

# Evaluation of Unsaturated Alkanoic Acid Amides as Maskers of Epigallocatechin Gallate Astringency

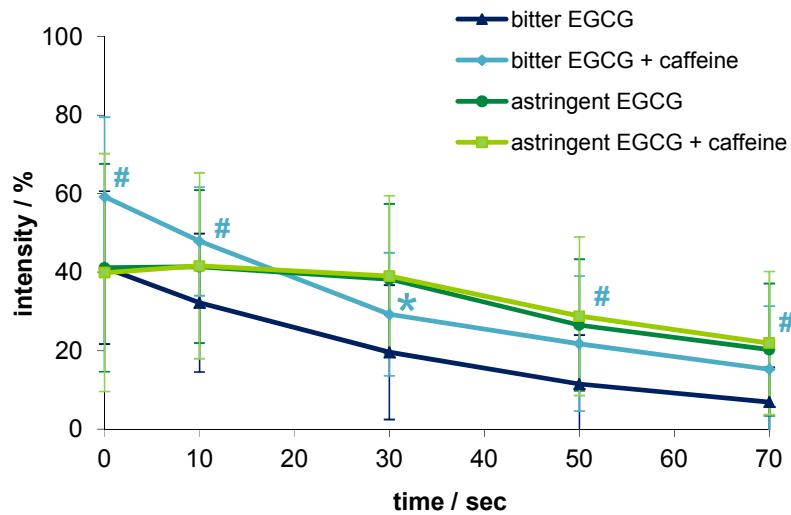
Katja Obst<sup>†</sup>, Susanne Paetz<sup>‡</sup>, Michael Backes<sup>‡</sup>, Katharina V. Reichelt<sup>‡</sup>,  
Jakob P. Ley<sup>‡\*</sup>, Karl-Heinz Engel<sup>†</sup>

<sup>†</sup>Technische Universität München, Chair of General Food Technology, Maximus-von-  
Imhof-Forum 2, D-85350 Freising-Weihenstephan, Germany;

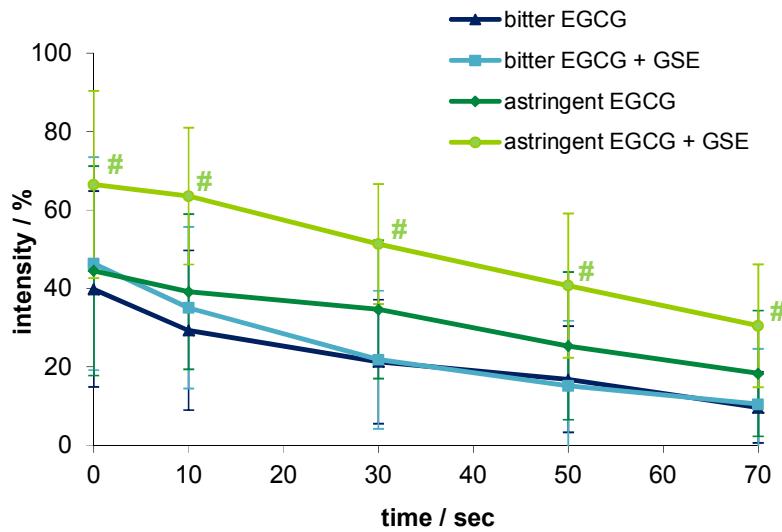
<sup>‡</sup>Symrise AG, Flavor & Nutrition Research & Technology, P.O. Box 1253, D-37601  
Holzminden, Germany

## SUPPLEMENTARY INFORMATION

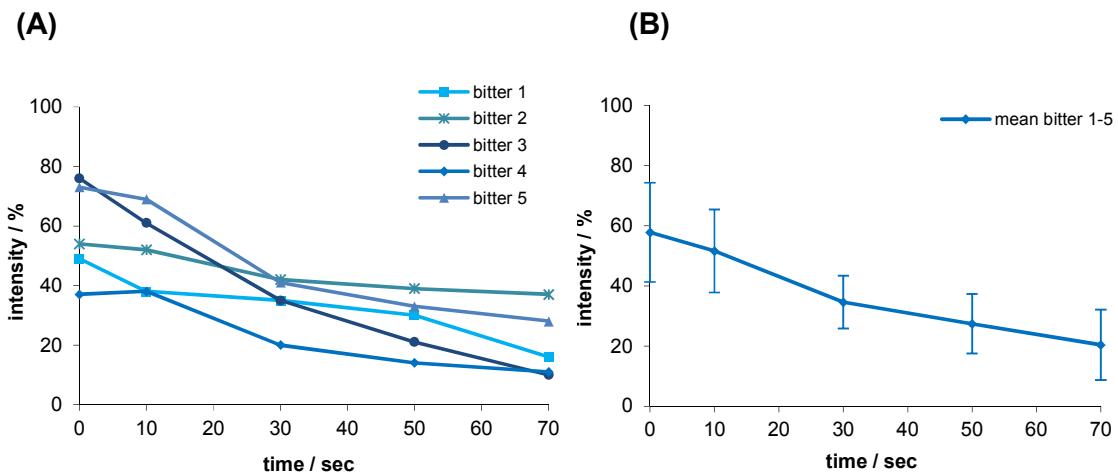
### FIGURES



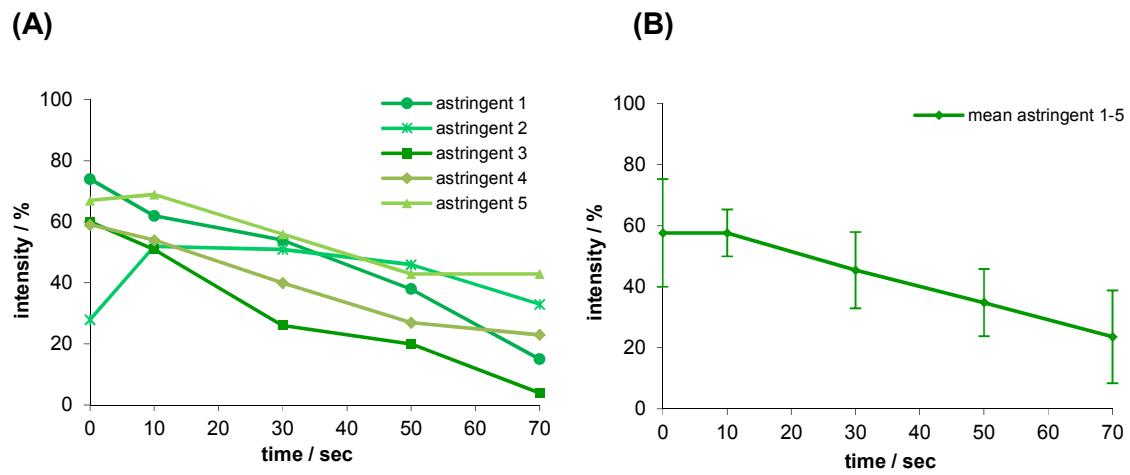
**F1.** Time-intensity curves of  $500 \text{ mg kg}^{-1}$  EGCG without caffeine: bitter (dark blue), astringent (dark green), with  $500 \text{ mg kg}^{-1}$  caffeine: bitter (light blue), astringent (light green); one replication, significant differences  $*p \leq 0.1$ ,  $\#p \leq 0.05$ .



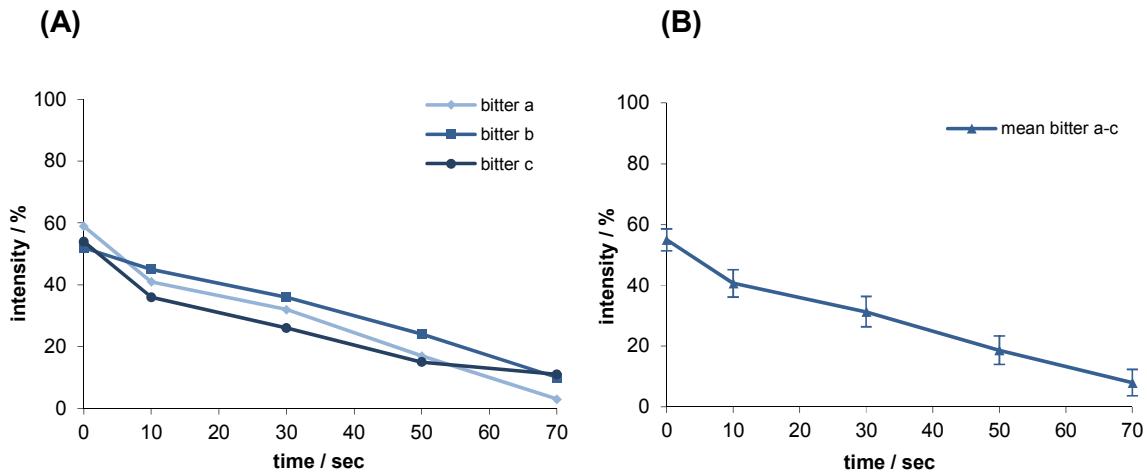
**F2.** Time-intensity curves of  $500 \text{ mg kg}^{-1}$  EGCG without grape seed extract (GSE): bitter (dark blue), astringent (dark green), with  $500 \text{ mg kg}^{-1}$  grape seed extract: bitter (light blue), astringent (light green); one replication, significant differences  ${}^{\#}p \leq 0.05$ .



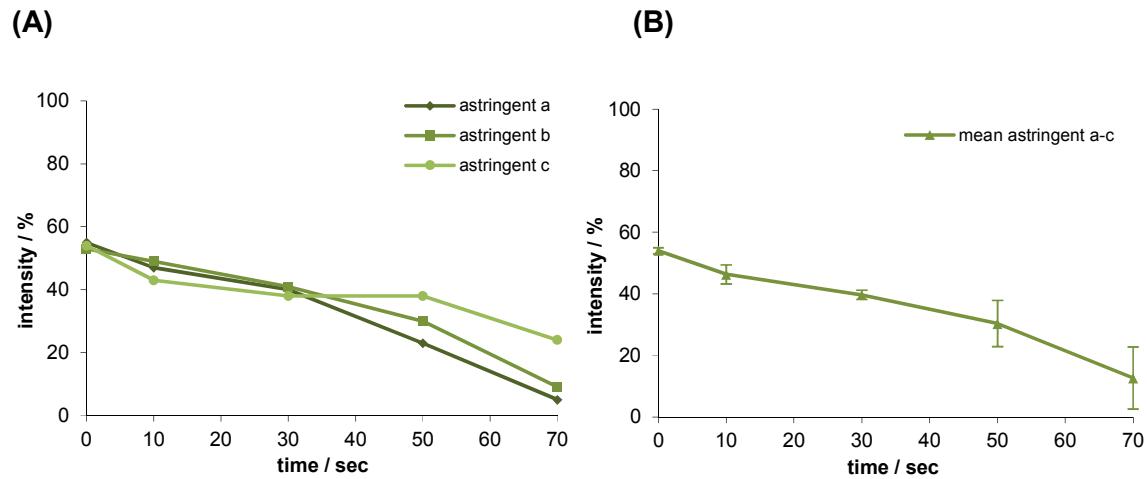
**F3. (A)** Time-intensity curves of five panelists in one session for the bitterness ratings of  $750 \text{ mg kg}^{-1}$  EGCG to present the inter-individual differences. **(B)** Mean and standard deviation of the results of the five panelists.



**F4.** **(A)** Time-intensity curves of five panelists in one session for the astringency ratings of  $750 \text{ mg kg}^{-1}$  EGCG to present the inter-individual differences. **(B)** Mean and standard deviation of the results of the five panelists.



**F5.** **(A)** Bitter time-intensity curves of  $750 \text{ mg kg}^{-1}$  EGCG, evaluated in three sessions by a selected panelist to present the intra-individual differences. **(B)** Mean and standard deviation of the results from the three sessions.



**F6.** **(A)** Astringency time-intensity curves of  $750 \text{ mg kg}^{-1}$  EGCG, evaluated in three sessions by a selected panelist to present the intra-individual differences. **(B)** Mean and standard deviation of the results from the three sessions.

## TABLES

**T1.** Comparison for all pairs of the tested EGCG concentrations by using Tukey-Kramer HSD. Concentrations not connected by the same letter are significantly different ( $p<0.1$ )

c(EGCG) time/s	bitter					astringent				
	0	10	30	50	70	0	10	30	50	70
3750 mg kg <sup>-1</sup>	A	A	A	A	A	A	A	A	A	A
2500 mg kg <sup>-1</sup>	A B	A B	A B	A B	A B	A B	A B	A B	A B	A B
1750 mg kg <sup>-1</sup>	A B C	B C	A B	A B C	B	B C	B C	B C	A B C	B C
1150 mg kg <sup>-1</sup>	B C	C D	B C	B C	B C	B C	B C D	B C	B C	C
750 mg kg <sup>-1</sup>	C	D	C	C D	B C	C	C D	C D	C D	C D
500 mg kg <sup>-1</sup>	D	E	D	D E	C D	C D	D	D	D E	D E
350 mg kg <sup>-1</sup>	D	E F	D E	E F	D	D E	E	E	E F	E
250 mg kg <sup>-1</sup>	E	F G	E	E F	D	D E F	E F	E	F	E
150 mg kg <sup>-1</sup>	E	G	E	F	D	E F	E F G	E	F	E
100 mg kg <sup>-1</sup>	E	G	E	F	D	E F	E F G	E	F	E
70 mg kg <sup>-1</sup>	E	G	E	F	D	E F	F G	E	F	E
45 mg kg <sup>-1</sup>	E	G	E	F	D	F	G	E	F	E