Record Nr. UNINA9911019558403321 Fatty acids and lipotoxicity in obesity and diabetes // editors: Gregory **Titolo** Bock and Jamie Goode Pubbl/distr/stampa London, : John Wiley, 2007 **ISBN** 9786612123870 9781282123878 1282123874 9780470985571 0470985577 9780470985564 0470985569 Descrizione fisica 1 online resource (223 p.) Collana Novartis Foundation symposium:: 286 Altri autori (Persone) BockGregory GoodeJamie Disciplina 612.397 Soggetti Lipids - Metabolism Fatty acids Adipose tissues Obesity Diabetes Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto FATTY ACIDS AND LIPOTOXICITY IN OBESITY AND DIABETES; Contents; Chair's introduction; Transcriptional control of energy homeostasis through the PGC1 coactivators; DISCUSSION; Human obesity and insulin resistance: lessons from experiments of nature; DISCUSSION; Lipidinduced metabolic dysfunction in skeletal muscle; DISCUSSION; Stearoyl-CoA desaturase deficiency, hypercholesterolaemia, cholestasis and diabetes; DISCUSSION; The role of lipin 1 in adipogenesis and lipid metabolism; DISCUSSION; The role of the AMP-activated protein kinase in the regulation of energy homeostasis; DISCUSSION Endoplasmic reticulum stress and inflammation in obesity and type 2

diabetesDISCUSSION; The impact of insulin resistance on macrophage

death pathways in advanced atherosclerosis; DISCUSSION; Fatty acid transport in adipocytes and the development of insulin resistance; DISCUSSION; Vectorial acylation: linking fatty acid transport and activation to metabolic trafficking; DISCUSSION; Lipid storage and mobilization pathways in yeast; DISCUSSION; Cide proteins and the development of obesity; DISCUSSION; General discussion I; Visualizing brown adipose tissue with FDG-PET Adiponectin and adiponectin receptors in obesity-linked insulin resistanceDISCUSSION; Anti-inflammatory and antidiabetic roles of PPARy; DISCUSSION; Final Discussion; Nutrition, ageing and lipotoxicity;

Sommario/riassunto

The potential lipotoxic effect of accumulation of fatty acids in non-adipose tissues is thought to be a major component in the development of insulin resistance. Chronic exposure to high concentrations of free fatty acids in the blood affects pancreatic & 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 deals with the molecular aspects of fatty acid action in obesity and insulin resistance. The topics in

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