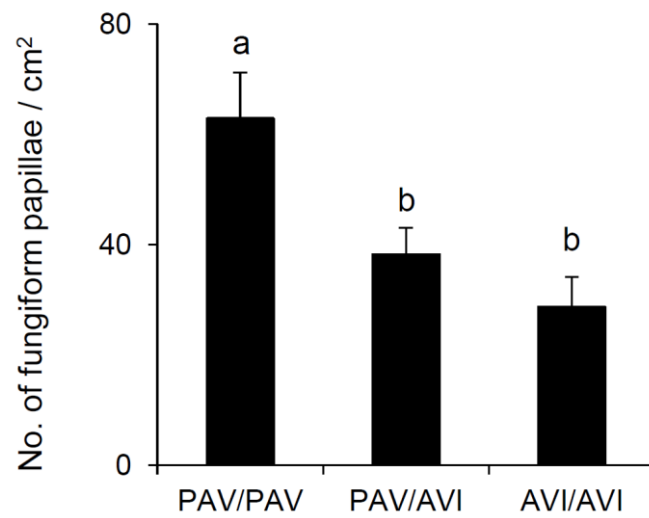


Supplemental Figure 1. Mean values (\pm SEM) of taste intensity evoked by stimulation with the sucrose (20 mmol/L), NaCl (20 mmol/L), citric acid (1.3 mmol/L), caffeine (1.5 mmol/L) and MSG (10 mmol/L) and those evoked by stimulation with the same solutions supplemented with L-Arg (1:1 molar ratio) according to *TAS2R38* genotypes. (a) Sucrose: $N = 21$. (b) NaCl: $N = 37$. (c) Citric Acid: $N = 46$. (d) Caffeine: $N = 59$. (e) MSG: $N = 60$. *Significant difference ($p < 0.037$; Fisher's LSD test, subsequent repeated-measures ANOVA). §Significant difference with respect to the corresponding value of each *TAS2R38* genotype in response to each stimulus without L-Arg supplementation ($p < 0.027$; Fisher's LSD test, subsequent repeated measures ANOVA).



Supplemental Figure 2. Mean values \pm SEM of density of fungiform papillae (n/cm^2) on the anterior part of the tongue in subjects with PAV/PAV genotype in *TAS2R38* locus ($N = 9$), PAV/AVI genotype ($N = 31$) and AVI/AVI genotype ($N = 24$). Different letters indicate significant difference ($p \leq 0.0091$; Fisher's LSD test; subsequent one-way ANOVA).