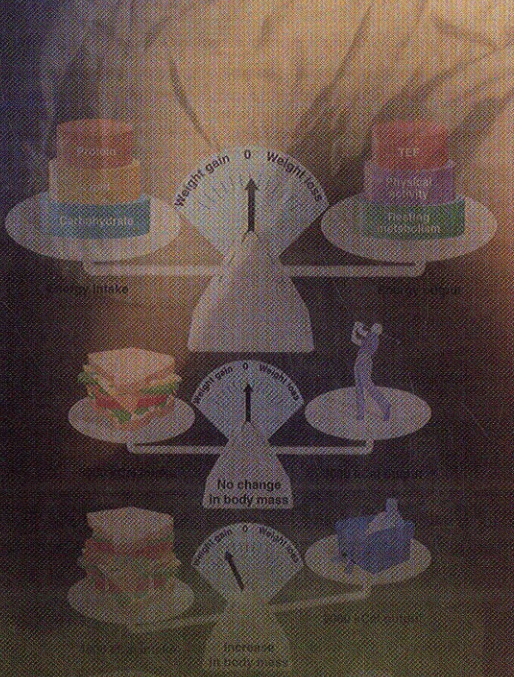


Sports and Exercise Nutrition

Third Edition

William D. McArdle
 Frank I. Katch
 Victor L. Katch



Wolters Kluwer | Lippincott Williams & Wilkins
 Health

thePoint

Contents

Preface vii

Acknowledgments xi

Introduction xv

PART I Food Nutrients: Structure, Function and Digestion, Absorption, and Assimilation 1

CHAPTER 1 The Macronutrients 2

CHAPTER 2 The Micronutrients and Water 46

CHAPTER 3 Digestion and Absorption of the Food Nutrients 90

PART II Nutrient Bioenergetics in Exercise and Training 123

CHAPTER 4 Nutrient Role in Bioenergetics 124

CHAPTER 5 Macronutrient Metabolism in Exercise and Training 154

CHAPTER 6 Measurement of Energy in Food and During Physical Activity 170

PART III Optimal Nutrition for the Physically Active Person: Making Informed and Healthful Choices 193

CHAPTER 7 Nutritional Recommendations for the Physically Active Person 194

CHAPTER 8 Nutritional Considerations for Intense Training and Sports Competition 233

CHAPTER 9 Making Wise Choices in the Nutrition Marketplace 254

PART IV Thermoregulation and Fluid Balance During Heat Stress 289

CHAPTER 10 Exercise Thermoregulation, Fluid Balance, and Rehydration 290

PART V Purported Ergogenic Aids 315

CHAPTER 11 Pharmacologic and Chemical Ergogenic Aids Evaluated 316

CHAPTER 12 Nutritional Ergogenic Aids Evaluated 360

PART VI Body Composition, Weight Control, and Disordered Eating Behaviors 391

CHAPTER 13 Body Composition Assessment and Sport-Specific Observations 392

CHAPTER 14 Energy Balance, Exercise, and Weight Control 449

CHAPTER 15 Disordered Eating 491

APPENDICES 527–656

APPENDIX A Nutritive Values for Common Foods, Alcoholic and Nonalcoholic Beverages, and Specialty and Fast-Food Items 527

APPENDIX B Energy Expenditure in Household, Occupational, Recreational, and Sports Activities 617

APPENDIX C Assessment of Energy and Nutrient Intakes: Three-Day Dietary Survey 630

APPENDIX D Body Composition Assessment 639

APPENDIX E Body Composition Characteristics of Athletes in Different Sports 647

APPENDIX F Three-Day Physical Activity Log 652

Index 657