

Inter-individual characteristics on basic taste recognition thresholds in a college-aged cohort: potential predictive factors

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Supplementary Table 1. Eigenvalues and variance explained by the extracted factors (PCA)

¹ Factor	Eigenvalue	Variance explained (%)	Cumulative variance explained (%)
All participants			
<i>Factor 1</i>	2.226	20.2	20.2
<i>Factor 2</i>	1.560	14.2	34.4
<i>Factor 3</i>	1.387	12.6	47.0
<i>Factor 4</i>	1.143	10.4	57.4
Females			
<i>Factor 1</i>	2.478	24.8	24.8
<i>Factor 2</i>	1.629	16.3	41.1
<i>Factor 3</i>	1.129	11.3	52.4
<i>Factor 4</i>	1.026	10.3	62.6
Males			
<i>Factor 1</i>	2.036	20.4	20.4
<i>Factor 2</i>	1.405	14.1	34.3
<i>Factor 3</i>	1.256	12.6	47.0
<i>Factor 4</i>	1.132	11.3	58.3
<i>Factor 5</i>	1.069	10.7	69.0

¹Factors reported if the eigenvalue was >1

Supplementary Table 2. Descriptor components of the extracted factors (PCA)

Factor	¹Components directly correlated (coefficient)	¹Components inversely correlated (coefficient)
All participants		
<i>Factor 1</i>	Any family antecedents (0.932); family antecedents of hypertension (0.716); family antecedents of diabetes (0.681); family antecedents of overweight/obesity (0.569)	
<i>Factor 2</i>	Rhinitis (0.630); sinusitis (0.664); smoking (0.414); missing teeth (0.404); BMI (0.378)	Female (-0.411)
<i>Factor 3</i>	Female (0.658); sinusitis (0.460); rhinitis (0.455)	BMI (-0.649)
<i>Factor 4</i>	Dental cavities (0.716); missing teeth (0.608)	
Females		
<i>Factor 1</i>	Any family antecedents (0.921); family antecedents of diabetes (0.739); family antecedents of hypertension (0.726); family antecedents of overweight/obesity (0.615); BMI (0.347)	
<i>Factor 2</i>	Rhinitis (0.839); sinusitis (0.833)	
<i>Factor 3</i>	Missing teeth (0.727); dental cavities (0.630)	
<i>Factor 4</i>		Smoking (-0.878)
Males		
<i>Factor 1</i>	Any family antecedents (0.905); family antecedents of hypertension (0.723); family antecedents of diabetes (0.550); family antecedents of overweight/obesity (0.343)	BMI (-0.328)
<i>Factor 2</i>	Sinusitis (0.683); Rhinitis (0.521); smoking (0.502); missing teeth (0.465); dental cavities (0.309)	
<i>Factor 3</i>	BMI (0.699); family antecedents of overweight/obesity (0.660)	Sinusitis (-0.370)
<i>Factor 4</i>	Missing teeth (0.598); rhinitis (0.443)	Smoking (-0.663)
<i>Factor 5</i>	Dental cavities (0.841)	Rhinitis (-0.392); BMI (-0.302)

¹Components reported if the coefficient was >0.3

Supplementary Table 3. Influence of sex on tastant recognition threshold scores

	Females	Males	p-value
Sucrose, mM	5.2 ± 1.2	4.9 ± 1.5	0.013
MSG, mM	2.7 ± 0.9	2.7 ± 1.0	0.757
NaCl, mM	4.5 ± 0.9	4.5 ± 1.0	0.501
Citric acid ¹ , mM	3.4 ± 1.1	3.2 ± 1.3	0.577
PTC, μM	2.7 ± 1.6	2.8 ± 1.7	0.544
Quinine, μM	3.0 ± 1.2	3.1 ± 1.3	0.557
Sinigrin, μM	3.2 ± 1.0	3.0 ± 1.1	0.357
TTS	0.460 ± 0.119	0.455 ± 0.155	0.748

MSG: monosodium glutamate; NaCl: sodium chloride; PTC: phenylthiocarbamide; TTS: total taste score.

Tastant recognition thresholds are expressed as mean ± standard deviation (SD). The Mann-Whitney U test was applied for equal distribution variances. ¹The Median test was used for non-equal distribution variances.