Record Nr. UNINA9910790070103321 Autore Polakof Sergio **Titolo** Brain glucosensing [[electronic resource]]: physiological implications / / Sergio Polakof Pubbl/distr/stampa Hauppauge, NY,: Nova Science Publishers, c2010 **ISBN** 1-61761-701-6 Descrizione fisica 1 online resource (79 p.) Collana Neurology - laboratory and clinical research developments Disciplina 572/.565 Soggetti Glucose - Metabolism Brain Neurochemistry Homeostasis Blood glucose Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto ""BRAIN GLUCOSENSING: PHYSIOLOGICAL IMPLICATIONS "": ""BRAIN GLUCOSENSING: PHYSIOLOGICAL IMPLICATIONS""; ""Contents""; ""Preface""; ""Introduction""; ""Glucose Metabolism in the Brain""; ""Sites of Glucosensing in the Brain""; ""The Glucosensor Mechanism in the Brain""; ""4.1. Glucose-Excited Neurons""; ""4.1.1. Glucose Transport""; ""4.1.2. Glucose Phosphorylation""; ""4.1.3. Distal Sensing of Metabolic Signals""; ""4.2. Glucose-Inhibited Neurons""; ""Lactate as Metabolic Coupling between Astrocytes and Glucosensing Neurons""; ""Network of Hypothalamic Glucosensing Neurons"" ""6.1. Neurons of the Arcuatus Nucleus""""6.2. Neurons of the Ventromedial Nucleus""; ""6.3. Neurons of the Lateral Nucleus""; ""The Mechanisms Underlying Glucosensing During Hypoglycemia""; ""7.1. Systemic Mechanism Against Hypoglycemia""; ""7.2. Metabolic Central Counterregulation""; ""7.3. Sites of Detection of Hypoglycemia""; ""7.4. Counterregulation to Hypoglycemia in T1DM: Why Glucosensor Mechanisms Fail?"": ""7.5. Glucosensing Markers Involved in the Counterregulatory Response to Hypoglycemia""; ""Brain Glucosensing

and the Regulation of Food Intake and Energy Expenditure""

""8.1. Glucosensing Markers Involved in The Control of Food Intake

and Energy Expenditure""""Glucosensing Neurons as Metabolic Sensors""; ""Conclusion""; ""References""; ""Index""