Metabolic diseases such as obesity, diabetes and hypertension are among the most common chronic illnesses and major causes of morbidity worldwide. These diseases are due to alterations of basic metabolic pathways such as those for glucose and lipids, and they are extremely costly to treat. Because of their increasing prevalence they have attracted tremendous attention from the scientific community in recent years and significant advances have been made in our understanding of their molecular nature.

• The potential lipotoxic effect of accumulation of fatty acids in non-adipose issue is thought to be a major component in the development of insulin resistance.

• Chronic exposure to elevated free fatty acids affects pancreatic β cell function, insulin secretion and lipid synthesis in the liver, and storage in adipose tissue.

• Maintaining the normal levels of fatty acids requires coordinated regulation between the liver, adipose tissue and skeletal muscle.

This book presents an integrated approach to the problems of obesity and type 2 diabetes and carefully examines the role that fatty acids and lipids play in the development and progression of these diseases and in the transition from one to the other. Topics covered include lipid metabolism, adipose tissue biology, β cell function and insulin resistance. Specific chapters also deal with the molecular genetics and molecular physiology of energy homeostasis. Fatty Acids and Lipotoxicity in Obesity and Diabetes will be of interest to anyone working on the causes of obesity and diabetes.
ABOUT THE AUTHOR

The Novartis Foundation is an international scientific and educational charity, which promotes the study and general knowledge of science and in particular encourages international co-operation in scientific research.

Chairman: Bruce Spiegelman.

SERIES

Novartis Foundation Symposia

For additional product details, please visit https://www.wiley.com/en-ca