Nutritional Aspects of Physical Performance

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Nutritional Aspects
of Physical Performance

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Preface

The relation between nutrition and physical performance has many aspects. The 15th Symposium of the Group of European Nutritionists in Wageningen dealt therefore not only with the question how physical performance is influenced by the composition of food, but also with other related problems. This book contains the lectures presented at this meeting. The main topic, nutritional aspects of physical performance, is discussed by several excellent contributions (Strauzenberg et al., de Wijn and co-workers, Hartmann and Oberli). These show in an impressive manner that athletic performance depends, besides a comprehensive
training, on an accurate diet, i.e., from the quantity and quality of various nutrients. Physical exercise also plays an important role in the prevention and treatment of certain civilization diseases as obesity, diabetes, atherosclerosis, etc.

Obesity has to be considered as an important health problem in our affluent societies. A major factor in its genesis is not only overfeeding but also the lack of physical exercise (Miller, Balabanski Parizkova). Passmore, among others, pointed out that increasing weight is generally associated more with diminished physical activity than with a rise in food intake. Among the risk factors of ischemic heart disease, nutrition as well as insufficient physical exercise plays an outstanding role. Recent publications show that polyunsaturated fatty acids also have a direct effect on the metabolism of the heart muscle and improves its physiological function. Physical exercise plays an essential role in the rehabilitation of heart infarction (Ten Hoor, Olsson, Kaiser et al.).

Berger and Bechtold discuss in their paper the effects of physical exercise on blood glucose levels and 'the potential benefits of exercise in the treatment of diabetic patents'. They emphasize the need of further research in this field. Other outstanding contributions deal with many connected problems, e.g., nutrition and physical performance of preschool children (Ferro-Luzzi et al.), relation between nutritional status and physical working capacity (Buzina et al.).

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the importance of nutrition education in this field (Saris et al.); further, very interesting papers, which unfortunately cannot be discussed in this short preface, are included in this book.

Finally, I would like to thank Prof. de Wijn, co-editor of this volume, Prof. Hautvast and the other members of the Dutch Organizing Committee for the marvellous preparation and realization of this symposium. A special debt of gratitude is due to the authors and to all those who have contributed to the publication of this book.

Rschlikon-Zrich, October 1978 Prof. Dr. J.C. Somogyi