Handbook of Sports Medicine and Science

The Paralympic Athlete

AN IOC MEDICAL COMMISSION PUBLICATION

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Foreword
By Dr Jacques Rogge

The physiology, biomechanics, and medical care of athletes must be studied and interpreted with special relationships to age, gender, and genetic potential. Each athlete must base programs of nutrition, physiological and psychological conditioning, and skill development on a base of what has been inherited from the parents. The special features brought to the competitive venues by athletes with a wide variety of disabilities must be carefully reviewed and understood in order to better serve their health, safety, and performance needs.

As levels of both interest and participation in sports by disabled athletes have grown markedly in recent years, so has the amount and sophistication of related research by sports medical personnel and sport scientists. Profs. Vanlandewijck and Thompson and their contributing authors have produced a handbook in which the research has not only been synthesized and summarized but also presented with practical applications of great use to sports medicine doctors, sports scientists, coaches and trainers, and the athletes themselves.

A major section of the handbook is devoted to all aspects of the science of disability sport: biomechanics, physiology, medicine, and the social sciences of philosophy, sociology, and psychology. A second major emphasis of the handbook is allocated to exercise testing and exercise prescription for Paralympic Sports. This includes aerobic and anaerobic power, strength, nutrition, mental preparation, and preparation for different meteorological environments.

The collaborative efforts of the International Olympic Committee and the International Paralympic Committee to produce this handbook have resulted in a major contribution to the health and welfare of many thousands of athletes.

Dr Jacques Rogge
IOC President
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Foreword

By Sir Philip Craven

Since its founding in 1989, the International Paralympic Committee (IPC) has experienced exponential growth in the number of sports but more importantly, the number of athletes competing against each other with the Paralympic Gold Medal as the ultimate prize. While much has been learned about the Paralympic athlete in these past two decades, there is still much more to be discovered. Scientists all over the world are now actively engaged in the study of Paralympic athletes. Much of the credit for the increased interest has to be attributed to the IPC Sports Science Committee.

This book, The Paralympic Athlete, introduces for the first time a comprehensive evaluation of the athlete from several different perspectives: basic science, applied science, social science, nutrition, and performance enhancement in both cold and hot environments. This book will be used to stimulate more research but can also be utilized by the coach and the athlete as a guide to improving athletic performance. The book can be a source of valuable information for coaches and athletes and will also be important in the classroom where now entire college and university courses are dedicated to the understanding of the Paralympic athlete.

Prof. Dr. Yves Vanlandewijck of Katholieke Universiteit (Leuven, Belgium) and Prof. Dr. Walt Thompson of Georgia State University (Atlanta, GA, USA), both members of the IPC Sports Science Committee, have successfully recruited the world’s best and most respected scientists to write exemplary chapters and then amalgamated this handbook into the most comprehensive book on the subject of the Paralympic athlete. The IPC Governing Board, Paralympic Sports, coaches and athletes, member nations, and the Paralympic Movement are indebted to all who contributed to this book.

Sir Philip Craven, MBE
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