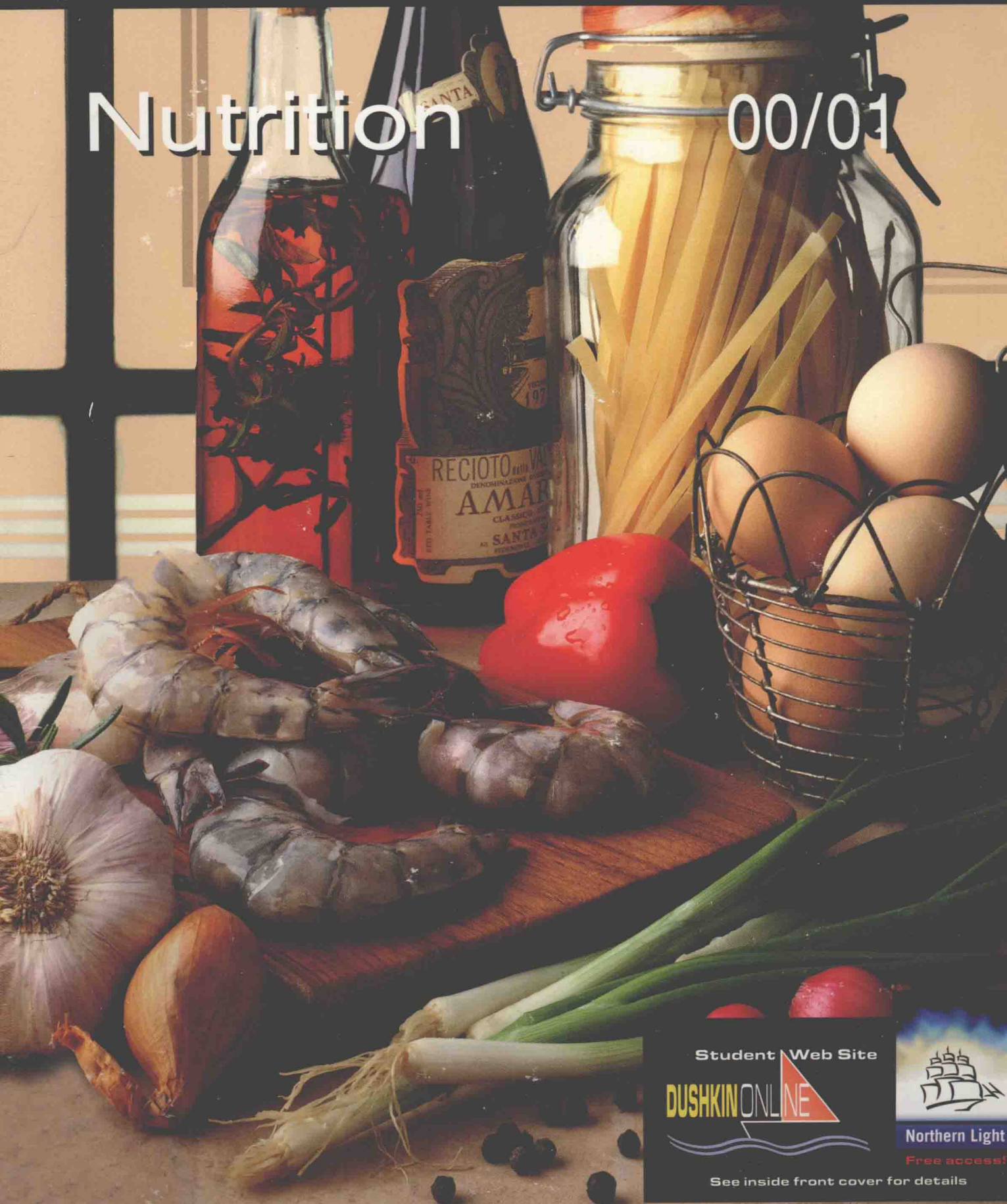


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## Nutrition

00/01

*Twelfth Edition*



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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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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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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.

New to ANNUAL EDITIONS is the inclusion of related World Wide Web sites. These sites have been selected by our editorial staff to represent some of the best resources found on the World Wide Web today. Through our carefully developed topic guide, we have linked these Web resources to the articles covered in this ANNUAL EDITIONS reader. We think that you will find this volume useful, and we hope that you will take a moment to visit us on the Web at <http://www.dushkin.com> to tell us 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 this *Annual Editions: Nutrition 00/01*, 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 dis-

ease, and weight control. All are topics which 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. This unit is intended primarily 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. Also, *World Wide Web* sites can be used to further explore topics. These sites are cross-referenced by number in the topic guide. 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.

*Annual Editions: Nutrition 00/01* 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.

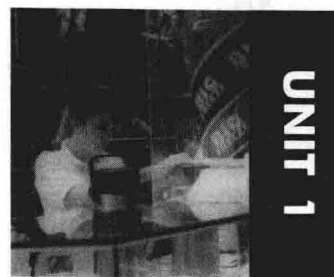
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Charlotte C. Cook-Fuller  
Editor



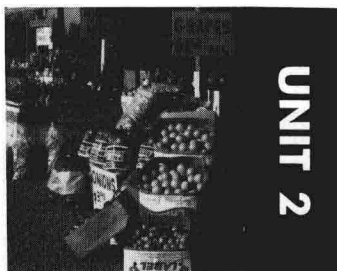
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2. <b>Nutrient Requirements Get a Makeover: The Evolution of the Recommended Dietary Allowances</b> , <i>Food Insight</i> , September/October 1998. The <b>Recommended Dietary Allowances (RDAs)</b> were conceived in 1941 to establish nutrient amounts that would <b>prevent deficiency diseases</b> . Currently a <b>more comprehensive view</b> establishes average requirements, adequate intake, and tolerable upper intake levels.	13
3. <b>Staking a Claim to Good Health</b> , Paula Kurtzweil, <i>FDA Consumer</i> , November/December 1998. <b>Health claims</b> on <b>food labels</b> alert consumers to the protective effects of foods in reducing <b>disease risk</b> . Currently 10 such claims can be scientifically supported and are authorized by the FDA.	16
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6. <b>The New Foods: Functional or Dysfunctional?</b> <i>Consumer Reports on Health</i> , June 1999. As long as a specific disease is not mentioned and the benefit comes from the food's nutrients, Congress allows " <b>structure and function</b> " <b>claims</b> on food labels. <b>Ambiguities</b> over what this means has led to a proliferation of food items on grocery shelves.	23
7. <b>The Curse of Frankenfood: Genetically Modified Crops Stir Up Controversy at Home and Abroad</b> , Phillip J. Longman, <i>U.S. News &amp; World Report</i> , July 26, 1999. <b>Genetically modified crops</b> are commonplace in our food supply. Paradoxically, they have both resolved some problems of crop production and raised <b>health and environmental issues</b> that are international in scope.	27
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9. <b>It's Crunch Time for P&amp;G's Olestra</b> , Pamela Sherri, <i>U.S. News &amp; World Report</i> , May 31, 1999. The synthetic fat <b>olestra</b> has achieved some acceptance but remains highly <b>controversial</b> . Food activists have persistently opposed its use. Consumers and food producers are wary of the label warning required by the FDA.	32
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## Trends Today and Tomorrow

Ten 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.



## 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.

- |  |           |
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| <b>11. Fats: The Good, the Bad, the Trans,</b> George Blackburn, <i>Health News</i> , July 25, 1999.   | <b>38</b> |
| <i>Fats</i> are required for good <b>health</b> , but the wrong kinds of fat can be harmful. In previous years we committed to margarine rather than butter to avoid saturated fat. Now we find that the <b>trans fatty acids</b> in margarine (and other processed foods) are just as harmful to health as is saturated fat.                |           |
| <b>12. Should You Be Eating More Fat and Fewer Carbohydrates?</b> Tufts University Health & Nutrition Letter, February 1999.   | <b>40</b> |
| Emerging information about <b>heart disease</b> indicates that more <b>fat</b> as opposed to <b>carbohydrates</b> may be advisable for those with <b>syndrome X</b> . A discussion of these findings and approaches to achieving heart health provides useful guidelines.  |           |
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- 20. Food for Thought about Dietary Supplements,** 66  
Paul R. Thomas, *Nutrition Today*, March/April 1996.  
Billions of dollars are spent yearly on **dietary supplements**. Paul Thomas, who used them extensively, 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**.

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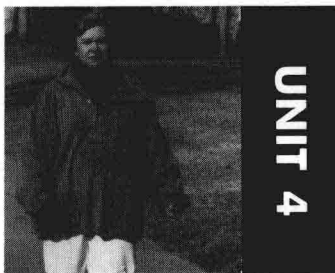
- 21. Disease-Fighting Foods? (Many Are Overhyped. But All Offer Important Lessons about Good Nutrition),** 76  
*Consumer Reports on Health*, March 1999.  
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- 22. "Mediterranean Diet" Reduces Risk of Second Heart Attack,** 78  
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- 23. Homocysteine: "The New Cholesterol"?** 80  
*The Cleveland Clinic Heart Advisor*, February 1999.  
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- 24. Soy: Cause for Joy?** 83  
Jack Raso and Ruth Kava, *Priorities*, Volume 11, Number 1, 1999.  
**Soybeans** contain an unusually high concentration of **isoflavones**, plant estrogens considered **protective** against diseases such as **coronary heart disease, cancer, and osteoporosis**. Soy products can be a good addition to the diet, but more research is needed to identify the risks of high intakes.
- 25. False Alarms about Food,** 86  
*Consumer Reports on Health*, February 1999.  
While **true allergies** exist, their incidence is greatly exaggerated. This article addresses **misconceptions** related to the frequency and seriousness of allergy occurrence, as well as lactose intolerance and monosodium glutamate reactions.
- 26. Questions and Answers about Cancer, Diet and Fats,** 90  
*International Food Information Council*, May 27, 1999.  
It is difficult to identify clear cause-and-effect relationships between **diet and cancer**. So far the strongest recommendations that can be supported indicate a **well-balanced diet** emphasizing fruits and vegetables, whole grains, and beans.
- 27. How to Grow a Healthy Child,** 92  
*Dairy Council Digest*, November/December 1998.  
**Children's** failure to eat **recommended diets** and the rise in **overweight** among the nation's youth trigger concern. Good childhood diets can protect against poor **early development** and later **osteoporosis**. Providing an environment for making healthy food selections is key.
- 28. A Focus on Nutrition for the Elderly: It's Time to Take a Closer Look,** 97  
*Nutrition Insights*, July 1999.  
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## Through the Life Span: Diet and Disease

Ten 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.





## Fat and Weight Control

Nine 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.

29. **Physical Activity and Nutrition: A Winning Combination for Health**, *Dairy Council Digest*, May/June 1998. 99

Avoiding and delaying disease requires a healthy lifestyle that includes **exercise** as well as a **good diet**.

30. **Alcohol and Health: Straight Talk on the Medical Headlines**, Charles H. Hennekens, *Health News*, March 31, 1998. 104

The news about **alcohol and health** is another example of **mixed reviews**. Although moderate and heavy drinking may be involved in several **chronic diseases**, alcohol offers some protection from **heart disease**.

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31. **Weight Control: Challenges and Solutions**, *Dairy Council Digest*, May/June 1999. 108

More than half of the adult population and a growing percentage of children are now categorized as either overweight or obese. Lack of **exercise** remains the primary key. Various **treatment and management approaches** are suggested.

32. **Childhood Obesity and Family SES Racial Differences**, Patricia B. Crawford, Allison Drury, and Sheila Stern, *Healthy Weight Journal*, May/June 1999. 113

Previous studies have shown **correlations between childhood obesity and socioeconomic status**, but newer studies find that this is not true for African American girls. **Weight similarities** between **white and African American girls** are associated with other variables of family structure.

33. **NIH Guidelines: An Evaluation**, Frances M. Berg, *Healthy Weight Journal*, March/April 1999. 115

This article **challenges the newest obesity guidelines** established by the National Heart, Lung, and Blood Institute (NHLBI). It points out fallacies related to **health risks** and reminds us that weight-loss methods are often ineffective and are themselves associated with health risks.

34. **The Great Weight Debate**, *Consumer Reports on Health*, January 1999. 119

This article acknowledges the **controversy** about weight, emphasizes the **health risks** of obesity, and points out that the **location of body fat** has significance. **Guidelines** for determining one's need to lose weight are offered.

35. **Exploding the Myth: Weight Loss Makes You Healthier**, Paul Ernsberger, *Healthy Weight Journal*, January/February 1999. 122

While **weight loss** is recommended to **ameliorate or cure a variety of conditions and diseases**, its ability to do so is **greatly exaggerated**. The benefits may be short-term only, but the **lifestyle changes** that accompany weight loss may be beneficial.

36. **Simplifying the Advice for Slimming Down**, *Tufts University Health & Nutrition Letter*, April 1999. 125

Once one has decided to lose weight, **choosing an appropriate weight loss plan** can be very difficult. **Guidelines** for selecting a safe plan and making it successful are offered.

37. **The History of Dieting and Its Effectiveness**, 128

Wayne C. Miller, *Healthy Weight Journal*, March/April 1997. Many **dieting schemes** have been tried with undesirable or temporary results. New approaches are often individualized but are expensive and may not be **safe** or **effective**.

- 38. Dieting Disorder**, David Rosen, *Health News*, May 10, 1999. **131**  
 The reason why 5 million Americans suffer from **eating disorders** is still unclear, but a recent study confirms that **severe dieting is a stronger predictor**. This and recognizing other risk factors can be useful in early intervention.
- 39. The Effects of Starvation on Behavior: Implications for Dieting and Eating Disorders**, David M. Garner, *Healthy Weight Journal*, September/October 1998. **133**  
 During **starvation**, the **physical and psychological changes** experienced are virtually identical to the behaviors of those with **anorexia nervosa**. This article addresses the misconceptions that willpower alone can control body weight and that emotional disturbance leads to binge eating.
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- 40. Food Safety: Don't Get Burned**, *Consumer Reports on Health*, July 1999. **140**  
 Answers to **common misconceptions** about **food handling practices** include cooking temperatures, freezing, and cutting boards.
- 41. Audits International's Home Food Safety Survey**, *Audits International*, 1999. **143**  
 Issues of **food safety** are relevant to **food handling at home** as well as in commercial establishments. Only a quarter of **survey participants** prepared food acceptably, although they knew they were being observed.
- 42. Avoiding Cross-Contamination in the Home**, *Institute of Food Science & Technology*, May 25, 1999. **150**  
**Cross-contamination of food** is preventable and would significantly reduce the incidence of **food-borne illness**. Using proper methods for food preparation and storage is essential.
- 43. Why You Need a Kitchen Thermometer**, *Tufts University Health & Nutrition Letter*, June 1998. **153**  
 Only the **thermometer** can tell you when your **food is safe**. To ensure that it has cooked enough, follow these tips.
- 44. Campylobacter: Low-Profile Bug Is Food Poisoning Leader**, Audrey Hingley, *FDA Consumer*, September/October 1999. **155**  
 The number-one cause of **food-borne illness** in the United States, **Campylobacter** is a resident of gastrointestinal tracts and is often found in raw **poultry**. Concern about **antibiotic resistance** in humans raises issues regarding the use of antibiotics in animals.
- 45. E. Coli 0157:H7—How Dangerous Has It Become?** *Nutrition & the M.D.*, September 1998. **158**  
 The extreme **virulence** of **E. Coli 0157:H7** means that we must eliminate it from food. Although the original **source** appears to be cattle, this organism has shown up in fresh produce as well.
- 46. A Crackdown on Bad Eggs**, Amanda Spake, *U.S. News & World Report*, July 12, 1999. **160**  
 The General Accounting Office estimates that hundreds of cases of **salmonellosis** occur yearly from **eggs**. New federal **storage standards** may help, but other problems must be addressed.



## Food Safety

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



## 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.

47. **Irradiation: A Safe Measure for Safer Food**, John Henkel, *FDA Consumer*, May/June 1998.  
Increased concern about the **safety of food** has resulted in **FDA approval** of irradiation for red meat. Over a period of 40 years, the FDA has found **irradiation** to be a safe and effective process and allows its use with a variety of other food products.
48. **Questions Keep Sprouting about Sprouts**, Paula Kurtzweil, *FDA Consumer*, January/February 1999.  
Increasingly, **food-borne illness** is linked to eating various kinds of **sprouts**. The seeds appear to be the source of the bacteria, making the solution difficult.

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49. **Twenty-Five Ways to Spot Quacks and Vitamin Pushers**, Stephen Barrett and Victor Herbert, *Quackwatch*, August 21, 1999.  
**Irresponsible promoters** of practices and gimmicks that are either **useless or harmful** abound. The savvy consumer will find **useful clues** in this article that will help identify such promoters.
50. **Yet Another Study—Should You Pay Attention?** 179  
*Tufts University Health & Nutrition Letter*, September 1998.  
A person reading reports of current health research will know that the evidence presented is often frightening and so contradictory that **finding truth** is difficult. However, knowing what different **types of studies are capable of proving** is key.
51. **Alternative Medicine—The Risks of Untested and Unregulated Remedies**, Marcia Angell and Jerome P. Kassirer, *The New England Journal of Medicine*, September 17, 1998.  
Many **alternative therapies** are closely connected to nutrition in that they include the use of **herbals** and other dietary remedies. These therapies have simultaneously become both more popular and more controversial.
52. **The Mouse That Roared: Health Scares on the Internet**, *Food Insight*, May/June 1999.  
Like information elsewhere, some **Internet sources** are **reliable**, and some initiate and promote **myths** that aren't always obvious. Learning how to choose sites is the first step in protection.
53. **Uprooting Herbal Myths**, *Consumer Reports on Health*, October 1998.  
**Myths and misconceptions** about **herbs** are common. Chemicals in herbs act as drugs, some of which help while others actually do harm. Their sale and use is **unregulated**.
54. **Herbal Weight Loss Tea: Beware the Unknown Brew**, *Healthy Weight Journal*, November/December 1998.  
Teas touted to promote **weight loss** can produce **risky** electrolyte imbalances, even causing death. This is another example of "let the buyer beware."
55. **5 Nutrition Topics That Are Not All They're Cracked Up to Be**, *Tufts University Health & Nutrition Letter*, Special Supplement, 1999.  
**Separating hype from fact on five popular topics** is the purpose of this article. Even the fear of dehydration has found a large following.
56. **Pyruvate: Just the Facts**, Joseph P. Cannon, *Nutrition Forum*, September/October 1998.  
Although **pyruvate studies** have been published in reputable journals, potential users should first know the **inside story**. The supportive evidence is sketchy and provided primarily by one researcher.

**57. Are Health Food Stores Better Bets than Traditional Supermarkets?** *Tufts University Health & Nutrition Letter*, May 1999. **200**

To many consumers it is logical to assume that the most wholesome foods are the **organic produce** and **food supplements** available in **health food stores**. Check again; it may not be true, and the "nutrition expert" on board may not be very knowledgeable either.

**58. The Unethical Behavior of Pharmacists**, Stephen Barrett, *Nutrition Forum*, January/February 1998. **203**

**Pharmacists** generally avoid the **ethical dilemma** that pits selling products to make a **profit** against selling **unproven herbals**, **homeopathic remedies**, and **excessive supplements**. By ignoring their obligation recommend and dispense such products responsibly, pharmacists contribute to misuse.

**Overview** **206**

**59. FAO Releases Annual State of Food and Agriculture Report Showing Worldwide Number of Hungry People Rising Slightly**, *Food and Agriculture Organization of the United Nations*, 1998. **208**

Although progress has been made in **reducing hunger and malnutrition** in **developing countries**, the numbers of undernourished and hungry people continue to escalate. The failure to reduce **poverty** is the primary cause. Rapidly expanding cities are of special concern for the future.

**60. Special Programme for Food Security at the Food and Agriculture Organization**, *Journal of Family and Consumer Sciences*, Volume 91, Number 1, 1999. **212**

Fears that **food security** cannot be achieved in developing countries are due to rapid **population expansion**. A program to **improve crop production** by small farmers has been proposed by the Food and Agriculture Organization (FAO) and approved by the World Food Summit.

**61. Starvation Syndrome in Africa**, Frances M. Berg, *Healthy Weight Journal*, September/October 1998. **214**

What happened to the Ik in Africa illustrates how far-reaching the **effects of starvation** can be. Appalling as it seems, **humanity erodes** into mere survival, and acts of cruelty and unconcern become the norm.

**62. How to Measure Malnutrition**, *Healthy Weight Journal*, September/October 1998. **216**

**Standards for measuring starvation** using body mass index (BMI) and guidelines for assessing **protein-calorie malnutrition** are provided.

**63. Hunger and Food Insecurity**, Katherine L. Cason, *Journal of Family and Consumer Sciences*, Volume 91, Number 1, 1999. **217**

Problems of **poverty, hunger, and food insecurity** have not been resolved in the United States. Victims from all ages and ethnic groups fail to grow, are anemic, or risk diseases. They become hostile and insecure. The purposes and resources of **federal nutrition programs** are identified, and recommendations are made.

**Glossary** **222**

**Index** **225**

**Article Review Form** **228**

**Article Rating Form** **229**



## World Hunger and Malnutrition

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

# Topic Guide

This topic guide suggests how the selections and World Wide Web sites found in the next section of this book relate to topics of traditional concern to students and professionals involved with the study of nutrition. It is useful for locating interrelated articles and Web sites for reading and research. The guide is arranged alphabetically according to topic.

The relevant Web sites, which are numbered and annotated on pages 4 and 5, are easily identified by the Web icon (🌐) under the topic articles. By linking the articles and the Web sites by topic, this ANNUAL EDITIONS reader becomes a powerful learning and research tool.

TOPIC AREA	TREATED IN	TOPIC AREA	TREATED IN
<b>Alcohol</b>	30. Alcohol and Health 🌐 <b>6, 13, 17</b>		
<b>Attitudes/ Knowledge</b>	5. Freshness Fallacy 8. Low-Calorie Sweeteners 41. Audits International's Home Food Safety Survey 52. Mouse That Roared 53. Uprooting Herbal Myths 55. 5 Nutrition Topics That Are Not All They're Cracked Up to Be 57. Are Health Food Stores Better Bets than Traditional Supermarkets? 58. Unethical Behavior of Pharmacists 🌐 <b>1, 2, 5, 7, 9, 10, 11, 32, 33, 34</b>		
<b>Carbohydrates</b>	12. Should You Be Eating More Fat and Fewer Carbohydrates? 13. Sugar: What's the Harm? 🌐 <b>1, 2, 10, 11, 12, 23, 26</b>		
<b>Cancer</b>	15. Best D-Fense 19. Fiber: Strands of Protection 24. Soy: Cause for Joy? 26. Questions and Answers about Cancer, Diet and Fats 29. Physical Activity and Nutrition 🌐 <b>6, 13, 14</b>	<b>Eating Disorders</b>	37. History of Dieting and Its Effectiveness 38. Dieting Disorder 39. Effects of Starvation on Behavior 🌐 <b>6, 17, 23, 25</b>
<b>Children/Infants</b>	27. How to Grow a Healthy Child 32. Childhood Obesity and Family SES Racial Differences 🌐 <b>10, 16, 18, 19, 21</b>	<b>Elderly</b>	28. Focus on Nutrition for the Elderly 29. Physical Activity and Nutrition 35. Exploding the Myth: Weight Loss Makes You Healthier 🌐 <b>11, 20</b>
<b>Controversies</b>	7. Curse of Frankenfood 9. It's Crunch Time for P&G's Olestra 12. Should You Be Eating More Fat and Fewer Carbohydrates? 13. Sugar: What's the Harm? 33. NIH Guidelines: An Evaluation 51. Alternative Medicine 🌐 <b>1, 2, 8, 9, 11, 12, 13</b>	<b>Fats/Substitutes</b>	9. It's Crunch Time for P&G's Olestra 12. Should You Be Eating More Fat and Fewer Carbohydrates? 22. "Mediterranean Diet" Reduces Risk of Second Heart Attack 🌐 <b>2, 11, 12, 24, 26</b>
<b>Coronary Heart Disease</b>	11. Fats: The Good, the Bad, the Trans 12. Should You Be Eating More Fat and Fewer Carbohydrates? 22. "Mediterranean Diet" Reduces Risk of Second Heart Attack 23. Homocysteine: "The New Cholesterol"? 24. Soy: Cause for Joy? 29. Physical Activity and Nutrition 🌐 <b>6, 15, 17, 32</b>	<b>Fiber</b>	19. Fiber: Strands of Protection 🌐 <b>2, 11, 12</b>
<b>Diet/Disease</b>	3. Staking a Claim to Good Health 11. Fats: The Good, the Bad, the Trans 12. Should You Be Eating More Fat and Fewer Carbohydrates? 13. Sugar: What's the Harm? 14. Vitamin C: Foods Yes, Pills No 16. Can Vitamin E Prevent Heart Disease? 18. National Academy of Sciences Introduces New Calcium Recommendations 19. Fiber: Strands of Protection 21. Disease-Fighting Foods?	<b>Food Allergies</b>	25. False Alarms about Food 🌐 <b>16</b>
		<b>Food Safety</b>	7. Curse of Frankenfood 41. Audits International's Home Food Safety Survey 43. Why You Need a Kitchen Thermometer 44. Campylobacter 46. Crackdown on Bad Eggs 47. Irradiation 48. Questions Keep Sprouting about Sprouts 🌐 <b>27, 28, 29, 30, 31</b>
		<b>Food Supply</b>	4. Are Fruits and Vegetables Less Nutritious Today? 6. New Foods: Functional or Dysfunctional? 7. Curse of Frankenfood 10. Supermarket Psych-Out 59. FAO Releases Annual State of Food and Agriculture Report 60. Special Programme for Food Security at the Food and Agricultural Organization 61. Starvation Syndrome in Africa 🌐 <b>3, 5, 36, 37</b>
		<b>Food-Borne Illness</b>	40. Food Safety: Don't Get Burned 41. Audits International's Home Food Safety Survey 42. Avoiding Cross-Contamination in the Home 43. Why You Need a Kitchen Thermometer 44. Campylobacter



TOPIC AREA	TREATED IN	TOPIC AREA	TREATED IN
<b>Food-Borne Illness (cont.)</b>	45. <i>E. Coli</i> O157:H7—How Dangerous Has It Become? 47. Irradiation 48. Questions Keep Sprouting about Sprouts ☉ <b>27, 28, 29, 30, 31</b>		52. Mouse That Roared 53. Uprooting Herbal Myths 55. 5 Nutrition Topics That Are Not All They're Cracked Up to Be 57. Are Health Food Stores Better Bets than Traditional Supermarkets? ☉ <b>2, 11, 12, 32, 33, 34</b>
<b>Guidelines/Recommendations</b>	2. Nutrient Requirements Get a Makeover 3. Staking a Claim to Good Health 8. Low-Calorie Sweeteners 11. Fats: The Good, the Bad, the Trans 12. Should You Be Eating More Fat and Fewer Carbohydrates? 14. Vitamin C: Foods Yes, Pills No 15. Best D-Fense 17. Disease of Too Much Iron 21. Disease-Fighting Foods? 22. "Mediterranean Diet" Reduces Risk of Second Heart Attack 28. Focus on Nutrition for the Elderly 29. Physical Activity and Nutrition 34. Great Weight Debate 36. Simplifying the Advice for Slimming Down 40. Food Safety: Don't Get Burned 41. Audits International's Home Food Safety Survey 42. Avoiding Cross-Contamination in the Home 43. Why You Need a Kitchen Thermometer 44. <i>Campylobacter</i> 46. Crackdown on Bad Eggs 48. Questions Keep Sprouting about Sprouts 50. Yet Another Study—Should You Pay Attention? 52. Mouse That Roared 53. Uprooting Herbal Myths 62. How to Measure Malnutrition ☉ <b>1, 2, 6, 9, 11</b>	<b>Nutrition Trends</b>	1. Millennium: Food and Nutrition ☉ <b>2, 11</b>
		<b>Physical Activity</b>	31. Weight Control: Challenges and Solutions ☉ <b>26, 32</b>
		<b>Risk/Benefit</b>	13. Sugar: What's the Harm? 14. Vitamin C: Foods Yes, Pills No 16. Can Vitamin E Prevent Heart Disease? 33. NIH Guidelines: An Evaluation 34. Great Weight Debate 35. Exploding the Myth: Weight Loss Makes You Healthier ☉ <b>1, 2, 3, 4, 5, 8</b>
		<b>Sugar/Substitutes</b>	8. Low-Calorie Sweeteners ☉ <b>2, 10, 11</b>
		<b>Supplements</b>	6. New Foods: Functional or Dysfunctional? 15. Best D-Fense 16. Can Vitamin E Prevent Heart Disease? 18. National Academy of Sciences Introduces New Calcium Recommendations 20. Food for Thought about Dietary Supplements ☉ <b>2, 5, 9, 11, 12, 13</b>
		<b>Vitamins</b>	5. Freshness Fallacy 14. Vitamin C: Foods Yes, Pills No 15. Best D-Fense ☉ <b>2, 10, 11, 12, 13</b>
<b>Herbals</b>	51. Alternative Medicine 53. Uprooting Herbal Myths 54. Herbal Weight Loss Tea 58. Unethical Behavior of Pharmacists ☉ <b>5, 9, 22, 32, 33, 34</b>	<b>Weight/Weight Control/Obesity</b>	13. Sugar: What's the Harm? 27. How to Grow a Healthy Child 29. Physical Activity and Nutrition 31. Weight Control: Challenges and Solutions 32. Childhood Obesity and Family SES Racial Differences 33. NIH Guidelines: An Evaluation 34. Great Weight Debate 35. Exploding the Myth: Weight Loss Makes You Healthier 36. Simplifying the Advice for Slimming Down 37. History of Dieting and Its Effectiveness 38. Dieting Disorder 54. Herbal Weight Loss Tea 56. Pyruvate: Just the Facts ☉ <b>2, 17, 23, 24, 25, 26</b>
<b>Hunger/Malnutrition</b>	37. History of Dieting and Its Effectiveness 39. Effects of Starvation on Behavior 59. FAO Releases Annual State of Food and Agriculture Report 61. Starvation Syndrome in Africa 62. How to Measure Malnutrition 63. Hunger and Food Insecurity ☉ <b>35, 36, 37</b>		
<b>Labeling</b>	3. Staking a Claim to Good Health		
<b>Minerals</b>	17. Disease of Too Much Iron 18. National Academy of Sciences Introduces New Calcium Recommendations ☉ <b>2, 10, 11, 12, 13</b>		
<b>Myths/Misinformation</b>	4. Are Fruits and Vegetables Less Nutritious Today? 5. Freshness Fallacy 25. False Alarms about Food 49. Twenty-Five Ways to Spot Quacks		

## ● AE: Nutrition

The following World Wide Web sites have been carefully researched and selected to support the articles found in this reader. If you are interested in learning more about specific topics found in this book, these Web sites are a good place to start. The sites are cross-referenced by number and appear in the topic guide on the previous two pages. Also, you can link to these Web sites through our DUSHKIN ONLINE support site at <http://www.dushkin.com/online/>.

**The following sites were available at the time of publication. Visit our Web site—we update DUSHKIN ONLINE regularly to reflect any changes.**

### General Sources

#### 1. American Dietetic Association

<http://www.eatright.org>

This consumer link to nutrition and health includes resources, news, marketplace, search for a dietitian, government information, and a gateway to related sites. The site includes a tip of the day and special features.

#### 2. The Blonz Guide to Nutrition

<http://www.blonz.com>

The categories in this valuable site report news in the fields of nutrition, food science, foods, fitness, and health. There is also a selection of search engines and links.

#### 3. Food Marketing Institute

<http://www.fmi.org>

FMI, a nonprofit association of grocery retailers, is committed to maintaining and improving a system of distribution of grocery products that is responsive to the changing needs and wants of customers.

#### 4. Institute of Food Technologists

<http://www.ift.org>

This site of the Society for Food Science and Technology is full of important information and news about every aspect of the food products that come to market.

#### 5. International Food Information Council Foundation

<http://ificinfo.health.org>

IFIC's purpose is to be the link between science and communications by offering the latest scientific information on food safety, nutrition, and health in a form that is understandable and useful for opinion leaders and consumers to access.

#### 6. 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, 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

#### 7. Food Science and Human Nutrition Extension

<http://www.exnet.iastate.edu/Pages/families/fshn/>

This extensive Iowa State University site links to latest news and reports, consumer publications, food safety information, and many other useful nutrition-related sites.

#### 8. Food Surveys Research Group

<http://www.barc.usda.gov/bhnrc/foodsurvey/home.htm>

Visit this site of Beltsville Human Nutrition Research Center Food Surveys research group first, and then click on USDA to keep up with nutritional news and information.

#### 9. U.S. Food and Drug Administration

<http://www.fda.gov/default.htm>

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.

### Nutrients

#### 10. Dole 5 A Day: Nutrition, Fruits & Vegetables

<http://www.dole5aday.com>

The Dole Food Company, a founding member of the National 5 A Day for Better Health Program, offers this site that is designed to entice children into taking an interest in proper nutrition.

#### 11. 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 and to find links to food and nutrition resources on the Internet.

#### 12. 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.

#### 13. 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, keep up on nutrition-related news, and peruse the national network of medical libraries.

### Through the Life Span: Diet and Disease

#### 14. 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.

#### 15. American Heart Association

<http://www.americanheart.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 warning signs, a reference guide, and explanations of diseases and treatments.

#### 16. The Food Allergy Network

<http://www.foodallergy.org>

This site, which welcomes consumers, health professionals, and reporters, includes product alerts and updates, information about food allergies, daily tips, and links to other sites.

#### 17. Go Ask Alice! from Columbia University Health Services

<http://www.goaskalice.columbia.edu>

This interactive site provides discussion and insight into a number of issues of interest to college-age people and those younger and older. Many questions about physical and emo-

tional well-being, fitness and nutrition, and alcohol, nicotine, and other drugs are answered.

### 18. Heinz Infant & Toddler Nutrition

<http://www.heinzbaby.com>

This site includes an educational section full of nutritional information and meal-planning guides for parents and caregivers, as well as articles and reviews by leading pediatricians and nutritionists.

### 19. LaLeche League International

<http://www.lalecheleague.org>

This site provides important information to mothers who are contemplating breast feeding. There are links to other sites.

### 20. National Osteoporosis Foundation

<http://www.nof.org>

The NOF has a mission of reducing the widespread prevalence of osteoporosis. It contains information about causes, prevention, detection, and treatment.

### 21. Nutrition for Kids: 24 Carrot Press

<http://www.nutritionforkids.com>

This Web site of 24 Carrot Press publishes material that takes a positive, fun approach to the more serious issues that affect children, including poor eating habits, obesity, and inactivity. Their site includes How to Teach Nutrition to Kids, Activity Guide, stickers, *Feeding Kids Newsletter*, and links.

### 22. Vegetarian Resource Group

<http://www.vrg.org>

The VRG offers information on everything of interest to vegans, vegetarians, and others.

## Fat and Weight Control

### 23. American Anorexia Bulimia Association

<http://www.aabainc.org/home.html>

The AABA is a nonprofit organization of concerned people dedicated to the prevention and treatment of eating disorders. It offers many services, including help lines, referral networks, school outreach, support groups, and prevention programs.

### 24. Calorie Control Council

<http://www.caloriecontrol.org>

The Calorie Control Council's Web site offers information on cutting calories, achieving and maintaining healthy weight, and low-calorie, reduced-fat foods and beverages.

### 25. Eating Disorders: Body Image Betrayal

<http://www.geocities.com/HotSprings/5704/edlist.htm>

This extensive collection of links leads to information on compulsive eating, bulimia, anorexia, and other disorders.

### 26. Shape Up America!

<http://www.shapeup.org>

At the Shape Up America! Web site you will find the latest information about safe weight management, healthy eating, and physical fitness. Links include Support Center, Cyberkitchen, Media Center, Fitness Center, and BMI Center.

## Food Safety

### 27. Centers for Disease Control and Prevention

<http://www.cdc.gov>

The CDC 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.

### 28. FDA Center for Food Safety and Applied Nutrition

<http://vm.cfsan.fda.gov>

This informative site leads to other sites that will tell you everything you might want to know about food safety and what government agencies are doing to ensure it.

### 29. Food Safety Information from North Carolina

<http://www.ces.ncsu.edu/depts/foodsci/agentinfo/>

This site from the Cooperative Extension Service at North Carolina State University has a database designed to promote food safety education via the Internet.

### 30. Food Safety Project

<http://www.exnet.iastate.edu/Pages/families/fs/>

The goal of this project is to develop educational materials that help the public to minimize the risk of food-borne illness. The site contains food safety lessons, 10 steps to a safe kitchen, consumer control points, and food law.

### 31. USDA Food Safety and Inspection Service

<http://www.fsis.usda.gov>

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."

## Health Claims

### 32. Diet, Health & Fitness

<http://www.ftc.gov/bcp/menu-health.htm>

This site of the Federal Trade Commission on the Web offers consumer education rules and acts, which include a wide range of subjects, from aging parents, to buying exercise equipment, to fraudulent health claims, to virtual health "treatments."

### 33. National Council against Health Fraud

<http://www.ncahf.org>

The NCAHF does business as the National Council for Reliable Health Information. At its Web page it offers links to other related sites, including Dr. Terry Polevoy's "Healthwatcher Net."

### 34. QuackWatch

<http://www.quackwatch.com>

Quackwatch Inc., a nonprofit corporation, provides this consumer guide to examine health fraud. Data for intelligent decision making on health topics are also presented.

## World Hunger and Malnutrition

### 35. Population Reference Bureau

<http://www.prb.org>

This is a key source for global population information—a good place to pursue data on nutrition problems worldwide.

### 36. World Health Organization

<http://www.who.ch>

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.

### 37. WWW Virtual Library: Demography & Population Studies

<http://demography.anu.edu.au/Virtuallibrary/>

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/>**

## Unit Selections

1. **Millennium: Food and Nutrition**, Jack Raso
2. **Nutrient Requirements Get a Makeover: The Evolution of the Recommended Dietary Allowances**, *Food Insight*
3. **Staking a Claim to Good Health**, Paula Kurtzweil
4. **Are Fruits and Vegetables Less Nutritious Today?** *University of California, Berkeley Wellness Letter*
5. **The Freshness Fallacy**, Minna Morse
6. **The New Foods: Functional or Dysfunctional?** *Consumer Reports on Health*
7. **The Curse of Frankenfood: Genetically Modified Crops Stir Up Controversy at Home and Abroad**, Phillip J. Longman
8. **Low-Calorie Sweeteners**, *Mayo Clinic Health Letter*
9. **It's Crunch Time for P&G's Olestra**, Pamela Sherrid
10. **Supermarket Psych-Out**, *Tufts University Health & Nutrition Letter*

## Key Points to Consider

- ❖ Which of the trends and developments predicted in the article, "Millennium, Food and Nutrition," do you believe are accurate? Why?
- ❖ What current consumer trends in the food industry will and will not support healthier lifestyles?
- ❖ Is the philosophical change that has occurred with the change from RDAs to DRIs a good one? Defend your answer.
- ❖ What demands do you think your generation will place on the food industry two or three decades from now? Why?
- ❖ What do you see as the issues related to the use of functional foods and those produced from genetically modified crops? How would you decide whether or not to buy them?
- ❖ Take a trip to the grocery store and try to identify the extent to which you are influenced by marketing techniques.
- ❖ Does change always equal progress? Why or why not? Give examples from the nutrition field.



## Links

[www.dushkin.com/online/](http://www.dushkin.com/online/)

7. **Food Science and Human Nutrition Extension**  
<http://www.exnet.iastate.edu/Pages/families/fshn/>
8. **Food Surveys Research Group**  
<http://www.barc.usda.gov/bhnrc/foodsurvey/home.htm>
9. **U.S. Food and Drug Administration**  
<http://www.fda.gov/default.htm>

These sites are annotated on pages 4 and 5.