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The coding of valence and identity in the mammalian taste system

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Supplementary Table 1

Figure	Groups (Ns refer to animals)	Statistical Analysis			
Fig. 3c	Water, (n = 24) Water+Light, (n = 24)	Two-tailed paired t-test, $P < 0.0001$			
Fig. 3d	Water, (n = 21) Water+Light, (n = 21)	Two-tailed paired t-test, $P < 0.0001$			
Fig. 3e (NBQX)	Pre, (n = 6) NBQX, (n = 6) Post, (n = 6)	RM One-Way ANOVA $F(2, 10) = 21.99$ $P = 0.0002$	Bonferroni post-hoc test: Pre vs. NBQX NBQX vs. Post Pre vs. Post	$P = 0.0009$ $P = 0.0004$ $P > 0.9999$	
Fig. 3e (Saline)	Pre, (n = 6) Saline, (n = 6) Post, (n = 6)	RM One-Way ANOVA, $F(2, 10) = 0.6491$, $P = 0.5432$			
Fig. 3f (NBQX)	Pre, (n = 7) NBQX, (n = 7) Post, (n = 7)	RM One-Way ANOVA $F(2, 12) = 53.3$ $P < 0.0001$	Bonferroni post-hoc test: Pre vs. NBQX NBQX vs. Post Pre vs. Post	$P < 0.0001$ $P < 0.0001$ $P > 0.9999$	
Fig. 3f (Saline)	Pre, (n = 7) Saline, (n = 7) Post, (n = 7)	RM One-Way ANOVA, $F(2, 12) = 2.784$, $P = 0.1016$			
Fig. 4a	Water, (n = 18) Sweet, (n = 18) Bitter, (n = 18)	RM One-Way ANOVA $F(2, 34) = 190.1$ $P < 0.0001$	Bonferroni post-hoc test: Water vs. Bitter Water vs. Sweet Bitter vs. Sweet	$P < 0.0001$ $P < 0.0001$ $P < 0.0001$	
Fig. 4c	Water, (n = 6) Bitter, (n = 6) Sweet, (n = 6) Sweet+Light, (n = 6)	RM One-Way ANOVA $F(3, 15) = 48.68$ $P < 0.0001$	Bonferroni post-hoc test: Water vs. Bitter Water vs. Sweet Water vs. Sweet+Light Bitter vs. Sweet Bitter vs. Sweet+Light Sweet vs. Sweet+Light	$P = 0.0003$ $P = 0.0037$ $P = 0.0001$ $P < 0.0001$ $P > 0.9999$ $P < 0.0001$	
Fig. 4e	Water, (n = 12) Sweet, (n = 12) Bitter, (n = 12) Bitter+Light, (n = 12)	RM One-Way ANOVA $F(3, 33) = 74.19$ $P < 0.0001$	Bonferroni post-hoc test: Water vs. Sweet Water vs. Bitter Water vs. Bitter+Light Sweet vs. Bitter Sweet vs. Bitter+Light Bitter vs. Bitter+Light	$P < 0.0001$ $P < 0.0001$ $P = 0.1103$ $P < 0.0001$ $P < 0.0001$ $P < 0.0001$	
Fig. 5b	Pre: Water, (n = 4) Water+Light, (n = 4) CNO: Water, (n = 4) Water+Light, (n = 4) Post: Water, (n = 4) Water+Light, (n = 4)	Two-tailed paired t-test	Water vs. Water+Light Pre: $P = 0.0054$ CNO: $P = 0.8900$ Post: $P = 0.0265$		
Fig. 5c	Pre: Water, (n = 6) Water+Light, (n = 6) NBQX: Water, (n = 6) Water+Light, (n = 6) Post: Water, (n = 6) Water+Light, (n = 6)	Two-tailed paired t-test	Water vs. Water+Light Pre: $P = 0.0049$ NBQX: $P = 0.9458$ Post: $P = 0.0042$		
Fig. 5e	Pre: Water, (n = 3) Water+Light, (n = 3) NBQX: Water, (n = 3) Water+Light, (n = 3) Post: Water, (n = 3) Water+Light, (n = 3)	Two-tailed paired t-test	Water vs. Water+Light Pre: $P = 0.0047$ NBQX: $P = 0.9125$ Post: $P = 0.0261$		

Fig. 5f	Pre: Water, (n = 3) Water+Light, (n = 3) Saline: Water, (n = 3) Water+Light, (n = 3) Post: Water, (n = 3) Water+Light, (n = 3)	Two-tailed paired t-test	Water vs. Water+Light	
			Pre: $P = 0.0261$ Saline: $P = 0.0230$ Post: $P = 0.0005$	
Fig. 5h	Saline groups: Pre-saline, (n = 5) Infusion-saline, (n = 5) Post-saline, (n = 5) NBQX groups: Pre-NBQX, (n = 5) Infusion-NBQX, (n = 5) Post-NBQX, (n = 5)	Saline groups: RM One-Way ANOVA $F(2, 8) = 0.1623, P = 0.8529$ NBQX groups: RM One-Way ANOVA $F(2, 8) = 11.49, P = 0.0044$	Bonferroni post-hoc test: Pre-saline vs. Infusion-saline Infusion-saline vs. Post-saline Pre-saline vs. Post-saline Pre-NBQX vs. Infusion-NBQX Infusion-NBQX vs. Post-NBQX Pre-NBQX vs. Post-NBQX	$P > 0.9999$ $P > 0.9999$ $P > 0.9999$ $P = 0.0057$ $P = 0.0206$ $P > 0.9999$
Fig. 5i	Saline groups: Pre-saline, (n = 8) Infusion-saline, (n = 8) Post-saline, (n = 8) NBQX groups: Pre-NBQX, (n = 8) Infusion-NBQX, (n = 8) Post-NBQX, (n = 8)	Saline groups: RM One-Way ANOVA $F(2, 14) = 0.149, P = 0.8629$ NBQX groups: RM One-Way ANOVA $F(2, 14) = 20.75, P < 0.0001$	Bonferroni post-hoc test: Pre-saline vs. Infusion-saline Infusion-saline vs. Post-saline Pre-saline vs. Post-saline Pre-NBQX vs. Infusion-NBQX Infusion-NBQX vs. Post-NBQX Pre-NBQX vs. Post-NBQX	$P > 0.9999$ $P > 0.9999$ $P > 0.9999$ $P = 0.0002$ $P = 0.0002$ $P > 0.9999$
Fig. 6b	AceK, (n = 6) Quinine, (n = 6) Water, (n = 6) Sucralose, (n = 6) Cyx, (n = 6)	Left port: RM One-Way ANOVA, $F(4, 20) = 1621, P < 0.0001$ Bonferroni post-hoc test: AceK vs. Quinine $P < 0.0001$ Quinine vs. Sucralose $P < 0.0001$ AceK vs. Water $P < 0.0001$ Quinine vs. Cyx $P > 0.9999$ AceK vs. Sucralose $P = 0.2962$ Water vs. Sucralose $P < 0.0001$ AceK vs. Cyx $P < 0.0001$ Water vs. Cyx $P > 0.9999$ Quinine vs. Water $P > 0.9999$ Sucralose vs. Cyx $P < 0.0001$ Right port: RM One-Way ANOVA, $F(4, 20) = 1621, P < 0.0001$ Bonferroni post-hoc test: AceK vs. Quinine $P < 0.0001$ Quinine vs. Sucralose $P < 0.0001$ AceK vs. Water $P < 0.0001$ Quinine vs. Cyx $P > 0.9999$ AceK vs. Sucralose $P = 0.2962$ Water vs. Sucralose $P < 0.0001$ AceK vs. Cyx $P < 0.0001$ Water vs. Cyx $P > 0.9999$ Quinine vs. Water $P > 0.9999$ Sucralose vs. Cyx $P < 0.0001$		
Fig. 6c	Pre Water, (n = 4) Pre Light, (n = 4) Pre Bitter, (n = 4) Pre Sweet, (n = 4) CNO Water, (n = 4) CNO Light, (n = 4) CNO Bitter, (n = 4) CNO Sweet, (n = 4) Post Water, (n = 4) Post Light, (n = 3) Post Bitter, (n = 4) Post Sweet, (n = 4)	Left port: Two-Way ANOVA Factor 1 (Pre, CNO, Post) x Factor 2 (Water, Light, Bitter, Sweet) Factor 1: $F(2, 35) = 0.2505, P = 0.7798$ Factor 2: $F(3, 35) = 779.6, P < 0.0001$ Bonferroni post-hoc test: Pre Water vs. CNO Water $P > 0.9999$ Pre Bitter vs. CNO Bitter $P > 0.9999$ CNO Water vs. Post Water $P > 0.9999$ CNO Bitter vs. Post Bitter $P > 0.9999$ Pre Water vs. Post Water $P > 0.9999$ Pre Bitter vs. Post Bitter $P > 0.9999$ Pre Light vs. CNO Light $P = 0.3016$ Pre Sweet vs. CNO Sweet $P > 0.9999$ CNO Light vs. Post Light $P > 0.9999$ CNO Sweet vs. Post Sweet $P > 0.9999$ Pre Light vs. Post Light $P > 0.9999$ Pre Sweet vs. Post Sweet $P > 0.9999$		
Fig. 6e	AceK, (n = 8) Quinine, (n = 8) Water, (n = 8) Sucralose, (n = 8) Cyx, (n = 8)	RM One-Way ANOVA $F(3, 21) = 668.7$ $P < 0.0001$	Bonferroni post-hoc test: AceK vs. Quinine $P < 0.0001$ AceK vs. Sucralose $P = 0.2554$ AceK vs. Cyx $P < 0.0001$ Quinine vs. Sucralose $P < 0.0001$ Quinine vs. Cyx $P > 0.9999$ Sucralose vs. Cyx $P < 0.0001$	
Fig. 6f (Sweet)	Pre-saline, (n = 8) Infusion-saline, (n = 8) Post-saline, (n = 8) Pre-NBQX, (n = 8) Infusion-NBQX, (n = 8) Post-NBQX, (n = 8)	Two-Way ANOVA Factor 1 (Saline, NBQX) x Factor 2 (Pre, Infusion, Post) Factor 1: $F(1, 42) = 0.984, P = 0.3269$ Factor 2: $F(2, 42) = 2.698, P = 0.0790$		

Fig. 6f (Bitter)	Pre-saline, (n = 8) Infusion-saline, (n = 8) Post-saline, (n = 8) Pre-NBQX, (n = 8) Infusion-NBQX, (n = 8) Post-NBQX, (n = 8)	Two-Way ANOVA Factor 1 (Saline, NBQX) x Factor 2 (Pre, Infusion, Post) Factor 1: $F(1, 42) = 2.008, P = 0.1638$ Factor 2: $F(2, 42) = 0.618, P = 0.5439$	
Extended Data Fig. 3b	Pre, (n = 8) Light, (n = 8)	Two-tailed paired t-test, $P = 0.0156$	
Extended Data Fig. 3d	Pre, (n = 5) Light, (n = 5)	Two-tailed paired t-test, $P = 0.0207$	
Extended Data Fig. 3f	Water, (n = 5) Water+Light, (n = 5)	Two-tailed paired t-test, $P = 0.0056$	
Extended Data Fig. 4b	Water, (n = 3) Water+Light, (n = 3)	Two-tailed paired t-test, $P = 0.0121$	
Extended Data Fig. 5a (hM4Di+Saline)	Pre: Water, (n = 6) Water+Light, (n = 6) Saline: Water, (n = 6) Water+Light, (n = 6) Post: Water, (n = 6) Water+Light, (n = 6)	Two-tailed paired t-test	Water vs. Water+Light Pre: $P = 0.0011$ Saline: $P < 0.0001$ Post: $P = 0.0014$
Extended Data Fig. 5b (WT+CNO)	Pre: Water, (n = 6) Water+Light, (n = 6) CNO: Water, (n = 6) Water+Light, (n = 6) Post: Water, (n = 6) Water+Light, (n = 6)	Two-tailed paired t-test	Water vs. Water+Light Pre: $P = 0.0025$ CNO: $P = 0.0008$ Post: $P = 0.0021$
Extended Data Fig. 5c (saline control for NBQX)	Pre: Water, (n = 6) Water+Light, (n = 6) Saline: Water, (n = 6) Water+Light, (n = 6) Post: Water, (n = 6) Water+Light, (n = 6)	Two-tailed paired t-test	Water vs. Water+Light Pre: $P = 0.0080$ Saline: $P = 0.0054$ Post: $P = 0.0046$
Extended Data Fig. 6a	Pre, (n = 5) CNO, (n = 5) Post, (n = 5)	RM One-Way ANOVA $F(2, 8) = 46.84$ $P < 0.0001$	Bonferroni post-hoc test: Pre vs. CNO $P = 0.0001$ CNO vs. Post $P < 0.0001$ Pre vs. Post $P > 0.9999$
Extended Data Fig. 6b	Pre, (n = 4) CNO, (n = 4)	Two-tailed paired t-test, $P = 0.7888$	