrogen levels. These unusual hormone levels cause stress.

Stress (Items 74-76)

The degree to which people react to stress and their method(s) of handling it give some idea of how stress may interact with their allergies and food sensitivities. (See Chapter III, Stress.) At high stress times, allergies and food sensitivities are more likely to flare, increasing emotional and behavioral problems. (See Chapter III, Ramaley Rectangle.) Clients may add to these problems by eating more of their allergic foods during stress periods. Or they may eat certain allergic foods ONLY at stress times when they want/need the allergic "high." Look for stress responses related to foods or contact with specific allergens, like chocolate binges or smoking. Note tendencies to rashes, pains, etc. which coincide with allergy reactions.

Family Allergy History (Items 77-78)

Tendencies toward allergy run in families.¹⁴ Look

to see if the family is strongly allergic. The tendencies of some allergies to occur frequently in certain populations may give some indication of what to look for: milk in Blacks, Native Americans, Chicanos, and Orientals; hay fever in Caucasians.

Daily Patterns of Eating (Items 79-89)

All of these items relate to sugar and starch (refined carbohydrate) intake and food allergy exposure. (See Chapter III, Symptoms of Food Intolerance, Symptoms of Allergy, Symptoms of Hypoglycemia.) At this time, look for a general description of eating styles. You are looking for patterns. Look for repeated eating of common allergic foods and/or heavy sugar and starch (refined carbohydrate) intake correlated with changes in moods or behavior. You may want to ask for a one week Food/Mood Diary to gather more specific eating/drinking data. (See sample Food/Mood Diary, p. 118).

Some people eat one way during the week and quite differently on weekends; for example, those who eat sugar coated cold cereal or sweet rolls for breakfast and fast foods for lunches and dinners during the week may switch to well-balanced meals on weekends; others are sugar-and-starch junkies only on weekends. Sugary, starchy breakfasts, many baked goods, fancy deserts or "junk" foods (very high in sugar) may be associated with mood and behavior changes. Similarly, patterns of allergic food intake may vary with

accompanying mood and behavior changes.

Sometimes a seasonal or holiday pattern emerges. Mood and/or behavioral change may be related to heavy sweet and/or allergic food intake in summer or winter, or at Christmas and birthday times.

Items 81-89 help identify hypoglycemia. People who feel very tired and lethargic when they get up in the morning may have low blood sugar. In Item 81, people who have one or more of these symptoms a few hours after each meal or snack are often hypoglycemic, especially if they feel better for a short while after each meal or snack.¹⁵ There may be a difference on weekends or at certain, seasonal allergies, or periodic stresses. (See Chapter III, Ramaley Rectangle.)

Items 83 and 84 may also identify allergy exposure such as pets at home, molds or fumes at work, cleaning compounds at school.

Items 83-86 may also identify patterns of stress.

Testing for Diet and Allergy Related Problems

A number of tests have been devised which are very helpful in identifying food-related problems, allergies, and blood sugar disorders. They are discussed below: food/mood diary, pulse test, diagnostic (rare foods) elimination diet, single food elimination diet, provocative sublingual test, skin tests, glucose tolerance test.

Food/Mood Diary

A food/mood diary can be a helpful addition to the

SAMPLE FOOD/MOOD DIARY

<u>Date</u>	<u>Time</u>	<u>Amount</u>	<u>Food/Drink</u>	<u>Mood</u>
23 May	Before breakfast		. . . . .	Hungry, depressed, anxious
	7:30 A.M.	1	Toast with jelly	
		1	Egg	
		1	Cup coffee with	
		1	t. sugar	
		1	Glass Tang	
	8:00		. . . . .	Jumpy but high
	10:30		Coffee	Hungry, irritable, anxious,
			Donut	jumpy
	11:00		. . . . .	High, well-being
	12:30		Cottage cheese	Hungry, depressed, anxious
			Milk	
			Salad	
			Fresh peach	
			Melba toast	
	1:00 P.M.		. . . . .	Calm, well-being
	6:00		Pizza	Hungry, mildly anxious
		1	Beers	
	6:30		. . . . .	Anxious, headache, paranoid
	8:00	2	Scoops ice cream	
	10:00		. . . . .	Paranoid, shaky, irritable, grim
	11:00		Bedtime	Paranoid, shaky, irritable, grim.
24 May	Before breakfast		. . . . .	Hungry, very anxious, hay fever active.

history form just discussed. All food and drink is recorded along with the accompanying mood, as shown below. Contract with the client, if you can, to keep the diary for at least one week (or until the next visit, one to two weeks). In addition to meal and snack times, ask the client to record feelings $\frac{1}{2}$ -1 hour after each meal and 2-4 hours after each meal. These in between "readings" will help determine addiction and hypoglycemia patterns. (See Chapter III, Hypoglycemia, Addictions and Allergies.)

Suggest to the client that s/he try to look for patterns in feelings and behavior. Often, the client will return with at least part of the problem figured out. Example: "I always feel terrible two hours after my morning coffee and sweet role or I feel best during the evening after a good dinner." (Be sure to have him/her defin "good." One man's good is sometimes another man's manic.)

Pulse Test

Studies of allergic individuals reveal their pulse rates are elevated by exposure to allergens (substances causing allergies). Using this information presence or absence of allergies can be determined by comparing the pulse rate before exposure with the pulse after exposure. No smoking is allowed during the test period.

The client begins by learning to take his/her pulse and establishes her/his base rate by recording it, usually sitting down, several times each day for a period of three days.

Recording times are prior to sitting up in the morning and at intervals throughout the day (just before each meal, three times after each meal at half hour intervals, and just before bed.) The pulse is not recorded during or immediately after strenuous physical exercise. Mild exercise, like walking around, is acceptable before a reading. The recordings are graphed to show patterns of rise and fall.

After the usual rate is established, foods or other possible allergenic substances are introduced, one by one, and the pulse taken one-half hour after each introduction. Pulse elevations of 15% and more are interpreted as indicating sensitivity.

The Pulse Test by Arthur Coca explains, describes, and evaluates this test in detail.¹⁷

Diagnostic Elimination (Rare Food)

This is the standard test for food intolerance. Complete details are available in Breneman's Basics of Food Allergy and Crook's Are You Allergic?¹⁸ It takes several weeks to complete and must be conducted under a physician's supervision because malnutrition may result if the diet is not carefully controlled.

"Elimination" means taking foods out of the diet. After they have been out for a week or more, they are reintroduced, one at a time, at suitable intervals (which vary with the type of food). Responses to each reintroduction are observed. (See Chapter V, and Table 4 for typical physical

responses; Chapter III, Symptoms of Food Intolerance for emotional, behavioral and physical responses.)

The elimination diet contains foods which are not ordinarily included in the American diet and those which do not ordinarily cause allergic reactions. By eating only these foods for a week, the person has an opportunity to cleanse the bowel of the old diet and refill it with less allergenic foods.

During the first four to five days, the symptoms may be worse. By day six, all of the symptoms are relieved for most people, and they feel greatly improved. After seven days, the most usual foods in the American diet are reintroduced one by one, each being eaten in large amounts at six consecutive meals over a two day period. Each has a chance to provoke symptoms at the time of reintroduction. (Usual reintroduction order is milk, wheat, egg, and corn.) Foods which provoke symptoms are removed from the diet again and reintroduced at least twice more to be sure each is at fault.

Sometimes the elimination diet does not relieve the symptoms. An unapproved food may have been eaten accidentally. In that case, the test is rerun. The person may have been allergic to one of the foods in the approved diet. When this is suspected, the diet is rerun with each of the foods eliminated in succession until the problem food is found.

Single Food (Modified) Elimination Diet¹⁹

Dr. William Crook suggests that many people can use

the elimination style of diet leaving out only a few suspected foods at a time. The suspected foods are eliminated entirely from the diet for 7 to 21 days and then reintroduced, one at a time while symptoms are observed. (See Chapter V, Table 2 and Table 4; Chapter III, Symptoms of Food Intolerance.) As with the Rare Foods Diet, symptoms are often worse for the first four to five days followed by dramatic improvement on the fifth to seventh day. A food present in the digestive tract usually takes about five days to be eliminated.

Crook suggests that each eliminated food be eaten in large quantity at three consecutive meals. The Brain Bio Center at Princeton, New Jersey, follows the same plan.²⁰ Breneman prefers six consecutive meals over a two day period because some symptoms are not apparent for more than twenty four hours. In the case of meats, Breneman suggests nine meals over a three day period because meat sensitivity symptoms, principally joint pains, are apparent only after two to three days or sometimes longer. (See Chapter V, Table 4.)

If there is an unclear response to an eliminated food, the elimination and reintroduction are repeated two more times. If several foods seem to be causing trouble, they can be re-tested but in reverse order.

The modified elimination diet does not require the radical change in eating necessitated by the Rare Foods Elimination Diet; therefore, it is much easier to follow. Many of my clients have had good success with it. Be sure you read

Crook's or Breneman's instructions before supervising this kind of experiment.

Provocative Sublingual

For this test, a few drops of a food extract are placed under the tongue. The patient's responses are observed. If symptoms occur, allergy is inferred.

This test is performed only by physicians, and seems to be the subject of strenuous controversy. H. L. Newbold reports successful use of it on many occasions.²¹ William Crook reports that it is successful only if the patient is eating the tasted substance regularly but believes the elimination diet is better.²² J. C. Breneman says the test is useless.²³

Allergy Scratch

A drop of allergy extract is put on a scratched area of skin and the area watched for a response. A red area, welt, or wheal will develop in about fifteen minutes. This test is useful for inhaled allergens but often useless with foods.²⁴

Allergy Intradermal

A small amount of allergy extract is injected into the skin. The area is observed for redness, welt, or wheal as a positive response. This test is useful for inhaled allergens but usually useless for foods.²⁵

Allergy Patch

A few drops of the substance suspected of causing the allergy is placed on the skin and covered with a patch for 24-48 hours. The area is then observed for reactions. This test is not effective for foods.²⁶

Provocative

The suspected allergen is dropped into the eye or inhaled and the person observed for allergy symptoms.

Glucose Tolerance Test

The Glucose Tolerance Test (commonly abbreviated to GTT) is the common medical test for abnormal blood sugar control. This laboratory test isn't difficult to perform, but the interpretation sometimes causes considerable furor in the medical community. The arguing points have to do with "norms" for blood sugar and "norms" for high and low readings during the test. What you read here is my compilation of the explanations given by a number of physicians who use GTTs in diagnosing hypoglycemia associated with emotional and behavioral problems.²⁷

All of their work is based on that of Dr. Seale Harris who published his original paper on low blood sugar and its symptoms in the Journal of the American Medical Association in 1924! I mention this because workers in this field frequently refer to the Harris paper or the Harris Diet as the standard. Also medical people outside the field often say

this is new material, and, as yet, untested; 1924 is hardly new.

The standard GTT is done in 3, 5, or 6 hours. For evaluation of hypoglycemia, the 5 or 6 hour test is necessary because a fall in the blood sugar level often takes place in the 4th or 5th hours.

The patient fasts from after dinner the preceding night until s/he arrives at the laboratory to have the first blood sample drawn. This first sample is evaluated to determine the level of blood sugar after a fast period: fasting blood sugar (commonly abbreviated FBS). Next, the patient is given a measured amount of glucose solution to drink. For many, choking down this sticky, sweet, and usually artificially colored solution is the worst part of the test.

After s/he drinks the glucose solution, blood is drawn several times: $\frac{1}{2}$ and then 1, 2, 3, 4, 5, and 6 hours. Each sample is evaluated for the amount of glucose it contains. The results are given in "milligrams percent," meaning mg/100 ml serum. (You don't have to know what that means, just that the results are all given in the same units and therefore can be compared with each other.)

After all of the samples have been drawn, and the glucose amounts in each have been established, the results are compared with each other. Often, the results are graphed so a glucose tolerance curve can be seen. The measured results, and sometimes the graph, are compared with norms

for the test. Usually, some pronouncement is made as to whether test results are "normal" or not.

That seemed pretty ordinary, didn't it? Not much room for intense disagreements is there? Why all the problems?

As with many measurements, "norms" may be hard to establish, and may be disagreed about after they are established. For example, the average American is eating approximately 100 pounds of sugar per year. That is four times as much as the average consumption fifty years ago.²⁸ What is "normal" sugar consumption--what humans ate for a million years or what Americans have eaten since 1930? Or since 1960?

The arguments start before the test begins. Should the patient eat his/her usual diet during the preceding three to four days, or should s/he load up on carbohydrates? Normal diet appears best to me, but some physicians dispute that.

What about fasting blood sugar (FBS)? What is the normal level? What does it mean if a patient is above or below the norm? The norm is usually accepted as 70-110 mg%. Readings above are usually interpreted as diabetic. One possible cause for readings above the norm is that not enough insulin is being produced to keep sugar levels down. Readings below are usually interpreted as hypoglycemia. One possible cause for low readings is that not enough sugar is made by the liver to maintain the body during the fast. (See Chapter III, Causes of Hypoglycemia.)

For the GTT, fasting blood sugar norms are made up from the profiles of many individuals. No one person shows that much variability in FBS from day to day. Instead, a particular individual will tend to vary within only a small portion of the whole normal range. Some will tend always to have fairly high readings; others, fairly low; still others, in the middle.

This same concept of range applies to the whole GTT. The important measures are the amount of rise and the amount of fall rather than whether or not the rise and/or fall are within the whole population's normal range. For example, if the total fall from the highest to the lowest reading of the test is more than 80-100 mg%, the relative drop indicates hypoglycemia even if it is within the normal test range.

I found all of this rather confusing until I read some guidelines for reviewing the tests and talked with a physiologist.²⁹ Their distilled wisdom is as follows.

If your client has a GTT, get the results in writing and suspect hypoglycemia if:

1. Clinical symptoms appear during the test which are the same as those previously reported as troubling the client. If they correspond with a period when the blood sugar level is falling rapidly, hypoglycemia is the very probable cause. (Note that lab technicians are not trained to observe patient symptoms during this test. For best results, the patient should be accompanied by someone who

knows his/her usual behavior and will be likely to notice changes. The companion should be instructed to look for changes and write them down along with the time of their occurrence. The companion should stop the test and feed the patient if symptoms become bizarre. Dizziness, headache, confusion, palpitations, fatigue, depression, anxiety, and paranoia are frequent symptoms. Newbold suggests drawing an extra sample if symptoms appear between readings to determine whether or not the low point is actually at that time.³⁰

2. There is a difference of 80-100 points between the highest and lowest readings during the test.

3. The fall is very rapid during the third or fourth hours.

4. The glucose level falls 50 mg% or more during any one hour of the test.

5. The glucose level falls to 50 mg% or lower.

6. The glucose level fails to rise more than 50% above the fasting level during the six hour test.

7. The glucose curve falls to 10-20 mg% below the fasting level during the six hour test.

8. There is sugar in the urine during the test. (This is also a sign for diabetes. Both are abnormal conditions.)

9. Symptoms are brought on by high intake of "junk" foods and relieved by a good diet, whether or not there is a normal curve on the GTT.

FOOTNOTES

CHAPTER IV

¹Barron Health Clinic, Low Blood Sugar (Pamphlet), (Cleveland, Ohio: Karpas Publishing Co., Inc., 1971), Chapter 20.

²Barbara Reed, Back To Basics (Packet), (Municipal Court of Cuyahoga Falls, Ohio: September, 1977), pp. 64-65: United States Senate, Diet Related to Killer Diseases, V Hearing Before the Select Committee On Nutrition and Human Needs of the United States Senate, 95th Congress, First Session, (U. S. Government Printing Office: June 22, 1977).

³William Crook, Walton W. Harrison, Stanley E. Crawford, Blanche S. Emerson, "Systemic Manifestations Due to Allergy, Pediatrics, 27 (1961):790-799.

⁴Judith A. Ramaley, Ph. D., Professor of Department of Physiology and Biophysics, University of Nebraska Medical School.

⁵Anne Lewis and Masud Hoghugi, "An Evaluation of Depression as a Side Effect of Oral Contraceptives," British Journal of Psychiatry, 115 (196):697-701; cited by Barbara Seaman, Free and Female, (Greenwich, Connecticut: Fawcett Publications Inc., 1972), pp. 249-250.

⁶Ramaley, *Ibid.*

⁷William Crook, Are You Allergic? (Jackson, Tennessee: Professional Books, 1978), p. 26.

⁸John N. Burry, "Allergic Contact Dermatitis," The Medical Journal of Australia Special Supplement on Allergy, 2, (1978):9.

⁹Roger J. Williams, Alcoholism: The Nutritional Approach, (Austin, Texas: University of Texas Press, 1959), p. 18.

¹⁰Harry M. Salzer, "Relative Hypoglycemia as a Cause of Neuropsychiatric Illness," Journal of the National Medical Association, 58, #1 (January, 1976), p. 16.

¹¹Art Ulene, as seen on the Today Show, January 25, 1979.

¹²John F. Greden, "Anxiety or Californism: a Diagnostic Dilemma," *American Journal of Psychiatry*, 131, #10 (October, 1974):1089-1092. High intake of coffee can give symptoms indistinguishable from anxiety neurosis: nervousness, irritability, tremulousness, occasional muscle twitch, insomnia, palpitations, flushing, arrhythmias, diuresis, caffeine withdrawal syndrom and headache with it like anxiety. Check caffeine intake especially if patients not responding to psychopharmacological agents, psychophysiological complaints, recurrent headaches, chronically drinking coffee, or hyperkinetic kids - pop.

¹³Ramaley, *Ibid.*

¹⁴Crook, Harrison, et al., *Ibid.*, p. 793.

¹⁵E. M. Abrahamson and A. W. Pezet, Body, Mind, and Sugar, (New York, New York: Pyramid Books, 1976), p. 132.

¹⁶Arthur F. Coca, The Pulse Test, (New York, New York: Arco Publishing Co., Inc., 1956), summarized.

¹⁷*Ibid.*

¹⁸James C. Breneman, Basics of Food Allergy, (Springfield, Illinois: Charles C. Thomas, 1978), p. 16.

¹⁹Crook, Are You Allergic?, *Ibid.*, p. 40.

²⁰Brain Bio Center, "How To Discover a Food Allergy," (Princeton, New Jersey), pamphlet.

²¹H. L. Newbold, Mega-Nutrients For Your Nerves, (New York, New York: Peter H. Wyden, 1975).

²²Barron Health Clinic, *Ibid.*, pp. 130-131.

²³Breneman, *Ibid.*, p. 116.

²⁴Crook, Are You Allergic?, *Ibid.*, p. 19.

²⁵*Ibid.*

²⁶*Ibid.*, pp. 19-20.

²⁷Salzer, *Ibid.*; Carlton Fredericks and Herman Goodman, Low Blood Sugar and You, (New York, New York: Grosset and Dunlap, 1969); Newbold, *Ibid.*; Carl C. Pfeiffer and the Publications Committee of the Brain Bio Center, Mental and Elemental

Nutrients, (New Canaan, Connecticut: Keats Publishing, Inc., 1975).

²⁸Newbold, Ibid., p. 16.

²⁹Ibid.; Robert C. Atkins and Shirley Linde, Dr. Atkins' Super-Energy Diet, (New York, New York: Crown Publishers, 1977); Ramaley, Ibid.

³⁰Newbold, Ibid., p. 74.

CHAPTER V

MAKING THE CHANGE

Overview

In this chapter, we look at the logistics of making changes: figuring out the new diet, and keeping allergies and stress under control. Then we consider what happens when one or more of these elements is temporarily out of control (relapses). Finally, we look at the therapeutic tasks which remain when the biochemistry is controlled.

Once again I want to remind you that problem emotions and behaviors are often produced by several factors interacting simultaneously. As indicated in the Ramaley Rectangle (Chapter III), input from each of the four corners must be controlled in order to control the output--that is, the symptoms. When one or more factors is out of control (allergies or food sensitivities or biorhythms or stress), the symptoms may reappear.

Figuring Out the Diet

General Guidelines

Each diet will need to be individually tailored to the needs of a particular person. All diets should have five common aims: 1. They should meet the client's nutritional

- needs. 2. They should be as close as possible to the client's usual eating pattern and eating preferences. 3. They should be as easy and convenient as possible to follow.
4. They should avoid all of the client's allergenic foods.
5. They should prevent hypoglycemia.

Depending on what the client's problems are with food, the diet may or may not be close to what s/he usually eats and the way s/he usually prepares food. Nevertheless, the aim is to make as few changes as possible, because fewer changes usually means more compliance.

The scion of a family from Naples, Italy, is hardly going to accept German or Chinese fare, (well, usually not) but he might be willing to switch to whole wheat-soy noodles and whole wheat-soy spaghetti, if they make him feel better. Of, if dairy products must go, milk substitutes (usually soy) may allow a client to continue to eat at least part of his/her preferred foods.

Nutritional needs vary. Age is an important factor. The very young and the very old have special needs. (See Chapter 7.) Needs also vary according to activity levels. Those who exercise vigorously, do hard physical labor, and/or are nursing babies need more nutrients and more calories per day. The extra should be supplied by real food, not sweets. Some people have absorption problems and need diets tailored to the idiosyncrasies of their digestive systems.

Most of my clients have not been eating a nutritionally adequate diet, especially the ones who have hypoglycemia. The diet provided by the American Diabetic Association and the American Dietetic Institute is better than most, but is higher in refined starches than most hypoglycemics tolerate well.¹ Good diets are available by mail from the Hypoglycemia Foundation, and from Barbara Reed.² Others appear in various books.³ Dr. William Crook gives diets for infants and children of various ages in his book Can Your Child Read? Is He Hyperactive?⁴ If you have several of these resources available, your clients can pick what appeals most to them.

Usually, the best diet is one the client likes. The closer it is to the usual eating pattern, the more likely the client is to comply. For this reason, the American Diabetic Association's approach is helpful because it gives equivalents. (The other resources named above give variants of this approach.) With equivalents, a person can select from a whole variety of possibilities which will give, for example, enough protein or enough vegetables for a meal. Naturally, the allergic foods are avoided.

The new diet should be as easy to follow as possible. Often, favorite recipes can be converted into something acceptable to the palate, the allergist, and the glucose regulating mechanisms. Whole wheat and soy flours substitute for white refined, honey for sugar, whole wheat noodles and spaghetti for refined, brown rice for white, plain fruit juices

and unflavored gelatin for the sugared, artificially colored kind. (See Chapter VI, Cookbooks and Diets for Special Problems, for some equivalents.)

Clients can learn to save time by preparing for several meals at once, cooking in large batches and making their own mixes. (Quick Mix in Diet for a Small Planet is good for pancakes, biscuits, coffee cakes, etc.)⁵

The only really helpful book I know for cooking preparations and conversions is Helen O. Brigham's Living High On the Sugarless Hog.⁶ She relates her experiences in shifting from an ordinary American diet to one which has no sugar, no refined starches, no additives, and no preservatives. The book is full of useful hints about how to go as far as needed, even if that isn't as far as the Brighams have gone. Many unusual recipes are included. I have watched and aided in preparation of many meals at her home and can attest that meal preparation time there is not longer than it is for most people who use partially prepared foods. Notable exceptions in preparation times are in picking fresh strawberries to top the homemade granola and fresh blueberries for pies (with whole wheat crust, of course).

In addition to keeping a supply of diet and recipe information, you may need to know the local suppliers of whole grain pasta, soy flour, etc. At the time of writing, large grocery chains in Omaha stock whole grain flours and some non-instant whole grain cereals. Soy flours and whole grain

noodles are available from local food coops and health food stores. Equivalent items tend to be cheapest at food coops and most expensive at health food stores.

You will also need to teach your clients to read labels so they can avoid the food substances which cause them problems. By law, ingredients for most foods must be listed on their labels. The ingredient in largest amount is listed first; others follow in rank order, with the smallest ingredient listed last (usually preservative or artificial color.)

Now to the tricky parts. First, rather than being listed as all one item, sweeteners are usually listed according to their separate names and amounts. For example, if you read the label on one of those commercial "naturally sweetened" granola cereals, you will find some of the following sweeteners, all listed separately: brown sugar, corn syrup, molasses, and honey. Listed separately, each of these sweeteners is ranked fairly far down in the list of ingredients. Added together, sweeteners may actually be the largest or second largest item in the cereal. Keep that maneuver in mind. It is used to disguise the total amount of sugar in many packaged foods.

Here is another example of sugar disguise: "non-dairy" creamer (Coffeemate by Carnation). Would you guess the largest ingredient is a milk substitute like soy? Wrong. The one I have next to me (as an example only, not to use, of

course) lists, in order: corn syrup solids (that's sugar!), vegetable fat, sodium caseinate, dipotassium phosphate, emulsifier (makes it act like a liquid instead of forming a blob), sodium silico-aluminate, artificial flavor, and artificial colors. For the person who is cutting calories by not using sugar in coffee or tea, this non-dairy creamer is not better. Ounce for ounce, it has more calories than ice cream! (Coffeemate, 65% sugar; Sealtest Ice Cream, 21% sugar.)⁷ Other brands of non-dairy creamer have corn syrup solids and lactose (milk sugar).

The second tricky part is avoiding allergenic foods. Would you be able to figure out what is in a non-dairy creamer? My husband, a chemistry professor, alerted me to some of the difficulties. "Vegetable fat" doesn't indicate from which vegetable it comes. Coconut, cottonseed, and soybean are common. "Sodium caseinate" is actually a milk product. Casein is a milk protein. Lactose is also a milk products. "Artificial flavor and artificial colors" doesn't tell us which ones they are. That might be of great concern if your client were one of the estimated 94,000 Americans who are allergic to Yellow Dye No. 5.⁸ Other people are allergic to other dyes, but probably not in such great numbers.

The third tricky part is that some foods don't have to carry lists of ingredients at all! Instead, they are defined by the United States Department of Agriculture. The U.S.D.A. keeps lists of ingredients for those foods, so, if

you happen to drop by their offices in Washington, D. C., you can find out what is on the acceptable list of ingredients for those particular foods.

The fourth tricky part is that some ingredients may be listed whether or not they are actually included! Some manufacturers hedge their bets by printing packages which allow for all the ingredients they might use in a product. Their packages give the following gratuitous information: "May contain natural and/or artificial flavorings and colors." Isn't that helpful? It might have yellow dyes, red dyes, real vanilla, artificial vanilla, real maple, artificial maple, malt, etc. If you were allergic to any of the listed ingredients, this product would have to be eliminated from your diet even though the allergenic food substance might not be included in this particular package.

The U.S.D.A. follows the same system for some of its defined foods. Your package of ice cream doesn't have a list of ingredients because its ingredients are filed at the U.S.D.A. When you drop by to find out what is on that list of ingredients, you will find out that your ice cream (you guessed it) "May contain natural and/or artificial flavorings and colors." Get a home ice cream freezer or ask your local manufacturer for a list of ingredients used locally.

Hunting the Problem Food(s)

Here you are with a history form all filled out, won-

dering how to figure out what food(s) is causing the problem. Where do you start?

First, look at the incidence of alcoholism, diabetes, and hypoglycemia in the family. My rule of thumb is: If one family member has any one of these three problems, my client probably has some problem with sugar. If two family members have some of these problems, my client is almost certain to have problems with sugar. If three or more members of the family have some of these problems, I assume the client has a sugar problem.

Barbara Reed and I discovered independently that our clients not only have a disproportionate incidence of alcoholism in their families (which we were trained to look for), but also a disproportionate incidence of diabetes, which we were not trained to look for.⁹ (See Chapter V, Hypoglycemia Prevention and Control for more information about diets with reduced sugar.)

Next, is there a food allergy problem? Check the contents of Table 1 against the history you have taken. Check Chapter III, Symptoms of Allergy. Do any of the symptoms fit in?

Check for any food allergies this client had as a child. Compare them with his/her current diet to see if the same foods appear in a suspicious way; that is, is it a food s/he eats every day? Is it a craved, binge, and/or addictive food? Is it a food eaten during stress periods? Is it an avoided food which might be hidden in the diet:

Table 1

COMMON FOOD ALLERGY SYMPTOMS*

Malaise: The most usual food allergy symptom. "Hangover facies." (Looks sick and hungover.) Characteristic scowl and frown.

Weight Gain: Sudden weight gain plus increased thirst, decreased urinary output, tight shoes, tight rings. May be as much as 4% weight gain. Disappears 18-24 hours after allergic food removed from diet.

Aching Joints: 48-96 hours after eating allergic food. Low backache, stiff fingers, sore feet.

Hypoglycemia: Mental confusion, thermal sensations (hot or cold), lightheadedness, dizziness, weakness, sweating, tremors, fainting. Usually 3-4 hours after eating. Intake of more of same food gives temporary relief, but another episode follows in another 3-4 hours. Often hunger for sweets.

Low Body Temperature: (Hypothermia) Person looks hot and flushed. Usually part of hypoglycemia attack.

Low Blood Pressure: (Hypotension) Often from hypoglycemia. Dizzy, light headed, nausea, vomiting. Also may accompany flushed appearance (vasodilation) of allergy.

*Modified from J. C. Breneman, Basics of Food Allergy, pp. 41-42.

corn disguised as corn syrup, corn meal, or cornstarch; barley disguised as malt flavoring; orange or lemon as a flavoring?

Check in the same way for common foods which were not childhood allergic foods. Then ask the client "What food(s) would you find hardest to give up?" In chronic food allergy, the allergic food is usually eaten every day. In my experience, it (or they) is the hardest to give up.

Look at Table 2, p. 142. The most common allergic foods are listed in order. With each is a list of the most typical physical symptoms and complaints. Like a Sherlock Holmes, you can add the clues together.

Foods client finds hardest to give up	(bread and milk)
Foods eaten every day	(bread and milk)
<u>+Client complains of frequent heartburn</u>	
	(Likely) wheat and milk
	<u>OR</u>
Foods client finds hardest to give up	(milk and egg)
Foods eaten every day	(milk and egg)
<u>+History duodenal ulcers not responding to</u>	
	(milk)
	milk

(Fooled you! Egg was a red herring--hopefully not allergenic.)

To help your detective work still further, look over Table 3, p. 143, which lists types of diseases and symptoms caused by particular foods. Do any of these fit with your client's history?

Table 2

TYPICAL SYMPTOMS AND COMPLAINTS
RELATED TO SPECIFIC FOODS*

- Milk: GI (heartburn, dyspepsie/upset stomach, aphthous stomatitis (little ulcers in the mouth), gas, diarrhea, colitis, gallbladder, pancreatitis), asthma, bed wetting, seizures, headache, rhinitis (sniffles), duodenal ulcer.
- Wheat: WI (especially heartburn, dyspepsia, and diarrhea), migraine, fatigue, malaise, emotional upsets, celiac disease (celiac disease is a gluten response. Wheat germ and bran are not usually a problem. Gluten is also associated with schizophrenia in some people.)
- Egg: Gallbladder attacks, gastritis, dyspepsia, migraine, asthma, diarrhea, acne, hives.
- Corn: Migraine, hives, gastritis, colitis, rhinitis, asthma.
- Chocolate: Gastritis, migraine, joint pain.
- Pork: Joint symptoms (ankylosing spondylitis and rheumatoid arthritis), migraine, gallbladder, diarrhea.
- Orange: Nasal stuffiness, sinus, aphthous stomatitis (little ulcers in the mouth), dyspepsia, adult cystitis (bladder inflammation).
- Peanut: Dyspepsia, migraine, acne, hives.
- Potato: Dyspepsie, little ulcers in the mouth (aphthous stomatitis).
- Chicken: Heartburn, nausea, migraine, diarrhea, joint pain including low back pain.

*Modified from J. C. Breneman, Basics of Food Allergy, Pp. 42-44.

Table 3

TYPES OF DISEASES AND SYMPTOMS

CAUSED BY PARTICULAR FOODS*

- Arthritis: Protein, particularly pork.
- Colitis: Usually milk, sometimes wheat, corn, egg, chocolate, and orange.
- Chronic duodenal ulcer: Milk.
- Enuresis (bed wetting): Milk (60%), wheat and egg (each 20%), chocolate, corn, orange (each 15%), pork, tomato, peanut, seafood, cinnamon.
- Allergic tension fatigue syndrome: Milk, chocolate.
- Upper respiratory infection (chronic or recurrent): Milk, egg, corn, wheat, spice, citrus fruit.
- Skin reaction: Milk, chocolate, nut, peanut, egg; seasonal: tomato, strawberry.
- Hives: Medications, peanut, egg, chocolate, spice, preservatives, coloring, flavoring.
- Blood vessel disease: Angioedema (capillary fragility, etc.) hives, migraine.
- Central nervous system (CNS) (Epilepsy, psychosis, psychoneurosis, psychotic episodes, double vision, delusions, hallucinations): Milk.
- Childhood learning disability: Milk, sugar, chocolate.
- Hyperactivity: Food additives (colorings, flavorings, preservatives).
- Obesity: Cereals.
- Diabetes: Affected by any food allergy.
- Insulin resistance: Beef or pork.
- Asthma: Aspirin, egg, milk, seafood, peanut, fish, chocolate, corn, nuts, wheat, garlic, onion.

*Modified from J. C. Breneman, Basics of Food Allergy, pp. 42-53.

Check everyone for symptoms of hypoglycemia. It may either be a source of the presenting problem or be contributing to the problem's intensity.

With experience comes not only faith but expertise. Don't discount your intuition. Intuition is a primary diagnostic tool. After a few of these detective jobs, you'll learn where and how to guess. Have your client participate in Sherlock's work. After all, it's his/her diet. One therapist + one client = a better chance of figuring out the allergic foods.

Trial Elimination of Possible Allergic Foods

Assuming that your Sherlock act has yielded up some suspects foods, how do you proceed? There are two ways to try to eliminate suspect foods: one by one or all together. Consider the following. The suspect food will have to be out of the diet for 8-10 days and then reintroduced over a 2-3 day period. Only one suspect food can be reintroduced at a time. If all the suspect foods are eliminated at once, then each has to be reintroduced over a 2- 3 day period. With three suspects foods, 8-10 days elimination + 3 (2-3 days reintroduction) = 14-19 days. If the same three suspect foods are eliminated serially, that will be $3(8-10) + 3(2-3) = 30-39$ days. (I didn't warn you about math anxiety, did ?) On the other hand, only one food has to be given up at a time in this sequence.

Discuss the choices with your client and note the following. More than one of the foods may be causing the symptoms. For example, if wheat and egg together are causing the problem, eliminating one or the other may not make very much difference. Only when both are eliminated at once will the symptoms decrease noticeably or disappear.

Should one family member try the new diet or should the whole family try it at once? Helen Brigham and I prefer changing the whole family. That way, the forbidden food(s) is not around to tempt the changer. Also, other members of the family may have the same problem food, possibly with different symptoms, and find relief the same way.

When sugar is the suspect food, or someone is going on the hypoglycemia diet for allergy control, I am particularly likely to suggest putting the whole family on the trial diet. As you may remember, sugar sensitivity seems to run in families. I always suspect other members of the family are sugar sensitive without knowing it. A trial period of eight to ten days may reveal how the amount of sugar in the regular diet is affecting all of them.

The staff of the Prescribed Activities Center in Des Moines, Iowa recommends changing only one family member's diet at a time.¹⁰ They think that if all the family members have the same sensitivity, their behavior may be quite unmanageable during the first three to four days of the trial when symptoms usually escalate.

What should you recommend? Check with the family cook about the feasibility of making the changes each way. Think about the family and what you know about them. Make an educated guess with your client (or your client's parent if your client is a little child.)

All forms of the suspected food must be eliminated for the entire period. Corn: on the cob, canned, frozen, cornmeal, corn syrup, etc. Dairy products: milk, cheese, cottage cheese, yogurt, dry milk solids, non-dairy creamer, etc. Breneman's book has complete lists for every conceivable food elimination.¹¹

If the suspected food is allergenic, what can your client expect? 1. S/he will be more _____ than usual. (The blank is the presenting symptom/complaint, like depressed, hyperactive, fatigued, etc. Classic withdrawal symptoms occur: headaches, irritability, and anxiety. 2. After the first 3-5 days, the symptoms will decrease markedly or even disappear. 3. When the food is reintroduced, the symptoms will recur. 4. If the food is removed from the diet again, the symptoms will decrease or disappear again.

You need some information about reintroducing the food(s): (See Chapter III, Tests for Food Intolerance for more information). Obviously, you test one at a time so you can tell which is the villain. Each is tested for 6-9 consecutive meals. (Meats are tested for 9.) The client should eat large amounts of the food at each of the test meals. Each

should be in its pure form so that no other possible allergic food is added inadvertently. If the symptoms reappear, discontinue that food immediately.

Dr. Crook points out food allergies are like fires.¹² After they die down from lack of fuel (allergenic food withdrawn), there may be a lag until they build up and flame brightly again. Each allergenic food may need to be eaten at several consecutive meals before the symptoms flare again.

Dr. Breneman also adds a cautionary note.¹³ If the food causes a lot of gut pain and inflammation when it is re-introduced, no other food can be tested until the gut has a rest period. In its inflamed state, the gut may react to many non-allergenic foods which would not ordinarily cause problems.

To help you, Table 4, p. 148, offers a list of frequent physical response to allergic foods. Dr. Breneman checks each of his patients for these symptoms when an eliminated food is reintroduced.¹⁴

When you have found the problem food, what next? Usually, all forms of that food must be excluded from the diet for a period of several weeks to several months. Sometimes, the food can be reintroduced occasionally in small quantity. The only way to find out whether or not this will work is to try it CAUTIOUSLY.

If it is a food which can be eaten cooked or raw, it may be better to eat it cooked because of enzyme changes

Table 4

FREQUENT PHYSICAL RESPONSES TO ALLERGIC FOODS*

- ½ hour - heartburn and dyspepsia (upset stomach)
- 1 hour - headache, rhinitis (stuffy or drippy nose), asthma
- 3-4 hours - gas, "bloating," diarrhea
- 6-12 hours - hives, skin rash
- 12-15 hours - weight gain through water retention
- 12-24 hours - epilepsy, confusion, other mental aberrations
- 48-96 hours - aching joints, aching back, aphthous ulcers
(small, white spot lesions over a wide area in a fungal pattern)

*Modified from J. C. Breneman, Basics of Food Allergy, pp. 21-23.

caused by heating.¹⁵ Breneman says cooking reduces allergenicity by 50%.

Sometimes, only a part of the food is causing the problem. Two good examples of this are wheat and milk. With wheat, many people are sensitive to only the gluten and may be able to eat bran and wheat germ without ill effect. With milk, there are three possibilities. People can be sensitive to the milk protein, the milk fat, or the milk sugar. The protein is just about impossible to avoid in any milk product; however, those who are sensitive to the milk fat, may be all right with non-fat milk. Most people who have problems with milk products are sensitive to the milk sugar (lactose). Some can eat yogurt because it contains the missing enzyme which breaks down the lactose. Most need to stay away from milk products altogether. (Some non-dairy creamers have milk solids in them. Beware!)

Most of the world's adults (about 70%) cannot tolerate lactose because they lack the necessary enzyme to break it down.¹⁶ (They had the enzyme as children but gradually stopped production as they grew to adulthood.) Breneman points out that people from Northwestern Europe have the highest tolerance of milk products as adults. Those are Scandinavians, Germans, etc. As one moves South and East across Europe and Africa and on to Asia, the percentage of adults tolerating milk becomes lower and lower. In Scandinavia, almost all adults can tolerate milk. In Southeast Asia and among Native Ameri-

cans, the percentage of toleration is very low. That has some interesting implications for our Oriental immigrants, including Vietnamese refugee families, especially if they are involved in a federal food program like school lunch.

The younger the person with a food allergy, the more likely it is that the allergy will be outgrown if the food is eliminated from the diet.¹⁷ If an infant has a food intolerance, 3 to 6 months without it may restore tolerance. In older children, more elimination time is needed (1-2 years). In adults, even after three years, most are still intolerant, but a few can eat the food again.

Some people just can't bear to give up a favorite allergenic food completely and forever. They may want to try to experiments. One is to do without it for several months and then try it again - a little bit, once. They may be able to tolerate it once a year, once a month, even once a week, and have serious problems only if it returns to the daily or weekly list.

Some people prefer another alternative. They eat the problem food only on a particular day of the week or month. If they have several foods, they eat all of them the same day. The problems return. They feel lousy for that day, and maybe a day or two afterward, but they get to eat the missed

Sometimes, after a few trials of this second alternative, they give up the food because the problems are so severe. Sometimes, especially if it is a child doing the experiment,

the family just battens down the hatches and waits out the problem period. I think the family of a child who is hyperactive, vicious, destructive, and/or criminal has the right to refuse this experiment. On the other hand, if the child is mildly irritable, and/or mildly depressed, they may want to try it. (Once a year, we let our son gorge on Christmas cookies at our church's vespers service. He hardly moves the next day. He can't even follow instructions. We just write off the possibility of any fruitful interactions with him for that day, load him up with vitamin C and brewer's yeast and wait for the day to pass.¹⁸ Exercise helps, but only if we can get him moving.)

One other problem remains: what to do with the old supplies of the now-banned food. I advance the following theory. Throwing it out is cheaper than the physician's visits and prescriptions for recurring symptoms. If throwing it out is unbearable, donate it to a charity food collection. Many churches and service organizations maintain emergency pantries stocked with donated foods.

Hypoglycemia Prevention and Control

The diet which prevents hypoglycemia requires most people to make two major changes in their eating. One is what they eat; the other, when they eat it.

The objective of the hypoglycemia diet is prevention of all hypoglycemic episodes. (See Chapter III, Hypoglycemia Prevention for details.) The blood glucose levels are main-

tained within appropriate limits by careful diet choices.

The entire diet is high in protein, moderate in fat, and low in carbohydrates (sugars and starches). Each meal and each snack should contain some protein and some fruits and/or vegetable. Moderate amounts of whole grain breads are allowed. No refined sugars or starches are allowed at all. Even honey is often avoided during the first few months. Prepackaged mixes, bakery products and alcoholic beverages are avoided. Caffeine and smoking are banned, too, since they interfere with glucose regulation.

Artificial sweeteners must also be avoided, at least for several months. Apparently the brain and pancreas build up a conditioned reflex to anything sweet. The sweet taste starts insulin release, even though the sweetness is not sugar of starch. Sugarless gum, sweetened with sorbitol and manitol, gives some of my clients strong sugar cravings. Many report that artificially sweetened anything, particularly diet pop, leads to hypoglycemic episodes.

The hypoglycemia diet needs to be adjusted according to the client's responses: "feedback." The person feeds outcome back into planning input: If s/he feels fine, the diet is probably adequate and should be continued as is. If there is a hypoglycemic episode, some adjustment needs to be made. To make the adjustment, foods eaten during the three to four hours prior to the episode need to be checked. Was there enough protein? Was there sugar or refined starch?

Was there too much sugary fruit? (A snack of one apple without accompanying protein sends many of my clients into hypoglycemia even though the same apple with cheese or milk has no ill effects. By itself, apparently, the apple causes a sugar load.)

Now all of this may sound a bit grim. Must your clients anticipate a life of unrequited sugar craving? Can they really be healthy without fast foods, sugar saturated snacks, etc.? What kind of payoff could possibly make this "sacrifice" worthwhile?

The best payoff is in feeling better. Don't forget that they came to see you because they were feeling bad or their lives were going badly. People are delighted to discover themselves as they are without their anxiety, fatigue, headache, or hyperactivity. The real self is often someone they were longing to find inside. As Mary remarked (see Chapter II), "I feel like a veil has been lifted from my whole life." When hypoglycemia is a veil, lifting it can be worth giving up sugar. When an uncontrollable child quiets down and interacts normally, a whole family may really enjoy being together for the first time. Giving up sugar is a small price for that.

Another marvelous benefit is a better sense of taste. Many people don't have any idea how food really tastes. When they aren't obscured by too much sugar and salt, many fruits and vegetables taste delightful even to people who thought they didn't like them.

There may be a healthy reduction in salt intake too. Sugar reduction in my own family took place over about ten years as we went from a better-than-average American diet, which included some refined sugar and starch, to one which has mostly honey and whole grains. During that same period, we noticed we were eating less and less salt. Since salt intake is associated with hypertension, which runs in my husband's family, the decrease has been a great potential health benefit to us all.

My colleague, Dr. Ramaley, explained the change this way: Cells in the wall of the small intestine pump glucose from inside the intestine, through the wall, into the blood stream.¹⁹ Salt is required to fuel these pumps. As there is less and less sugar to be pumped, less and less salt is required. If sugar consumption should increase again, more salt would be required again. Sure enough, although I haven't tried that particular experiment, some of my clients report fierce salt cravings after a binge on sweets. They are fueling their pumps.

I have heard some remarkable stories about lives affected by hypoglycemia. Perhaps none are more startling than those of the probationers handled by Barbara Reed in the Municipal Court of Cuyahoga Falls, Ohio.²⁰ They are given her written test for hypoglycemia. If they score above a set number of points, probation is contingent on their following a diet which Barbara Reed prescribes. Failure to follow

the diet removes them from probation and sends them to jail. Faced with that, most stay on the diet, and with remarkable results: changed lives. Many are physically and mentally well for the first time in their lives.

Her diet and meal plan are reprinted below. Notice they contain only real food! (I have removed cranapple juice because now it is only available presweetened.)

After several weeks on a diet like this, most clients will be able to try whole wheat and/or whole wheat-soy spaghetti and noodles, brown rice, and potatoes in moderation. Many will also be able to substitute mixtures of grains and lentils for more expensive meat protein, at least part of the time.

Reed Diet

(Reprinted from "Diet Related to Killer Diseases, V)

NUTRITIONAL DIET

Protein: (fresh or frozen) All lean meats - beef, pork, lamb, - chicken, fish, turkey, eggs, cheese, yogurt.

Vegetables: (fresh or frozen)

Eat many raw or lightly cooked - artichoke, asparagus, avocado, beet greens, black-eyes peas, broccoli, brussel sprouts, cabbage, cauliflower, carrots, celery, collards, corn, cucumbers, eggplant, garlic, kale, lentils, lettuce, lima beans, mustard greens, mushrooms, okra, onions, peas, peppers, pumpkind, pumpkin seeds, radishes, sauerkraut, soy beans, spinach, squash, string beans, sunflower seeds, swiss chard, tomatoes, turnips, turnip greens, water cress (home-made soups).

Fruits: (fresh or frozen)

Apples, apricots, berries, cherries, fresh coconut, grapefruit, kumquats, lemons, limes, mango, melon, papaya, peaches, pears, pineapple and tangerines. (You may eat with cream but no sugar.)

Juices: (fresh or frozen)

Apple, grapefruit, orange, pineapple, tomato, vegetable, Vegemato, V-8.

Beverages: Any of the above juices, plain buttermilk, milk (moderately), herb teas, Fresca (moderately), vichy, kefir, carob - no sweetener.

SNACKS

Raw sunflower seeds, raw pumpkin seeds, popcorn, banana chips, granola, hard boiled egg, blueberries, canteloups, avocado, dried pineapple rings, sprouts (sunflower, alfalfa, soy), cottage cheese, cheese slices, cold roast beef, cold chicken, yogurt (plain or with blueberries, nuts, or bananas), nut mix (raw), Pepperidge Farm goldfish pretzels, Pepperidge Farm mixed suits: pretzels cheese or green onion.

Note: Use cold pressed oil for salad dressing or cooking. (Apple cider vinegar.)

Eat only whole grain bread (wheat, soy, rye, corn, or oatmeal), no preservatives.

STRICTLY FORBIDDEN FOODS

Avoid ALL refined sugar and flour - or products made with them (read labels).

Avoid foods with artificial additives, coloring, preservatives, or sweeteners.

Do not consume: bakery products such as pastries, cake, pie, puddings, etc., Jello, chocolate.

Avoid coffee and coffee substitutes such as Sanka and Decaf, Coca Cola, Pepsi Cola, or other pop (diet or otherwise). (Substitute instead: the listed juices, herb teas, etc.)

Avoid grapes, prunes, dates, raisins, and figs. (At least for 4 to 6 months, due to high sugar content.)

Avoid pre-packaged instant foods.

Avoid starches such as: macaroni, spaghetti, rice, noodles, (except soy noodles), pizza, potatoes, ravioli.

Avoid medications containing caffeine.

Avoid beer, cocktails, cordials, wines.

EATING PATTERN

Upon arising - 4 oz. vegetable, fruit, or tomato juice.

Breakfast within 20 minutes of juice - high protein

Mid-morning snack (or two hours later) - from snack list (raw sunflower and/or pumpkin seeds are excellent).

Lunch - high protein with raw vegetable salad.

Mid-afternoon snack - Yogurt, buttermilk or vegetable juice.

Before dinner (½ hour) - 4 oz. juice.
 Dinner - high protein - (fresh fruit for desert) with lightly
 cooked vegetables or raw vegetable salad.
 Light evening snacks - each 2 hours until bed - from snack
 list.

This pattern should be followed for 4 to 6 months.
 The snacks are needed to keep from having nervous, shaky feel-
 ing several hours after eating. A need for the snacks will
 diminish except during times of unusual stress, either men-
 tal or physical. It is wise to carry some nut mixture with
 you when you will be away from home (or your normal schedule)
 for any length of time or will not be eating at normal times.
 When following this eating pattern with the foods recommended
 a positive change should be noted within 4 to 6 days.

As your body becomes balanced an "avoided" food may
 occasionally be eaten without any ill effect. If it still
 causes you problems, you should eliminate it from your diet
 completely.

For those of you who do not take time to have break-
 fast before going to work, please try to following:

- 5 or 6 oz. unsweetened juice, (start blender on low
 and add:)
- 2 tablespoons Protein powder, or liquid
- 1 teaspoon powdered Brewer's yeast (gradually increase
 to 2 tablespoons over a period of 4 weeks)
- 1 teaspoon cold pressed Safflower oil
- 1 teaspoon RAW honey (optional)

Turn blender to high and blend for about 30 seconds.
 If you have problems with constipation, you may add a table-
 spoon of miller's bran at the beginning). DRINK SLOWLY.

Allergy Control

For many clients, gaining control over allergies
 other than food will be a necessary change too. The obvious
 first step is establishing what causes the allergies. (See
 Tests for Diet and Allergy Related Problems, Chapter IV.)
 Then, consider how each of the allergens can be controlled
 Some are more easily controlled than others. Control of
 any will decrease the total allergy load enough to make some
 improvement.

For me, the greatest help in controlling other people's allergies came from reading the down-to-earth advice of some experts. The greatest return for the least reading is in Johnston's "The Natural History of Allergic Disease in Children."²¹ These seven pages packed with information about allergies, are fairly easy reading. (You can skip the medical explanations at the beginning.) It has been the basis for most of the work I have done with clients. The rest is a marvelous summary of what is known about allergy prevention and control in children. Most of it applies to adults too.

Two other authors have written well and thoroughly in language any high school graduate can read. William Crook's Are You Allergic? is a gold mine.²² There isn't much you could want to know about an allergy, food or otherwise, that he hasn't covered in this interesting, well written, little paperback. He has check lists for everything, and sources for special equipment, information, allergy diets, etc., etc. He isn't paying me to advertise. I just happen to think he writes wonderfully and is very thorough. Coca's The Pulse Test is also filled with well-written useful information about allergy control.²³

Johnstone's book talks about allergies from before birth through the early years.²⁴ He even reports some prospective studies which are trying, before birth, to predict which children will have allergies. Family history

of allergy and amount of trauma at birth are also two very important factors in determining which people will develop allergies. (The incidents of asthma is much greater among children who had trauma at birth or were hospitalized, with or without surgery, during the first year of life. Stress is believed to have turned on their allergic defenses.)

Johnstone points out that airborne allergens are circulated through many homes with forced air systems for central heating or air conditioning. He recommends tempering the effects of humidifiers in cold weather and dehumidifiers in the summer dampness. Electrostatic precipitators may help too.

Family pets are another source of allergies. Johnstone recommends that allergic children not sleep in the same room with the pet. Using the pet for a pillow is not recommended. Obviously, allergic adults have the same need to protect themselves.

During the hay fever season, pets may deposit highly allergenic saliva on floors and furniture when they drool. They may also carry large amounts of pollen on their fur. Johnstone gives a very practical suggestion for both children and pets during the pollen season: rinse their fur/hair when they come in from outside and at the end of the day. (Cats may need to be brushed outside.) He also recommends keeping pollens out by closing bedroom windows and doors, avoiding grass cutting, and using bedroom air conditioners and/or electrostatic precipitators.

Allergy to house dust is not necessarily a reflection on someone's housekeeping. Remember, allergy is an unusual sensitivity to something which doesn't bother most other people. The exceptional people need to minimize the number of dust collecting items in their living space. Furniture coverings, curtains, and rugs should be washable, and be washed frequently. Special covers for mattresses and pillows often help too.

All of the authors point out the large variety of chemical "insults" to most Americans: insecticides, herbicides, tobacco smoke, auto and industrial exhausts and fumes. People who are allergic to any of these substances need to work on protecting themselves. The home gardeners can avoid using insecticides and herbicides, and should stay indoors when their neighbors use them. Allergic people should also be careful not to handle plants or sit on grass which has been sprayed.

Of course, the battle between smokers and non-smokers is raging. Gradually, local ordinances are protecting more and more people from tobacco fumes. The client who is really allergic to smoke (and there will be many) may have to curtail some activities, like bar visits, and defend his/her right to clean air at work and play.

Look again at the Ramaley Rectangle (Chapter III). As you can see, other factors besides the allergens can influence the degree of response. So, part of allergy control

is in controlling stress, preventing hypoglycemia, and eliminating allergenic foods. Particularly when the allergies are likely to flare, such as when the hay fever season is on or the person is exposed to tobacco smoke, the other factors need to be kept well under control. As mentioned earlier, the person who has figured out a satisfactory diet for, say, winter and spring, may be so overwhelmed by summer hay fever that the diet has to be further curtailed. Or, in times of stress, allergies which were believed under control may flare again. The total load is too great when allergies and stress are combined.

Stress Control

As mentioned in Chapter III, stress comes in many flavors. Some are easier to avoid than others. Extremes of heat and cold may be avoided or minimized, but monthly job reports and school vacations are inexorable.

When most people think of stress, they think of jobs or emotional upheaval. Another important stress, often overlooked, is illness, especially chronic illness like diabetes or heart disease. Chronic and acute infections cause stress too.

Cold and high altitudes are stresses for most of us. In the Great Plains, a Colorado vacation is a treat, but the altitude change of 4,000 (Denver) to 9,000 (resorts) feet can be a big stress for us flatlanders, especially if our trip is a ski vacation, adding cold to high altitude.

As stress increases, the body is more responsive to food sensitivities, allergies and daily rhythms. (See Chapter III, Ramaley Rectangle.) Each client needs to be aware of the stress periods in his/her life and reduce the total load at those times by: 1. getting more exercise which relieves stress and improves glucose regulation, 2. controlling other (non-food) allergies, and 3. avoiding foods that are even mildly allergenic. In the height of an allergy season or when going out for dinner where an allergenic food may be served, the person under stress may want to protect him/herself from an allergic flareup with an antihistamine or large dose of vitamin C.

Finally, if stress cannot be avoided, perhaps we should all follow the advice of a sage physician of my acquaintance. One of her patients reported severe chest pain, pain radiating down the right arm, rapid heart beat, and other symptoms commonly associated with heart disease. All of these exciting symptoms were found to be "Chest twinge syndrome" which can afflict people under great stress. The written prescription for this condition read, "Get lots of exercise, laugh a lot, and have a friend with whom you can share everything." The prescription works when it is followed every day.

Exercise

As mentioned above under Stress Control, exercise helps to reduce stress by giving a physical release of tension.

Exercise also affects glucose regulation. If the blood glucose level is low, it will rise with exercise. If the level is very high, it will lower as extra calories are used.

Several of my sugar sensitive friends report they get over a sugar attack more quickly and less painfully with very vigorous exercise because they speed the cleaning out of their systems. My friend, Jenny, says she doesn't have good judgment or quick reactions when she is sugared up; therefore, she does some unskilled exercise in a safe place at those times.²⁵ Your clients will need to protect themselves in the same way. Children need to be protected by adults.

Relapses, Crashes, and "Great Falls"

Eventually, everyone has a relapse. (Some call it a "fall from grace;" others, "acrash." As one friend remarked, "The only drawback to feeling so much better is that feeling bad is even worse." Everything was going fine and then... The old symptoms are back in full force: depression, anxiety, hyperactivity, or whatever. Groan.

You may receive a frantic phone call or a very discouraged office visit. The clients feel helpless and hopeless. They believe their symptoms have come back forever.

First, they need reassurance from you that this relapse is not forever. If they got better before, they will get better again. Happily, if remedies are started immediately

recovery will be well along in forty-eight hours. (Even forty-eight hours will seem only slightly less than eternity to a relapsed client.)

Do not try to get on with the current therapy/problem solving/counseling. During relapse time, the work is not likely to go well; in fact, it probably won't go at all. Your clients will have their previous impediments back: confusion, anxiety, hyperactivity, depression, and/or other symptoms. At best, they won't have the needed focus or energy. Trying to work will only give a tremendous sense of failure and incompetency. Further discouragement is not needed. It will only make it harder to come back and work after the relapse is over.

After you give reassurance and promise of recovery, help your client to identify the cause of the fall. Go around the Ramaley Rectangle (see Chapter III) checking in each corner for some factor which changed: food sensitivity, allergy, stress, and/or biorhythms.

The cause of relapse might have been an allergenic food. The client thought that eating it just this once wouldn't matter, but it did. At a party, the allergenic food might have been hidden in a yummy looking casserole or otherwise disguised. On a long trip, there might have been less choice of foods, so one was risked and found risky.

Maybe it was an allergy other than food. The client might have been controlling symptoms but running a little close

to his/her edge. A new pet, visiting someone else's pet, or the onset of the pollen or mold season could have shoved him/her over the brink.

It might have been stress. A family fight, a problem at work, worry over a bad report card, or kids at home with the chickenpox could have been the last straw.

Finally, biorhythms have tipped the scale. Remember that men have 9 or 20-22 day cycles affecting their moods. Women and girls of reproductive age are likely to have 25-34 day menstrual cycles. There is a most vulnerable period in each of these cycles.

What will speed recovery? First, stop whatever caused the relapse. Second, clean out the system and reduce stress by exercising vigorously. (Obviously, not possible if the relapse took the form of asthma.) Third, cut back a bit on everything which may be pushing the client toward his/her edge: Take extra care in curbing exposure to all known allergens including foods, and make every possible reduction in stress. Some extra vitamin C may be helpful. It is a natural antihistamine and very effective in helping many people feel better sooner. Some brewer's (nutritional) yeast may also help, especially if the problem stems from sugar or starch. Brewer's yeast has glucose tolerance factor (GTF) and B vitamins.²⁶ B vitamins are quickly exhausted during stress periods and are used in digesting sugar and starch. Lack of B vitamins disturbs carbohydrate (sugar and starch)

metabolism and contributes to hypoglycemia (a stress in itself).²⁷

There is another kind of relapse which I call "insidious deterioration." It is a gradual return to the original condition. The most usual progression is through eating increasing amounts of sugar and starch and/or an allergenic food. In some cases, return to caffeine does it. Reintroduction of allergenic fumes could do it too.

Often, the client doesn't notice the changes because they are slow. You may notice the old symptoms during a counseling session. Maybe the child will be restless and distracted--part way to hyperactivity again; maybe an adult will be confused or paranoid or have trouble working on problems.

Your job is to be an observer and report what you see, or to listen to the reports of those who have seen, and check them out. Is the child more restless? Does the client seem paranoid? Has thinking clearly become a problem?

Frequently, when I mentioned my observations, the client is defensive: "I only ate a little. That couldn't cause any problem." I reflect back what I am seeing and contrast these observations with the observations I made when the problem was better. I ask the client to help figure out where there is slippage and stop that slippage so the counseling work can continue effectively.

After the Diet is Fixed and the Allergies Controlled...

If you flip back to the beginning of this book, you will find I wanted information about diet, allergies, and behavior to be thought of as one tool - one way to go at solving problems. Now I want to emphasize that one tool is all it is. For most of the people we deal with, one tool is not enough.

If you have been skillful and/or lucky, the work you have done with your client or group of clients has paid off. Their thinking has become clearer. Their mood swings are less wide. Their concentration is better. Their activity level is more appropriate: If they were chronically fatigued, they've become more energized. If they were hyperactive, we might say they've become de-energized: they are no longer hyper, they're just active. A sense of humor has emerged. Chances are, you notice a difference in the way they think. They focus on a problem more easily and stay focused on it. You may even notice an increased interest in solving problems. Something new has been added.

If the whole diet and allergy part of the problem is pretty much under control, don't think you've done yourself out of a job. You're not going to be unemployed. In some ways, your work is just beginning. Most of these people will still have many problems to deal with in terms of interpersonal relationships.

What you've done in working with them so far is to make them more able to get into the problem solving process

by making their thinking clearer and reducing the distractions (allergy symptoms and moods). They still need new things to think about and new ways to think about them. They still have old habits they've brought along with them and now need help in breaking.

Quite often, I find that this isn't the first time that a person has tried to solve a particular kind of problem or to break an old habit. They may, in fact, be very discouraged about changing. "Gee, I tried that over and over again, and it never worked," or "I knew years ago that I needed to work on that, and I tried. I just couldn't get anywhere."

Your support is needed for clients to believe this time can be different. You will also need to recognize and admit that diet and allergy control have not solved all of the problems. Your clients' past lives still affect them.

Now, you need to bring into play all the skills, all the training, and all the experience you would ordinarily use in problem solving with clients. You can use all the same roster of techniques that you did before you ever found out about diet, allergies, and behavior.

I find working with clients who are biochemically upset is very discouraging. Their biochemistry needs to be dealt with very early in the process. Otherwise, they work with about the same effectiveness as if they were swimming through thick mud. They might get there, but they certainly

aren't going to win the Olympics or set any new time records. They will use more of their energy and more of their time, and they will be more discouraged because it is more difficult than it has to be.

So, again, I urge you. Check it out. Is it diet? Is it allergies? Is it a combination? If the answer is affirmative, work on those problems at the beginning. When they start to get cleared up, cleared out, more effective in their general functioning, then engage them in the whole problem solving process you were trained for in the first place.

FOOTNOTES

CHAPTER V

¹The American Diabetic Association, 1 East 45th Street, New York, New York, 10017; The American Dietetic Association, 620 North Michigan Avenue, Chicago, Illinois 60611.

²The Hypoglycemia Foundation, P. O. Box 98, Fleetwood, Mt. Vernon, New York 10552; Barbara J. Reed, Probation Department, 2310 Second Street, Cuyahoga Falls, Ohio 44221.

³Carlton Fredericks and Herman Goodman, Low Blood Sugar and You, (New York, New York: Grosset and Dunlap, 1969); Robert C. Atkins and Shirley Linde, Dr. Atkins' Super-Energy Diet, (New York, New York: Crown Publishers, 1977).

⁴William G. Crook, Can Your Child Read? Is He Hyperactive?, (Jackson, Tennessee: Professional Books, 1977).

⁵Frances Moore Lappe, Diet For A Small Planet (New York, New York: Ballantine Books, Inc., 1975), p. 307

⁶Helen Opie Brigham, Living High On The Sugarless Hog, (St. Stephen, N.B., Canada: Soupstone Enterprises, 1978).

⁷"Too Much Sugar?" Consumer Reports, 43, #3 (March, 1978):136.

⁸"Label Notice Proposed on Use of Yello 5," FDA Consumer, 11, #2 (March, 1977):27

⁹Barbara J. Reed, interview, 17 October 1978.

¹⁰Prescribed Activities Center, 3223 University Avenue, Des Moines, Iowa 50311

¹¹James C. Breneman, Basics of Food Allergy (Springfield, Illinois: Charles C. Thomas, 1978).

¹²William G. Crook, "Letters to the Editor," Annals of Allergy, 34 (February, 1975).

¹³Breneman, Ibid., p. 44.

¹⁴Ibid., p. 21.

¹⁵Ibid., p. 142.

¹⁶Ibid., p. 12.

¹⁷Ibid., p. 140.

¹⁸Brewer's (nutritional) yeast helps humans lower their blood sugar. For details, read Tuman's "Comparison and Effects of Natural and Synthetic Glucose Tolerance Factor in Normal and Genetically Diabetic Mice." Vitamin C aids the process.

¹⁹Judith A. Ramaley, Ph. D., Professor, Department of Physiology and Biophysics, University of Nebraska Medical School, interview.

²⁰Diet Related to Killer Diseases, V Hearing Before The Select Committee On Nutrition and Human Needs of the United States Senate, 95th Congress, First Session, June 22, 1977, U.S. Government Printing Office, 1977.

²¹Douglas E. Johnstone, "The Natural History of Allergic Disease in Children," Annals of Allergy, 138, #6 (June, 1977).

²²William G. Crook, Are You Allergic? (Jackson, Tennessee: Professional Books, 1978).

²³Arthur F. Coca, The Pulse Test, (New York, New York: Arco Publishing, 1956).

²⁴Douglas, Ibid.

²⁵Jenny Brigham, interview, July, 1977.

²⁶Robert W. Tuman, James T. Bilbo, and Richard J. Daisy, "Comparison and Effects of Natural and Synthetic and Genetically Diabetic Mice," Diabetes, 27, #1 (1978).

²⁷Fredericks, Ibid., p. 38.

Chapter VI

GETTING AND GIVING MORE INFORMATION

Overview

Now that you have done what you can with the information and skills you have, you may need to get more information for yourself and your clients. The first part of this chapter is about reference material selection: books and journal articles about diet, allergy, and behavior; cookbooks; and special diets. The second part of the chapter is about referrals: kinds of referrals you may want to make, ways to find and communicate with physicians, ways to find other specialists, and, finally, problems and profits of working with a health care team.

References

General Guidelines

If you are using diet and allergy information in your human services practice, you will probably need to use and acquire a number of new reference materials. Here are a few suggestions about choosing and using references.

Don't try to buy everything. Stock what you find easiest to use and what you think will be most appealing and most helpful to your clients. Look for a variety of presenta-

tion styles. Have a good checkout system so your reference materials don't disappear. If you work in an agency, try to have a central location for reference materials so everyone can use them. Let everyone know they are available.

You will need a variety. No one book or article covers everything you need to know, not even this one. Some give more general information (the big picture) while others are more specialized (the close up). Some give more attention to allergies; others to stress; still others to foods.

You and your clients may differ in comprehension levels and require a variety of resources to meet your different needs. Some of your clients may differ widely from each other. Your colleagues may understand more or less than you do.

Look around before you buy. Check your local library. Maybe it has some books you won't see elsewhere. Maybe you won't want to duplicate what you and your clients can take out on loan locally.

Look in bookstores and on racks in health foods stores. Some food coops have good books on foods available for loan or sale too.

Look through the annotated bibliography at the end of this book. There, I have revealed my bias about many articles and books. I have noted the relevant topics covered in each and given my evaluation of the level of reading difficulty. In some cases, I have noted particularly helpful

or obtuse writing styles. Where a particularly enlightening book or journal article, like Johnstone, has a mixture of "science" and ordinary language, I have noted that too.¹ You can skip the "science" if you want to.

I have included a separate bibliography of scientific journal articles, primarily for physicians' use.

If you find an author whose style you particularly like, check her/his bibliography. S/he may have written more. For example, I first read two medical journal articles by Dr. William Crook.² They were distillations of his work. Later, he wrote two excellent non-medical books on the same subjects.³ I was delighted to discover them and add them to my library. Clients love them.

I'm not much of a television fan. Still, I have seen some authors interviewed on TV and then scouted out their books or looked for more information to add to what I learned from their appearances. Dr. Lendon Smith was very entertaining. His book, Improving Your Child's Behavior Chemistry, contains very useful information about diet and behavior.⁴ Dr. Art Ulene reported the caffeine content of perked and non-perked coffee, cola drinks, candy bars, and No Doz on the Today Show.⁵ Betty Furness discussed the high sugar content of catsup, non-dairy creamer, and prepared salad dressings on the Today Show, too. That sent me running to Consumer's Reports for more information on the hidden sweets in many condiments.⁶ An uproarious appearance by some Minnesota mothers led me to

their book on Continuously Advertised Nutritionally Deficient Yummies (C.A.N.D.Y.).⁷ Their cookbook is certainly not sugar free, but the recipes are a great improvement over those in the diet of most American children.

Your state library systems, state university library(ies) and even your local or state medical library can help you locate medical/scientific journal articles and books. You may photocopy journal articles for your own use. Often, the author of some enormous medical tome has distilled his/her wisdom into one medical journal article. A copy of that article may serve your needs as well as the whole book. (Maybe you can afford the book later.)

Duplicate other people's bibliographies. Read their annotations. They may help you find exactly what you seek, or may alert you to seek anew. I have been led to consider some new part of many problem(s) in this way.

The Center for the Study of Science in the Public Interest has produced some excellent and readable materials on foods. For \$1.75, you can obtain a handsome, colorful, useful wall chart which ranks a large number of foods for their nutritional value. People who can read, including children, may spend some interesting minutes ranking the foods they have eaten; in fact, you could start a family or group contest for the highest nutritional score. That might keep some kids thinking--and eating well.

Cookbooks and Diets for Special Problems

Eating is America's number one indoor sport. Cooking isn't even in the top 50. There are quite a few gourmet cooks around, but your clients are likely to be fast food and instant-everything freaks. You will rarely see people who are devoted to delicious, low calorie, low sugar, whole grain diets.

Some of your clients won't know how to cook; others won't know what to cook. You will need a roster of recipes and cooking hints to help them.

Diet For a Small Planet gives many excellent recipes.⁹ They are low in sugar and use a mixture of grains, legumes, nuts, seeds, eggs, and dairy products to provide complete protein in place of meat. In the revised edition, Quick Mix has been added as a substitute for Bisquick-type mixtures.¹⁰ Nutritious, whole grain, sugar-free, biscuits, pancakes, waffles, and coffee cakes can be produced in a few minutes from this delicious, whole wheat, soy flour, wheat germ, powdered milk mix.

Most natural foods cookbooks have many good recipes. Diet For A Small Planet was such a success that Recipes For A Small Planet followed.¹¹ After that, The New York Times Natural Foods Cookbook came along to tickle the taste buds, and Stella Standard's Whole Grain Cookery was revised and reissued.¹² These are my favorite four, but many others are available; for example, Adele Davis' books are very popular.

Children want to learn to cook too. Several good, wholesome cookbooks are available for them. My favorites are the Whole-Sum Cookbook, Kids Are Natural Cooks, and The Good For Me Cookbook.

The Meals for Millions Foundation has issued a free, one page poster showing the appropriate protein.¹⁴ (They also have meatless main dish recipes available.) In essence, one third to one half cup cooked legumes (lima beans, lentils, chick peas, pinto beans, split peas, soy beans, etc.) + one half to three fourths cup cooked grain (wheat, oats, barley, rye, corn, rice, etc.) = complete protein for one third the adult daily requirement. Three or four tablespoons of sunflower, squash, pumpkin, or sesame seeds, or peanuts or cashews, can be added to the grain-legume mixture for flavor and increased protein.

Many people can continue to use their favorite recipes, using substitutions for disallowed ingredients. Sugar can be omitted or replaced with honey. Whole wheat flour can be substituted for refined white flour. Whole wheat pasta can replace refined. Here are some equivalents:

one fourth to one third cup honey substitutes for one cup sugar. When whole wheat flour is substituted for white, the liquid in the recipe needs to be increased about 20%; however, if honey is being substituted for sugar in the same recipe, an amount of whole wheat flour equal to the white is just about right. If whole wheat flour is used in cake or bread in place of white, baking powder and baking soda need to be almost doubled because the whole wheat is heavier. For more protein, soy flour can be substituted for one fourth of the whole wheat flour. The resulting baked goods will be heavier and moister than those made with whole wheat alone. Use one half the

amount of salt required in the original recipe. Whole wheat macaroni, spaghetti, and noodles need to cook about twice as long as their refined equivalents.

For overall help, I strongly recommend Living High On The Sugarless Hog by Helen Birgham.¹⁵ Her book deals with the logistics of diet change: substituting ingredients, school lunches, sugar holidays like Halloween and Easter, potluck suppers, savings on food preparation time, and a host of other basic problems. Her book is based on her own experience, so everything suggested has been tried and found to work. She also includes a variety of recipes not found elsewhere, even a sugar-free wedding cake!

Copies of special diets are available from a number of organizations: The Hypoglycemia Foundation, The Feingold Association, The Allergy Foundation of America, The American Diabetic Association, and The American Dietetic Association.⁸

For people with allergy problems, special recipes and lists of substitutions are available from many sources. The U. S. Department of Agriculture has recipes for wheat, milk, and egg-free foods. Quaker Oats also has special recipes. Your home extension service probably can help too. Extension services often have supplies from U.S.D.A. The dietetics and/or nutrition departments of your state university can sometimes help as can the same departments of your state medical school. Sometimes a hospital dietetics department has the information you need and many recipes. Local allergists may have recipes too. You can contact them through

the yellow pages of your telephone book or the county medical society.

Recently, I have noticed a number of allergy cookbooks on sale in bookstores and health food stores. You and/or your client can check periodically to see what is available.

Referrals

Inevitably, you will want to make referrals to get more information or to supplement your work with a client. How do you find someone? What do you say?

Let's start with the physician. And let's be honest. Many physicians do not believe there is a relationship between foods and moods. It may be hard to find one who is sympathetic. Please keep in mind that few physicians have allergy training. It is a medical specialty; therefore, training is confined to allergists and a few pediatricians. (My pediatrician was one of the few. He had many allergies himself.)

Try some of the likelier local resources. You can contact your local Feingold Association. The members have probably found a sympathetic physician. Try your local allergists. Some may be helpful.

You can write to several places for names of physicians in your area who may be helpful:

1. American Schizophrenic Association
56 West 45th Street
Suite #805
New York, New York 10036

2. Huxley Institute for Biosocial Research
1114 First Avenue
New York, New York 10021
3. Hypoglycemia Foundation
P. O. Box 98
Fleetwood
Mt. Vernon, New York 10552
4. International Academy of Preventive Medicine
871 Frostwood Drive
Houston, Texas 77024
5. Linus Pauling
Institute of Science and Medicine
2700 Sand Hill Road
Menlo Park, California 94025

When you are making a referral and talking with a physician, be positive. Assume you will get a hearing. Be brief. Physicians are busy. Be explicit. "I have noted that Mr. X has (periods of extreme anxiety) which appear to be related to eating (eggs). I want _____ test because..." or "I want _____ information." Ask for written reports including all test results.

Allergists speak a shorthand all their own when they talk with each other. The air is thick with "immunoglobulins, mast cells, antigens," and other, mysterious sounding words. If you don't speak allergy, ask to be spoken to in English.

Try to describe your clients' symptoms as clearly as possible and explain any associations you have seen. "When this client is around cats, she is anxious, sniffly, sneezing, itching..."

On the history form, you will see some genuine medical terms which describe common symptoms: allergic rhinitis

(sniffles), allergic shiners (dark circles under the eyes), etc. These may assist your communications.

If you have specific allergy tests in mind, tell the physician which ones and why. If s/he suggests different ones, be sure to get an explanation of the choice. If there are suspected sugar problems, be sure the 5-6 hour glucose tolerance test will be done. (See Chapter IV, Testing For Diet and Allergy Related Problems, Glucose Tolerance Test.) The shorter ones are not useful. Ask for all test results in writing.

Brief your clients before sending them on referrals. Tell them what you have requested and why. Give them as much information as possible so they will know what is happening. Be sure they request written test results for you. They may have to sign Release of Information forms for test results to be sent to you.

If you are sending your client for a specific test, read the part of Chapter IV which describes that test and share the information with your client. Note, for example, the importance of sending someone with the client for the Glucose Tolerance Test.

You may want other kinds of tests and referrals. Dr. William Crook describes a variety of tests which he believes are appropriate for children who are hyperactive and/or have learning disabilities.¹⁶ He ends up with a complete pediatric history, a physical examination, a behavior inventory, a

dietary history and inventory, evaluation of allergies, intellectual evaluation and psychological tests, and behavior and school records. He has the services of a testing psychologist on his staff. You can probably find one associated with your local schools or the Child Development Department of your local university (often in the Home Economics Department). Parents can provide the information for a behavior inventory. Teachers can provide school records and answer questions about the child's behavior in the classroom. All of these kinds of information may help you in assessing your client and planning interventions for him/her.

Health Care Teams

Ideally, I believe that work with diet, allergies, and behavior can best be done with a health care team, employing the knowledge and skills of several people with different expertise. Maybe I am so convinced of the value of this approach because, in my previous incarnation, I did research in medical care and was trained in preventive medicine. At that time I had a chance to see how well the team approach could work and how beautifully the skills of team members could dovetail in service delivery. Remember, I said that was the ideal.

The reality is that different people do have different knowledge and skills. Each can make unique contributions in working with a client/patient who has behavior problems related to food and allergies. In many ways, the work is like that

with chronic illness: it takes a long time and requires coordination of many kinds of services and ongoing support.

Different parts of the work are best done by specialists, but the client needs coordinated care for which someone has the major responsibility. Some people who work with health care teams believe the coordinator must always be the physician. Even there, a choice may have to be made between the allergist and the general physician if both are involved.

Other people believe the coordinator should be the person who best relates to the client on a personal basis. I happen to be in this latter group, and I want to state my reasons.

Let me use as an example a hyperactive, learning disabled child. Initially this child might be brought either to the physician for evaluation or to me for a behavior problem. The physician and I would need information from each other and from several other specialists. I would take a social history and screen for diet and allergy related problems. The physician would take a medical history, check physical development, do a variety of neurological and motor performance tests, and evaluate any diet and allergy clues I had found. An allergist might be consulted too. Tests might follow. If the elimination diets were tried, they might be supervised by the physician, a physician's assistant, a nurse, a dietitian, or even me, with suitable instruction from the physician. A

clinical psychologist would probably be asked to do a battery of tests for development, motor skills, language skills, etc. The psychologist and I would probably evaluate the school records together. I would take a behavior history from the parents. Finally, the whole team would put their information together, and evaluate the case. Based on their findings, drugs might be prescribed (physician), a new diet might be tried (nutritionist, dietitian). The psychologist or I might work with the school to provide the best learning atmosphere and appropriate school time support (psychologist, social worker). The parents would need to have the whole evaluation and program explained. Extensive work with the whole family would be necessary to maintain the diet, support changes in the child, report behavior changes, and change family members' behavior toward the child (nutritionist, social worker, psychologist, physician, physician's assistant). Consistent medical and psychological followup would be needed, maybe for a number of years (physician, physician's assistant, social worker, psychologist, nurse).

Necessary support and coordination of services for this client and his/her family would take an inordinate amount of time--more than any physician I know has time to give. With all the different services and the confusion of so many different types of workups and instructions, a client or a family could become very discouraged and/or very confused. Confusion could be avoided by having one person be the contact,

coordination, and support person. That person could maintain a relationship and provide continuity with the client no matter who else gave part of the service.

As mentioned above, there are various views about whom that contact person should be. Social workers are certainly trained for the job. Sometimes lay persons are trained as coordinators. In working with children, especially (and, I believe, with any clients), the team member who has the best rapport with the client is often the best choice. Dr. Crook reports using trained "colleague assistants" for this work with children.¹⁷ His "colleague assistants" are allied health workers, including interested and experienced mothers with special training who work well with children and their families.

In her excellent book, Teamwork: Working Together in the Human Services, Naomi Brill discusses the dynamics of teamwork, in identifying the factors which promote good or bad team functioning.¹⁸ She points out that there are two team models which may involve people in the human services: the hierarchical and the collegial. Note that physicians are trained in the former; and social workers in the latter. Given these two different models, a team which includes physicians and social workers is likely to come to grief unless roles are carefully worked out. The working out is explained and illustrated in the book along with useful information about defining roles for team members and selecting appropriate contact persons to connect the team with the client(s).

FOOTNOTES

CHAPTER VI

¹Douglas E. Johnstone, "The Natural History of Allergic Disease in Children," Annals of Allergy, 38, #6 (June, 1977).

²William G. Crook, "Food Allergy...The Great Masquerader," Pediatric Clinics of North America, 22, #1, (February, 1975); William G. Crook, Walton W. Harrison, Stanley E. Crawford, Blance S. Emerson, "Systems Manifestations Due to Allergy," Pediatrics, 27, (1961).

³William G. Crook, Are You Allergic? (Jackson, Tennessee: Professional Books, 1978); William G. Crook, Can Your Child Read? Is He Hyperactive? (Jackson, Tennessee: Professional Books, 1977).

⁴Lendon Smith, Improving Your Child's Behavior Chemistry, (New York, New York: Prentice Hall, 1976).

⁵Art Ulene, as seen on The Today Show, January 25, 1979.

⁶"Too Much Sugar?" Consumer Reports, 43, #3 (March, 1978):136-142.

⁷Vicki Lansky, The Taming of the C.A.N.D.Y. Monster, (Wayzata, Minnesota: Meadowbrook Press, 1978).

⁸The Hypoglycemia Foundation, P. O. Box 98, Fleetwood, Mt. Vernon, New York, 10552; The Feingold Association, 759 National Press Building, D. C. 20045; The Allergy Foundation of America, 801 Second Avenue, New York, New York 10017; The American Diabetic Association, 1 East 45th Street, New York, New York 10017; The American Dietetic Association, 620 North Michigan Avenue, Chicago, Illinois 60611.

⁹Frances M. Lappe, Diet For A Small Planet, (New York: Ballantine Books, Inc., 1975).

¹⁰Ibid.

¹¹Ellen B. Ewald, Recipes For A Small Planet, (New York: Ballantine Books, 1973).

¹²Jean Hewitt, The New York Times Natural Foods Cookbook, (New York: Avon Books, 1971); Stella Standard, Whole Grain Cookery, (Garden City, New York: Doubleday and Co., 1961).

¹³Whole-Sum Cookbook, Jewish Community Center, 134 College Street, Lewiston, ME 04240; Parent's Nursery School, Kids Are Natural Cooks, (Boston: Houghton-Mifflin Co., 1972); Karen Croft, The Good For Me Cookbook (Palo Alto, CA: R. & E. Research Assoc., 1977).

¹⁴Meals For Millions Foundation, P. O. Box 680, Santa Monica, CA 90406.

¹⁵Helen O. Brigham, Living High On The Sugarless Hog, (St. Stephen, N.B., Canada: Soupstone Enterprises, 1978).

¹⁶Crook, Can Your..., Ibid., p.p. 95-141.

¹⁷Ibid., p. 95.

¹⁸Naomi I. Brill, Teamwork: Working Together For the Human Services, (New York: J. P. Lippincott Co., 1976).

Chapter VII

WORKING WITH SPECIAL GROUPS

Overview

So far, you have learned about applying allergy, diet, and behavior information to individuals and families. In this chapter, you see how to adapt the information to some of the groups you may meet in your practice: the aging and those in institutions (preschools, schools, and residential facilities). Finally, you look at the problem of eating well on low income.

The Aging

By the time people are in their old age, they usually develop some special dietary needs.¹ Not only may the cost of adequate food be prohibitive, but also body changes may interfere with eating an adequate diet. Older people may have less energy available for food seeking, whether that means going to the grocery store, a neighbor's, or some community food program. Their diminished sense of smell may interfere with their wanting to eat. They will need fewer calories and often eat less as their activity decreases. Problems with chewing, absorption, and/or utilization may keep them from utilizing all of the nutrients in the foods they do eat.

The aging body also has less margin for error.² Even when all of the body systems function adequately, they take longer to correct any disturbance of their normal function. For example, after taking in a sugar load, the blood glucose level of an older person takes longer to return to normal.

When elderly people are irritable, moody, depressed, forgetful, and/or are unable to make decisions, they are often labeled senile or stereotyped as "just getting old."³ When that label is given, their decreased performance is judged irreversible and no attempt is made to correct it. In fact, they may be showing the behavioral signs of malnutrition. With adequate nutrition, their bodies can still make corrections and restore normal functioning; but because impaired food absorption and impaired blood circulation affect their abilities for growth and repair, the recovery will be slower than when they were younger.

What does all of this mean in terms of the diet for an elderly person? The food should be available, affordable, attractive, edible, easily absorbed, and nutritious. Elderly people need to have their nutritional needs assessed, planned, and supervised along with the rest of their health care so their diets and meal preparations are appropriate to their needs and capabilities. Extra effort must be made to distribute meals to the elderly or take them to the places where food is served. The foods and/or prepared meals must be affordable to those with low incomes. Foods should fit within

each person's usual eating preferences because their lifelong eating habits are unlikely to change. Attractive appearance and increased seasonings may be more important as the sense of taste diminishes. Impaired taste may be corrected by adding zinc to the diet.⁴ Decreased efficiency in chewing and absorption may require adaptation of recipes. Because less is eaten, and less of what is eaten is utilized, there is no margin for foods providing only calories (like refined sugars). Instead, every bit of food should have maximum nutritional value.

More information about special nutritional needs of the aging, and about programs to meet those needs, are available from a variety of sources. The U. S. Department of Health, Education, and Welfare, Office of Human Development, Administration on Aging, is one good resource for information and references.

Preschools

As the number of children in day care increases, especially at the preschool level, it is appropriate to consider how their nutritional needs are being met. Some children have only snacks at school, but many participate in breakfast and/or lunch programs.

Little children grow at a phenomenal rate, most rapidly in the first two years. During their earliest years, they are building the bodies which must serve them the rest of their lives. Only good quality building materials build

good bodies. The building materials must be attractive, too, or they won't be eaten.

Federally funded or subsidized meal programs require that certain categories of foods be served at every meal. Foods are from the basic four: milk, meat, vegetables and fruits, and breads and cereals. Until recently, these programs required each child to take some food from each group. Now more choices are allowed. Sometimes surplus commodities are provided by the government.

The usual federally subsidized breakfast or lunch program fits within the federal guidelines but is high in refined carbohydrates and low in proteins, fruits, and vegetables. Often, fruits are canned and served in sweet syrup. Vegetables which have been cooked once in canning and are then reheated, destroying much of the nutritional content and flavor. Enriched white flour is the main ingredient of breads, pancakes, muffins, and other bread and cereal items. Whole grains are rarely used. Sugary syrups and jellies increase the sugar load without adding any nutrients.

Cost is often given as the reason for high refined carbohydrate selection. Children's food preferences are given as the other reason -- "They don't like what is good for them." Obviously not many of the meal planners have read Confessions of a Sneaky Organic Cook which explains how to make the food people like good for them (higher in nutritive

value and lower in refined carbohydrates.⁵

After talking with many preschool teachers and preschool cooks, and watching many preschool children fix food and eat it, I have distilled the following wisdom.

Hungry children eat. They eat more if the food is attractive (brightly colored, smells good) and/or they had a part in its preparation. Attractiveness is less important when children prepare the food themselves than when it is prepared for them.

Contrary to what you have been told, children love vegetables and fruits, but they usually prefer them raw. They will even eat many which their elders will not, like cauliflower, broccoli, green beans, green pepper, turnips, etc.

Children love to work/play with food. They like to test everything about its flavor, texture, and consistency. Once they have mauled it sufficiently, they will usually eat it if they are hungry.

Children do not need to eat sweets at school. They will come to expect what is usually given to them. Fresh fruits and vegetables, cheese, peanut butter, meat cubes, eggs, unsalted crackers, whole wheat bread, plain fruit juice, and milk are usually very popular, are nutritious, and meet children's needs for energy.

Whatever children eat needs to be safe. Hard foods, including some raw vegetables, seeds, and nuts, need to

wait until children can and do chew well lest a piece get stuck in the windpipe or lodge in the lung. Harder raw vegetables, like carrots, can be grated and eaten by younger children.

Some children or groups of children, will have food sensitivity problems. For example, many non-Caucasian children can't drink milk or eat dairy products. Teachers and cooks need to be forewarned of these special needs.

Every preschool teacher (and most parents) dreads sugar holidays like Halloween, Easter, and special birthday celebrations because of the uproar which follows eating so much sugar, refined starch, preservative, and food coloring. Every teacher has the right to set limits on those foods in her/his classroom. S/he also needs to share her/his reasons for the limits with the children's parents and ask for their cooperation.

You may be the person helping the teacher figure out what to do and how to explain her/his policies to the parents. Here are some suggestions.

Point out that sugar holidays are usually followed by increased unhappiness and unacceptable behavior: children are noisier, clumsier, and more irritable. They fight more and cry more. Available information indicates that there is a relationship between sugar, food colorings, preservatives, and problem behavior (see Bibliography). In order to help the children be happier and more able to control themselves,

foods which are likely to cause trouble will not be available in the classroom. Parents are expected to cooperate. (Ask the school nurse for support.)

What can be done instead? For birthdays, suggest that all of the children who have birthdays in one month celebrate on one day. Either the teacher can make some safe, low sugar, acceptable snack food or s/he can ask one or more parents to do so. Acceptable recipes should be made available. Another possibility is an annual birthday party, also hopefully, celebrated with low sugar snacks. Even if it weren't low sugar, the sugar glut would then be down to only one day a year.

Celebrate the holidays with less attention to food and more attention to the event. Look at what the holiday is really about. It was not about candy and cake originally. Replace Easter or Passover candy with a celebration of spring. Concentrate on growth, new plants, and rain. At Halloween, concentrate on costumes and stories instead of sweets.

Ask parents to help out in non-food ways. They could blow up balloons or put up other decorations. Ask them to contribute celebration ideas about games and other activities to replace food.

Many parents are quite pleasantly surprised when they taste good food from school. Teachers can bring samples to meetings with parents or send samples and recipes home with the children. Teachers can help each other by trading

successful classroom food ideas. They can also bring nutritious contributions to potluck festivities.

Primary and Secondary Schools

Many of the food problems in preschools also exist in primary and secondary schools. Children with food sensitivities still must have their special needs met. Minority children (non-Caucasian) are more, not less, sensitive to dairy products as they get older.⁶ Children continue to need good, attractive, nutritious food and snacks in order to grow and think well. Sugar holidays continue to be a problem in most schools--and can often be handled in the same ways prescribed under Preschools.

Above the preschool level, children usually have some kind of school lunch program available, often federally funded and operating under some federal guidelines as described above.

A new problem arises: the presence of machines dispensing snacks and other foods, generally of a non-nutritious nature. Not only do the machines dispense "junk foods," but the lunchroom fare often is chosen either to compete with the machines and/or to be as cheap as possible. In large cities, many schools may use one, central meal preparation facility. Meals are transported from the center to each school, practically guaranteeing overcooked, unpalatable meals and reducing menu choices to easily transported items.

How can it be done differently? The West Virginia legislature banned machines dispensing "junk food" from schools all over the state. Only nutritious foods such as fresh fruits, milk, and wholesome sandwiches are now permitted.

Milwaukee set up a student panel to taste foods and choose which ones should be served in the public schools. All of the samples are nutritious, reasonably attractive and reasonably prices. The tasters' choices are much lower in sugar and unrefined starches than the usual lunchroom fare. Whole grains are used, along with fresh fruits and vegetables. Meals are prepared in school kitchens instead of a central facility. Breadstuffs are baked at each school. Meals are cheaper per serving than before, and more students are buying them. Apparently teenagers can eat what they like and have it be nutritious.

When all else fails, I believe that a child with food problems should be excused from school activities which may exacerbate the problems. The most frequent problem, of course, will be sweets at holiday times. As Helen Brigham suggests in Living High On The Sugarless Hog, a child should not be punished for needing to eat properly.⁷ The problem should be discussed with the teacher. If no arrangements can be made to change the celebration, then the child should be excused from school and given some alternative celebration on that day. (Arrangements should be made to pick up Valentines, Christmas presents, or whatever.)

Residential Care

The first thing to be aware of in considering diets in residential care is that people do not normally live in residential care facilities. Therefore, just living in such a facility constitutes stress. As with all stress situations, needs for a B and C vitamin increase greatly.⁸

Secondly, any stress situation is likely to make food sensitivities and allergies worse (see Chapter III, Ramaley Rectangle). Therefore, extra care is needed in reducing exposure to foods and other allergens.

Third, in identifying allergens, special attention needs to be given to the environment. While great care may be taken in keeping floors and furniture clean, covering mattresses, etc., the cleaning process itself may be a problem for the allergic. Many potent commercial cleaning compounds and sprays are likely to be used. For the sensitive, these cleaning aids may turn out to be hazardous to physical and mental well being.⁹

What about the diet in residential institutions? It is generally reported to be high in sugars and refined starches, very low in fruits and vegetables (mostly over-cooked). Does institutional food have to be that way? Apparently not. Better Food For Public Places gives information and instructions for improving the quality of institutional foods: preschools, schools, hospitals, prisons, rest homes, etc.¹⁰ Tactics are given for winning over and then

training the kitchen staff. Preparation methods are described in detail. Quantity recipes are included. There is even a section on cooperative buying for three or more institutions (within a twenty-five mile radius) wanting to work together to obtain nutritious ingredients at lower costs.

Not surprisingly, many people in residential institutions suffer from the same kinds of dietary problems described earlier in this chapter (The Aging). Institutional quantity preparation is often unpalatable. Overcooking destroys not only taste and appearance, but also vital nutrients.

People are in residential institutions for a reason: they are physically and/or mentally ill, or incarcerated. Their interest in food may be minimal, but their need for good nutrition is maximum. Food needs to be easily available, attractive, and easy to eat. The stress of institutionalization alone requires high B and C vitamin content.¹¹ All necessary steps should be taken to provide optimal levels of every nutrient including vitamins and minerals.

Many psychiatric and residential treatment facilities have machines, dispensing junk foods like those in junior and senior high schools. Many patients fill up on snacks instead of more nutritious fare. Surely their mental health and physical well being deserves a better chance.

Let's look at two kinds of "mental patients" and their

special dietary needs. The first group were schizophrenics being tested for the effect gluten had on their hospital recovery.¹² In this study, men on a locked ward were randomly assigned CF (cereal free) or HC (high cereal) diets. Usual medications were continued. The average length of stay for schizophrenics in the cereal free group was one-half the average length of stay of the high cereal group. In the next study period, the cereal free group had gluten added secretly to their diet. Average length of stay for the two groups was then equal. Diet had no effect on the length of stay of non-schizophrenics on the ward.

In a second study, schizophrenics on a cereal free and milk free diet and receiving optimal treatment with neuroleptics (drugs) showed an interruption or reversal of their therapeutic progress during a wheat gluten challenge.¹³ Improvement was resumed when the gluten challenge ended.

A second group with special dietary needs may be autistic children. Dr. Bernard Rimland of the Institute for Child Behavior Research, has reported on a national study of children labeled autistic or autistic-type.¹⁴ The study compared effects of certain drugs with effects of certain vitamin supplements. Children's responses were rated by their parents and their physicians. Not even the best drug (Mellaril), gave as good results as large doses of C and B vitamins! Think of the implications for institutionalized children with severe behavior problems.

Eating Appropriately On A Low Income

Naturally, cost is always a consideration when food is the subject. Can people afford to live on the kinds of diets described in this book?

I have discussed the cost issue with Barbara Reed, Chief Probation Officer of the Municipal Court of Cuyahoga Falls, Ohio.¹⁵ Her clients are usually right out of prison without jobs, and often using food stamps. Their terms of probation include staying on a strict hypoglycemia diet, often with many supplementary vitamins and minerals (see diet, p. 155). Can they do it?

Barbara Reed says the good diet does not cost more. Per unit, junk food is often more expensive. On her diet, certain expensive items disappear from the diet altogether; for example, coffee, tea, liquor, sweetened cold cereals, packaged mixes, and pastries. Healthful substitutions include non-fat dry milk, chicken, turkey, fish, whole grains, fresh fruits, fresh and frozen vegetables, and real fruit juices.

Barbara Reed takes her probationers to the grocery store and shows them how to shop for high quality/low cost food. Your clients might get similar help with shopping from your county extension service, the 4-H Clubs, or some other group with experts on food. They could teach your clients how to shop for food meeting their special needs. By and large, appropriate, nutritious foods can be found in large grocery stores. Health foods stores are usually more expensive.

Food coops are growing in popularity all over the country. In return for member participation, they offer low cost foods, bought in bulk. Usually, their selection includes whole grains, color-free cheeses, and fruits and vegetables. Members often make up a support group for healthy, nutritionally sound living.

Some of your clients may want to take up gardening and should be encouraged to do so. Good, fresh food is hard to beat, especially when growing it also gave the gardener good outdoor exercise. When the soil is rich in organic matter and minerals, vegetables grown in it are high quality. When harvested and eaten promptly, they offer a higher quality nutrients than the same foods purchases in any grocery store.

FOOTNOTES

CHAPTER VII

¹George V. Mann, "Relationship of age to nutrient requirements," The American Journal of Clinical Nutrition, 26 (October, 1973):1096-1097.

²Judith A. Ramaley, Ph. D., Professor, Department of Physiology and Biophysics, University of Nebraska Medical School, interview, March, 1979.

³Sylvia Sherwood, "Sociology of food and eating: implications for action for the elderly," The American Journal of Clinical Nutrition, 26 (October, 1973); cited in Symposium Nutrition and Aging U.S. Department of Health, Education and Welfare, Office of Human Development, DHEW Publication No. (OHD) 75-20240, p. 1108.

⁴William G. Crook, Can Your Child Read? Is He Hyperactive?, (Jackson Tennessee: Professional Books, 1977), p. 171.

⁵Jane Kinderlehrer, Confessions of a Sneaky Organic Cook, (Emmaus, PA: Rodale Press, 1971).

⁶Kay Young, interview, May, 1978.

⁷Helen Opie Brigham, Living High On The Sugarless Hog, (St. Stephen, N.B., Canada: Soupstone Enterprises, 1978).

⁸Mark D. Altschule, M.D. Nutritional Factors in General Medicine, Effects of Stress and Distorted Diets, (Springfield, Illinois: Charles C. Thomas, 1978), pp. 98-140.

⁹Theron G. Randolph, Human Ecology and Our Susceptibility to the Chemical Environment, (Springfield, Illinois: Charles C. Thomas, 1962). All of these kinds of allergies are discussed in this book.

¹⁰Anne Moyer, Better Foods for Public Places, (Emmaus, PA: Rodale Press, 1977).

¹¹Altschule, Ibid., pp. 98-140.

¹²F. C. Dohan, J. Grasberger, F. Lowell, H. Johnson and A. W. Arbogast, "Cereal-Free Diet in Relapsed Schizophrenics," *Federation Proceedings, FASEB*, 27:2, 1968, p. 219.

¹³M. Singh and S. R. Kay, "Wheat gluten as a pathogenic factors in schizophrenia," *American Association for the Advancement of Science*, 191:401-2, 1976.

¹⁴Bernard Rimland, *An Orthomolecular Study of Psychiatric Children*, *Orthomolecular Psychiatry*, 3:4 (1974):371-377.

¹⁵Barbara J. Reed, interview, 17 October 1978.

GLOSSARY

Addiction: Compulsive use of a substance. Withdrawal causes distress.

Alcoholism: Addiction to drinking alcoholic beverages. Progressive disease accompanies the condition. Psychological symptoms also occur.

Allergen: A substance which causes allergy.

Allergic: Related to allergy; having an allergy.

Allergy: Exaggerated reaction to a specific substance which is harmless in the same amount to most other people.

Blood Sugar Level: The amount of glucose (a sugar used for body fuel) in the bloodstream. Levels usually measured in mg% (milligrams per 100 milliliters of blood).

Central Nervous System (CNS): The brain and spinal cord.

CNS (Central Nervous System): See preceding item.

Elimination Diet: A test for food allergy/intolerance. Foods suspected of causing symptoms are removed from the diet for approximately one week and then reintroduced one-by-one. Subject is watched for decrease or disappearance of symptoms during elimination period and return of symptoms following reintroduction of selected food(s).

Food Allergy: Unusual response to food which does not cause symptoms in most other people.

Food Intolerance: Same as food allergy.

Food Insensitivity: Same as food allergy.

Glucose: Form of sugar used as a body fuel. Preferred fuel for brain and nerve cells.

Hypoglycemia: Literally, "low sugar in the blood." Refers to abnormally low level of glucose in the blood. This condition may be accompanied by a wide variety of mental and physical symptoms.

Inhalant Allergens: Allergy causing substances which are breathed in like pollens, molds, auto exhaust fumes, paint fumes, cleaning compounds, etc.

Intradermal: In the skin.

Low Blood Sugar: Hypoglycemia. See explanation above.

Mucus Membranes: The lining of an inside surface of the body like the nose, throat, esophagus, mouth, etc.

Postnasal Drip: Secretion from the nose dripping down the back of the throat.

Pulse Test: Test for allergy sensitivity. Exposure to allergenic substances, including food, cause increase in pulse rate.

Sublingual: Under the tongue.

ANNOTATED BIBLIOGRAPHY

The opinions expressed below are entirely my own. They represent my idea of the ease of reading, style of writing, and/or major or most useful topics covered in each work.

The materials are divided into these categories: articles, books, useful addresses and other miscellany.

Articles

Allergies (Other Than Food)

1. Abrahamson, Emanuel M., "A Dietary Treatment for Asthma and Hay Fever," U. S. Naval Medical Bulletin, #40, 1942, pp. 711-718. Moderately easy reading. Shows relationship between asthma and hay fever and low blood sugar. Indicates good response in both to Harris diet: high fat, low carbohydrate, frequent small meals. Caffeine to be avoided absolutely. Also avoid sugar and sweetened desserts. Excellent explanations and case studies. A classic.
2. Crook, William G., "An Alternate Method of Managing the Hyperactive Child," Pediatrics, 54:5, p. 656, 1974. Easy reading. Adverse or allergic reaction to one or more foods, especially cane sugar, common cause of hyperactivity and minimal brain dysfunction. Instructions for elimination diet. Only one page long but loaded with useful information.
3. Crook, William G., "Food Allergy-the Great Masquerader," Pediatric Clinics of North America, Vol. 22, #1, February, 1975, pp. 227-238. Fairly easy to read. Mostly about the allergic tension-fatigue syndrome. Describes symptoms of allergy. Explains controversy over term "allergy." Enumerates other conditions to be checked before allergy. Describes elimination diet. Excellent descriptions of typical patients.
4. Crook, William G., "Letter to the Editor," Annals of Allergy, Vol. 34, February, 1975, pp. 130-131. Moderately easy reading. Points out flaw in the way sublingual (under the tongue) testing was used as the basis for a negative report by the Food Allergy Committee of the American College of Allergists (Annals of Allergy, September, 1974). According to his experience, patients should be eating an unrestricted diet which includes the test foods. Explains why.

5. Crook, William G.; Harrison, Walton W.; Crawford, Stanley E.; and Emerson, Blanche S.; "Systemic Manifestations Due to Allergy," Pediatrics, 27, pp. 790-799, May, 1961. Moderately easy reading. This is a gem. Written for physicians, but comprehensible to civilians. Lists many symptoms for allergy. Cautions that child needs to be checked for anemia, chronic infection, and other generalized body disease. In their absence, symptoms of fatigue, irritability, pallor, circles under the eyes, and nasal congestion indicate allergies. Elimination diet described.

6. "How to Discover a Food Allergy," Brain Bio Center, Princeton, New Jersey. (No author, date, or page numbers given.) Fairly easy reading. This handout, given to Brain Bio Center patients, has the best explanation of the symptoms and the process, and the most complete list of foods by categories. Special attention is given to corn sensitivities. Adequately written.

7. Speer, Frederic, "The Allergic Tension-Fatigue Syndrome," Pediatric Clinics of North America, 1954, pp. 1029-1037. Moderately easy reading. A little "medicalese." Very useful. Describes children with irritability and high activity (tension) and sluggishness and lessened activity (fatigue) due to allergy. Itemizes a number of signs and typical histories. Describes possible other causes which need to be eliminated like malnutrition and infection. Useful case histories.

8. Stenbuck, F., M.D., "Food Allergy in Children: Its Proctean Manifestations," Journal of Asthma Research, Vol. 3, #3, March, 1966, pp. 217-220. Fairly easy reading. Common and uncommon allergic symptoms. Some explanation of cause. Some medical terms. Good for giving idea of several unusual responses and unusual causes.

Food Sensitivities

9. Bach, M. Taylor, "TA and Hypoglycemia," Transactional Analysis Journal, 5:2, April, 1975, pp. 178-179. Easy reading. Indicates low blood sugar level locks person into Child ego state. Gives useful list of questions to ask client suspected of blood sugar problems. Supports diet contract.

10. Bernier, Charles L., "Terse Literatures, II, Ultraterse Literatures," Journal of Chemical Information and Computer Sciences, Vol. 15, #3, 1975, pp. 189-192. Easy reading. Correlation between sugar intake, chromium deficiency and atherosclerosis.

11. Brenner, Arnold, "A Study of the Efficacy of the Fein-gold Diet on Hyperkinetic Children," Clinical Pediatrics,

Vol. 16:7, pp. 652-656, July, 1977. Easy reading. MD's account of his experience using Feingold diet for children with behavior problems with poor impulse control and unusual irritability. Good account of why some clients won't try the diet or discontinue it. Notes differing responses to offending agents with some guesses as to the causes. Recommends routine use of Feingold diet with hyperkinetic and behavior disorder patients.

12. Calvera, Donna M.; Rimland, Bernard; Philpott, William H.; "Angels Is Coming Home," Ecology House Clinic and Laboratory, 820 Northeast 63rd Street, Oklahoma City, Oklahoma 73105, October, 1976. Easy reading. Case history of six year old autistic child after one year of treatment by "clinical ecology"; avoidance of certain chemicals, and vitamin supplements. Describes and explains diagnostic procedure with foods, food colorings, etc. Explains psychological disturbances and learning.

13. Challem, Jack, "Additives and Hyperactivity," FDA Consumer, Vol. 11, #4, May, 1977, p. 4. Easy reading. Letter to Consumer Forum suggests parents not use artificial food additives on long term basis because no one knows long-term effects.

14. Cooper, D. and Pfeiffer, C., "Functional Hypoglycemia: Ubiquitous Maladay," Brain Bio Center, Princeton, New Jersey. No date given. Moderately easy reading with occasional lapses into "medicalese." Tells how and why it happens, describes symptoms, relates to drug addiction and mental illness. Differentiates kinds of hypoglycemia. Gives diagnosis methods including alternatives to the glucose tolerance test. Describes treatment including diet and exercise. Skip the section on "Regulation of Blood Sugar Concentration." The rest is excellent.

15. Danof, Deborah; et al. "Big Mac Attack," New English Journal of Medicine, 298:19, May 11, 1978, 1095-1096. Is nothing safe? Gum tragacanth is added to food for bulk, thickness, and binding. It's a powerful allergen. Life threatening to some.

16. "Diet and Crime," Behavior Today, Vol. 8:23, June 20, 1977, pp. 1-2. Easy reading. Reports series of articles by Timothy D. Schellhardt in The Wall Street Journal on recent research connecting sugar, refined carbohydrates, and vitamin deficiencies with anti-social behavior (crime). Reprints several short segments. Note that the whole series of articles appears in Diet Related to Killer Diseases... (see books).

17. Dohan, F. D.; et al., "Cereal-Free Diet in Relapsed Schizophrenics," Federation Proceedings, FASEB, 27:2, 1968.

Reports effects of grains on schizophrenics. Moral: try taking gluten-containing grains out of their diets. They may get better sooner.

18. Gaylin, Jody, "Good to the Last Drop-But Not For Some..." Psychology Today, November, 1977. Reports Greden's research on caffeine and anxiety neurosis. Easy reading. You'll be surprised at all the ways we can eat caffeine. You'll want to check your anxious clients and yourself.

19. Greden, John F., "Anxiety or Caffeinism: a Diagnostic Dilemma," American Journal of Psychiatry, 131:10, October, 1974, 1089-1092. High caffeine intake produces symptoms indistinguishable from anxiety neurosis. Caffeine withdrawal syndrome and associated headache also mimic anxiety. Check client's intake (including kids).

Johnstone, Douglas E., "The Natural History of Allergic Disease in Children," Annals of Allergy. 38:6, June, 1977, pp. 387-393. Although written for MDs, most of this can be understood by all. Excellent explanations of the mechanisms of allergy, how allergies get started, and a full review of case management. Practical suggestions abound. Moderately easy reading after the second page.

21. Kane, Francis J. Jr., "Evaluation of Emotional Reactions to Oral Contraceptive Use," American Journal of Obstetrics and Gynecology, Vol. 126:8, pp. 968-972, December 15, 1976. Difficult reading. Written in "medicalese." Role of vitamin deficiencies in mood shifts associated with oral contraceptives.

22. "Label Notice Proposed on Use of Yellow 5," FDA Consumer, #2, March, 1977, pp. 27-28. Easy reading. FDA actions to label and eliminate Yellow Dye #5 (tartrazine). Estimate 47,000-94,000 people allergic. Laws being considered: 1. label when in foods. 2. prohibit in certain drugs used frequently by allergic people (people allergic to aspirin). 3. label where present in other drugs.

23. Larkin, Timothy. "Food Additives and Hyperactive Children," FDA Consumer, Vol. 11, #2, March, 1977, pp. 19-21. Easy reading. Explains how Feingold arrived at his theory and his diet. Explains why there are questions about the relationship between that diet and behavior. Outlines possible further studies and the questions to be answered. Urges not using diet long-term until proven. Good explanation of scientific thinking. States position of FDA.

24. Lepkowski, Wilbert C., "Saccharin Ban Goes Beyond Issue of Cancer," Chemical and Engineering News, 55:15, pp. 17-21, April 11, 1977. Moderately easy reading. Questions role of sugars in the diet; known to cause obesity, tooth decay, heart disease, and a variety of other pathologies. Perhaps should

be classified as a toxic substance.

25. Lockhart, Jean D., "Misquote Corrected," FDA Consumer, Vol. 11, #6, July-August, 1977, p. 6. Easy reading. Says Committee on Nutrition, American Academy of Pediatrics, says there is no published evidence that dietary modification influences hyperactivity.

26. Rimland, Bernard, "An Orthomolecular Study of Psychotic Children," Orthomolecular Psychiatry, Vol. 3:4, 1974, pp. 371-377. Moderately easy reading. Reports on vitamin study of autistic children by Institute for Child Behavior Research. Discusses range of individuality in vitamin needs. Gives some information on toxicity of vitamins. Notes existence of sizable body of scientific literature on vitamin literature. Author notes how broad categories such as "schizophrenia" or "autism" obscure subgroups which differ in vitamin responses.

27. Rimland, Bernard, "Comparative Effects of Treatment on Child's Behavior," Institute for Child Behavior Research, Publication 34, June, 1977. Easy reading. Information collected by questionnaire from parents of 277 children with autism or severe behavioral disorders. Given parents' ratings of miscellaneous therapies like removing certain food substances from diet, psychotherapy, patterning, operant conditioning, etc. Compares parent ratings of effectiveness of all drugs, best drug, and high dosage vitamins. Vitamins win.

28. Rimland, Bernard, "Foreword" in New Hope for the Retarded by Henry Turkel, 1975. Easy reading. Supports the use of the "U" series of vitamins, minerals, and drugs for children with Down's syndrome (mongolism) because of improved mental and physical functioning. Skip the polemics. Read about the treatment.

29. Rimland, Bernard, "Megavitamins, Hypoglycemia, and Food Intolerances as Related to Autism," Institute for Child Behavior Research, San Diego, California (no date given). Based on talk given at the Annual Meeting of the National Society for Autistic Children, Flint, Michigan, June, 1972. Easy reading. Results of the Institute for Child Behavior Research's vitamin research. Explanation of harmful effects of sugar and hypoglycemia. Explanation of food intolerances and allergies of the nervous system. Suggestions for testing for food allergies at home.

30. Salzer, Harry M., "Relative Hypoglycemia as a Cause of Neuropsychiatric Illness," Journal of the National Medical Association, 58:1, January, 1966, pp. 12-17. Moderately easy reading with occasional bouts of "medicalese." Relative

hypoglycemia mimics any neuropsychiatric disorder. The table on page 13 lists major psychiatric, neurological, and somatic symptoms. Emphasizes high protein, low carbohydrate, caffeine free diet. Nutriment between meals and in evening. Useful information about symptoms and diet.

31. Schellhardt, Timothy D., "Can Chocolate Turn You Into a Criminal? Some Experts Say So. Food Allergies, Malnutrition Are Tied to Violent Acts: A Banana Leads to Blows," The Wall Street Journal, October 2, 1977, p. 1. Easy reading. Explains some possible causes for links between allergies and violence. Several dramatic cases and some indications for institutionalized people. First of a series of articles all printed in Diet Related to Killer Diseases V. . . (see books).

32. "Too Much Sugar," Consumer Reports, March, 1978, Vol. 43, #3, pp. 136-142. Sugar content of processed foods. Full of nasty surprises. Will make your hair stand on end. Keep a copy in your office; otherwise, no one will believe you.

33. Tuman, Robert W.; Bilbo, James T; and Doisy, Richard J. "Comparison and Effects of Natural and Synthetic Glucose Tolerance Factor in Normal and Genetically Diabetic Mice," Diabetes, 27:1, pp. 49-56, 1978. This is written in "science," but the evidence is there: brewer's (nutritional) yeast contains a glucose tolerance factor (GTF). It improves the ability of animals, including humans, to deal with glucose; it is also important in lipid metabolism. That means it lowers serum cholesterol too. Brewer's yeast is the richest source of chromium complexes which are part of GTF.

34. Wright, Jim, "The Sweet Taste of Excess," New Times, Vol. 8, April 15, 1977, pp. 28-40. Easy reading. Documents rise in per capita refined sugar consumption. Indicates surveys showing sugar is replacing good nutrients so that many people are eating inadequate nutrients. Describes promotion of sugar use.

Books (Other Than Cookbooks)

35. Abrahamson, E. M., and Pezet, A. W., Body, Mind, and Sugar, Pyramid Books, New York, 1952, 14th printing, 1976. Mostly moderately easy reading. Explanation of activities of various glands. Explanation of glucose tolerance tests. Some outdated material on alcohol and alcoholism. Rather dated diet suggestions.

36. Altschule, Mark, Nutritional Factors in General Medicine Effects of Stress and Distorted Diets, Springfield, Illinois: Charles C. Thomas, 1978. Written for MDs. Gives details for

for every vitamin and mineral: recommended dose, therapeutic doses, deficiency symptoms, etc. Packed with useful information not available elsewhere.

37. Breneman, J. C., Basics of Food Allergy, Springfield, Illinois: Charles C. Thomas, 1978. Written for MDs, but not very hard to read. Everything you could possibly need to know about the physical signs, symptoms, and causes. Not much on the psychological. Don't know how I lived without it.

38. Brigham, Helen Opie, Living High On The Sugarless Hog, St. Stephen, N.B., Canada: Soupstone Enterprises, 1978. The only book on changing to an additive-free, no-sugar diet. Logistics, recipes, meal planning, etc. Well written. Very readable.

39. Brill, Naomi. Teamwork: Working Together In the Human Services, New York: J. P. Lippincott, Co., 1976. Everything you will need to know about teamwork in the human services. Well written.

40. Coca, Arthur F., The Pulse Test, New York: Arco Publishing 1956. Explains how to use the pulse test as a method for determining food and other allergies. This test seems to be one which people can learn to do for themselves. Results are faster than with the elimination diet. Case studies. Easy reading.

41. Crook, William G., "Are You Allergic?", Jackson, Tennessee: Professional Books, 1978. Absolutely indispensable for diet and allergy work. Well written. Easy reading. Well indexed. Very complete. You can find just about everything you could possibly need to know in this book. Your clients will like reading it, too.

42. Crook, William G., Can Your Child Read? Is He Hyperactive? Jackson, Tennessee: Professional Books, Inc., 1977. This is my current choice for Great Books! Detailed information for unraveling allergies and food sensitivities, history forms, cases, sage advice. Explains other causes of hyperactivity and other allergic reactions. Sensible summary of drug use information. Very readable.

43. Diet Related to Killer Diseases, Hearing Before the Select Committee on Nutrition and Human Needs of the U. S. Senate, 95th Congress, First Session, June 22, 1977, Mental Health and Mental Development, U. S. Government Printing Office, Washington, 1977. A wonderful collection! Get a copy free from your U. S. Senator. You've already paid for it. Testimony pp. 62-68 by Barbara Reed, Ohio parole officer, includes written test for hypoglycemia, recommended diet, list of forbidden

foods, and references. 200+ pages of appended articles of all types, most with extensive references. Get two copies. Someone will swipe the first one as soon as s/he hears what's in it.

44. Dufty, William, Sugar Blues, New York, New York: Warner Books, 1976. Easy reading. Personally, I don't like the writing style. I think it talks down. However, lots of folks tell me this book was their road to good health and giving up sugar. So...

45. Fredericks, Carlton and Goodman, Herman, Low Blood Sugar and You, New York, New York: Grosset and Dunlap, 1969. Easy reading. Some outdated information: diet allows artificial sweetener and meats containing nitrites. Otherwise, good diet section and instructions for grocery shopping.

46. Harrison's Principles of Internal Medicine, Sixth Edition, Eds. Maxwell M. Wintrobe, et al., New York, New York: McGraw Hill Book Co., 1970, Chapter 96, pp. 542-549. Difficult reading. Your MD has this book or one like it right on her/his desk. Describes hypoglycemia: symptoms, causes, diagnosis, and treatment. Unfortunately, it omits the emotional-behavioral symptoms and uses mood drugs in the therapy. Try to get your MD to read Williams (#22).

47. Milam, James R., The Emergent Comprehensive Concept of Alcoholism, Kirkland, Washington: ACA Press, 1970. A gold mine! Lots of new information and techniques here.

48. Moyer, Anne, Better Food For Public Places, Emmaus, Pennsylvania: Rodale Press, 1977. Wholesome, nutritious, delicious food for institutions: schools, prisons, hospitals, rest homes, etc. Tells how to win over the cooking staff and teach them proper food preparation. Even has a how-to section on cooperative buying. Quantity recipes with instructions for quantity preparation.

49. Newbold, H. L., Mega-nutrients for Your Nerves, New York, New York: Peter H. Wyden, 1975. Easy and entertaining reading. A good choice for the beginner in nutrition and behavior. Excellent explanations of allergies and addictions.

50. Passwater, Richard, Supernutrition, New York, New York: Dial Press, 1975. Writing style switches between "science" (he's a biochemist) and "just plain folks." Recommends MD's supervision for change in diet and vitamin and mineral supplements. Gives a "supernutritious quiz" with which to evaluate health before and during regimen change. Worth reading for that section.

51. Pfeiffer, Carl C. and the Publications Committee of the Brain Bio Center, Mental and Elemental Nutrients, New Canaan, Connecticut: Keats Publishing, 1975. This book reads like it was written for MDs by a committee, which it was. Nevertheless, it is very complete and orderly.
52. Pfeiffer, Carl C., The Schizophrenias: Yours and Mine, New York, New York: Pyramid Books, 1970. Part of this is easy reading, and part of it is written in "science," however, this is where I finally found out how diet and symptoms fitted together. If you deal with "schizophrenics" or know someone who has one in the family, read this book.
53. Randolph, Theron G., Human Ecology and Our Susceptibility to the Chemical Environment, Springfield, Illinois: Charles C. Thomas, 1962. Written for MDs. Will set you to wondering...
54. Reed, Barbara, Back To Basics (Packet), Municipal Court of Cuyahoga Fall, Ohio, September, 1977. This packet contains Ms. Reed's excellent hypoglycemia diet, a good pamphlet on Low Blood Sugar, and a narrative description of dietary work with probationers of this court. Interesting, easy reading, and very useful.
55. Smith, Lendon, Improving Your Child's Behavior Chemistry, New York, New York: Prentice Hall, Inc., 1976. Easy vocabulary but very disorganized. Too bad, because this volume should have been really good. It does have some useful information, but I had to grit my teeth to read through it.
56. Symposium: Nutrition and Aging, U. S. Department of Health, Education and Welfare, Office of Human Development, DHEW Publication No. (OHD) 75-20240.
57. Williams, Robert H., Textbook of Endocrinology, Fifth Edition, Philadelphia, Pennsylvania: W. B. Saunders, Co., 1974, pp. 823-824. Difficult reading. A medical test. Led to it, any MD can read about the characteristic behavior disorders that accompany low blood sugar and about diet therapy.
58. Williams, Roger J., Alcoholism: The Nutritional Approach, Austin, Texas: University of Texas Press, 1959. Explains the interaction between diet and alcoholism. Well written. Moderately easy reading. Useful advice for planning alcoholic's diet.

Cookbooks

59. Brigham, Helen O., Living High On The Sugarless Hog, (see #38). Not really a cookbook but has many good recipes.

60. Croft, Karen, The Good For Me Cookbook, Palo Alto, California: R. & E. Research Associates, 1977. Nice, little cookbook for young children. Nutritious recipes children can make themselves.
61. Ewald, Ellen Buchman, Recipes For A Small Planet, New York, New York: Ballantine Books, 1973. All vegetarian cookbook. Complete protein obtained from vegetable combinations. Use it all the time. Yum!
62. Hewitt, Jean, New York Times Natural Foods Cookbook, New York, New York: Avon Books, 1971. Delicious recipes. Some meat, chicken, and fish included. I use this one a lot.
63. Kinderlehrer, Jane, Confessions of a Sneaky Organic Cook, Emmaus, Pennsylvania: Rodale Press, 1971. Recipes for making ordinary looking foods actually nutritious. Give a copy to your local schools.
64. Lappe, Frances Moore, Diet For A Small Planet, New York, New York: Ballantine Books, 1975. All vegetarian cookbook. Complete protein obtains from vegetable combinations. Quick Mix is wonderful for almost-instant pancakes, biscuits, coffee cakes, etc. which taste great and are nutritious.
65. Parents' Nursery School, Kids Are Natural Cooks, Boston, Massachusetts: Houghton Mifflin Co., 1972. Great book for kids who do their own cooking with or without adult assistance. Quite nutritious. Plenty of instructions for the novice.
66. Whole-Sum Cookbook, Jewish Community Center, 134 College Street, Lewiston, Maine 04240. Delicious, nutritious snacks for kids at school or home. Lovely photos.

Useful Addresses and Other Miscellany

67. Allergy Foundation of America, 801 Second Avenue, New York, New York 10017.
68. American Diabetic Association, 1 East 45th Street, New York, New York 10017.
69. American Dietetic Association, 620 North Michigan Avenue, Chicago, Illinois 60611.
70. American Schizophrenia Association, 56 West 45th Street, Suite 805, New York, New York 10036. Information about schizophrenia.
71. Center For the Study of Science in the Public Interest, 1757 S Street, N.W. Washington, D. C. 20009

72. Feingold Association of the U. S., 759 National Press Building, Washington, D. C. 20045. Information on the Feingold additive-free, salicylate-free diet for hyperactive and other children.
73. Huxley Institute for Biosocial Research, 1114 First Avenue, New York, New York 10021. List of physicians trained in nutrition and preventive medicine. Helpful source of additional information on schizophrenia.
74. Hypoglycemia Foundation, P. O. Box 98, Fleetwood, Mt. Vernon, New York 10552. On request, sends name of nearby MD who takes hypoglycemia seriously. \$1.00 brings packet of information.
75. International Academy of Preventive Medicine, 871 Frostwood Drive, Houston, Texas 77024. List of physicians trained in nutrition and preventive medicine.
76. Linus Pauling Institute of Science and Medicine, 2700 Sand Hill Road, Menlo Park, California 94025. Will provide list of nutritionally oriented doctors.
77. "Newsletter," Institute for Child Behavior Research, 4758 Edgeware Road, San Diego, California 92116. Gives results of research, announcements, requests for cooperation with new research projects. Publications list available from same address.
78. "How to Obtain Complete Protein." Free from Meals for Millions Foundation, P. O. Box 680, Santa Monica, California 90406. Chart. Gives proportions of legumes, grains, nuts and seeds which eaten during the same meal will provide complete protein (eight essential amino acids). Helps people on limited income to get complete protein. Of course, you have to check for sensitivities, especially with grains, before using all of it.

Allergy per se

1. Abrahamson, Emanuel M.: A Dietary Treatment for Asthma and Hay Fever. U. S. Naval Med. Bulletin. 40:711-718, 1942.
2. Brostoff, Jonathan: Atopic Disease - Hay Fever. The Practitioner. 220:532-538, 1978.
3. Crook, Wm. G., Walton W. Harrison, Stanley E. Crawford, Blanche S. Emerson: Systemic Manifestations Due to Allergy. Pediatrics. 27:790-799, 1961.
4. Greden, John F.: Anxiety or Caffeinism: A Diagnostic Dilemma. Am. J. Psychiatry. 131:1089-1092, 1974.
5. Jones, Roger Verrier: Allergic Rhinitis in Childhood. The Practitioner. 220:553-558, 1978.
6. Johnstone, Douglas E.: The Natural History of Allergic Disease in Children. Annals of Allergy. 38:387-393, 1977.
7. Walker-Smith, J. A.: Gastrointestinal Allergy. The Practitioner. 220:562-573, 1978.

"Food allergy" and behavior

8. Brenner, A.: A Study of the Efficacy of the Feingold Diet on Hyperkinetic Children. 16:652-656, 1977.
9. Cooperman, Earl M.: Hyperactivity and Diet. Canadian Med'l Assoc. J. 119:113 & 116, 1978.
10. Crook, William G.: An Alternate Method of Managing the Hyperactive Child. Pediatrics. 54:656, 1974.
11. Crook, Wm. G.: Food Allergy - The Great Masquerader. Pediatric Clinics of North America. 22:227-238, 1975.
12. Danoff, Deborah, Lawrence Lincoln, D. M. P. Thompson, Phil Gold: Big Mac Attack. New Engl. J. Med., 298: 1095-1096, 1978.
13. Does Lead Make Children Hyperactive? Nutrition Reviews. 31:88-90, 1973.
14. Finn, Ronald & H. Newman Cohen: Food Allergy: Fact or Fiction? The Lancet. 25:426-428, 1978.
15. Kolata, Gina Bari: Childhood Hyperactivity: A New Look at Treatments & Causes. Science. 199:515-517, 1978.
16. Larkin, Timothy: Food Additives & Hyperactive Children. FDA Consumer. 2:19-21, 1977.
17. Miller, James S.: Hyperactive Children: A 10-year Study. Pediatrics. 61:217-223, 1978.
18. Palmer, Sushma, Judith L. Rapoport, Patricia O. Quinn: Food Additives & Hyperactivity. Clinical Peds. 14: 956-959, 1975.
19. Speer, Frederic: The Allergic Tension-Fatigue Syndrome. Ped. Clinics of N. America. 1:1029-1037, 1954.

"Food allergy" and behavior, cont.

20. Stenbuck, F.: Food Allergy in Children: Its Protean Manifestations. J. of Asthma Research. 3:217-220, 1966.

Metabolism - glucose regulation

21. Anthony, Dick., Stephen Dippe, Fred D. Hofeldt, John W. Davis, Peter H. Forsham: Personality Disorder & Reactive Hypoglycemia. Diabetes. 22:664-675, 1973.
22. Feinberg, Leonard J., Herschel Sandberg, Oscar DeCastro & Samuel Bellet: Effects of Coffee Ingestion on Oral Glucose Tolerance Curves in Human Subjects. Metabolism. 17:916-922, 1968.
23. Firestone, A. J., M. G. Wohl: Hypoglycemia: A Complex Problem. Medical Clinics of N. America. 54:531-542, 1970.
24. Freinkel, Norbert: The Role of Nutrition in Medicine: Recent Developments in Fuel Metabolism. J. American Medical Assoc. 239:1868-1872, 1978.
25. Graham, D. M. PhD.: Caffeine - Its Identity, Dietary Sources, Intake & Biological Effects. Nutrition Reviews. 36:97-102, 1978.
26. Isselbacher, Kurt J.: Metabolic & Hepatic Effects of Alcohol. New Engl. J. Med. 296:612-616, 1977.
27. Salzer, Harry M.: Relative Hypoglycemia as a Cause of Neuropsychiatric Illness. J. of the Nat'l Medical Assoc. 58:12-17, 1976.
28. Simonelli, Christine & R. Philip Eaton: Cardiovascular & Metabolic Effects of Exercise. Postgraduate Med. 63: 71-77, 1978.
29. Tuman, Robt W., James T. Bilbo, Richard J. Doisy: Comparison & Effects of Natural & Synthetic Glucose Tolerance Factor in Normal & Genetically Diabetic Mice. Diabetes. 27:49-56, 1978.
30. Wurtman, Richard J. & John D. Fernstrom: Effects of the Diet on Brain Neurotransmitters. Nutrition Reviews. 32:193-200, 1974.

BIBLIOGRAPHY

- Aas, Kjell. "What Makes An Allergen An Allergen." Allergy, 33(1)3-14, 1978.
- Abrahamson, Emanuel M. "A Dietary Treatment for Asthma and Hay Fever." U. S. Naval Medical Bulletin, 40, 1942, 711-718.
- Abrahamson, Emanuel M. and Pezet, A. W. Body, Mind, and Sugar. New York: Pyramid Books, 1976.
- Altschule, Mark D., M.D.. Nutritional Factors in General Medicine, Effects of Stress and Distorted Diets. Springfield, Illinois: Charles C. Thomas, 1978.
- Atkins, Robert C. and Linde, Shirley. Dr. Atkins' Super-Energy Diet, New York: Crown Publishers, 1977.
- Barron Health Clinic. Low Blood Sugar (Pamphlet) Cleveland, Ohio: Karpas Publishing Co., Inc., 1971.
- Breneman, James C. Basics of Food Allergy. Springfield, Illinois: Charles C. Thomas, 1978.
- Brigham, Helen Opie. Living High On The Sugarless Hog, St. Stephen, N.B., Canada: Soupstone Enterprises, 1978.
- Brill, Naomi I.. Teamwork: Working Together In the Human Services, New York, New York: J. P. Lippincott Co. 1976.
- Burry, John N. "Allergic Contact Dermatitis." The Medical Journal of Australia Special Supplement on Allergy, 1978 2:9-10.
- Coca, Arthur F. The Pulse Test. New York, New York: Arco Publishing Co., Inc., 1956.
- Croft, Karen. The Good For Me Cookbook. (Palo Alto, California: R. & E. Research Associates, 1977.
- Crook, William G. Are You Allergic? Jackson, Tennessee: Professional Books, 1978.

- _____. Can Your Child Read? Is He Hyperactive? Jackson, Tennessee: Professional Books, July, 1977.
- _____. "Food Allergy...The Great Masquerader." Pediatric Clinics of North America, Vol. 22, No. 1, February, 1975, pp. 227-238.
- _____. "Letters To The Editor." Annals of Allergy, 34: February, 1975, 130-131.
- Crook, William G.; Harrison, Walton W.; Crawford, Stanley E., Emerson, Blanche S. "Systemic Manifestations Due To Allergy." Pediatrics, 27, 790-799, 1961.
- Czarny, Daniel. "Urticaria and Angio-oedema." The Medical Journal of Australia Special Supplement on Allergy, 1978 2:10-13.
- Diet Related To Killer Diseases, V Hearing Before The Select Committee On Nutrition And Human Needs of the United States Senate, 95th Congress, First Session, June 22, 1977, U. S. Government Printing Office, 1977.
- Dohan, F. C.; Grasberger, J.; Lowell, F.; Johnson, H.; and Arbegast, A. W. "Cereal-Free Diet in Relapsed Schizophrenics." Federation Proceedings, FASEB, 27:2, 1968.
- Ewald, Ellen Buchman. Recipes For A Small Planet. New York, New York: Ballantine Books, 1973.
- Feinberg, Leonard J.; Sandberg, Herschel; De Castro, Oscar and Bellet, Samuel. "Effects of Coffee Ingestion in Oral Glucose Tolerance Curves in Human Subjects." Metabolism, 17:916-922, 1968.
- Finn, Robert and Cohen, H. Newman. "Food Allergy: Fact or Fiction?" The Lancet, 25 February 1978, 426-428.
- Fredericks, Carlton and Goodman, Herman. Low Blood Sugar And You, New York, New York: Grosset and Dunlap, 1969.
- Greden, John F. "Anxiety or Caffeinism: a Diagnostic Dilemma." American Journal of Psychiatry, 131:10, October, 1974, 1089-1092.
- Hewitt, Jean. The New York Times Natural Foods Cookbook, New York, New York: Avon Books, 1971.
- Hoffer, Abram. "Treatment of Schizophrenia." Orthomolecular Psychiatry, Vol. 3, #4, 1974, pp. 280-290.

- "How To Discover a Food Allergy." Brain Bio Center, Princeton, New Jersey.
- Johnston, Douglas E. "The Natural History of Allergic Disease in Children." Annals of Allergy, Vol. 38, #6 pp. 387-393, June, 1977.
- Kinderlehrer, Jane. Confessions of a Sneaky Organic Cook, Emmaus, Pennsylvania: Rodale Press, 1971.
- "Label Notice Proposed on Use of Yellow 5." FDA Consumer, Vol. 11, #2, March, 1977, pp. 27-28.
- Lansky, Vicki. The Taming of the C.A.N.D.Y. Monster, Wayzata, Minnesota: Meadowbrook Press, 1978.
- Lappe, Frances Moore. Diet For A Small Planet, New York, New York: Ballantine Books Inc., 1975.
- Lewis, Anne and Hoghugi, Masud. "An Evaluation of Depression as a Side Effect of Oral Contraceptives." British Journal of Psychiatry, (1969), Vol. 115, pp. 697-701, cited by Seaman, Barbara, Free and Female, Greenwich, Connecticut: Fawcett Publications Inc., 1972, pp. 249-250.
- Mann, George V. "Relationship of age to nutrient requirements." The American Journal of Clinical Nutrition, 26:October, 1973, pp. 1096-1097.
- Milam, James R. The Emergent Comprehensive Concept of Alcoholism, Kirkland, Washington: ACA Press, 1970.
- Moyer, Anne. Better Foods For Public Places. Emmaus, Pennsylvania: Rodale Press, 1977.
- Newbold, H. L. Mega-Nutrients For Your Nerves. New York, New York: Peter H. Wyden, 1975.
- Parents' Nursery School. Kids Are Natural Cooks, Boston: Houghton Mifflin Co., 1972.
- Passwater, Richard. Supernutrition. New York, New York: Dial Press, 1975.
- Pfeiffer, Carl C. and the Publications Committee of the Brain Bio Center. Mental and Elemental Nutrients. New Canaan, Connecticut: Keats Publishing, Inc., 1975.
- Professional Committee of the Schizophrenia Foundation of New Jersey. The Schizophrenias: Yours and Mine, New York, New York: Pyramid Books, 1970.

- Randolph, Theron G. Human Ecology and Our Susceptibility to the Chemical Environment, Springfield, Illinois: Charles C. Thomas, 1962.
- Reed, Barbara. Back To Basics (Packet) Municipal Court of Cuyahoga Falls, Ohio, September, 1977.
- Rimland, Bernard. "An Orthomolecular Study of Psychotic Children." Orthomolecular Psychiatry, 3:4, 1974, 371-377.
- Salzer, Harry M. "Relative Hypoglycemia as a Cause of Neuropsychiatric Illness." Journal of the National Medical Association, 58 (1), January, 1976, 12-17.
- Schellhardt, Timothy D. "Can Chocolate Turn You Into A Criminal? Some Experts Say So." The Wall Street Journal, October 2, 1977, p. 1.
- Sherwood, Sylvia. "Sociology of food and eating: implications for action for the elderly." The American Journal of Clinical Nutrition: 26, October, 1973, pp. 1108, 1110.
- Singh, M. M. and Kay, S. R. "Wheat gluten as a pathogenic factor in schizophrenia." American Association for the Advancement of Science, 191:401-402, 1976.
- Smith, Lendon. Improving Your Child's Behavior Chemistry, New York, New York: Prentice Hall, 1976.
- Speer, Frederic. "The Allergic Tension - Fatigue Syndrome." Pediatric Clinics of North America, 1:1954, 1029-1037.
- Standard, Stella. Whole Grain Cookery, Garden City, New York, New York: Doubleday and Co., 1961.
- Steiner, Claude. Scripts People Live. New York, New York: Grove Press, 1974.
- "Too Much Sugar?" Consumer Reports, March, 1978, Vol. 43, #3, pp. 136-142.
- Tuman, Robert W.; Bilbo, James T.; and Daisy, Richard J. "Comparison and Effects of Natural and Synthetic Glucose Tolerance Factor in Normal and Genetically Diabetic Mice." Diabetes, 27(1), 49-56, 1978.
- Whole-Sum Cookbook, Jewish Community Center, 134 College Street, Lewiston, Maine 04240.

- Williams, Robert H. Textbook of Endocrinology, Fifth Edition.
Philadelphia, Pennsylvania: W. B. Saunders Co.,
1974.
- Williams, Robert J. Alcoholism: The Nutritional Approach.
Austin, Texas: University of Texas Press, 1959.
- Woolcock, Ann J. "Why Are Asthmatics Allergic?" The Medi-
cal Journal of Australia Special Supplemental on
Allergy, 1978, 2:25-26.
- Wurtman, Richard J. and Fernstrom, John D. Effects of the
Diet on Brain Neurotransmitters, Nutrition Reviews,
32:7, 193-200, July, 1974.