

SUPPLEMENTAL MATERIALS

Table 1. Glycemic and appetite responses by low and high phenolic metabolizer after beverages intake alone (trial I)

CGJ	3-hydroxyhippuric acid			Iso/ferulic-3'-O-glucuronide		
	Low	High	<i>p</i>	Low	High	<i>p</i>
4h glucose _t AUC	22,342 ± 818	21,870 ± 877	0.697	23,010 ± 682	19,596 ± 718	0.009
24h glucose _t AUC	140,270 ± 3,573	137,660 ± 5,084	0.677	144,176 ± 3,446	124,490 ± 3,485	0.003
24h glucose (mg/dL)	98.3 ± 2.4	96.2 ± 3.7	0.623	100.9 ± 2.4	87 ± 2.4	0.003
Hunger	50.5 ± 4.4	54.7 ± 3.5	0.459	55.5 ± 3.3	44.4 ± 4.6	0.078
Thirst	44 ± 5.6	51.4 ± 3.9	0.287	48.6 ± 4.5	45.2 ± 3.5	0.673
Fullness	41.2 ± 2.7	27.5 ± 3.3	0.003	33.5 ± 3.2	36.9 ± 2.3	0.545
Desire	53.1 ± 4.2	54.4 ± 4.7	0.829	55.9 ± 3.9	47.8 ± 4.2	0.259
Prospective consumption	49.7 ± 4.1	56.7 ± 4.2	0.249	56.1 ± 3.7	45.1 ± 3.8	0.101

LP	3-hydroxyhippuric acid			Iso/ferulic-3'-O-glucuronide		
	Low	High	<i>p</i>	Low	High	<i>p</i>
4h glucose _t AUC	22,944 ± 538	21,633 ± 830	0.194	22,640 ± 489	21,893 ± 918	0.464
24h glucose _t AUC	144,742 ± 4,601	133,189 ± 3,673	0.058	142,493 ± 4358	134,996 ± 4,220	0.228
24h glucose (mg/dL)	103.1 ± 3.2	94,5 ± 2.1	0.032	100.8 ± 3.5	96.5 ± 1.8	0.297
Hunger	51.3 ± 4.3	52.4 ± 4.2	0.860	54.3 ± 4.1	49.1 ± 4.3	0.385
Thirst	39.3 ± 4.3	43.3 ± 5.6	0.573	42.0 ± 4.3	40.5 ± 5.8	0.835
Fullness	28.9 ± 4.7	36.9 ± 4.0	0.205	28.9 ± 4.7	37.5 ± 3.9	0.174
Desire to eat	49.9 ± 4.5	456.5 ± 4.9	0.326	52.8 ± 4.3	53.5 ± 5.3	0.910

Prospective consumption	52.0 ± 4.5	53.8 ± 4.1	0.775	55.4 ± 4.1	50.0 ± 4.4	0.370
LPF	Caffeic acid-O-sulfate			Iso/ferulic-3'-O-glucuronide		
	Low	High	<i>p</i>	Low	High	<i>p</i>
4h glucose _t AUC	20,431 ± 759	23,468 ± 876	0.013	22,121 ± 876	21,732 ± 927	0.764
24h glucose _t AUC	128,851 ± 5,130	147,614 ± 4,689	0.011	139,856 ± 5,302	136,176 ± 5,522	0.637
24h glucose (mg/dL)	90.2 ± 3.5	103.1 ± 3.2	0.010	97.5 ± 3.7	95.5 ± 3.8	0.702
Hunger	58.1 ± 4.3	58.2 ± 4.0	0.980	57.4 ± 3.8	59.1 ± 4.5	0.774
Thirst	46.1 ± 4.3	53.5 ± 5.8	0.314	53.0 ± 4.4	45.7 ± 6.0	0.331
Fullness	37.6 ± 5.0	28.1 ± 2.8	0.107	34.8 ± 4.5	30.5 ± 3.4	0.476
Desire to eat	55.3 ± 4.3	56.7 ± 4.0	0.813	54.4 ± 4.0	58.0 ± 4.2	0.538
Prospective consumption	56.7 ± 4.8	60.6 ± 4.0	0.530	57.2 ± 4.2	60.4 ± 4.7	0.615

Values are mean ± SE in low and high phenolic metabolizer classified according to the median value for each compound. The variables for each phenolic compound were compared using independent T-test ($p < 0.05$). Appetitive sensations were assessed from 0-4h after beverage intake. CGJ: 100% Concord grape juice, LP: phenolic-free grape flavored drink with matched flavor essence to CGJ, LPF: phenolic-free and low flavor essence grape flavored drink.

Table 2. Glycemic and appetite responses by low and high phenolic metabolizer after beverages intake with a meal (trial II)

CGJ	4-OH-benzaldehyde isomer			Caffeic acid-O-sulfate		
	Low	High	<i>p</i>	Low	High	<i>p</i>
4h glucose μ AUC	26281 \pm 985	24897 \pm 671	0.254	25943 \pm 908	2352.94 \pm 800	0.563
24h glucose μ AUC	162287 \pm 5182	1570.91 \pm 4361	0.449	159782 \pm 4808	159596 \pm 4857	0.979
24h glucose (mg/dL)	115 \pm 3.5	109 \pm 3.1	0.183	114 \pm 3.4	111 \pm 3.4	0.523
Hunger	55.1 \pm 4.3	45.0 \pm 4.1	0.097	55.2 \pm 4.7	45.0 \pm 3.6	0.094
Thirst	47.7 \pm 4.9	38.3 \pm 4.5	0.172	52.1 \pm 4.1	34.3 \pm 4.5	0.007
Fullness	34.1 \pm 3.2	36.1 \pm 3.1	0.648	35.1 \pm 3.3	35.1 \pm 3.1	0.994
Desire	56.6 \pm 3.7	44.4 \pm 3.9	0.032	56.2 \pm 4.2	44.7 \pm 3.6	0.044
Prospective consumption	57.3 \pm 4.0	47.7 \pm 4.5	0.123	56.7 \pm 4.6	48.3 \pm 4.0	0.174
LP	4-OH-benzaldehyde isomer			Caffeic acid-O-sulfate		
	Low	High	<i>p</i>	Low	High	<i>p</i>
4h glucose μ AUC	25690 \pm 981	25722 \pm 599	0.978	25806 \pm 902	25606 \pm 713	0.863
24h glucose μ AUC	1562689 \pm 4341	157699 \pm 3778	0.805	155163 \pm 4452	158804 \pm 3598	0.529
24h glucose (mg/dL)	109 \pm 3.0	110 \pm 2.5	0.679	108 \pm 3.1	111 \pm 2.3	0.450
Hunger	49.0 \pm 3.3	51.4 \pm 3.9	0.649	46.6 \pm 3.6	53.9 \pm 3.3	0.147
Thirst	47.2 \pm 4.4	42.4 \pm 3.2	0.387	45.9 \pm 3.9	43.8 \pm 3.9	0.706
Fullness	34.4 \pm 4.5	38.4 \pm 3.8	0.501	35.2 \pm 4.2	37.6 \pm 4.2	0.689
Desire to eat	47.7 \pm 3.9	44.8 \pm 3.9	0.601	44.6 \pm 3.9	48.1 \pm 4.0	0.535
Prospective consumption	50.1 \pm 3.5	51.8 \pm 3.9	0.746	49.3 \pm 3.7	52.6 \pm 3.8	0.546

LPF	4-OH-benzaldehyde isomer			3-OH-phenylacetic acid isomer		
	Low	High	<i>p</i>	Low	High	<i>p</i>
4h glucose μ AUC	24980 \pm 741	25464 \pm 757	0.651	24302 \pm 800	26141 \pm 619	0.078
24h glucose μ AUC	149623 \pm 3643	154218 \pm 4067	0.406	146309 \pm 3669	157532 \pm 3616	0.037
24h glucose (mg/dL)	105 \pm 2.4	109 \pm 2.7	0.198	104 \pm 2.8	110 \pm 2.2	0.078
Hunger	48.6 \pm 3.6	46.6 \pm 3.4	0.684	46.2 \pm 3.6	49.0 \pm 3.4	0.585
Thirst	35.8 \pm 4.5	43.8 \pm 4.3	0.209	41.5 \pm 4.9	38.2 \pm 4.0	0.612
Fullness	30.1 \pm 2.8	39.9 \pm 3.8	0.048	37.3 \pm 3.3	32.9 \pm 3.8	0.388
Desire to eat	46.9 \pm 4.1	47.7 \pm 4.2	0.885	43.3 \pm 3.6	51.5 \pm 4.4	0.160
Prospective consumption	51.0 \pm 3.1	46.2 \pm 3.0	0.273	47.3 \pm 2.9	49.9 \pm 3.3	0.564

Data expressed as mean \pm SE in low and high phenolic metabolizer classified according to the median value for each compound. The variables for each phenolic compound were compared using independent T-test ($p < 0.05$). Appetitive sensations were assessed from 0-4h after beverage intake with a meal. CGJ: 100% Concord grape juice, LP: phenolic-free grape flavored drink with matched flavor essence to CGJ, LPF: phenolic-free and low flavor essence grape flavored drink.