



Nutrition and Physical Activity in Inflammatory Diseases

Edited by
Manohar L. Garg
and **Lisa G. Wood**

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Preface

This book presents recent developments and discoveries in the vital areas of inflammation and related chronic diseases to stimulate further research and to translate such discoveries rapidly to the interested parties. The information presented in this book includes: an introduction to inflammation, with special reference to aspects that can be modified by nutrition and physical activity interventions; a description of how various nutrients affect inflammatory process; a summary of the impact of aerobic and strength training on inflammatory mediators; and a comprehensive review of how nutrition and physical activity interventions can be used to modulate inflammation to prevent the development and progression of chronic diseases including obesity, diabetes mellitus, cardiovascular disease, eye disease, inflammatory bowel disease, asthma and arthritis.

Inflammatory mediators originating in a single organ can spill over into the circulation and influence functioning of other organs. As a result, chronic inflammatory diseases often cluster together in individuals and are likely to be linked together via the common element, inflammation. Literature describing nutrition and physical activity as modifiers of inflammation highlights the potential for behavioural interventions to modify a broad range of diseases using non-pharmacological approaches. This presents an opportunity for multidisciplinary approaches to be used to tackle the multi-organ perspectives of inflammatory diseases, involving clinicians, nutritionists, food scientists and exercise physiologists.

Our experience with our own research has been that interventions targeting a specific disease process are relevant for a variety of other indications. The intention of the book is to compile knowledge and recent developments that demonstrate the multi-organ effects of chronic inflammation and the nutritional and physical activity approaches that can be used to reduce inflammation, particularly when pharmacological approaches alone have struggled to deliver safe and efficacious disease management.

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