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## EXPECTED FUNCTIONS OF SALIVARY HSP70 IN THE ORAL CAVITY (REVIEW ARTICLE)

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*Tibor Károly Fábán<sup>1</sup>, Csaba Sőtő<sup>2</sup>, Minh Tu Nguyen<sup>2</sup>, Péter  
Csermely<sup>2</sup> and Pál Fejérdy<sup>1</sup>*

<sup>1</sup>Semmelweis University Budapest, Faculty of Dentistry, Clinic of Prosthetic Dentistry,  
Budapest, Hungary, EU;

<sup>2</sup>Semmelweis University Budapest, Faculty of Medicine, Institute of Medical Chemistry  
Molecular Biology and Pathobiochemistry, Budapest, Hungary, EU.

### ABSTRACT

*Saliva* is a major determinant of the environment on all oral surfaces in both healthy and pathological conditions. It is a body fluid, secreted by three pairs of major salivary glands and by many of minor salivary glands supplemented with several constituents originated from intact or destroyed mucosal cells, immune cells, oral microorganism and blood. *Salivary Hsp70* is an important constituent of saliva, originating from several sources including salivary glands, mucosal cells, gingival crevicular fluid, blood and oral microbes. Salivary Hsp70 seems to be excreted constitutively, but its level can be increased significantly with psychological stress conditions, and also with chewing and taste stimulation. Several physiotherapeutic procedures like massage and local heat stimulation of major salivary glands also increases the amount. *Expected functions* of salivary Hsp70 include immunological and other antimicrobial defense mechanisms, and also cytoprotective effects on mucosal and immune cells. Consequently, it likely plays a role in healing of mucosal wounds and ulcers; in defense against gingival inflammation; in release of immune answer toward mucosal tumors; and also in allergic and autoimmune mucosal processes. Salivary Hsp70 is also likely participating in the formation of acquired pellicle on tooth and denture surfaces, leading to a possible role in physico-chemical defense of tooth surfaces; in crystal growth homeostasis of the teeth; in bacterial adhesion to tooth/denture surfaces; and in prevention and healing of denture