Smokers' tongues fail taste test

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Smokers have fewer and flatter taste buds. A study of the tongues of 62 Greek soldiers, published in the open access journal *BMC Ear, Nose and Throat Disorders,* has demonstrated how cigarettes deaden the ability to taste.

Pavlidis Pavlos led a team of researchers from the Aristotle University of Thessaloniki who used electrical stimulation to test the taste threshold of the soldiers and endoscopes to measure the number and shape of a kind of taste bud called fungiform papillae. He said, "Statistically important differences between the taste thresholds of smokers and non-smokers were detected. Differences concerning the shape and the vascularisation of fungiform papillae were also observed".

By applying electrical current to the tongue, a unique metallic taste can be generated. Measuring how much current is required before a person perceives this sensation allows determination of their taste sensitivity. The 28 smokers in the study group scored worse than the 34 non-smokers. Upon close examination with a contact endoscope, the smoker's tongues had flatter fungiform papillae, with a reduced blood supply. Pavlos concludes, "Nicotine may cause functional and morphological alterations of papillae, at least in young adults".

More information: Evaluation of young smokers and non-smokers with electrogustometry and contact endoscopy. Pavlos Pavlidis, Vasilios Nikolaidis, Antonia Anogeianaki, Dimitrios Koutsonikolas, Georgios Kekes and George Anogiannakis; *BMC Ear, Nose and Throat Disorders* (in press); www.biomedcentral.com/bmcearnosethroatdisord/

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