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Titolo	Inflammation and Oxidative Stress in Neurological Disorders : Effect of Lifestyle, Genes, and Age / / by Akhlaq A. Farooqui
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ISBN	3-319-04111-8
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Descrizione fisica	1 online resource (364 p.)
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Soggetti	Neurosciences Human physiology Neurology Human Physiology Neurology
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 at the end of each chapters and index.
Nota di contenuto	1. The effects of diet, exercise, and sleep on brain metabolism and function2. Biochemical Aspects of Neuroinflammation 3. Contribution of dietary fat in neuroinflammation 4. Contribution of receptors, transcription factors, and genes in the induction of neuroinflammation 5. Effect of exercise on neurodegeneration in neurological disorders 6. Neurochemical Aspects of Oxidative and Nitrosative Stress 7. Contribution of dietary fat in the induction of oxidative stress 8. Contribution of dietary carbohydrates in induction of oxidative stress 9. Contribution of transcription factors and genes in the induction of oxidative stress 10. Effect of exercise on oxidative stress in neurological disorders 11. Summary, perspective, and directions for future studies.
Sommario/riassunto	Consumption of healthy balanced diet (colored and green vegetables, fresh fruits, lean meats, fish, and whole grain) along with moderate

1.

exercise (30-45 min/day), and 6-7 hours of sleep results in a healthier blood pressure pattern and low cholesterol levels leading into a reduced risk of obesity related diseases, such as diabetes, and metabolic syndrome. Both these pathological conditions are not only the risk factors for heart disease, but also contribute and promote the risk for stroke, Alzheimer disease, and depression. A healthy lifestyle -- which includes a healthy diet with plenty of fruits and vegetables, moderate exercise for maintaining a healthy body weight, and optimal sleep may help in preventing not only diabetes, and metabolic syndrome, but delaying the pathogenesis of stroke, Alzheimer disease, and depression. Information on diet, exercise, and sleep is scattered throughout the literature in the form of original papers, reviews, and some books, which deal with the effects of diet, exercise, and sleep on viscera. This monograph is the first to describe the effect of neuroinflammation and oxidative stress in relation to diet, exercise, and sleep on brain. It describes the contribution of dietary carbohydrates, fats, protein, and nucleic acids in neuroinflammation and oxidative stress in the normal aged brain and in the brains of patients with neurological disorders. Inflammation and Oxidative Stress in the Brain presents readers with cutting edge and comprehensive information on the effect of diet, exercise, and sleep on neuroinflammation and oxidative stress in normal brains and brains from patients with neurological disorders. It is hoped that this monograph will be useful to postgraduate students, faculty, research scientists, nutritionists, exercise physiologists, and physicians, who are curious about the molecular mechanisms that link neuroinflammation and oxidative stress with the pathogenesis of neurotraumatic, neurodegenerative, and neuropsychiatric disorders.