Record Nr. UNINA9910583095403321 **Titolo** Addictive substances and neurological disease: alcohol, tobacco, caffeine, and drugs of abuse in everyday lifestyles / / edited by Ronald Ross Watson, University of Arizona, Arizona Health Sciences Center, Tucson, AZ, USA, Sherma Zibadi, Department of Pathology, University of South Florida Medical School, Tampa, FL, USA Pubbl/distr/stampa London:,: Academic Press, an imprint of Elsevier,, [2017] 2017 Descrizione fisica 1 online resource (xv, 398 pages): illustrations (chiefly color) Collana Gale eBooks Disciplina 616.8607 Soggetti Substance abuse - Physiological aspects Substance abuse - Psychological aspects Drugs of abuse - Physiological effect Nervous system - Diseases Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapter and index. Nota di contenuto Acute ethanol-induced changes in microstructural and metabolite concentrations on the brain: noninvasive functional brain Imaging --Prenatal alcohol exposure and neuroglial changes in neurochemistry and behavior in animal models -- Alcohol on histaminergic neurons of brain -- Antenatal alcohol and histological brain disturbances --Alcohol intoxication and traumatic spinal cord injury: basic and clinical science -- Visual and auditory changes after acute alcohol ingestion --Zebrafish models of alcohol addiction -- Effect of alcohol on the regulation of a-Synuclein in the human brain -- Consumption of ethanol and tissue changes in the central nervous system -- Ethanol consumption and cerebellar disorders -- Gene expression in CNS regions of genetic rat models of alcohol abuse -- Role of TLR4 in the ethanol-induced modulation of the autophagy pathway in the brain --

Cholinergic signaling in ethanol reward -- Alcoholic neurological syndromes -- Frontal lobe dysfunction after developmental alcohol exposure: implications from animal models -- Ethanol's action

mechanisms in the brain: from lipid general alterations to specific protein receptor binding -- Antioxidant vitamins and brain dysfunction in alcoholics -- Serotonin deficiency and alcohol use disorders --Functional reorganization of reward- and habit-related brain networks in addiction -- Ethanol: neurotoxicity and brain disorders --Functionally relevant brain alterations in polysubstance users: differences to monosubstance users, study challenges, and implications for treatment -- Deep brain stimulation: a possible therapeutic technique for treating refractory alcohol and drug addiction behaviors -- Understanding the roles of genetic and environmental influences on the neurobiology of nicotine use -- Tobacco smoke and nicotine: neurotoxicity in brain development -- Paradise lost: a new paradigm for explaining the interaction between neural and psychological changes in nicotine addiction patients -- Interactions of alcohol and nicotine: CNS sites and contributions to their co-abuse -- Role of basal forebrain in nicotine alcohol co-abuse -- Chronic and acute nicotine exposure versus placebo in smokers and nonsmokers: a systematic review of resting-state fMRI studies -- Novel psychoactive substances: a new behavioral and mental health threat -- Cholesterol and caffeine modulate alcohol actions on cerebral arteries and brain -- Sleep, caffeine, and physical activity in older adults -- Ketamine: neurotoxicity and neurobehavioral disorders -- Left/right hemispheric "unbalance" model in addiction.

## Sommario/riassunto

Addictive Substances and Neurological Disease: Alcohol, Tobacco, Caffeine, and Drugs of Abuse in Everyday Lifestyles is a complete guide to the manifold effects of addictive substances on the brain, providing readers with the latest developing research on how these substances are implicated in neurological development and dysfunction. Cannabis, cocaine, and other illicit drugs can have substantial negative effects on the structure and functioning of the brain. However, other common habituating and addictive substances often used as part of an individual's lifestyle, i.e., alcohol, tobacco, caffeine, painkillers can also compromise brain health and effect or accentuate neurological disease. This book provides broad coverage of the effects of addictive substances on the brain, beginning with an overview of how the substances lead to dysfunction before examining each substance in depth. It discusses the pathology of addiction, the structural damage resulting from abuse of various substances, and covers the neurobiological, neurodegenerative, behavioral, and cognitive implications of use across the lifespan, from prenatal exposure, to adolescence and old age. This book aids researchers seeking an understanding of the neurological changes that these substances induce, and is also extremely useful for those seeking potential treatments and therapies for individuals suffering from chronic abuse of these substances.--