Record Nr. UNINA9910163021503321 Adipose tissue development [[electronic resource]]: from animal **Titolo** models to clinical conditions: 3rd ESPE Advanced Seminar in Developmental Endocrinology, Paris, March 12-13, 2009 / / volume editors, Claire Levy-Marchal, Luc Penicaud Pubbl/distr/stampa Basel;; New York,: Karger, c2010 **ISBN** 1-283-15369-6 9786613153692 3-8055-9451-8 Descrizione fisica 1 online resource (105 p.) Endocrine development, , 1421-7082 ; ; v. 19 Collana Altri autori (Persone) Levy-MarchalC (Claire) PenicaudLuc Disciplina 571.5/7 Soggetti Adipose tissues - Pathophysiology Adipose tissues - Diseases - Endocrine aspects Metabolic syndrome Developmental endocrinology 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 indexes. ""Cover""; ""Contents""; ""Preface""; ""Human Lipodystrophies: Genetic Nota di contenuto and Acquired Diseases of Adipose Tissue"": ""Abstract"": ""Definition and Diagnosis""; ""Classification""; ""Pathophysiology of Adipose Tissue Loss""; ""Genetic Lipodystrophies""; ""Acquired Lipodystrophies""; ""Treatment of Lipodystrophies""; ""Conclusion""; ""Acknowledgements""; ""References""; ""The Emergence of Adipocytes""; ""Abstract""; ""The Adipose Organ""; ""Developmental Origin of Fat""; ""Origin of Adipocytes""; ""Conclusion""; ""References""; ""Adipose Tissue and the Reproductive Axis: Biological Aspects"" ""Abstract""""Adipose Tissue as an Endocrine Organ""; ""Gene Expression in Subcutaneous Adipose Tissue from Growing Pigs and Neonatal and Fetal Pigs""; ""Adipose Depot Innervation""; ""Adipokines and Reproductive Function""; ""References""; ""Unraveling the Obesity and Breast Cancer Links: A Role for Cancer-Associated Adipocytes?""; ""Abstract""; ""Adipose Tissue Is an Active Component of the Tumor

Stroma""; ""Consequences for the Poor Prognosis Observed for Breast Cancer in Obese Patients: Some Answers, Many Questions""; ""Acknowledgements""; ""References""; ""Early Determinants of Obesity"" ""Abstract"""Infancy Is a Risk Period for Later Obesity""; ""Infancy Weight and Subsequent Puberty""; ""Common Genetic Determinants of Childhood Obesity""; ""Life-Course Associations with FTO and MC4R Variants""; ""Nutritional Regulation of Infancy Growth""; ""Biomarkers of Infant Growth and Adiposity""; ""Influence of Maternal Glucose on Birth Size and Infancy Growth""; ""Wider Determinants of Infant Feeding and Weight Gain""; ""Determinants of Parental Feeding Choices""; ""References""; ""Metabolic Syndrome in Childhood a€? Causes and Effects""; ""Abstract""
""Pathophysiology of the Insulin Resistance Syndrome in Childhood""""
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""Reduced Fetal Growth and Hormonal Function of the Adipose
Tissue"""Fat Growth and Insulin Resistance""; ""Conclusion"";
""References""; ""The Neural Feedback Loop between the Brain and
Adipose Tissues""; ""Abstract""; ""From the Brain to Adipose Tissues"";
""Role of Autonomic Nervous System in Adipose Tissues Biology"";
""From the Adipose Tissues to the Brain""; ""Perspectives"";
""References""; ""Author Index""; ""Subject Index""

## Sommario/riassunto

Nowadays, adipose tissue is not only regarded as an organ of storage related to fuel metabolism but also as an endocrine organ involved in the regulation of insulin sensitivity, lipids and energy metabolism. These proceedings cover the nervous regulation of both white and brown adipose tissue mass. Different physiological parameters such as metabolism (lipolysis and thermogenesis) and secretory activity (leptin and other adipokines) are reviewed. The plasticity of adipose tissue (proliferation, differentiation and apoptosis) showing the presence of a neural feedback loop between adipose tissue and the brain, which plays a major role in the regulation of energy homeostasis, is discussed. Merging basic knowledge and various clinical conditions, this thorough review is of great interest to both scientists and physicians, in particular pediatricians, interested in obesity, endocrinology and nutrition.