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Sommario/riassunto

"Recent advancement in neuroimaging research enables us to understand the brain mechanisms underlying oral functions, including mastication, swallowing, and sensory processing. Cumulating evidence has revealed that individual variations in brain signatures account for the difference in oromotor and sensory abilities, and the underlying neural mechanisms, including brain plasticity and functional adaptation, are critical to the clinical dental practice and geriatric oral healthcare. The association between aging, cognitive functions, and oral functions has been hotly debated. However, until now a full investigation in these issues and a synthesis of the individual disciplines (brain science and oral science) has not been fully established. This proposal aims to fill a current gap left by outdated texts, presenting up-to-date research evidence regarding the brain mechanisms of oral functions based on neuroimaging, to provide a theoretical framework about the brain-stomatognathic axis, and to encourage potential clinical applications in the dental practice, for both undergraduate and graduate dental students and for researchers specialising in neuroscience/brain science"--
