

PART I WELCOME TO SPORT AND EXERCISE NUTRITION 1

CHAPTER 1	What Is Sport and Exercise Nutrition?	3
Origins and History of Sport Nutrition	4	
Sport Nutrition as a Subspecialty of Nutrition	9	
Is Sport Nutrition an Art or a Science?	10	
The Short of It	10	
CHAPTER 2	What Can I Do With Sport Nutrition?	13
What Jobs Are Associated With Sport Nutrition?	14	
What Degrees and Credentials Are Needed?	16	
How Does Sport Nutrition Interface With Other Professions?	19	
The Short of It	20	

PART II BUILDING BLOCKS OF SPORT AND EXERCISE NUTRITION 21

CHAPTER 3	Energy Balance and Imbalance	23
What Is Energy?	24	
What Is Energy Balance?	28	
Effect of Metabolic Rate on Energy Balance	32	
Effect of TEF on Energy Balance	33	
What Is Energy Imbalance?	34	
The Short of It	37	
CHAPTER 4	Carbohydrate	39
What Is Carbohydrate and How Does It Relate to Exercise?	40	
What Are the Daily Carbohydrate Recommendations?	42	
Sources of Carbohydrate	45	
Distribution of Daily Carbohydrate Intake	49	
How Does an Athlete Carbohydrate Load?	55	
The Short of It	56	
CHAPTER 5	Protein	59
What Are Amino Acids and Proteins?	60	
Sources of Dietary Protein	62	
What Is the Daily Protein Recommendation?	64	
The Short of It	70	
CHAPTER 6	Fat	71
What Is Fat?	72	
How Is Fat Digested, Stored, and Utilized for Energy?	74	
How Is Fat Used During Rest and Exercise?	75	
What Is the Daily Recommendation for Fat?	78	

Sources of Fat.....	79
Are Some Fats Associated With Health Risks?.....	80
The Short of It.....	80
CHAPTER 7 Vitamins.....	83
What Are Vitamins?	84
How Do Vitamins Function?.....	85
How Much of Each Vitamin Is Recommended Daily?.....	88
Sources of Vitamins	92
The Short of It.....	94
CHAPTER 8 Minerals.....	95
What Are Minerals?	96
How Do Minerals Differ From Vitamins?	97
How Do Minerals and Exercise Affect the Body?.....	98
What Is the Recommended Daily Intake of Minerals?	103
Which Minerals Are Likely to Be Deficient?	105
The Short of It.....	109
CHAPTER 9 Water, Electrolytes, and Fluid Balance	111
What Is Homeostasis and How Is It Maintained?.....	112
Factors That Affect Water Balance.....	115
Factors That Affect Electrolyte Balance	117
Is Precise Regulation of Water Necessary?	118
Why Do Athletes Need Individualized Plans for Fluid and Electrolyte Intake?	119
What Type and How Much Fluid Should Be Consumed?.....	119
How Does Dehydration Affect Training, Performance, and Health?	128
Signs of Dehydration	130
The Short of It.....	130
CHAPTER 10 Weight, Body Composition, and Performance	131
What Is Body Weight?	132
What Is Body Composition?.....	135
How Do Weight and Body Composition Relate to Performance?.....	138
What Is Needed to Increase Muscle Mass?	146
How Much Muscle Mass Can Be Gained?	147
The Short of It.....	147
CHAPTER 11 Athletes and Disordered Eating	149
How Do Normal and Disordered Eating Differ?.....	150
What Is an Eating Disorder?.....	153
Which Athletes Are Most Susceptible?	157
Factors That Influence the Development of Eating Disorders	158
What Is the Female Athlete Triad?	159
The Short of It.....	161
Epilogue: The Future of Sport and Exercise Nutrition	163
Appendix A: Learn More About Sport and Exercise Nutrition.....	167
Appendix B: Implementing Sport and Exercise Nutrition in the Real World	171
Appendix C: Abbreviations, Acronyms, and Conversions	179
Bibliography	181
Index	187
About the Author	195