

Table of Contents

Chapter 1: The Power of Food

Learning Objectives	1
It's All About the Food.....	4
Attitudes toward Healthful Eating	5
How Diets Have Changed	7
Health Risks.....	8
Why We Eat What We Eat	9
Choosing Healthful Foods	11
Nutrients in Foods	12
Energy Balance	13
Nutrient Density	15
Portion Distortion	16
A Place for Healthful Food in Foodservice	17
Operational Implications	17
The Alliance of Taste and Health Moves Forward	18
Learning Activities and For More Information	20

Chapter 2: Nutrition Standards and Tools

Learning Objectives	21
Dietary Reference Intakes	22
Daily Values.....	22
<i>Dietary Guidelines for Americans</i>	23
<i>MyPlate</i>	25
Food Pyramids	35
Food Labels.....	35
Nutrient Content Claims.....	37
Health Claims	38
Allergen Labeling.....	42
Organic and Natural Labeling	43
Front-of-Package Nutrition Labeling	44
Learning Activities and For More Information	47

Chapter 3: Carbohydrates

Learning Objectives	49
Nutrition Science	50
Recommendations for Carbohydrates	56
Culinary Science	57
Culinary Applications: Sugar	60
Sugar Substitutes	62
Learning Activities and For More Information	66

Chapter 4: Fats and Oils

Learning Objectives	67
The Science of Fats.....	69
Fats Used in Cooking	76
Tips for Reducing the Fat in Recipes.....	83
More Healthful Cooking Tips	84
Fats at-a-Glance.....	87
Learning Activities and For More Information	87

Chapter 5: Proteins

Learning Objectives	89
Functions of Protein	90
Protein Structure	90
Digestion and Metabolism.....	91
Protein Needs	92
Protein and Health	92
Protein is Satisfying	94
Major Sources of Protein.....	95
Turning Dietary Guidance into Meals	106
Learning Activities and For More Information	108

Chapter 6: Water and Beverages

Learning Objectives	109
How Much Water Does the Body Need?.....	110
Bottled Water . . . and Water in Bottles	114
Coffee	116
Tea.....	117
Dairy Drinks	121
Juices and Fruit Drinks.....	122
Soft Drinks	123
Alcoholic Beverages and Cooking with Alcohol	124
Learning Activities and For More Information	128

Chapter 7: Vitamins, Minerals and Phytochemicals

Learning Objectives	129
Vitamins: Fat-Soluble.....	133
Vitamins: Water-Soluble	139
Minerals: Major	148
Minerals: Trace.....	156
Phytochemicals, Potential Health Benefits and Sources.....	159
Enrichment and Fortification.....	164
Bioavailability	165
Nutrient Retention	166
Learning Activities and For More Information	169

Chapter 8: Planning Healthful Menus

Learning Objectives	171
Menu Trends	172
Starters	173
Soups.....	174
Salads and Dressings	176
Sandwiches.....	178
Main Courses	181
Sauces	183
Side Dishes	184
Breads	185
Desserts.....	186
Breakfast	188
Beverages	189
Presenting Food: Portioning and Plating	190
Children's Menus	192
Selecting Healthful Ingredients	194
Sustainable Agriculture and the Sustainable Foods Movement	196
Organic Foods	202
Functional Foods	203
Learning Activities and For More Information	208

Chapter 9: The Flavor Factor

Learning Objectives	209
The Physiology of Taste	211
Taste Interactions	215
What Makes Us Feel Full?	218
Flavors from Processes.....	221
Flavors from Ingredients.....	222
Seasoning Tips	225
Ethnic Influences	228
The Issue of Salt	230
Reducing the Sodium Content of Food	233
Learning Activities and For More Information	234

Chapter 10: Healthful Cooking Techniques

Learning Objectives	235
Roasting and Baking	237
Crispy-Baked and Oven-Crisped	238
Broiling and Grilling	239
Smoke-Roasting and Pan-Smoking	240
Sauteing, Searing, Stir-Frying, Pan-Frying and Deep-Frying.....	242
Microwave Cooking	244
Poaching, Simmering, Boiling, Sous Vide and Blanching.....	244
Steaming	247
Braising and Stewing.....	247
Sauces	248
Nutrient Retention	249
Learning Activities and For More Information	254

Chapter 11: Communicating Nutrition Messages

Learning Objectives	255
Nutrition on the Menu and the Healthcare Reform Act	257
Sharing Your Story	260
Community and Professional Involvement	261
Non-Commercial Foodservice	263
Staff Development	266
Making a Nutrition Claim	267
Calculating and Presenting Nutrient Data.....	269
Learning Activities and For More Information	275

Chapter 12: Food for Healthful Living

Learning Objectives	277
Meeting the Needs of Children	278
Meeting the Needs of Aging Adults	283
Meeting the Needs of Athletes	286
Weight Management	290
Meeting the Needs of Vegetarians	297
Religious Considerations	302
Kosher Meals	304
Halal Meals	308
Learning Activities	312

Chapter 13: Serving Guests with Special Health Needs

Learning Objectives	313
Cardiovascular Disease	315
Hypertension	320
Cancer	324
Diabetes Mellitus.....	330
Digestive Disorders	336
Food Allergies.....	341
Gluten Intolerance	354
Learning Activities	363

Appendices

A: Standards for Food and Diet Quality, American Institute of Wine & Food.....	366
B: Dietary Reference Intakes	368
C: Daily Values for Food Labeling.....	369
D: <i>MyPlate</i>	370
E: Body Mass Index Table.....	372
F: Exchange Lists for Diabetic Menu Planning.....	373
G: Carb Counting.....	378
H: Recipe Index with Carb Counts and Exchanges	376

References	377
Glossary	383
Index	393