	Preface Acknowledgments	vi viii
Part I	Overview and History	
Chapter 1	Perceived Exertion  Developing the Concept 2  Early Perceived Exertion Studies 4  The Three Effort Continua 6  Defining Perceived Exertion 8	2
Chapter 2	Pain Defining Pain 11 Special Aspects of Pain 11	10
Chapter 3	Measuring Perceived Exertion and Pain The Borg RPE and CR10 Scales 13 When to Use the Scales 14 What Scale to Use 14 Some Misuses of the Scales to Avoid 15	13
Part II	Principles of Scaling and Using the Borg Scales	
Chapter 4	Psychophysical Scaling Ratio Scaling 19 Interindividual and Other Interprocess Comparisons 24	18
Chapter 5	The Borg RPE Scale  Construction of the Scale 29  Reliability of the Scale 31  Validity of the Scale 34	29
Chapter 6	The Borg CR10 Scale  Construction of the Scale 39  Reliability of the Scale 41  Validity of the Scale 42	39

iii

iv Contents

Chapter 7	Administration of the Borg Scales	44
	General Principles 44 The Borg RPE Scale 46 The Borg CR10 Scale 49	
Part III	Applications of the Scaling Methods	
Chapter 8	Perceived Exertion in Working Capacity Tests  Aerobic Exercise Testing and RPE 54  Anaerobic Exercise Testing and RPE 57  Estimating Maximal and Resting Heart Rates 58  The Simple Run or Walk Test 59	<b>54</b>
Chapter 9	Scaling Pain and Related Subjective Somatic Symptoms Evaluating Symptoms and Pain 63 Scaling Pain With the Borg CR10 Scale 65	63
Chapter 10	External, Physiological, and Psychological Factors and Perceived Exertion The Environment 68 Nutrition and Drugs 69 Physiological Factors 70 Psychological Factors 72 Weighing All the Factors 74	68
Chapter 11	Applying the Scales to Training and Rehabilitation  Mode of Exercise 75  Frequency and Duration of Exercise 76  Intensity of Exercise 76  Short-Term Exercise and Muscular Training 78  Long-Term Exercise Regulation 79  Rehabilitation 79	75
Chapter 12	Ergonomics and Epidemiology Ergonomics 81 Epidemiological Intensity Evaluations 84	81
Chapter 13	Perceived Exertion and Sports  Short-Term Maximal Effort 87  Long-Term Maximal Effort 87  Short-Term Submaximal Effort 88  Long-Term Submaximal Effort 89  Sports With Mixed Efforts of Varying Duration 89	86
	References Index About the Author	92 98 103
	Appendix	104