

Diabetes and Physical Activity

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Subjects: Diabetes, Exercise, Nutrition, Prevention, Treatment.

Description: *Diabetes and Physical Activity* collects current review articles on the relationship between exercise and diabetes, and discusses in detail the physiologic, molecular and genetic mechanisms involved in this interaction.

Purpose: The goal of the book, as stated in the preface, is to provide current evidence-based information regarding the effects of physical activity/inactivity and nutrition on insulin resistance and diabetes, and to determine the underlying mechanisms to explain the observed effects.

Audience: The book has much to offer and is highly recommended to research scientists, students and clinicians, including physicians, dieticians, exercise physiologists, biokineticists, physiotherapists, nurses and diabetes educators.

Features: The book is composed of 14 review articles each written by different experts and includes 15 figures and 8 tables. The following topics are addressed in the review articles: 1- "The relationship between Exercise, Nutrition and Type 2 Diabetes", 2- "Sedentary Behavior

as a Mediator of Type 2 Diabetes", 3- "Increasing Prevalence of Type 2 Diabetes in Sub-Saharan Africa: Not Only a Case of Inadequate Physical Activity", 4- "Exercise Interventions to Prevent and Manage Type 2 Diabetes: Physiological Mechanisms", 5- "Relationships between Exercise, Mitochondrial Biogenesis and Type 2 Diabetes", 6- "Interaction between Lipid Availability, Endurance Exercise and Insulin Sensitivity", 7- "Mechanisms in Exercise-Induced Increase in Glucose Disposal in Skeletal Muscle", 8- "The effect of Exercise on Obesity, Body Fat Distribution and Risk for Type 2 Diabetes", 9- "Gene-Physical Activity Interactions and Their Impact on Diabetes", 10- "Physical Activity and Gestational Diabetes Mellitus", 11- "Physical Activity in Children: Prevention of Obesity and Type 2 Diabetes", 12- "Diabetes and Exercise in the Elderly", 13- "Public health Recommendations for Physical Activity in the Prevention of Type 2 Diabetes Mellitus", and 14- "Exercise for People with Type 1 Diabetes".

Assessment: The contributors to this book are highly knowledgeable scientists and clinicians in the fields of diabetes, nutrition and physical activity. The book is a practical reference tool that is written about diabetes and exercise, and the role of exercise in the treatment and management of diabetes. In brief, the latest up-to-date public health guidelines for type 1 and 2 diabetes are discussed.

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