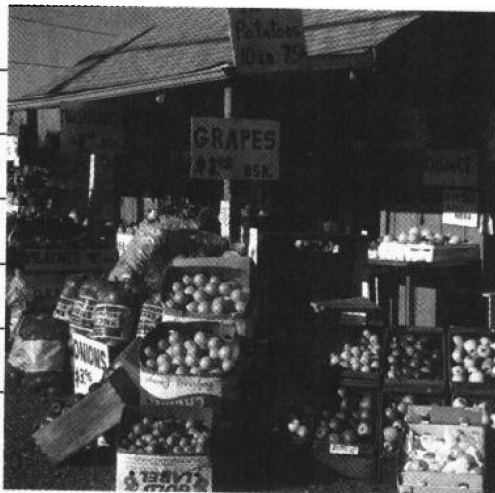

NUTRITION 98/99

Tenth Edition



Editor

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Towson University

Charlotte Cook-Fuller has a Ph.D. in community health education and graduate and undergraduate degrees in nutrition. She has worked for several years in public health services and has also been involved with the federally funded WIC (Women, Infants, and Children) program. Now as a professor, she teaches nutrition within both professional and consumer contexts, as well as courses for health education students. She has coauthored a nutrition curriculum for grades K-12 and is currently involved in a multidisciplinary effort to provide strategies to public school teachers for teaching about global issues such as hunger.

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Tenth Edition

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Members of the Advisory Board are instrumental in the final selection of articles for each edition of ANNUAL EDITIONS. Their review of articles for content, level, currentness, and appropriateness provides critical direction to the editor and staff. We think that you will find their careful consideration well reflected in this volume.

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To the Reader

In publishing ANNUAL EDITIONS we recognize the enormous role played by the magazines, newspapers, and journals of the *public press* in providing current, first-rate educational information in a broad spectrum of interest areas. Many of these articles are appropriate for students, researchers, and professionals seeking accurate, current material to help bridge the gap between principles and theories and the real world. These articles, however, become more useful for study when those of lasting value are carefully *collected, organized, indexed, and reproduced* in a *low-cost format*, which provides easy and permanent access when the material is needed. That is the role played by ANNUAL EDITIONS. Under the direction of each volume's *academic editor*, who is an expert in the subject area, and with the guidance of an *Advisory Board*, each year we seek to provide in each ANNUAL EDITION a current, well-balanced, carefully selected collection of the best of the public press for your study and enjoyment. We think that you will find this volume useful, and we hope that you will take a moment to let us know what you think.

You may agree with Pudd'nhead Wilson (a character created by Mark Twain) who said, "The only way to keep your health is to eat what you don't want, drink what you don't like, and do what you'd rather not." Nutritionists would argue that you can't achieve or maintain good health on a diet of soft drinks and vending machine foods. But you might be surprised to learn that many of your favorite foods can fit into a good diet. In making food choices, remember that variety and moderation are two key words that will assist you in achieving positive health outcomes and avoiding the negative results of excesses or deficiencies.

An array of resources is available to help you make decisions, including popular publications, the news media, scientific journals, and people from many educational backgrounds. Your dilemma is to select reliable sources that will supply factual information based on science rather than exaggerations based on bias. It is important to avoid overreacting to nutrition- and food-related news items or promotional materials, especially if they sound sensational or have shock value. The exaggeration and the myth are what much of the public grasps and, in large measure, reacts to. My challenge to you is to use *Annual Editions: Nutrition 98/99*, preferably with a standard nutrition text, as an invitation to learning. Become a discriminating learner. Compare what you hear and read to the accepted body of knowledge. If this volume provides you with useful information, challenges your thinking, broadens your understanding, or motivates you to take some useful action, it will have fulfilled its purpose.

While this entire volume is essentially one of current events and current thinking, the first unit focuses on trends that give a preview of the future and that relate to characteristics of today's food consumer, the food industry, and views of foods and food components. The next three units are devoted to nutrients, diet and disease, and

weight control. All are topics that directly relate to our health, and the dynamic state of knowledge on these subjects requires each of us to be constantly learning and adjusting. Units on food safety and health claims follow, areas in which consumers are especially vulnerable to media and promotional hype and misinformation. The last unit addresses hunger and malnutrition as social and political issues as well as one requiring scientific knowledge for solution. Originally, this unit was intended as a forum for global concerns, but it has become abundantly clear that hunger is also a national issue.

Although the units in this book are distinct, many of the articles have broader significance. The *topic guide* will help you to find other articles on a given subject. You also will find that many of the articles contain at least some element of controversy, the origin of which may be incomplete knowledge, questionable policy, pseudoscience, or competing needs. Sometimes these are difficult issues to resolve, and frequently any resolution creates further dilemmas. But creatively solving problems is our challenge. We take the world as it is and use it as the foundation for tomorrow's discoveries and solutions.

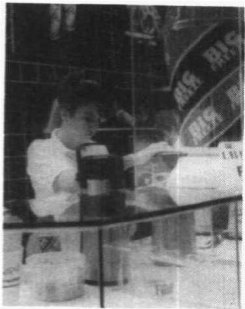
New to this edition are *World Wide Web* sites that can be used to further explore the topics. These sites are cross-referenced by number in the topic guide.

Annual Editions: Nutrition 98/99 is an anthology, and any anthology can be improved, including this one. You can influence the content of future editions by returning the postage-paid article rating form on the last page of this book with your comments and suggestions.

Charlotte C. Cook-Fuller

Charlotte C. Cook-Fuller
Editor

UNIT 1

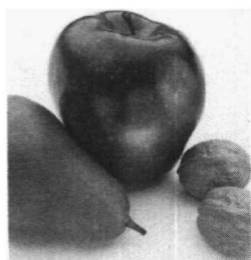


Trends Today and Tomorrow

Nine articles examine the eating patterns of people today. Some of the topics considered include nutrients in our diet, eating trends, food labeling, and self-service outlets.

| | |
|--|----|
| To the Reader | iv |
| Topic Guide | 2 |
| Selected World Wide Web Sites | 4 |
| Overview | 6 |
| 1. "What We Eat in America" Survey, <i>Nutrition Today</i> , January/February 1997. | 8 |
| The U.S. Department of Agriculture (USDA) has released new data showing the correlation between people's <i>attitudes and knowledge</i> about nutrition and their nutrient intakes and <i>food choices</i> . Among the interesting results, sodium intakes were found to be greatly in excess of recommendations for both men and women, while only men exceeded cholesterol guidelines. Women are more likely to have nutrient shortages of vitamins and minerals. | |
| 2. Fruits & Vegetables: Eating Your Way to 5 a Day, Paula Kurtzweil, <i>FDA Consumer</i> , March 1997. | 12 |
| <i>Guidelines for a good diet</i> recommend at least two fruits and three vegetables daily, something many Americans fail to eat. Most fruits and vegetables are low in calories and fat and high in vitamins, minerals, and fiber, which are <i>protective against disease</i> . Evidence shows that <i>misperceptions</i> such as excessive cost, preparation time, and <i>pesticide residues</i> need not be cause for concern. | |
| 3. Health Claims under the Nutrition Labeling and Education Act, Johanna Dwyer and Donna Porter, <i>Nutrition & the M.D.</i> , April 1997. | 18 |
| With the passage of the Nutrition Labeling and Education Act of 1990, <i>health claims</i> showing certain diet and disease relationships were permitted on <i>labels</i> . The intent of influencing consumer <i>food choices</i> appears to have been fulfilled, particularly in regard to fat and cholesterol consumption. Finding an effective way to relay sound information about food and health relationships to consumers, while avoiding misleading claims, continues to be a challenge. | |
| 4. Today's Special Nutrition Information, Paula Kurtzweil, <i>FDA Consumer</i> , May/June 1997. | 22 |
| Consumers need no longer wonder if the <i>health and nutrient claims</i> made on <i>menus in restaurants</i> are accurate. New <i>regulations</i> require that all eating establishments must have <i>nutrition information</i> available upon request. | |
| 5. Meat Meets Its Match? <i>Consumer Reports on Health</i> , June 1997. | 26 |
| Another way to <i>reduce fat</i> in one's diet is to eat <i>traditional products in lower-fat versions</i> . However, many of them, even meatless burgers, have more fat than consumers often believe. This article contains <i>tips</i> on what to look for and what to avoid if eating less fat is your goal. | |
| 6. Phytochemicals: Drugstore in a Salad? <i>Consumer Reports on Health</i> , December 1995. | 29 |
| Until recently, foods were known by the nutrients they contained. Now the airwaves are full of news about <i>phytochemicals</i> , which are neither vitamin nor mineral, yet appear to have great significance for <i>protecting</i> the body against <i>disease</i> . This article lends support to the long-known fact that fruits, vegetables, dried beans, and grains are good for you. | |
| 7. The Food Police, Minna Morse, <i>Health</i> , November/December 1996. | 31 |
| Determined to change the way that Americans view <i>food choices</i> , the Center for Science in the Public Interest (CSPI) has been waging a campaign for some years. They have pointed out grave dangers in consuming a variety of food products from fast food restaurants and various ethnic offerings. The question is, are they saviors or witch hunters or a bit of both? | |

UNIT 2



Nutrients

Ten articles discuss the importance of nutrients and fiber in our diet. Topics include dietary standards, carbohydrates, fiber, vitamins, supplements, and minerals.

8. **High Price of Shelf Space**, Sean Somerville, *The Baltimore Sun*, June 1, 1997. 35
If you have wondered about the placements of some food items in your *grocery store* and the amount of space given to them, this article may provide an explanation. The *Federal Trade Commission (FTC)* investigation of the battle over shelf space for spices brings to light a practice whereby manufacturers bid for shelf space in grocery stores. Called *slotting*, this practice is increasing and raises several *controversial issues*.
9. **The Coming Boom(er) Market**, *Food Insight*, March/April 1997. 37
Baby boomers, now reaching their 50s, are not expected to age gracefully. The same *aging* process that their forebears encountered will, however, dictate their nutritional needs. The marketing industry must consider the *eating habits and attitudes* of this large population group in developing and selling products that will meet both their demands and their physiological needs.

Overview 40

10. **A Type of Fat We May Need More Of**, *Tufts University Health & Nutrition Letter*, March 1997. 42
The possible health benefits of *fish oils*, which contain *omega-3 fatty acids*, have been news items for some time. Additional evidence that these oils are somewhat beneficial for *heart disease* and *arthritis* pain appears well supported. More *controversial* are the role of omega-3s in preventing depression and the advisability of adding the fatty acid DHA to infant formula.
11. **The Facts about Fats**, *Consumer Reports on Health*, March 1997. 44
While the public is very aware of the different *kinds of fat* in the foods they eat, they are less knowledgeable about the *roles of these fats* in the body. *Saturated and unsaturated fats* affect health very differently. Furthermore, *trans-fatty acids* produced in the process of hydrogenation are also cause for concern. Suggested *guidelines* allow adequate fat without significantly increasing health risk.
12. **Should You Be Eating More Protein—or Less?** *University of California at Berkeley Wellness Letter*, June 1996. 47
The public generally perceives that more *dietary protein* is better than less. While it may be true that some people, such as athletes and the elderly, need more protein per unit of body weight than others, large amounts of protein can have *detrimental* effects. Few of us need to add more protein to our diets, as most of us exceed the *recommendations* in normal eating.
13. **A 'Bran-New' Look at Dietary Fiber**, Kathleen A. Meister and Jack Raso, *Priorities*, Volume 9, Number 1, 1997. 50
Fiber, although not a nutrient, has been found to be *important to good health*. While some claims are proven, others lack absolute proof. Most Americans would benefit from increasing the amount of fiber they get from their diets.
14. **Food for Thought about Dietary Supplements**, Paul R. Thomas, *Nutrition Today*, March/April 1996. 54
Billions of dollars are spent yearly by Americans on *dietary supplements*. Author Paul Thomas, who used them extensively as a teenager, has since decided that a good dose of skepticism about supplement use is healthy. He believes that there is *no scientific support* for *routine supplement use* and provides rationales for his conclusions. Consumers should ask if supplements are harmful, helpful, or simply a waste of money.
15. **Vitamin C: Is Anyone Right on Dose?** Jane E. Brody, *New York Times*, April 16, 1996. 62
Vitamin C is, perhaps, everybody's favorite supplemental vitamin, but *controversies* about safe and healthy amounts of *vitamin C* have continued over the years. While this new discussion claims support for more than the current RDA amounts, others refute the evidence leading to that conclusion. Higher than currently recommended amounts should still be viewed as controversial.

UNIT 3



Through the Life Span: Diet and Disease

Eleven articles examine our health as it is affected by diet throughout our lives. Some topics include the links between diet and disease, cholesterol, and eating habits.

16. **The Trials of Beta-Carotene: Is the Verdict In?** *Tufts University Diet & Nutrition Letter*, March 1996. 65
Not long ago, glowing claims were made about the *cancer-fighting properties of beta-carotene*. Newer evidence raises questions so serious that trial studies have been canceled. Now scientists must try to sort fact from fiction.
17. **Too Little Sun?** *Consumer Reports on Health*, July 1997. 68
According to this article, *Vitamin D* not only promotes *the absorption of calcium* to strengthen bones but may also be protective against *arthritis* and some *cancers*. Because exposure of the skin to sunlight creates vitamin D, people who live in northern climates and who avoid sunlight might be deficient. While supplements are one solution, getting *too much of this vitamin is equally risky*.
18. **Fluoridation: A Triumph of Science over Propaganda,** Michael W. Easley, *Priorities*, Volume 8, Number 4, 1996. 70
Since 1945, most of us have accepted the value of *fluoridated water* in preventing *tooth decay* and have come to take it for granted. But good nutrition and health practices are sometimes countered by groups of extremists who are remarkably effective. Such has been the history of fluoridation, although thousands of students have shown that fluoride in the amounts used is both safe and effective.
19. **Yes, But Which Calcium Supplement?** *Tufts University Health & Nutrition Letter*, February 1997. 74
Calcium supplements may be a good option for those who find it difficult to consume adequate amounts of dairy products. However, choosing the right supplement to ensure sufficient calcium and good absorption can be a real dilemma. Answers to these questions are provided in this special report.
- Overview 76
20. **Beating the Odds: Best Bets for Cancer Prevention,** *Tufts University Diet & Nutrition Letter*, December 1996. 78
The public may believe in a *diet-cancer connection*, but many are mystified about implications for their dietary habits. In fact, consuming large amounts of *fruits and vegetables* will be protective for some cancers, while being *overweight* or consuming *alcohol* will be the key issue for others. The primary risk, of course, is *smoking*, which is not a dietary issue.
21. **Most Frequently Asked Questions . . . about Diet and Cancer,** *Nutrition Today*, May/June 1997. 80
Additional information concerning the *relationship between diet and various cancers* is provided in this question-and-answer format. Such issues as cause-and-effect connections with specific *vitamins and minerals*, *sweeteners*, *additives*, and *irradiation* are explored.
22. **Diet and Hypertension: Progress Towards a Better Understanding,** *Dairy Council Digest*, July/August 1997. 83
The public health reason for *limiting salt intake* is that it may aid in reducing *hypertension (HBP)*, thus reducing risks of *strokes and heart attacks*. However, as this article indicates, the HBP/sodium connection is not clear cut, and many other lifestyle factors are also implicated. These include weight control and the adequate consumption of other minerals.
23. **Boning Up on Osteoporosis,** Carolyn J. Strange, *FDA Consumer*, September 1996. 89
Osteoporosis is a common disease in the United States, causing over a million fractures yearly. Although postmenopausal white women are most often the victims, older men can be affected as well. *Estrogen replacement* at menopause is a powerful weapon and should be considered seriously. Besides a calcium-rich diet, other methods are now available to help prevent or minimize the effects of this disease.
24. **Heart Disease Handbook—Part 2: Deciphering Blood Cholesterol,** Adrienne Forman, *Environmental Nutrition*, March 1997. 95
With this article you will be able to clear up confusion about *cholesterol in your blood* and the *health risk* it might predict. Information about *cholesterol testing* and how to interpret the results are included, as well as a discussion of what to do if the numbers are too high.

UNIT 4

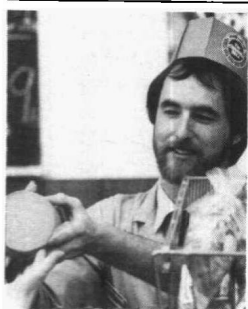


Fat and Weight Control

Seven articles examine weight management. Topics include the relationship between dieting and exercise, the effects of various diet plans, and the relationship between being overweight and fit.

25. **Heart Disease Handbook—Part 3: Triglycerides Turn Troublesome**, Marsha Hudnall, *Environmental Nutrition*, April 1997. 97
In addition to cholesterol, *triglycerides* also travel through the bloodstream and may be a risk factor for *heart disease*. The reasons why this may be so are described in this essay. The "prescription" for reducing high triglyceride levels includes *heart-healthy habits* such as maintaining healthy weight, exercising, reducing fat, and, in this case, avoiding alcohol.
26. **Breast-Feeding Best Bet for Babies**, Rebecca D. Williams, *FDA Consumer*, October 1995. 99
Breast-feeding, in most cases, is the *preferred choice for babies*. With its perfect ratio of nutrients, breast milk also provides *protection from diseases*, and the practice of breast-feeding promotes healthy psychological development. *Guidelines* for success are included.
27. **Lactose Intolerance**, *Mayo Clinic Health Letter*, February 1997. 103
Each of us has a better than even chance of being genetically programmed for some degree of *lactose intolerance*. As we age, the reduced amount of *lactase* may cause problems with digesting milk sugar, resulting in digestive misery. Options are available so that *calcium* consumption need not suffer.
28. **When Eating Goes Awry: An Update on Eating Disorders**, *Food Insight*, January/February 1997. 105
Perhaps half a million *adolescents* and *young adults* suffer from *eating disorders*. *Anorexia nervosa* and *bulimia nervosa* are currently recognized by the American Psychiatric Association, but binge-eating is receiving attention as well. Causes are complex and require treatments that address many facets of the problem.
29. **Nutritional Implications of Ethnic and Cultural Diversity**, *Dairy Council Digest*, September/October 1995. 108
There is ample evidence that morbidity and mortality rates for *nutrition-related chronic diseases* vary among *ethnic groups*. While whites have greater risk for *osteoporosis*, other groups are more likely to suffer from the effects of *obesity*, adult-onset *diabetes*, and *hypertension*. The interactions of culture and genetics that contribute to these variations are addressed in this article.
30. **Alcohol: Weighing the Benefits and Risks for You**, *University of California at Berkeley Wellness Letter*, August 1997. 113
The use of *alcohol* is a controversial subject because it is associated with both *risks and benefits*. The good news is that alcohol, in moderation, is protective against *heart disease*, but the bad news is that it causes accidents and apparently increases *cancer risk*. Some people, as described in this article, should avoid alcohol altogether, while others must assess benefits and risks for themselves.
- Overview 116
31. **Three Major U.S. Studies Describe Trends**, Frances M. Berg, *Healthy Weight Journal*, July/August 1997. 118
Analysis of data collected by the Third National Health and Nutrition Examination Survey (NHANES III) reveals that about one-third of American adults are overweight. Furthermore, *more people are gaining weight*, and those who are heavier are gaining the most weight. *Children and teenagers*, especially *girls*, are *overly concerned about weight loss and body image*.
32. **The History of Dieting and Its Effectiveness**, Wayne C. Miller, *Healthy Weight Journal*, March/April 1997. 126
Many *dieting schemes* have been tried through the years, often against the advice of experts and with undesirable or temporary results. Modern approaches are often individualized but are expensive and may not be *safe*. Furthermore, all methods have low *effectiveness* records and unreliable or little data to support effectiveness claims.
33. **Diet Pills: Are Millions of Women Playing Russian Roulette with Their Health?** *Women's Health Advocate Newsletter*, June 1997. 128
Millions of prescriptions are being issued for *diet pills*. While they do appear to offer weight loss with continued use, exercise, and calorie restriction, the drugs are not perfect—in fact, they have proven fatal for some unlucky women.

UNIT 5



Food Safety

Five articles discuss the safety of food. Topics include food-borne illness, pesticide residues, naturally occurring toxins, and food preservatives.

34. **Obesity: No Miracle Cure Yet**, Kristine Napier, *Priorities*, Volume 8, Number 2, 1996. 131
An *obesity gene* has been found. So have body chemicals that suppress appetite. Neither embodies an immediate solution for those of us who are *overweight*. Although these discoveries represent new knowledge, the answer to *weight control* remains in the balancing of caloric intake with caloric expenditure. Kristine Napier reports that weight loss drugs may help but must be used carefully.
35. **Diet and Exercise: What Kids Need Today**, Dairy Council Digest, November/December 1996. 135
Overweight in children is increasing, and young people are more sedentary than ever before. Since the consumption of calories and fat remains the same, it is concluded that lack of *exercise* is the primary causative factor. Both parents and schools will need to promote *higher activity levels* and more healthful diets.
36. **Dysfunctional Eating: A New Concept**, Frances M. Berg, *Healthy Weight Journal*, September/October 1996. 141
Women, girls as young as 9 years, *men, and teenage boys* increasingly are ignoring the normal physiological cues that represent need for food and, instead, *eat to be thin*, to achieve a certain body build, or to satisfy emotional needs. Called *dysfunctional eating*, it may be expressed either in under- or overeating and result in abnormal weights. Effects on mental abilities such as concentration or on social interaction follow, while preoccupation with food often increases.
37. **Reduced-Fat Foods: Dieter's Dream or Marketer's Ploy?** 147
Consumer Reports on Health, July 1995.
Unrealistic or not, many consumers had hopes that *reduced-fat food items* would be helpful in *losing weight*. Unfortunately, the bottom line in weight reduction is cutting calories, and low-fat foods may actually be higher in calories than their higher-fat counterparts. Evidence also supports the contention that people simply eat more as well.

Overview 150

38. **Foodborne Illness: Role of Home Food Handling Practices**, 152
Food Technology, April 1995.
Many organisms can contaminate food and result in *food-borne illness* if *improper food handling* occurs. The old adage that "forewarned is forearmed" holds true for those who know how to avoid practices that can lead to illness. Information concerning common food-borne diseases caused by bacteria, toxins, viruses, protozoa, and parasites is included in this article.
39. **For Safety's Sake: Scrub Your Produce**, Abigail Zuger, 162
Health News, June 24, 1997.
An increasing number of reports that *food-borne illness* has resulted from the consumption of *raw produce* is of concern to the American consumer. The causative organisms are varied, as are the food products and their origins. Consumers can protect themselves with *proper handling* of the produce and by buying *pasteurized* juices such as cider.
40. **New Risks in Ground Beef Revealed**, Tufts University Diet & Nutrition Letter, June 1996. 163
In recent years the public has become very aware of the dangers of *E. coli 0157 poisoning*. Now it is clear that, worldwide, more than 50 *E. coli* types produce *dangerous toxins* and that a large share of our *ground beef* may be contaminated. *Prevention* lies in safe handling. Early treatment depends on recognizing symptoms.
41. **How Much Are Pesticides Hurting Your Health?** Tufts University Diet & Nutrition Letter, April 1996. 167
Concerns about risks from *pesticide ingestion* are often fueled by the news media. Although such reports are worrisome, this article reveals that there is little need for concern. Rinsing fresh produce in plain water can lower even the small risk.
42. **After the Glow**, Alan Morton, *Restaurant Business*, February 10, 1995. 169
Food irradiation's ability to destroy *food pathogens* is turning some opponents into proponents. Currently, irradiated products on the market are well received by consumers. Many national and international organizations strongly support the use of the technology, as Alan Morton describes.

UNIT 6



Health Claims

Ten articles examine some of the health claims made by today's "specialists." Topics include quacks, fad diets, and nutrition myths and misinformation.

- | | |
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| Overview | 172 |
| 43. How Quackery Sells, William T. Jarvis and Stephen Barrett, <i>Nutrition Forum</i>, March/April 1991. | 174 |
| <i>Quacks</i> are masters of the art of influencing people. As supermanipulators, they sell false hope through products that cannot possibly produce the desired magical effects. This article exposes the tricks that they use. | |
| 44. Confessions of a Former Women's Magazine Writer, Marilynn Larkin, <i>Nutrition Forum</i>, May/June 1993. | 179 |
| A long-time writer of <i>popular nutrition articles</i> , Marilynn Larkin understands the basic <i>pat formula</i> often used to make products sell. Publishing priorities include starting with provocative headlines, following with noncontroversial trivia, and providing a "nice environment" for advertisers. This leaves little room for a straightforward presentation of facts or an honest appraisal of research. | |
| 45. Food for Thought: Can You Trust Your Favorite Magazine to Tell You What to Eat? Diane Woznicki and Ruth Kava, <i>Priorities</i>, Volume 8, Number 2, 1996. | 183 |
| Popular magazines are doing a better job of <i>reporting nutrition information</i> , according to a study completed by the American Council on Science and Health. The three found to be <i>most reliable</i> are <i>Consumer Reports</i> , <i>Better Homes and Gardens</i> , and <i>Parents</i> . | |
| 46. How to Spot a "Quacky" Web Site, Stephen Barrett, <i>Quackwatch</i>, 1997. | 187 |
| Now that <i>exploring the World Wide Web</i> for information has become very popular, it is appropriate to be concerned about the <i>reliability of information</i> that one finds. This brief article, itself from a reliable Web site, suggests characteristics and statements to look for that can indicate a source that is not trustworthy. | |
| 47. Why Do Those #&*?@! "Experts" Keep Changing Their Minds? University of California at Berkeley Wellness Letter, February 1996. | 188 |
| What the <i>layman understands</i> from the <i>news</i> often leads him to <i>conclude falsely</i> that experts can't make up their minds about nutrition issues. According to this article, the nature of discovery through research is partly responsible for such confusion, but knowing how to read and interpret research reports will increase one's understanding. | |
| 48. Vitamin and Nutritional Supplements, Mayo Clinic Health Letter, June 1997. | 191 |
| Promoters imply that one's life and health depend upon <i>supplement use</i> , but experts warn that they are not always useful and may carry <i>health risks</i> . Furthermore, the <i>safety</i> of dietary supplements is not guaranteed. Caveat emptor or "let the buyer beware" is a warning to be heeded. Occasions when supplement use might be advisable are discussed in this report. | |
| 49. Nutrition Shortcut in a Can? George Blackburn, <i>Health News</i>, June 4, 1996. | 196 |
| New marketing strategies tout <i>liquid meals-in-a-can</i> as beneficial for virtually everyone. While acknowledging that meal replacements are useful in some circumstances, George Blackburn notes that these promotions are generally misleading and that the benefits from real food are greater. | |
| 50. The 'Dietary Supplement' Mess: Commission Report Issued, Stephen Barrett, <i>Nutrition Forum</i>, July/August 1997. | 198 |
| With the passage of the <i>Dietary Supplement and Health Education Act of 1994</i> , rules governing claims for dietary supplements have changed. The changes are controversial, requiring the consumer to be more knowledgeable but also allowing more freedom to make choices, as Stephen Barrett explains. Charts provide clear descriptions of the <i>new regulations</i> compared to those that applied formerly. | |

UNIT 7



Hunger and Global Issues

Five articles discuss the world's food supply. Topics include global malnutrition, water quality, agriculture, and famine.

51. **Dead Doctors Don't Lie, But People Who Sell Minerals . . .** 203
University of California at Berkeley Wellness Letter, June 1997.
Taped lectures that are mailed to homes have become a popular way to promote questionable products. The product discussed in this article is a collection of *colloidal minerals*, which *promises to cure virtually everything*. The lecture is full of the usual misinformation that suggests that consumers cannot get the necessary nutrients from their food supply.
52. **Don't Buy Phony 'Ergogenic Aids': The Real Story vs. a Mountain of Hype**, Stephen Barrett, *Nutrition Forum*, May/June 1997. 205
Because *athletes* are always looking for the competitive edge, they are especially vulnerable to the *hype* that surrounds the promotion of *vitamin, mineral, and protein supplements*. Typical ploys used by promoters over the years are described in this article. These descriptions provide the reader with information that is useful to avoid becoming one of the "suckers."

Overview 208

53. **Table Set Thinly as Food Summit Pledges to Halve World Hunger in 20 Years**, *UN Chronicle*, Volume 33, Number 4, 1996. 210
The *World Food Summit* convened in November 1996 with representatives from 186 countries who agreed that it is intolerable for hundreds of thousands of people worldwide to be *hungry* and *malnourished*. The commitments made at this conference are recorded in this article. Questions of implementation remain, and on these there is no agreement.
54. **Will the World Starve? Feast and Famine**, *The Economist*, November 16, 1996. 214
Whether or not enough *food* can be grown to *feed a population* that is predicted to double by the middle of the next century remains an unanswered question. This essay examines the issues and concludes that we will have to rely on existing technology plus promises made but not yet delivered by *biotechnology* techniques.
55. **Running Out of Water, Running Out of Time**, Arun P. Elhance, *The Sun*, March 11, 1997. 217
Insufficient and contaminated water supplies, says Arun Elhance, will be the cause of *millions of deaths* in the world's developing countries before the next century begins. Further demands will be made on scarce water stores by an *increasing population* that demands *more food*, something that is already scarce. International cooperation for water sharing is badly needed to alleviate this problem.
56. **Crop Gurus Sow Some Seeds of Hope**, Fred Pearce, *New Scientist*, November 9, 1996. 219
Promises to meet or exceed *increases in world food production* produced by the earlier "green revolution" reverberated at the fall 1996 *World Food Summit*. These expectations, which rely on developments in *biotechnology*, are challenged as unrealistic by others. New breeds of cassava, rice, and potatoes are under development.
57. **New Farm Techniques Spur Ethiopia Rebirth**, Jimmy Carter, *USA Today*, March 19, 1997. 220
If the solutions are to be lasting, issues of *chronic hunger* and adequate *food supplies* must be addressed within the country affected. Former president Jimmy Carter describes how the Carter Center successfully introduced local farmers to *strategies to increase food production*. In fact, since 1994, the yields have increased dramatically, giving hope that some developing countries may become self-sustaining.

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| Article Review Form | 228 |
| Article Rating Form | 229 |

The concepts in bold italics are developed in the article. For further expansion please refer to the Topic Guide, the Glossary, and the Index.

Topic Guide

This topic guide suggests how the selections in this book relate to topics of traditional concern to students and professionals involved with the study of nutrition. It is useful for locating articles that relate to each other for reading and research. The guide is arranged alphabetically according to topic. Articles may, of course, treat topics that do not appear in the topic guide. In turn, entries in the topic guide do not necessarily constitute a comprehensive listing of all the contents of each selection. In addition, relevant Web sites, which are annotated on pages 4 and 5, are noted in bold italics under the topic articles.

| TOPIC AREA | TREATED IN | TOPIC AREA | TREATED IN |
|-------------------------------|---|---|--|
| Additives | 18. Fluoridation 21. Most Frequently Asked Questions ... about Diet and Cancer 41. How Much Are Pesticides Hurting Your Health? (3, 11, 12, 13, 14, 26) | Coronary Heart Disease (cont.) | 25. Triglycerides Turn Troublesome 30. Alcohol: Benefits and Risks (5, 8, 9, 12, 14, 16, 23, 24, 25) |
| Alcohol | 30. Alcohol: Benefits and Risks (5, 9, 18) | Cultural Influence | 29. Nutritional Implications of Ethnic and Cultural Diversity (6, 17) |
| Antioxidants | 6. Phytochemicals: Drugstore in a Salad? 16. Trials of Beta-Carotene 21. Most Frequently Asked Questions ... about Diet and Cancer (5, 6, 8, 9, 10, 11) | Diet/Disease | 6. Phytochemicals: Drugstore in a Salad? 10. Type of Fat We May Need More Of 11. Facts about Fats 13. 'Bran-New' Look at Dietary Fiber 17. Too Little Sun? 18. Fluoridation 20. Beating the Odds 21. Most Frequently Asked Questions ... about Diet and Cancer 22. Diet and Hypertension 24. Deciphering Blood Cholesterol 25. Triglycerides Turn Troublesome (6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21) |
| Athletes | 52. Don't Buy Phony 'Ergogenic Aids' (30) | Dieting | 28. When Eating Goes Awry 32. History of Dieting and Its Effectiveness 33. Diet Pills 36. Dysfunctional Eating 37. Reduced-Fat Foods (21, 22, 23, 24, 25) |
| Attitudes/ Knowledge | 1. "What We Eat in America" Survey 9. Coming Boom(er) Market (5, 6, 7, 8, 9, 10, 12) | Eating Disorders | 28. When Eating Goes Awry 36. Dysfunctional Eating (23, 24, 25) |
| Biotechnology | 54. Will the World Starve? 56. Crop Gurus Sow Some Seeds of Hope (31, 32, 33, 34) | Elderly | 23. Boning Up on Osteoporosis (20) |
| Cancer | 6. Phytochemicals: Drugstore in a Salad? 16. Trials of Beta-Carotene 17. Too Little Sun? 20. Beating the Odds 21. Most Frequently asked Questions ... about Diet and Cancer 30. Alcohol: Benefits and Risks (5, 9, 11, 12, 13, 14, 15, 17, 20) | Fats/Substitutes | 5. Meat Meets Its Match? 10. Type of Fat We May Need More Of 11. Facts about Fats 37. Reduced-Fat Foods (8, 9, 10, 11, 12, 13, 14) |
| Children/Infants | 10. Type of Fat We May Need More Of 26. Breast-Feeding Best Bet for Babies 31. Three Major U.S. Studies Describe Trends 35. Diet and Exercise (11, 12, 13, 14, 24, 25) | Fiber | 13. 'Bran-New' Look at Dietary Fiber 21. Most Frequently Asked Questions ... about Diet and Cancer (11, 12, 13, 14, 17, 18, 21) |
| Controversies | 3. Health Claims under the Nutrition Labeling and Education Act 7. Food Police 22. Diet and Hypertension 30. Alcohol: Benefits and Risks 32. History of Dieting and Its Effectiveness 33. Diet Pills 37. Reduced-Fat Foods 48. Vitamin and Nutritional Supplements 49. Nutrition Shortcut in a Can? 50. 'Dietary Supplement' Mess 54. Will the World Starve? (5, 8, 9, 12, 17, 28, 29, 30) | Food and Drug Administration (FDA) | 33. Diet Pills 50. 'Dietary Supplement' Mess (24, 25) |
| Coronary Heart Disease | 6. Phytochemicals: Drugstore in a Salad? 10. Type of Fat We May Need More Of 11. Facts about Fats 24. Deciphering Blood Cholesterol | Food Industry | 8. High Price of Shelf Space 9. Coming Boom(er) Market |
| | | Food Safety | 39. For Safety's Sake: Scrub Your Produce 40. New Risks in Ground Beef Revealed 41. How Much Are Pesticides Hurting Your Health? 50. 'Dietary Supplement' Mess (26, 27) |

| TOPIC AREA | TREATED IN | TOPIC AREA | TREATED IN |
|--------------------------------|--|-------------------------------------|--|
| Food Supply | 53. Table Set Thinly as Food Summit Pledges to Halve World Hunger 54. Will the World Starve? 56. Crop Gurus Sow Some Seeds of Hope 57. New Farm Techniques Spur Ethiopia Rebirth (31, 32, 33, 34) | Myths/ Misinformation (cont.) | 43. How Quackery Sells 44. Confessions of a Former Women's Magazine Writer 45. Can You Trust Your Favorite Magazine? 46. How to Spot a "Quacky" Web Site 47. Why Do Those #&*?@! "Experts" Keep Changing Their Minds? 48. Vitamin and Nutritional Supplements 51. Dead Doctors Don't Lie 52. Don't Buy Phony 'Ergogenic Aids' (28, 29, 30) |
| Food-borne Illness | 38. Foodborne Illness 39. For Safety's Sake: Scrub Your Produce 40. New Risks in Ground Beef Revealed 41. How Much Are Pesticides Hurting Your Health? 42. After the Glow (26, 27) | Obesity | 31. Three Major U.S. Studies Describe Trends 34. Obesity: No Miracle Cure Yet 35. Diet and Exercise 37. Reduced-Fat Foods (22, 23, 24, 25) |
| Guidelines/ Recommendations | 2. Fruits & Vegetables 3. Health Claims under the Nutrition Labeling and Education Act 4. Today's Special Nutrition Information 5. Meat Meets Its Match? 6. Phytochemicals: Drugstore in a Salad? 11. Facts about Fats 12. Should You Be Eating More Protein? 17. Too Little Sun? 19. Yes, But Which Calcium Supplement? 22. Diet and Hypertension 23. Boning Up on Osteoporosis 24. Deciphering Blood Cholesterol 25. Triglycerides Turn Troublesome 27. Lactose Intolerance 35. Diet and Exercise 38. Foodborne Illness 39. For Safety's Sake: Scrub Your Produce 40. New Risks in Ground Beef Revealed 41. How Much Are Pesticides Hurting Your Health? 42. After the Glow (5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 21, 23) | Pesticides | 41. How Much Are Pesticides Hurting Your Health? (8, 9) |
| | | Phytochemicals | 6. Phytochemicals: Drugstore in a Salad? (5, 10, 11) |
| | | Policies | 2. Fruits & Vegetables 3. Health Claims under the Nutrition Labeling and Education Act 4. Today's Special Nutrition Information 50. 'Dietary Supplement' Mess 53. Table Set Thinly as Food Summit Pledges to Halve World Hunger (8, 9, 32, 33) |
| | | Protein | 12. Should You Be Eating More Protein? 52. Don't Buy Phony 'Ergogenic Aids' (11, 12, 13, 14, 28, 29, 30) |
| | | Sugar/Sugar Substitutes | 21. Most Frequently Asked Questions . . . about Diet and Cancer (11, 12, 13, 14) |
| Herbals | 48. Vitamin and Nutritional Supplements (29) | Supplements | 14. Food for Thought about Dietary Supplements 15. Vitamin C 16. Trials of Beta-Carotene 17. Too Little Sun? 19. Yes, But Which Calcium Supplement? 48. Vitamin and Nutritional Supplements 49. Nutrition Shortcut in a Can? 50. 'Dietary Supplement' Mess 52. Don't Buy Phony 'Ergogenic Aids' (11, 12, 13, 14) |
| Hunger/ Malnutrition | 53. Table Set Thinly as Food Summit Pledges to Halve World Hunger 54. Will the World Starve? 55. Running Out of Water 57. New Farm Techniques Spur Ethiopia Rebirth (31, 32, 33, 34) | Teenagers | 28. When Eating Goes Awry 31. Three Major U.S. Studies Describe Trends (23, 24, 25) |
| Labeling | 3. Health Claims under the Nutrition Labeling and Education Act (5, 8, 9) | Vitamins | 14. Food for Thought about Dietary Supplements 16. Trials of Beta-Carotene 17. Too Little Sun? 21. Most Frequently Asked Questions . . . about Diet and Cancer (11, 12, 13, 14) |
| Lactose Intolerance | 27. Lactose Intolerance | Weight/ Weight Control | 32. History of Dieting and Its Effectiveness 33. Diet Pills 34. Obesity: No Miracle Cure Yet 35. Diet and Exercise 37. Reduced-Fat Foods (22, 23, 24, 25) |
| Minerals | 18. Fluoridation 19. Yes, But Which Calcium Supplement? 21. Most Frequently Asked Questions . . . about Diet and Cancer 22. Diet and Hypertension 23. Boning Up on Osteoporosis 27. Lactose Intolerance 51. Dead Doctors Don't Lie (11, 12, 13, 14, 28, 29, 30) | | |
| Myths/ Misinformation | 12. Should You Be Eating More Protein? 14. Food for Thought about Dietary Supplements 21. Most Frequently Asked Questions . . . about Diet and Cancer | | |

Selected World Wide Web Sites for Annual Editions: Nutrition

All of these Web sites are hot-linked through the *Annual Editions* home page: <http://www.dushkin.com/annualeditions> (just click on this book's title). In addition, these sites are referenced by number and appear where relevant in the Topic Guide on the previous two pages.

Some Web sites are continually changing their structure and content, so the information listed may not always be available.

General Sources

1. American Medical Association—<http://www.ama-assn.org/>—The venerable AMA offers this site for consumers and health practitioners to find up-to-date nutritional and medical information, discussions of such topics as women's health, and important publications such as the *Journal of the American Medical Association*.
2. Health Links—<http://www.hslib.washington.edu/>—Open this site to find links to sites of interest to people with knowledge of nutrition and other health sciences. There are links to international health statistics, journals, public health topics, library services, and so on.
3. University of Pennsylvania School of Medicine Nutrition Education and Prevention Program—<http://www.med.upenn.edu/~nutrimed/>—The aim of the Nutrition Education and Prevention Program is to engage medical students in active learning about nutrition and medicine through interdisciplinary study. This home page provides links to many related Web sites.
4. U.S. National Institutes of Health—<http://www.nih.gov/>—Consult this site for links to extensive health information and scientific resources. Comprised of 24 separate institutes, centers, and divisions—including the Institute of Mental Health—the NIH is one of eight health agencies of the Public Health Service, which, in turn, is part of the U.S. Department of Health and Human Services.

Trends Today and Tomorrow

5. Center for Science in the Public Interest—<http://www.cspinet.org/>—Search the links of this page of CSPI's Web site for information on food allergies, improving one's diet, Olestra, alcohol, food safety, and other topics. CSPI is a nonprofit education and advocacy organization that focuses on educating the public about nutrition and alcohol.
6. The Gallup Organization—<http://www.gallup.com/>—Open this Gallup Organization page for links to an extensive archive of public opinion poll results and special reports on a huge variety of topics. It will help in gaining understanding of people's food choices.
7. The Society of Behavioral Medicine—<http://socbehmed.org/sbm/sisterorg.htm>—This site of the Society of Behavioral Medicine provides listings of major, general health institutes and organizations as well as discipline-specific links and resources in medicine, psychology, and public health.
8. U.S. Department of Agriculture—<http://www.usda.gov/news/news.htm>—Visit this site of the USDA to keep up with nutritional news and information. The site provides links to publications, educational resources, and related congressional news.
9. U.S. Food and Drug Administration—<http://www.fda.gov/fdahomepage.html>—This is the home page of the FDA, which describes itself as the United States' "foremost consumer protection agency." Visit this site and its links to learn about food

safety, food and nutrition labeling, and other topics of importance in the study of nutrition.

10. Vegetarian Pages—<http://www.veg.org/veg/>—The Vegetarian Pages are intended to be an independent, definitive Internet guide for vegetarians, vegans, and others. The index and listings will lead you to information about all things vegetarian.

Nutrients

11. Encyclopedia Britannica—<http://www.ebig.com/>—This huge "Britannica Internet Guide" will lead you to a cornucopia of informational sites and reference sources in nutritional health. This is a good starting point for research into vitamins and other nutrients.
12. Food and Nutrition Information Center—<http://www.nal.usda.gov/fnic/>—Use this site to find dietary and nutrition information provided by various USDA agencies, to find links to food and nutrition resources on the Internet, and to access FNIC publications and databases.
13. Nutrient Data Laboratory—<http://www.nal.usda.gov/fnic/foodcomp/>—This USDA Agricultural Research Service site provides information about the USDA Nutrient Database. Search here for answers to FAQs, a glossary of terms, facts about food composition, and useful links.
14. U.S. National Library of Medicine—<http://www.nlm.nih.gov/>—This huge site permits you to search a number of databases and electronic information sources such as MEDLINE, learn about research projects and programs, keep up on recent nutrition-related news, and peruse the national network of medical libraries.

Through the Life Span: Diet and Disease

15. American Cancer Society—<http://www.cancer.org/frames.html>—Open this site and its various links to learn the concerns—and lifestyle advice—of the American Cancer Society. It provides information on tobacco, alternative therapies, other Web resources, and more.
16. American Heart Association—<http://www.amhrt.org/>—The AHA offers this site to provide the most comprehensive information on heart disease and stroke as well as late-breaking news. The site presents facts on the warning signs of heart disease and stroke, a reference guide, explanations of diseases and treatments, and so on.
17. American Studies Web—<http://www.georgetown.edu/crossroads/asw/>—This eclectic site provides links to a wealth of resources on the Internet related to American studies, from gender studies, to environment, to race and ethnicity. It is of great help when doing research in demography and population studies and in topics such as health differentials between races or ethnic groups.
18. Columbia University Health Services—<http://www.columbia.edu/cu/healthwise/about.html>—This interactive site provides discussion and insight into a number of personal issues of interest to college-age people—and those younger and older. Many questions about physical and emotional health and well-being in the modern world are answered.

19. Dr. Ivan's Depression Central—<http://www.psycom.net/depression.central.html>—This extensive site describes itself as the "Internet's central clearinghouse for information on all types of depressive disorders and on the most effective treatments" for these disorders—and it lives up to the billing. The site provides extensive information about eating disorders.
20. National Institute on Aging—<http://www.nih.gov/nia/>—The NIA, one of the institutes of the U.S. National Institutes of Health, presents this home page to lead you to a variety of resources on health and lifestyle issues that are of interest to people as they grow older.
21. Sympatico: Healthy Way: Health Links—<http://www.ab.sympatico.ca/Contents/Health/GENERAL/sitemap.html>—This Canadian site meant for consumers will lead you to many links addressing human sexuality over the life span, general health, and reproductive health.

Fat and Weight Control

22. American Society of Exercise Physiologists—<http://www.css.edu/users/tboone2/asep/toc.htm>—ASEP is devoted to promoting people's health and physical fitness. This extensive site provides links to journals and other publications related to exercise, career opportunities in exercise physiology, and the process of professionalization of the field.
23. The Blonz Guide to Nutrition—<http://www.wenet.net/blonz/>—The categories in this valuable site report news in the fields of nutrition, food science, foods, fitness, and health. There is also an excellent selection of search engines and other important links.
24. Healthfinder—<http://www.os.healthfinder.gov/>—This U.S. Department of Health and Human Services consumer site has extensive links to information on such topics as the health benefits of exercise, weight control, and prudent lifestyle choices. Bibliographies on a multitude of health topics can be accessed here.
25. MedWeb: Nutrition—<http://www.gen.emory.edu/MEDWEB/keyword/nutrition.html>—The links in this massive Emory University site will take you to information and resources on virtually all topics in nutritional health, from dietary supplements to eating disorders. This site is useful for research into other topics of concern to students of health sciences, such as weight control.

Food Safety

26. Centers for Disease Control and Prevention—<http://www.cdc.gov/>—The CDC—which calls itself "The Nation's Prevention Agency," offers this home page, from which you can learn information about travelers' health, data and statistics related to disease control and prevention, general nutritional and health information, publications, and more.
27. Food Safety and Inspection Service—<http://www.usda.gov/agency/fsis/homepage.htm>—The FSIS, part of the U.S. Department of Agriculture, is the government agency "responsible for ensuring that the nation's commercial supply of meat, poultry, and egg products is safe, wholesome, and correctly labeled and packaged." This is its home page.

Health Claims

28. Agency for Health Care Policy and Research—<http://www.ahcpr.gov/>—The aim of the AHCPR is to improve health care quality through education and research. Open this site to find information on consumer health, U.S. health care policy and trends, clinical research, and data and surveys.
29. Alt-MEDMarket—<http://alt.medmarket.com/indexes/indexmfr.html>—This commercial site bills itself as "the Internet guide to alternative therapies and products." Click on the "Alternative Health E-Mail" for an alternative medicine directory and herbal information center; alternative medicine providers, listed by geographic area and specialty; a listing of articles; herbs with their corresponding treatments; and other information.
30. Science News Digest for Physicians and Scientists—<http://genome.eerie.fr/bioscience/news/scientis/obesity2.htm>—This site provides information about neuropeptide Y and its known and suspected functions in regulation of body weight and circadian rhythms, sexual functioning, and anxiety and stress response. A bibliography is included.

Hunger and Global Issues

31. Penn Library: Nutrition—<http://www.library.upenn.edu/resources/healthscience/disciplines/nutrition.html>—This site is rich in links to information about virtually every subject you can think of in nutrition. From here, click to Penn Library's other health study sites and its extensive population and demography resources, which address such concerns as family planning and nutrition in various world regions.
32. World Health Organization—<http://www.who.ch/Welcome.html>—This home page of the World Health Organization will provide you with links to a wealth of statistical and analytical information about health and nutrition around the world.
33. World Hunger Year—<http://www.iglou.com/why/ria.htm>—WHY offers this site as part of its program called Reinvesting in America, its effort to help people fight hunger and poverty in their communities. Various resources and models for grassroots action are included here.
34. WWW Virtual Library: Demography & Population Studies—<http://coombs.anu.edu.au/ResFacilities/DemographyPage.html>—This is a definitive guide to demography and population studies. A multitude of important links to information about global poverty and hunger can be found here.

We highly recommend that you review our Web site for expanded information and our other product lines. We are continually updating and adding links to our Web site in order to offer you the most usable and useful information that will support and expand the value of your Annual Editions. You can reach us at: <http://www.dushkin.com/annualeditions/>.

Trends Today and Tomorrow

It is change, continuing change, inevitable change, that is the dominant factor in society today. No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be.

—Isaac Asimov 1981

The average consumer is a phantom, constantly reshaping and reemerging under the influences of the food industry, the media, activist organizations, and whatever health messages are currently most persuasive. Years ago, for the sake of heart health, we were persuaded to switch from butter and lard to vegetable oil and margarine. Later, we obediently avoided tropical oils. More recently we were told to beware of trans-fatty acids produced in the manufacture of solid margarines. Thus, for the last half century, Americans have been constantly bombarded by health and nutrition messages and admonitions at an increasingly rapid rate, many of which have been misleading and contradictory. It is no wonder that consumers have become more and more confused and have grown disenchanted with conventional sources of advice. Respondents frequently report being unhappy with conflicting information, and many say they'd rather get information *after* nutrition and health professionals have reached consensus. As more and more people access the Internet, this problem may be exacerbated rather than lessened.

All of this does not mean that Americans are unconcerned or disinterested in their dietary habits, although one survey finds that fewer are doing all they can to eat a balanced diet. Other surveys repeatedly show that the average consumer is knowledgeable and very interested in the health effects of nutrition. The average consumer is also confused and holds many misconceptions, believing that foods can be divided into categories of good and bad foods, that tasty foods are not nutritious, and that it is simply too time-consuming to eat well. The first article in this book provides new data showing the correlation between people's attitudes and knowledge about nutrition and their nutrient intakes and food choices. Overall, fat consumption has dropped slightly, with about one-third of Americans meeting the guideline of less than 30 percent of calories coming from fat. At the same time, total calorie consumption is 9 percent *higher* than 20 years ago, and this in spite of the many reduced-fat and fat-free products available. Issues of fat content in food products are addressed in "Meat Meets Its Match?"

Today's sophisticated consumer is desirous of information about diets and food. Responses have come from

government agencies and the food industry as well as professionals and voluntary associations. A revision of the Recommended Dietary Allowance (RDA) is not yet published, although we await it eagerly and expect at least some changes in the recommendations. The 1995 Dietary Guidelines, however, are available. Issued jointly by the U.S. Departments of Agriculture and Health and Human Services, their purpose is to provide advice to healthy Americans about the relationship between food choices and health. They reflect a clear linkage to the popular Food Pyramid and the Nutrition Facts Label. A review of these guidelines is mandatory every 5 years, and publication of a new edition follows a lengthy process of literature review; solicitation of written comments from health professionals, trade organizations, and the public; and public hearings.

One way to achieve a diet that conforms to the 1995 Dietary Guidelines and the Food Pyramid is to eat a minimum of three vegetables and two fruits daily, a subject discussed in "Fruits & Vegetables: Eating Your Way to 5 a Day." According to data reported by the National Cancer Institute, the average American now approaches this goal, having actually consumed 4.4 servings daily in 1994. Other surveys, however, indicate that potatoes may account for half the vegetables eaten and that less than one-third of the daily serving comes from the dark green and yellow vegetables that are so rich in vitamin A. Children are the most likely to have eaten french fries or possibly tomatoes in a pasta sauce. Even less popular than vegetables, fruits averaged two servings only because of the apples in apple pie. Again, children consume lots of boxed juices, but most of them are juice drinks, not 100 percent fruit juice. Clearly variety seems limited, and consumers would benefit from eating more of the 350 to 400 fresh products available in most supermarkets.

In this unit, two articles address the subject of consumer information on labels and, more recently, in restaurants. In both instances, this information is an application of the Nutrition Labeling and Education Act of 1990. Well-substantiated health claims indicating the benefits of specific foods or food substances are permitted on labels and can be useful to the consumer in making food choices. Examples of permitted claims are the relationship between dietary fat and heart disease and between folic acid and neural tube defects. A very recent addition to the list of permitted claims states that diets both high in oat bran or oatmeal and low in fat may be protective against heart disease. Regulations now also require restaurants to sup-



ply verifying information if menu items claim to have specific nutritional content or health benefits. The consumer must ask for this information, and it may be produced in almost any form. Some analysts predict that the process will be too cumbersome and that claims on menus will disappear. However, 57 percent of the population eats out daily, and that represents a lot of people who might find the information useful.

Another trend worthy of note is the increased interest in food chemicals other than nutrients, the topic in the article "Phytochemicals: Drugstore in a Salad?" Phytochemicals represent an expanded knowledge of the chemical composition of normal plant foods and the potential for promoting good health and preventing diseases such as cancer and heart disease. More and more frequently we read about the possible advantages of isoflavones, saponins, flavinoids, phytoestrogens, and many others. The promises are great but are mostly unproven, making the balance between developing this new market and maintaining public health and safety a challenge. The best current wisdom dictates eating a wide variety of foods with emphasis on fruits, vegetables, and whole grains rather than on supplements or manufactured foods.

Manufacturers and market forces are accused of dictating food choices and programming consumers, and there is evidence to this effect. In "High Price of Shelf Space," for example, Sean Somerville confirms what you may have suspected about grocery stores—that the placement of foods and the amount of space allotted sometimes fol-

lows a hidden plan. It is equally true that markets respond to consumer demands. Baby boomers (see "The Coming Boom(er)"), now entering their 50s, have sufficient numbers to influence the food industry. Although boomers will have the same nutritional needs as their forebears, they will live longer, and they will demand foods that are more convenient and that specifically address medical and weight-loss needs. Current trends in this direction seem well established. Of the nearly 17,000 new products introduced in 1995, over a tenth were low-fat items.

Leading opponents of the fat substitute Olestra, fast foods, high-fat items, and a good many other products are the Center for Science in the Public Interest (CSPI) and its director, Michael Jacobson. Otherwise known as the food police, they have alerted the public to many problems of the average American diet. Critics claim that CSPI exaggerates facts out of proportion to reality. Thus, truth blurs with fiction, making it difficult for the consumer to draw a reasonable conclusion. Minna Morse explores these issues in "The Food Police," allowing the reader to decide.

In other news, Campbell's is bidding for an increased market share by adding more chicken to a favorite, chicken noodle soup, and is introducing new lines of frozen soups, nearly fat-free cream soups, and soups in glass jars. Rice cakes have made a comeback since their manufacturer added chocolate and popcorn flavors, thus conceding that taste is the most important issue. H. J. Heinz will capitalize on the consumer's fixation with organic products and will offer organic baby foods, at a significantly higher price, of course. And KFC, which sells half the fried chicken in the United States, boosted its stagnant sales by adding roast chicken as well as chicken pot pies. Thus we end another year.

Cultural change clearly is occurring in our lifetimes. An orange was a treat in the toe of my mother's Christmas stocking. As a child I had fresh oranges and orange juice in cans. For my daughters, frozen orange juice was commonplace. My grandchildren enjoy drinking it from sealed cartons and fortified with calcium, although all of the previous options remain. Which of the new food experiences being planned for us will we like, and which will retreat into oblivion? Perhaps all we can say with certainty is that there will be change.

Looking Ahead: Challenge Questions

What current consumer trends and trends in the food industry will and will not support healthier lifestyles?

What demands do you think your generation will place on the food industry two or three decades from now?

What do you think is the role of a consumer watchdog organization such as CSPI? Would you change its approach, and if so, how?

Does change always equal progress? Why or why not? Give examples from the nutrition field.