Daily consumption of cranberry improves endothelial function in healthy adults: a double blind randomized controlled trial

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2 Supplemental Table S1: Mean habitual baseline daily intake of total energy, macro-

3 , and micronutrients.¹

Macro- & micronutrients (/day)	Cranberry (n=22)	Control (n=22)	p²
Total energy, kJ	6,149 ± 1,648	7,238 ± 3,698	0.21
Carbohydrate, g	159 ± 43	191 ± 104	>0.99
Total sugars, g	77 ± 23	90 ± 41	>0.99
Dietary fibre, g	10 ± 3	13 ± 7	>0.99
Protein, g/Kg body weight	0.9 ± 0.3	1.0 ± 0.5	>0.99
Total fat, g	63 ± 22	72 ± 39	>0.99
Saturated fatty acids, g	25 ± 9	28 ± 16	>0.99
Monounsaturated fatty acids, g	22 ± 7	26 ± 14	>0.99
Polyunsaturated fatty acids, g	10 ± 4	11 ± 6	>0.99
Cholesterol, mg	263 ± 146	340 ± 160	>0.99
Alcohol, g	5.4 ± 4.7	5.1 ± 4.5	>0.99
Sodium, mg	1,846 ± 428	2,196 ± 1,483	>0.99
Potassium, mg	2,460 ± 515	3,075 ± 1,240	0.25
Chloride, mg	2,808 ± 623	3,316 ± 2,198	0.78
Calcium, mg	788 ± 304	892 ± 499	>0.99
Iron, mg	8 ± 2	9 ± 5	>0.99
Vitamin A, μg	449 ± 308	729 ± 1,035	>0.99
Vitamin C, mg	67 ± 29	81 ± 44	>0.99
Vitamin D, μg	2.4 ± 1.6	2.5 ± 1.8	>0.99
Vitamin E, mg	8.0 ± 2.6	9.5 ± 4.4	>0.99

⁴ ¹Values are mean ± SD; ND: not defined.

^{5 &}lt;sup>2</sup>Independent samples t-test

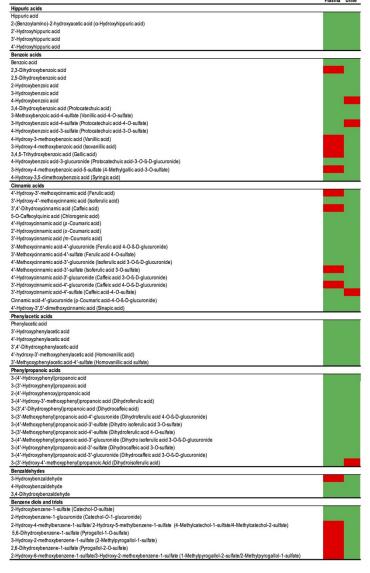
Supplemental Table S2: Baseline (poly)phenol intake of population. Results are

8 presented as mean ± SD.

(Poly)phenol (mg/d)	Cranberry (n=23)			Placek	p-value		
Total polyphenols	802 :	± ;	549	1,278	±	1,125	ns
Flavonoids	190	±	211	165	±	157	ns
Anthocyanins	4.22	±	3.43	5.60	±	9.93	ns
Chalcones	0.00	±	0.00	0.00	±	0.00	ns
Dihydrochalcones	0.26	±	0.46	0.26	±	0.31	ns
Dihydroflavonols	0.07	±	0.07	0.04	±	0.06	ns
Flavanols	87	±	145	73	±	106	ns
Flavanol monomers	61	±	121	48	±	89	ns
Proanthocyanidins	26	±	27	25	±	21	ns
Theaflavins	14	±	30	11	±	22	ns
Flavanones	19	±	19	21	±	21	ns
Flavones	14	±	10	10	±	7	ns
Flavonols	32	±	31	34	±	26	ns
Isoflavones	1.8	±	3.8	0.6	±	1.1	ns
Phenolic acids	590	±	546	1,089	±	1,030	ns
Hydroxybenzoic acids	26	±	39	25	±	29	ns
Hydroxycinnamic acids	564	±	581	1020	±	1085	ns
Hydroxyphenylacetic acids	0.08	±	0.08	0.09	±	0.08	ns
Hydroxyphenylpropanoic acids	0	±	0	0	±	0	ns

Lignans	21	±	11	23	±	20	ns
Stilbenes	0.1	±	0.1	0.1	±	0.1	ns
Alkylmethoxyphenols	2.0	±	2.1	3.6	±	3.8	ns
Catechols	0.01	±	0.01	0.01	±	0.01	ns
Hydroxybenzaldehydes	0.002	±	0.002	0.002	±	0.002	ns
Hydroxybenzoketones	0.08	±	0.07	0.08	±	0.08	ns
Hydroxycoumarins	0.27	±	0.30	0.50	±	0.56	ns
Methoxyphenols	0.63	±	0.68	0.54	±	0.55	ns
Pyrogallols	802	±	549	1278	±	1125	ns
Tyrosols	190	±	211	165	±	157	ns

- 10 Supplemental Table S3: List of 137 (poly)phenols / metabolites analyzed in plasma
- 11 and urine. Green designates metabolites that were detected and analysed, red not
- detected and not analysed and yellow detected but not analysed as only detected in
- 13 traces in individual samples.



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-Hydroxy-methoxyphenyly-valerolactone (3 '5') -(Methoxyphenyly-valerolactone sulfate (3 'A') isomer 2 -(Methoxyphenyly-valerolactone-sulfate (3 'A', 5') isomer 1 -(Hydroxy-methoxyphenyly-valerolactone-sulfate (3 'A', 5') isomer 1 -(Hydroxy-methoxyphenyly-valerolactone-sulfate (3 'A', 5') isomer 1 -(Hydroxy-methoxyphenyly-valerolactone-sulfate (3 'A', 5') isomer 2 -(Hydroxy-methoxyphenyly-valerolactone-sulfate (3 'A', 5') isomer 2 -(Hydroxy-methoxyphenyly-valerolactone-sulfate (3 'A', 5') isomer 3 -(G'-Hydroxyphenyly-valerolactone-sulfate (3 'A', 5') isomer 3 -(G'-Hydroxyphenyly-valerolactone-sulfate (3 'A', 5') isomer 3 -(G'-Hydroxyphenyly-valerolactone-sulfate (3 'A', 5') isomer 3 -(Hydroxyphenyly-valerolactone-sulfate (3 'A', 5') -(Hydroxyphenyly-valerolactone-sulfate (3 'A', 5') -(Hydroxyphenyly-valerolactone-sulfate (3 'A', 5') -(Hydroxyphenyly-valerolactone-sulfate (3 'A', 5') -(Hydroxyphenyly-valerolactone-sulfate surronide (3 'A', 5') -(Hydroxyphenyly-valerolactone-sulfate (3 'A', 5') -(Hyd		
-(Dhydroxy-methoxybpeny)-y-valerolactone (3 4 5) -(Methoxypheny)-y-valerolactone-sulfate (3 5) -(Methoxypheny)-y-valerolactone-sulfate (3 5) -(Methoxypheny)-y-valerolactone-sulfate (3 5) -(Methoxypheny)-y-valerolactone-sulfate (3 5) -(Mydroxy-methoxypheny)-y-valerolactone-sulfate (3 5) -(Mydroxy-methoxypheny)-y-valerolactone-sulfate (3 4 5) -(Mydroxy-methoxypheny)-y-valerolactone-glucuronide (3 4 5) -(Methoxypheny)-y-valerolactone-glucuronide (3 4 5) -(Mydroxy-methoxypheny)-y-valerolactone-glucuronide (3 4 5) -(Mydroxy-methoxypheny)-y-valerolactone-glucuronide (3 4 5) -(Mydroxy-methoxypheny)-y-valerolactone-glucuronide (3 4 5) -(Hydroxy-fivyhynely-y-valerolactone-glucuronide (3 4 5) -(Hydroxy-fivytoxy-methoxyphenylyvaleric acid -(Hydroxy-fivytoxy-methoxyphenylyvaler		
	5-(Dihydroxy-methoxyphenyl)-y-valerolactone (3',4',5')	
-(Mehnoxyhenyi)-v-valerolacone-sulfala (3 - 5) isomer 1 -(Mehnoxyhenyi)-v-valerolacone-sulfala (3 - 5) isomer 2 -(Dihydroxyhenyi)-v-valerolacone-sulfala (3 - 4 - 5) -(Dihydroxyhenyi)-v-valerolacone-sulfala (3 - 4 - 5) -(Hydroxy-mehnoxyhenyi)-v-valerolacone-sulfala (3 - 4 - 5) -(Mehnoxyhenyi)-v-valerolacone-glucuronida (3 - 4 - 5) -(Mehnoxyhenyi)-v-valerolacone-glucuronida (3 - 4 - 5) -(Mydroxyhenyi)-v-valerolacone-glucuronida (3 - 4 - 5) -(Hydroxy-mehnoxyhenyi)-v-valerolacone-glucuronida (3 - 4 - 5) -(Hydroxyhenyi)-v-valerolacone-glucuronida (3 - 4 - 6) -(Hydroxyhenyi)-v-valerolacone-glucuroni	5-(Methoxyphenyl)-γ-valerolactone-sulfate (3',4') isomer 2	
- (Chydroxynehry)valerolachone-sulfale (3 '4 '5') - (Hydroxynehrolynehry)valerolachone-sulfale (3 '4 '5') - (Hydroxynehrolynehry)valerolachone-sulfale (3 '4 '5') - (Hydroxynehroxypheny)valerolachone-sulfale (3 '4 '5') - (Hydroxynehroxypheny)valerolachone-sulfale (3 '4 '5') - (Hydroxynehroxypheny)valerolachone-glucuronide isomer (3 '4') - (Hebroxypheny)valerolachone-glucuronide isomer (3 '5') - (Chlydroxypheny)valerolachone-glucuronide (3 '4 '5') - (Chlydroxypheny)valerolachone-glucuronide (3 '4 '5') - (Chlydroxypheny)valerolachone-glucuronide (3 '4 '5') - (Hydroxynehry)valerolachone-glucuronide (3 '4 '5') - (Hydroxynehryny)valerolachone-glucuronide (3 '4 '5') - (Hydroxynehryny)	5-(Methoxyphenyl)-γ-valerolactone-sulfate (3',5') isomer 1	
-Hydroxy-methoxyphenyly-valerolactone-suites (3 · 4 · 5) isomer 1 -(Hydroxy-methoxyphenyly-valerolactone-suites (3 · 4 · 5) isomer 2 -(Hydroxy-methoxyphenyly-valerolactone-suites (3 · 4 · 5) isomer 3 -(5 · Hydroxy-methoxyphenyl)-y-valerolactone-suites (3 · 4 · 5) isomer 3 -(5 · Hydroxy-methoxyphenyl)-y-valerolactone-glucuronide isomer (3 · 4) -(Methoxyphenyl)-y-valerolactone-glucuronide isomer (3 · 5) -(Methoxyphenyl)-y-valerolactone-glucuronide isomer (3 · 5) -(Hydroxy-methoxyphenyl)-y-valerolactone-glucuronide isomer (3 · 5) -(Hydroxy-methoxyphenyl)-y-valerolactone-glucuronide (3 · 4 · 5) -(Hydroxy-fichenyly-valerolactone-suitate-glucuronide (3 · 4 · 5) -(Hydroxy-fichenyly-valerolactone-suitate-glucuronide (3 · 4 · 5) -(Hydroxy-fichenyly-valeric acid -(Methoxyphenyly-valeric acid -(Hydroxy-fichenyly-valeric acid -(Hydroxy-fichenyly-valeric acid -(Hydroxy-fichenyly-valeric acid -(Hydroxy-fichenyly-valeric acid -(Hydroxy-fichenyly-valeric acid -(Hydroxy-fichy-valeric acid-suitate -(Hydroxy-fichy-valeric acid-glucuronide -(Hehoxyphenyly-valeric acid-glucuronide -(Hehoxyphenyly-valeric acid-glucuronide -(Hydroxy-fi-yhdroxyphenyly-valeric acid-glucuronide -	5-(Methoxyphenyl)-γ-valerolactone-sulfate (3´,5´) isomer 2	
-Hydroxy-methoxyphenyly-valerolactone-suitles (3 '.4' 5') isomer 2 -Hydroxy-methoxyphenyly-valerolactone-suitles (3 '.4' 5') isomer 3 -(6'-Hydroxyphenyly-valerolactone-3'-glucuronide isomer (3'.4') -(Methoxyphenyly-valerolactone-glucuronide isomer (3'.4') -(Methoxyphenyly-valerolactone-glucuronide isomer (3'.5') -(Methoxyphenyly-valerolactone-glucuronide isomer (3'.5') -(Methoxyphenyly-valerolactone-glucuronide isomer (3'.5') -(Methoxyphenyly-valerolactone-glucuronide isomer (3'.5') -(Hydroxyn-enyl-valerolactone-glucuronide isomer (3'.5') -(Hydroxyn-enyl-valerolactone-suitlas-glucuronide isomer (3'.5') -(Hydroxyn-enyl-valerolactone-glucuronide isomer (3'.5') -(Hydroxyn-enyl-valeric acid -(Hydroxyn-enyl-valeric acid-sulfate -(Hydroxy-e		
-i-(Hydroxy-methoxyphenyl)-valerolacdrone-suitate (3' 4' 5') isomer 3 -i-(Hydroxyphenyl)-valerolacdrone-glucuronide isomer (3' 4') -i-(Methoxyphenyl)-valerolacdrone-glucuronide isomer (3' 4') -i-(Methoxyphenyl)-valerolacdrone-glucuronide isomer (3' 4') -i-(Hydroxy-methoxyphenyl)-valerolacdrone-glucuronide isomer (3' 4') -i-(Hydroxy-methoxyphenyl)-valerolacdrone-glucuronide isomer (3' 5') -i-(Hydroxy-fehroxhone-suitate-glucuronide isomer (3' 5') -i-(Hydroxy-fehroxhone-suitate-glucuronide isomer (3' 5') -i-(Hydroxy-fehroxhone-suitate-glucuronide isomer (3' 5') -i-(Hydroxy-fehroxhone-suitate-glucuronide isomer (3' 4') -i-(Hydroxy-fehroxhone-suitate-glucuronide (3' 4' 5') -i-(Hydroxy-fehroxhone-suitate (3' 4' 5') -i-(Hyd		
+(3-Hydroxphenyl)-valerolactone-3'-gluuronide -(Hydroxphenyl)-valerolactone-gluuronide -(Hydroxphenyl)-valerolactone-gluuronide -(Hydroxphenyl)-valerolactone-gluuronide -(Ghydroxynehryl)-valerolactone-gluuronide -(Ghydroxynehryl)-valerolactone-gluuronide -(Ghydroxynehryl)-valerolactone-gluuronide -(Ghydroxynehryl)-valerolactone-gluuronide -(Ghydroxynehryl)-valerolactone-gluuronide -(Ghydroxynehryl-valerolactone-gluuronide -(Ghydroxynehryl-valerolactone-gluuronide -(Ghydroxynehryl-valerolactone-gluuronide -(Ghydroxynehryl-valerolactone-gluuronide -(Ghydroxynehryl-valerolactone-gluuronide -(Ghydroxynehryl-valerolactone-gluuronide -(Ghydroxynehryl-valerolactone-gluuronide -(Ghydroxynehryl-valerolactone-gluuronide -(Hydroxynehryl-valerolactone-gluuronide -(Hydroxynehry		
i-(Mehnoyshenyi)valerolacione-glucuronide isomer (3'.4') (-(Mehnoyshenyi)valerolacione-glucuronide isomer (3'.5') (-(Dhydroxyshenyi)valerolacione-glucuronide (3'.4'.5') (-(Hydroxyshenyi)valerolacione-glucuronide (3'.4'.5') (-(Hydroxyshenyi)valerolacione-glucuronide (3'.4'.5') (-(Hydroxyshenyi)valerolacione-sullate-glucuronide (3'.4'.5') (-(Hydroxyshenyi)-valerolacione-sullate-glucuronide (3'.4'.5') (-(Hydroxyshenyi)-valerolacione-sullate-glucuronide (3'.4'.5') (-(Hydroxyshenyi)valeric acid (-(Hydroxyshenyi)valeric acid-sulfate (-(Hydroxyshenyi)valeric acid-glucuronide (-(Hydroxyshenyi)valeric		
I-Methoxyhenyih-evalenolacione-glucuronide isomer (3.5°) (-Diyhdroxyhenyih-valenolacione-glucuronide (3.4′.5°) (-Phenyih-valenolacione-glucuronide (3.4′.5°) (-Phenyih-valenolacione-glucuronide (3.4′.5°) (-Phenyih-valenolacione-glucuronide isomer (3.5°) (-Phenyih-valenolacione-glucuronide isomer (3.5°) (-Phenyih-valenolacione-glucuronide isomer (3.4°) (-Phydroxy-S-(phenyihyalenic acid (-Phydroxy-S-(phenyihyalenic acid (-Phydroxy-S-(phenyihyalenic acid (-Phydroxy-S-(phenyihyalenic acid (-Phydroxy-S-(phenyihyalenic acid (-Phydroxy-S-(phenyihyalenic acid (-Phydroxy-S-(phydroxyhenyihyalenic acid (-Phydroxy-S-(phydroxyhenyihyalenic acid (-Phydroxy-S-(phydroxyhenyihyalenic acid (-Phydroxy-S-(phydroxyhenyihyalenic acid (-Phydroxy-S-(phydroxyhenyihyalenic acid (-Phydroxy-S-(phydroxyhenyihyalenic acid-sulfate (-Phydroxy-S-(ph		
- (Chlydroxyphenyl)valerolachone-glucuronide (3 '4'.5') - (Phenyl)valerolachone-glucuronide (3 '4'.5') - (Phenyl)valerolachone-suffate-glucuronide (3 '4'.5') - (Phenyl)valerolachone-suffate-glucuronide (3 '4'.5') - (Phenyl)valerolachone-suffate-glucuronide (3 '4'.5') - (Hydroxyphenyl)-valerolacid - (4'.4-dlydroxyphenyl)-valerolacid - (4'.4-dlydroxyphenyl)-valerolacid - (4'.4-dlydroxyphenyl)-valerolacid - (4)-droxy-5-(hydroxyphenyl)-valerolacid - (4)-droxy-5-(hydroxyphenyl)-valerolacid - (4)-droxy-5-(hydroxy-mehoxyphenyl)-valerolacid - (4)-droxy-5-(3'.4'-dlydroxyphenyl)-valerolacid - (4)-droxy-5-(4'.3-dlydroxyphenyl)-valerolacid - (4)-droxy-5-(4'.3-dlydroxy-mehoxyphenyl)-valerolacid - (4)-droxy-5-(dlydroxy-mehoxyphenyl)-valerolacid - (4)-droxy-5-(dlydroxy-mehoxyphenyl)-valerolacid - (4)-droxy-5-(dlydroxy-mehoxyphenyl)-valerolacid - (4)-droxy-5-(dlydroxy-mehoxyphenyl)-valerolacid - (4)-droxy-5-(dlydroxy-mehoxyphenyl)-valerolacid - (4)-droxy-5-(hydroxy-mehoxyphenyl)-valerolacid-sulfate - (4)-droxy-5-(hydroxy-henyl)-valerolacid-sulfate - (4)-droxy-5-(hydroxy-henyl)-valerolacid-sulfate - (4)-droxy-5-(hydroxy-henyl)-valerolacid-sulfate - (4)-droxy-5-(hydroxy-henyl)-valerolacid-sulfate - (4)-droxy-5-(hydroxy-mehoxyphenyl)-valerolacid-sulfate - (4)-droxy-5-(hydroxy-mehoxyphenyl)-valerolacid-sulfate - (4)-droxy-5-(hydroxy-henyl)-valerolacid-glucuronide - (4)-droxy-5-(hydrox		
-(Hydroxy-methoxyphenyl)-valerolactone-glusuronide (3' 4' 5') -(Hydroxyphenyl)-valerolactone-sulfate-glucuronide (3' 4' 5') -(Hydroxyphenyl)-valerolactone-sulfate-glucuronide (3' 4' 5') -(Hydroxy-f-phenyl)valeric acid -(Hydroxy-f-phenyl)valeric acid -(Hydroxy-f-ghenyl)valeric acid-sulfate -(Hydroxy-f-		
- (-(Penry)valerolachen-sulfats-glucuronide isomer (3 '.5') - (-(Hydroxypheny)-valerolachen-sulfats-glucuronide (3 '.4'.5') - (Hydroxypheny)-valerolachen-sulfats-glucuronide (3 '.4'.5') - (Hydroxypheny)-valeric acid - (3 '.4'-dinydroxypheny)-valeric acid - (4)-ydroxys-flyotypheny)-valeric acid-sulfats - (4)-ydroxys-flyotypheny)-valeric acid-glucuronide - (4)-ydroxy-flyotypheny)-valeric acid-glucuronide - (4)-ydroxy-flyotypheny-valeric acid-glucuronide - (5)-ydroxy-flyotypheny-valeric acid-glucuronide - (5)-ydroxy-flyotypheny-		
-thydroxys-fiphenylysaleria acid -(Mehonyphenyl)-lavieria acid -(3' A'-dihydroxyphenylysaleria acid -(3' A'-dihydroxyphenylysaleria acid -(3' A'-dihydroxyphenylysaleria acid -(1-ydroxys-ethydroxyphenylysaleria acid -(1-ydroxys-fiy-dihydroxyphenylysaleria acid-sulfate -(1-ydroxys-fiy-dihydrox	5-(Phenyl)-y-valerolactone-sulfate-glucuronide isomer (3',5')	
- (Meh noxyhenyl)valeric acid - (3' 4'-dhyfroyphenyl)valeric acid - (Hydroxy-6-(hydroxyphenyl)valeric acid - (Hydroxy-6-(hydroxyphenyl)valeric acid - (Hydroxy-6-(hydroxyphenyl)valeric acid - (Hydroxy-6-(hydroxy-mehoxyphenyl)valeric acid - (Hydroxy-6-(hydroxy-hydroxy-mehoxyphenyl)valeric acid - (Hydroxy-6-(hydroxyphenyl)valeric acid-glucuronide - (Hydroxy-6-(hydroxyphenyl)va	5-(Hydroxyphenyl)-γ-valerolactone-sulfate-glucuronide (3´,4´,5´)	
-(3 A' -4 Mydroxyphenyl)valeric acid -(Hydroxy-Fityroxyphenyl)valeric acid -(Hydroxy-Fityroxyphenyl)valeric acid -(Hydroxy-Fityroxy-methoxyphenyl)valeric acid -(Hydroxy-Fityroxy-methoxyphenyl)valeric acid -(Hydroxy-Fityroxy-methoxyphenyl)valeric acid -(Hydroxy-Fityroxy-methoxyphenyl)valeric acid -(Hydroxy-Fityroxy-methoxyphenyl)valeric acid -(Hydroxy-Fityroxy-methoxyphenyl)valeric acid -(Hydroxyphenyl)valeric acid-sulfate -(Hydroxyphenyl)valeric acid-sulfate -(Hydroxyp-Fityroxy-fityroxyphenyl)valeric acid-sulfate -(Hydroxy-Fityroxyphenyl)valeric acid-sulfate -(Hydroxy-Fityroxy-Fityroxyphenyl)valeric acid-sulfate -(Hydroxy-Fityro	4-Hydroxy-5-(phenyl)valeric acid	
-thydroxy-finydroxphenylywlaric add -thydroxy-finydroxphenylywlaric add -thydroxy-5-(3',4'-dihydroxphenylywlaric add -thydroxy-5-(3',4'-dihydroxphenylywlaric add -thydroxy-5-(3',4'-dihydroxphenylywlaric add -thydroxy-5-(1)yydroxy-mehoxphenylywlaric add -thydroxy-5-(mehoxphenylywlaric add-di-thydroxy-finydroxy-mehoxphenylywlaric add -thydroxy-5-(dihydroxy-mehoxphenylywlaric add-sulfate -thydroxy-5-(phydroxphenylywlaric add-glucuronide -thydroxy-	5-(Methoxyphenyl)valeric acid	
-Hydroxy-enboxyphenylyaleric acid -Hydroxy-54 - Hydroxy-enboxyphenylyaleric acid-sulfate -Hydroxy-54-phenylyaleric acid-sulfate		
-thydroxy-5-(3' A'-dihydroxyphenylyvaleric acid -thydroxy-5-(1)-over-mehoxyphenylyvaleric acid -thydroxy-5-(1)-over-mehoxyphenylyvaleric acid -thydroxy-5-(3' A', 5'-tihydroxyphenylyvaleric acid -thydroxy-5-(1)-over-mehoxyphenylyvaleric acid -thydroxy-5-(1)-over-mehoxyphenylyvaleric acid -thydroxyphenylyvaleric acid-sulfate -thydroxyphenylyvaleric acid-sulfate -thydroxy-5-(hydroxyphenylyvaleric acid-sulfate isomer (3' A') -thydroxy-5-(hydroxyphenylyvaleric acid-sulfate -thydroxy-5-(hydroxyphenylyvaleric acid-sulfate -thydroxy-5-(hydroxyphenylyvaleric acid-sulfate -thydroxy-5-(hydroxyphenylyvaleric acid-sulfate -thydroxy-5-(hydroxyphenylyvaleric acid-sulfate isomer (3' A') -thydroxy-5-(hydroxyphenylyvaleric acid-sulfate isomer (3' A', 5') -th		
-thydroxy-f-thydroxy-methoxyphenylyvaleric acid -thydroxy-54 ("brithydroxyhenylyvaleric acid-sulfate -thydroxy-54 ("brithydroxyhenylyvaleric acid-sulfate -thydroxy-54 ("britydroxyhenylyvaleric acid-sulfate) -thydroxy-55 ("britydroxyhenylyvaleric acid-sulfate) -thydroxy-55 ("britydroxyhenylyvaleric acid-sulfate) -thydroxy-55 ("britydroxyhenylyvaleric acid-sulfate) -thydroxy-55 ("britydroxyhenylyvaleric acid-sulfate) -thydroxy-56 ("b		
I-hydrays-Gilhydrays-mehayphenylyvaleric add I-hydrays-Gilhydrays-mehayphenylyvaleric add I-(Hydrays-Gilhydrays-mehayphenylyvaleric add (3'.4'.5') I-(Hydrays-Gilhydrays-mehayphenylyvaleric add-sulfate I-(Hydrays-Gynybhenylyvaleric add-sulfate I-(Mehayphenylyvaleric add-sulfate I-(Mehayphenylyvaleric add-sulfate isomer (3'.4') I-hydrays-Gynybpenylyvaleric add-sulfate isomer (3'.5') I-hydrays-Gynybpenylyvaleric add-sulfate I-hydrays-Gynybpenylyvaleric add-sulfate I-hydrays-Gynybpenylyvaleric add-sulfate I-hydrays-Gynybpenylyvaleric add-sulfate I-hydrays-Gynybpenylyvaleric add-sulfate I-(Phenylyvaleric add-glucuronide isomer 1 I-(Phenylyvaleric add-glucuronide isomer 2 I-hydrays-Gynybpenylyvaleric add-glucuronide		
I-Hydray-S-(dihydray-methoxyphenyl/valeric acid (3'.4'.5') (Phenyl)valeric acid -sulfate (Phenyl)valeric acid -sulfate (Phydray-phenyl)valeric acid -sulfate (Hydray-S-(hydrosyphenyl)valeric acid -glucuronide (Hydray-S-(hydrosyphenyl)valeric acid-glucuronide isomer (3'.4') (Hydray-S-(hydrosyphenyl)valeric acid-glucuronide (3'.4'.5') (Hydrosy-S-(hydrosyphenyl)valeric acid-sulfate-glucuronide (3'.4'.5') (Hydrosy-S-(hydrosyphenyl)valeric acid-sulfate-glucuronide (Hydrosy-S-(hydrosyphenyl)valeric acid-sulfate-glucuronide (Hydrosy-S-(hydrosyphenyl)valeric acid-sulfate-glucuronide		
- (Phenry) waleric and -sulfate - (Hydroxy)-en-(Hydroxy)		
I-thydrays-f-phenylysaleric acid-sulfate (-Mehrosyphenylysaleric acid-sulfate I-thydrays-f-thydrosyphenylysaleric acid-sulfate isomer (3',4') I-thydrays-f-thydrosyphenylysaleric acid-sulfate isomer (3',5') I-thydrosy-f-thydrosyphenylysaleric acid-sulfate I-thydrosy-f-thydrosyphenylysaleric acid-sulfate I-thydrosy-f-thydrosyphenylysaleric acid-sulfate (3',4',5') I-thydrosy-f-thydrosyphenylysaleric acid-sulfate I-thydrosy-f-thydrosyphenylysaleric acid-sulfate I-thydrosy-f-thydrosyphenylysaleric acid-sulfate I-thydrosy-f-thydrosyphenylysaleric acid-sulfate I-thydrosy-f-thydrosyphenylysaleric acid-splucuronide I-thydrosy-f-thydrosyphenylysaleric acid-splucuronide isomer (3',4') I-thydrosy-f-thydrosyphenylysaleric acid-splucuronide isomer (3',4') I-thydrosy-f-thydrosyphenylysaleric acid-splucuronide isomer (3',4') I-thydrosy-f-thydrosyphenylysaleric acid-splucuronide (3',4',5') I-thydrosy-f-thydrosyphenylysaleric acid-splucuronide (3',4',5') I-thydrosy-f-thydrosy-enhosyphenylysaleric acid-splucuronide (3',4',5')	5-(Phenyl)valeric acid-sulfate	
I-thydrays-f-phenylysaleric acid-sulfate (-Mehrosyphenylysaleric acid-sulfate I-thydrays-f-thydrosyphenylysaleric acid-sulfate isomer (3',4') I-thydrays-f-thydrosyphenylysaleric acid-sulfate isomer (3',5') I-thydrosy-f-thydrosyphenylysaleric acid-sulfate I-thydrosy-f-thydrosyphenylysaleric acid-sulfate I-thydrosy-f-thydrosyphenylysaleric acid-sulfate (3',4',5') I-thydrosy-f-thydrosyphenylysaleric acid-sulfate I-thydrosy-f-thydrosyphenylysaleric acid-sulfate I-thydrosy-f-thydrosyphenylysaleric acid-sulfate I-thydrosy-f-thydrosyphenylysaleric acid-sulfate I-thydrosy-f-thydrosyphenylysaleric acid-splucuronide I-thydrosy-f-thydrosyphenylysaleric acid-splucuronide isomer (3',4') I-thydrosy-f-thydrosyphenylysaleric acid-splucuronide isomer (3',4') I-thydrosy-f-thydrosyphenylysaleric acid-splucuronide isomer (3',4') I-thydrosy-f-thydrosyphenylysaleric acid-splucuronide (3',4',5') I-thydrosy-f-thydrosyphenylysaleric acid-splucuronide (3',4',5') I-thydrosy-f-thydrosy-enhosyphenylysaleric acid-splucuronide (3',4',5')	5-(Hydroxyphenyl)valeric acid-sulfate	
-thydrays-fhydrosphenylywlaric add-sulfate isomer (3 'A') -thydrays-fhydrosphenylywlaric add-sulfate isomer (3 'S') -thydrays-fydrosphenylywlaric add-sulfate -thydrays-fydrosphenylywlaric add-sulfate -thydrays-fidinydrosphenylywlaric add-sulfate -thydrays-fidinydrosphenylywlaric add-sulfate -thydrays-fidinydrosphenylywlaric add-sulfate -thydrays-fidinydrosphenylywlaric add-sulfate -thydrays-fidinydrosphenylywlaric add-sulfate -thydrays-fighyvlaric add-sulfate -thydrays-fighyvlaric add-sulfate -thydrays-fighyvlaric add-sulfate -thydrays-fighyvlaric add-sulfate -thydrays-fidinydrosphenylywlaric add-sulfate-glucuronide -thydrosy-fi-thydrosy-finydrosphenylywlaric add-sulfate-glucuronide -thydrosy-fi-thydrosphenylywlaric add-sulfate-glucuronide -thydrosy-fi-thydrosphenylywlaric add-sulfate-glucuronide -thydrosy-fi-thydrosphenylywlaric add-sulfate-glucuronide -thydrosy-fi-thydrosphenylywlaric add-sulfate-glucuronide -thydrosy-fi-thydrosphenylywlaric add-sulfate-glucuronide -thydrosy-fi-thydrosphenylywlaric add-sulfate-glucuronide	4-Hydroxy-5-(phenyl)valeric acid-sulfate	
-thydrays-finydrosphenylyaleric acid-sulfate isomer (3 ,5') -thydrays-finydrosphenylyaleric acid-sulfate -thydrays-finebroxphenylyaleric acid-sulfate -thydrays-finebroxphenylyaleric acid-sulfate -thydrays-finydroxy-methoxyphenylyaleric acid-sulfate -(Phenylyaleric acid-disulfate -(Phenylyaleric acid-disulfate -(Phenylyaleric acid-glucuronide isomer 1 -(Phenylyaleric acid-glucuronide isomer 2 -thydrays-fiphenylyaleric acid-glucuronide -(Nethoxyphenylyaleric acid-glucuronide -(Nethoxyphenylyaleric acid-glucuronide -(Nethoxyphenylyaleric acid-glucuronide isomer (3',4') -thydrays-finydroxphenylyaleric acid-glucuronide isomer (3',5') -thydrays-finydroxphenylyaleric acid-glucuronide isomer (3',5') -thydrays-finydroxphenylyaleric acid-glucuronide (3',5') -thydrays-finydroxphenylyaleric acid-glucuronide (3',5') -thydrays-finydroxyphenylyaleric acid-glucuronide (3',5') -thydrays-finydroxyphenylyaleric acid-glucuronide (3',5') -thydrays-finydroxy-methoxyphenylyaleric acid-glucuronide (3',5') -thydrays-finydroxyphenylyaleric acid-sulfate-glucuronide	5-(Methoxyphenyl)valeric acid-sulfate	
-thydrays-f-methoxyphenylyaleric acid-sulfate -thydrays-f-(hightoxyphenylyaleric acid-sulfate (3'.4'.5') -thydrays-f-(hightoxyphenylyaleric acid-sulfate (3'.4'.5') -thydrays-f-(hightoxyphenylyaleric acid-sulfate (3'.4'.5') -(thenylyaleric acid-sulfate -(thenylyaleric acid-sulfate -thydrays-f-(phenylyaleric acid-sulfate -thydrays-f-(phenylyaleric acid-sulfate -thydrays-f-(phenylyaleric acid-sulfate -thydrays-f-(phenylyaleric acid-sulfate -thydrays-f-(phenylyaleric acid-sulfate) -thydrays-f-(phenylyaleric acid-sulfate -thydrays-f-(phenylyaleric acid-sulfate)	4-Hydroxy-5-(hydroxyphenyl)valeric acid-sulfate isomer (3´,4´)	
-thydrays-f-(dihydraxphenylyaleric acid-sulfala (3'.4'.5') -thydrays-f-(hydraxphenylyaleric acid-sulfala (3'.4'.5') -(Phenylyaleric acid-disulfala -(Phenylyaleric acid-disulfala -(Phenylyaleric acid-disulfala -(Phenylyaleric acid-glucuronide isomer 1 -thydrays-f-(phenylyaleric acid-glucuronide -(Hethosyphenylyaleric acid-glucuronide -(Hethosyphenylyaleric acid-glucuronide -(Hethosyphenylyaleric acid-glucuronide -(Hethosyphenylyaleric acid-glucuronide -(Hethosyphenylyaleric acid-glucuronide -(Hethosyphenylyaleric acid-glucuronide isomer (3'.4') -thydrays-f-(hydraxphenylyaleric acid-glucuronide (3'.4'.5') -thydrays-f-(hydraxphenylyaleric acid-glucuronide -thydrays-f-(hydraxphenylyaleric acid-glucuronide (3'.4'.5') -thydrays-f-(hydraxphenylyaleric acid-glucuronide (3'.4'.5') -(Phenylyaleric acid-sulfala-glucuronide isomer 2 -thydrays-f-(phenylyaleric acid-sulfala-glucuronide -thydrays-f-(hydraxphenylyaleric acid-sulfala-glucuronide -thydrays-f-(hydraxphenylyaleric acid-sulfala-glucuronide -thydrays-f-(hydraxphenylyaleric acid-sulfala-glucuronide	4-Hydroxy-5-(hydroxyphenyl)valeric acid-sulfate isomer (3',5')	
-thydrays-fhydrosy-methoxyphenylylaleric acid-sulfate (3'A'.5') -(Phenylywaleric acid-disulfate -(Phenylywaleric acid-disulfate -(Phenylywaleric acid-disulfate -(Phenylywaleric acid-glucuronide isomer 2 -thydrays-f-phenylywaleric acid-glucuronide -(hydroxys-f-phenylywaleric acid-glucuronide -(hydroxys-f-thydroxyphenylywaleric acid-glucuronide isomer (3'.4') -thydroxys-filydroxyphenylywaleric acid-glucuronide isomer (3'.5') -thydroxys-filydroxyphenylywaleric acid-glucuronide -(hydroxys-filydroxyphenylywaleric acid-glucuronide -(hydroxys-filydroxyphenylywaleric acid-glucuronide -(hydroxys-filydroxyphenylywaleric acid-glucuronide -(3'.4'.5') -(hydroxys-filydroxyphenylywaleric acid-glucuronide -(3'.4'.5') -(hydroxys-filydroxy-methoxyphenylywaleric acid-glucuronide (3'.4'.5') -(hydroxys-filydroxy-methoxyphenylywaleric acid-glucuronide (3'.4'.5') -(hydroxy-5-filydroxyphenylywaleric acid-sulfate-glucuronide -(hydroxy-5-filydroxyphenylywaleric acid-sulfate-glucuronide -(hydroxy-5-filydroxyphenylywaleric acid-sulfate-glucuronide	4-Hydroxy-5-(methoxyphenyl)valeric acid-sulfate	
- (Phenyl)waleric acd-disulation - (Mehoxyh-enyl)waleric acd-disulation - (Mehoxyh-enyl)waleric acd-disulation - (Mehoxyh-enyl)waleric acd-disulation - (Phydroxy-5-(Phydroxyhenyl)waleric acd-disulation)- (Phydroxyhenyl)waleric acd-disulation - (Phydroxyhenyl)waleric acd-d		
- (Phenylywaleric acid-glucuronide isomer 1 - (Phenylywaleric acid-glucuronide isomer 2 - (Phenylywaleric acid-glucuronide isomer 2 - (Phenylywaleric acid-glucuronide - (Phenylywaleric acid-glucuronide - (Phenylowyaleric acid-glucuronide - (Phenylowyaleric acid-glucuronide isomer (3'.4') - (Phydroxy-5-(Inydroxyphenylywaleric acid-glucuronide isomer (3'.5') - (Phydroxy-5-(Inydroxyphenylywaleric acid-glucuronide isomer (3'.5') - (Phydroxy-5-(Inydroxyphenylywaleric acid-glucuronide (3'.4'.5') - (Phydroxy-5-(Inydroxyphenylywaleric acid-glucuronide (3'.4'.5') - (Phydroxy-5-(Inydroxyphenylywaleric acid-glucuronide (3'.4'.5') - (Phenylywaleric acid-sulfata-glucuronide isomer 2 - (Phydroxy-5-(Phydroxyphenylywaleric acid-sulfata-glucuronide - (3'.4'.5') - (Phenylywaleric acid-sulfata-glucuronide - (1'.4'.5') - (Phenylywaleric acid-diplucuronide		
- (Phenylywaleric and-glucuronide isomer 2 - (Hydroxy-5-(phenylyvaleric acid-glucuronide - (Hydroxy-5-(phenylyvaleric acid-glucuronide - (Hydroxy-5-(phenylyvaleric acid-glucuronide - (Hydroxy-5-(phenylyvaleric acid-glucuronide isomer (3',4') - (Hydroxy-5-(hydroxybenylyvaleric acid-glucuronide isomer (3',5') - (Hydroxy-5-(hydroxybenylyvaleric acid-glucuronide isomer (3',5') - (Hydroxy-5-(hydroxybenylyvaleric acid-glucuronide (3',4',5') - (Hydroxy-5-(hydroxy-enboxybenylyvaleric acid-glucuronide (3',4',5') - (Hydroxy-5-(hydroxy-enboxybenylyvaleric acid-glucuronide (3',4',5') - (Hydroxy-5-(hydroxy-enboxybenylyvaleric acid-sulfab-glucuronide (3',4',5') - (Hydroxy-5-(hydroxybenylyvaleric acid-sulfab-glucuronide		
-thydrays-fiphenylyvaleric acid-disultate -thydrays-fiphenylyvaleric acid-disultate -thydrays-fiphenylyvaleric acid-glucuronide -thydrays-fipytrosybenylyvaleric acid-glucuronide -thydrays-fipytrosybenylyvaleric acid-glucuronide isomer (3',4') -thydrays-fipytrosybenylyvaleric acid-glucuronide isomer (3',5') -thydrays-finytrosybenylyvaleric acid-disultate (3',4',5') -thydrays-finethoxybenylyvaleric acid-glucuronide -thydrays-finethoxybenylyvaleric acid-glucuronide (3',4',5') -thydrays-finytrosy-enboxybenylyvaleric acid-glucuronide (3',4',5') -thydrays-finytrosy-enboxybenylyvaleric acid-glucuronide (3',4',5') -thydrays-finytrosybenylyvaleric acid-sulfa-glucuronide -thydrays-finytrosybenylyvaleric acid-sulfa-glucuronide -thydrays-finytrosybenylyvaleric acid-sulfa-glucuronide -thydrays-finytrosybenylyvaleric acid-sulfa-glucuronide		
I-Hydrays-S-(phenylyvaleric acid-glucuronide (-Mehonyphenyl)valeric acid-glucuronide I-Hydrays-S-(hydroxyphenyl)valeric acid-glucuronide isomer (3',4') I-Hydrays-S-(hydroxyphenyl)valeric acid-glucuronide isomer (3',4') I-Hydrays-S-(hydroxyphenyl)valeric acid-glucuronide isomer (3',4') I-Hydrays-S-(hydroxyphenyl)valeric acid-glucuronide I-Hydrays-S-(hydroxyphenyl)valeric acid-glucuronide (3',4',5') I-Hydrays-S-(hydroxy-mehoxyphenyl)valeric acid-glucuronide (3',4',5') I-Hydrays-S-(hydroxy-mehoxyphenyl)valeric acid-glucuronide I-Hydrays-S-(phenyl)valeric acid-sulfab-glucuronide I-Hydrays-S-(hydroxyphenyl)valeric acid-sulfab-glucuronide (3',4',5') I-(Phenyl)valeric acid-glucuronide I-Hydrays-S-(hydroxyphenyl)valeric acid-sulfab-glucuronide I-Hydrays-S-(hydroxyphenyl)valeric acid-sulfab-glucuronide		
-(Mehnoxyhenrylivaleric acid-glucuronide -Hydroxy-5-(hydroxyphenyl)valeric acid-glucuronide isomer (3', 4') -Hydroxy-5-(hydroxyphenylyvaleric acid-glucuronide isomer (3', 5') -Hydroxy-5-(dihydroxyphenylyvaleric acid-disulate (3', 4', 5') -Hydroxy-5-(dihydroxyphenylyvaleric acid-glucuronide -Hydroxy-5-(dihydroxyphenylyvaleric acid-glucuronide (3', 4', 5') -Hydroxy-5-(hydroxyphenyl)valeric acid-glucuronide (3', 4', 5') -(Hydroxy-5-(hydroxyphenyl)valeric acid-glucuronide (3', 4', 5') -(Hydroxy-5-(hydroxyphenyl)valeric acid-sulfate-glucuronide -(Hydroxy-5-(hydroxyphenyl)valeric acid-sulfate-glucuronide (3', 4', 5') -(Hydroxy-5-(hydroxyphenyl)valeric acid-sulfate-glucuronide (3', 4', 5')		
Hydrays-f-thydrosphenylyaleric add-gluuronide isomer (3 '.4') Hydrays-f-thydrosphenylyaleric add-gluuronide isomer (3 '.5') Hydrays-f-thydrosphenylyaleric add-gluuronide Hydrays-f-thydrosphenylyaleric add-gluuronide Hydrays-f-thydrosphenylyaleric add-gluuronide Hydrays-f-thydrosphenylyaleric add-gluuronide Hydrays-f-thydrosphenylyaleric add-gluuronide (3 '.4',5') Hydrays-f-thydrosphenylyaleric add-gluuronide (3 '.4',5') Hydrays-f-thydrosphenylyaleric add-sulfa gluuronide Hydrays-f-tyhdrosphenylyaleric add-sulfa gluuronide Hydrays-f-thydrosphenylyaleric add-sulfa gluuronide		
-thydroxy-5-(hydroxypheny)/valeric acid-glucuronide isomer (3 '.5') -thydroxy-5-(dhydroxypheny)/valeric acid disulfate (3' 4'.5') -thydroxy-5-(midydroxypheny)/valeric acid-glucuronide -thydroxy-5-(dhydroxypheny)/valeric acid-glucuronide (3'.4'.5') -thydroxy-5-(hydroxypheny)/valeric acid-glucuronide (3'.4'.5') -(theny)/valeric acid-sulfate-glucuronide isomer 2 -thydroxy-5-(hydroxypheny)/valeric acid-sulfate-glucuronide -thydroxy-5-(hydroxypheny)/valeric acid-sulfate-glucuronide -thydroxy-5-(hydroxypheny)/valeric acid-sulfate-glucuronide (3'.4'.5') -(theny)/valeric acid-diglucuronide	4-Hydroxy-5-(hydroxyphenyl)valeric acid-glucuronide isomer (3°,4°)	
-thydrays-f-(dihydroxpheny)valeric acid-disultate (3' 4',5') -thydrays-f-(methoxpheny)valeric acid-glucuronide -thydroxy-5-(dihydroxpheny)valeric acid-glucuronide (3' 4',5') -thydroxy-5-(hydroxp-methoxpheny)valeric acid-glucuronide (3' 4',5') -(thenylywaleric acid-alluta-glucuronide isomer 2 -thydroxy-5-(phenylyvaleric acid-sulfab-glucuronide -thydroxy-5-(phenylyvaleric acid-sulfab-glucuronide -(thenylyvaleric acid-diplucuronide	4-Hydroxy-5-(hydroxyphenyl)valeric acid-glucuronide isomer (3',5')	
-thydroxy-5-(dihydroxypheny)valeric acid-glucuronide (3 '.4 '.5') -(-thydroxy-5-(hydroxy-mehoxypheny)valeric acid-glucuronide (3 '.4 '.5') -(-theny)lyaleric acid-sulfata-glucuronide isomer 2 -thydroxy-5-(pheny)valeric acid-sulfata-glucuronide -(thydroxy-5-(hydroxypheny)valeric acid-sulfata-glucuronide (3 '.4 '.5') -(theny)lyaleric acid-diglucuronide	4-Hydroxy-5-(dihydroxyphenyl)valeric acid-disulfate (3',4',5')	
-thydroxy-f-hydroxy-methoxyhenrylyaleric add-glucuronide (3',4',5') -(Phenrylyaleric add-adulta-glucuronide (3',4',5') -(Phenrylyaleric add-adulta-glucuronide -thydroxy-5-(phenrylyaleric add-sulfalta-glucuronide -thydroxy-5-(hydroxyphenrylyaleric add-sulfalta-glucuronide -(Phenrylyaleric add-dighucuronide	4-Hydroxy-5-(methoxyphenyl)valeric acid-glucuronide	
-(Phenyl)valeric acid-sulfa te-glucuronide isomer 2 -Hydroxy5-(phenyl)valeric acid-sulfa te-glucuronide -Hydroxy5-(Hydrox)phenylvaleric acid-sulfa te-glucuronide (3',4',5') -(Phenyl)valeric acid-diglucuronide	4-Hydroxy-5-(dihydroxyphenyl)valeric acid-glucuronide (3',4',5')	
I-Hydroxy-5-(phenyl)valeric acid-sulfate-glucuronide I-Hydroxy-5-(hydroxyphenyl)valeric acid-sulfate-glucuronide (3´,4´,5´) i-(Phenyl)valeric acid-diglucuronide	4-Hydroxy-5-(hydroxy-methoxyphenyl)valeric acid-glucuronide (3',4',5')	
I-Hydroxy-5-(hydroxyphenyl)valeric acid-sulfate-glucuronide (3´,4´,5´) i-(Phenyl)valeric acid-diglucuronide		
i-(Phenyl)valeric acid-diglucuronide		
iyuroxy-o-(prieriyiyraidiic duu-uigiucuronius		
	4-i iyaroxy-o-(prioriyi)yaletic adu-digidodiotiide	
Plasma	Detected and quantified	56
Detected and quantified 56		

ot quantified as only present in traces in just few samples

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- 16 **Supplementary Table S4:** Analysis of 56 (poly)phenol metabolites detected in plasma after cranberry or placebo consumption.
- 17 Results are presented as fasted baseline mean concentrations nmol/L and standard error of the mean (SEM) within cranberry and
- 18 control group before first intervention and mean changes from baseline at 2 hours (2 h) after consumption of first intervention, after
- 19 1 month (1 mo) of daily consumption and at 2 h after additional single consumption after 1 month daily consumption (1 mo, 2h).
- 20 Changes are adjusted for average baseline values. Differences represent mean estimated effect of cranberry over control and 95%
- 21 confidence intervals. Statistical analyses are based on repeated measurements analysis of covariance.

	Cranberry C								Contro								
	Basel	Baseline		2 h	Change 1 mo	Change 1 mo, 2 h	Baselir	ne .	Change 2 h	Change 1 mo	Change 1 mo, 2 h	at 2 h	Difference (Cranberry vs Cont at 1 mo	at 1 mon, 2 h	p (treatment)	p (timextreatment)	
		SEM		SEM	Mean SEM	Mean SEM	Mean	SEM	Mean SEM	Mean SEM	Mean SEM				p (accounting)	, (
Total polyphenols	58,844	3,035	-136	3,241	3,211 4,913	-6,893 3,850	65,898	3,967	-15,351 3,392	6,457 5,142	-12,504 4,029	15,215 (5,748, 24,682)	-3,245 (-17,598, 11,108)	5,611 (-5,635, 16,857)	0.258	0.002	
Hippuric acids																	
Hippuric acid	464	84	-16	60	152 115	35 87	561	100	-174 63	-46 120	-103 91	157 (-19, 334)	199 (-138, 535)	138 (-119, 394)	0.099	0.920	
2-(benzoylamino)-2-hydroxyacetic acid (a-hydroxyhippuric acid)	1,181	142	467	184	379 154	1149 307	467	75	416 195	-186 163	196 324	51 (-537, 640)	564 (71, 1,057)	953 (-27, 1,933)	0.034	0.145	
2'-Hydroxyhippuric acid	399	50	93	42	117 49	-8 37 0 0	168	30	-134 44 0 0	77 51 0 0	-137 39 0 0	226 (94, 358)	194 (41, 347)	130 (13, 246)	<0.001 0.447	0.555 0.061	
3'-Hydroxyhippuric acid	97	13	63	21	52 15	0 0 205 45	28	7	40 22	-141 16	39 47	-0.1 (-0.3, 0.1) 23 (-44, 91)	-0.4 (-0.9, 0.2) 93 (45, 140)	0.2 (-0.1, 0.4) 166 (22, 310)	0.447	0.13	
4'-Hydroxyhippuricacid Benzoic acids	97	13	63	21	32 13	205 45	20		40 22	-141 10	39 47	23 (-44, 91)	93 (45, 140)	166 (22, 310)	0.001	0.13	
Renzoic acid	479	181	-292	85	94 156	93 158	464	129	-146 89	-271 163	-155 166	-145 (-393, 103)	364 (-91, 819)	248 (-215, 711)	0.123	0.208	
2,5-Dihydroxybenzoic acid	172	25	20	16	42 16	-14 16	103	11	-66 17	-56 17	-51 17	86 (38, 134)	98 (50, 146)	37 (-11, 85)	<0.001	0.056	
2-Hydroxybenzoic acid	266	34	-59	26	60 32	47 27	184	25	-73 27	0 33	-60 29	14 (-62, 91)	60 (-34, 154)	107 (25, 189)	0.026	0.269	
3-Hydroxybenzoic acid	4	3	-7	6	-5 5	10 6	31	5	36 7	18 5	22 7	-43 (-23, -63)	-23 (-7, -38)	-12 (-32, 8)	0.001	0.016	
4-Hydroxybenzoic acid	2	0	0	0	-1 0	0 0	3	0	0 0	0 0	0 0	0.2 (-0.3, 0.8)	-0.6 (-0.1, -1.2)	-0.2 (-1.0, 0.6)	0.376	0.113	
3,4-Dihydroxybenzoic acid (Protocatechuic acid)	14	4	-3	1	4 3	8 3	2	1	-7 1	-6 3	-7 4	3.8 (-0.3, 7.9)	9.8 (0.7, 18.9)	14.7 (4.4, 25.0)	0.001	0.126	
3-Methoxybenzoic acid-4-sulfate (Vanillic acid-4-O-sulfate)	41	7	28	8	3 4	13 7	12	3	-17 9	-20 4	-10 7	45 (19, 72)	23 (10, 36)	23 (1, 45)	< 0.001	0.245	
3-Hydroxybenzoic acid-4-sulfate (Protocatechuic acid-4-O-sulfate)	4	1	-1	0	-1 0	0 1	2	1	-1 0	-1 1	-2 1	0.3 (-0.9, 1.5)	0.2 (-1.1, 1.5)	1.9 (0.4, 3.4)	0.018	0.162	
4-Hydroxybenzoic acid-3-sulfate (Protocatechuic acid-3-O-sulfate)	1	0	1	0	1 0	2 1	1	0	1 0	0 0	1 1	0.4 (-0.4, 1.1)	0.4 (-0.1, 0.7)	1.6 (0.2, 2.9)	0.007	0.109	
4-Hydroxybenzoic acid-3-glucuronide (Protocatechuic acid-3-O-B-D-glucuronide)	27	2	2	3	2 1	3 2	.1	0	-14 3	-3 1	-15 3	16 (7, 26)	6 (1, 10)	18 (10, 27)	< 0.001	0.011	
4-Hydroxy-3,5-dimethoxybenzoicocid (Syringic acid)	545	78	165	73	203 74	122 63	101	41	-192 77	-232 78	-172 66	358 (120, 595)	435 (195, 675)	294 (90, 498)	< 0.001	0.625	
Cinnamic acids																	
3'-Hydroxy-4'-methoxycinnamic acid (Isoferulic acid)	466 6.1	208 3.1	-453 -1.8	279 0.4	-748 307 -1.9 0.7	-473 274	6,100	355	220 302 -3.6 0.5	912 332 -3.1 0.7	488 296 -3.3 0.9	-674 (-1,757, 410)	-1,660 (-2,852, -468) 1.2 (-0.8, 3.2)	-961 (-2,024, 101)	0.014 0.001	0.245 0.395	
5-O-Caffeoylquinic acid (Chlorogenic acid)	6.1	3.1		5	-1.9 0.7	-0.2 0.8 25 6	1.0	0.4	-3.6 0.5 15 5	-3.1 0.7 -1 1	-3.3 0.9 13 6	1.8 (0.4, 3.1)		3.1 (0.6, 5.6)	0.001	0.395	
4'-Hydroxycinnamic acid (p-Coumaric acid) 2'-Hydroxycinnamic acid (p-Coumaric acid)	13	1	21 10	5	1 1	25 6	22	1	-5 4	-1 1	-1 3	6 (-9, 20) 16 (4, 28)	3 (-1, 7) 1 (-10, 12)	12 (-5, 30) 3 (-7, 13)	0.006	0.554	
3'-Hydroxycinnamic acid (m-Coumaric acid)	96	0	9	-	4 4	6 5	58	2	-17 5	-12 5	-18 5	25 (9, 32)	21 (7, 34)	24 (9, 39)	<0.001	0.799	
3'-Methoxycinnamic acid-4'-glucuronide (Ferulic acid 4-O-8-D-glucuronide)	11	3	21	5	13 3	16 4	5	2	6 5	-12 5	10 4	15 (1, 31)	15 (5, 25)	6 (-6, 17)	<0.001	0.799	
3'-Methoxycinnamic acid-4'-sulfate (Ferulic acid 4-O-sulfate)	11	5	4	1	9 2	11 3	3	2	3 1	4 2	1 1	1 (-3, 4)	5 (-2, 11)	8 (2, 14)	0.005	0.120	
4'-Methoxycinnamic acid-3'-glucuronide (Isoferulic acid 3-O-8-D-glucuronide)	12	2	20	5	26 6	27 5	10	2	6 5	5 7	4 5	14 (-0.4, 29)	22 (3, 40)	22 (8, 37)	< 0.001	0.732	
4'-Hydroxycinnamic acid-3'-glucuronide (Caffeic acid 3-O-6-D-glucuronide)	48	9	2	5	1 7	-4 6	40	6	-15 5	-1 8	-7 6	17 (3, 31)	2 (-20, 24)	3 (-13, 24)	0.208	0.346	
3'-Hydroxycinnamic acid-4'-sulfate (Caffeic acid-4-O-sulfate)	1	ō	1	0	0 0	0 0	1	0	0 0	0 0	-1 0	0.7 (0.2, 1.3)	0.1 (-0.4, 0.5)	0.7 (0.3, 1.2)	0.002	0.075	
Cinnamic acid-4'-glucuronide (p-Coumaric acid-4-O-B-D-glucuronide)	5	1	95	7	1 1	84 7	4	1	0 7	1 1	2 7	95 (74, 115)	-0 (-4, 4)	83 (62, 103)	< 0.001	< 0.001	
4'-Hydroxy-3',5'-dimethoxycinnamic acid (Sinapic acid)	140	29	156	41	62 40	112 40	158	29	57 43	64 42	113 41	99 (-20, 219)	-1 (-120, 117)	-1 (-117, 114)	0.303	0.404	
Phenylacetic acids	100 Mark 11 ab	20070-2007	1,110	0000000	and the second	NEW YORK AND ARREST	0.00000000	0 - 3001	and the second	and accept an acceptance	100000 10000		And the modern community of the communit		10000000	talograph 1	
Phenylacetic acid		1,536		1,002	735 1,801	-3,911 840	13,322	1,486	-5,154 1,049	3,890 1,886	-4,110 880	5,241 (2,312, 8,171)	-3,155 (-8,424, 2,114)	199 (-2,258, 2,657)	0.569	0.008	
3'-Hydroxyphenylacetic acid	1,429	430	-1,196	276	-891 823	-1,831 238	3,636	1,441	-2,162 289	309 862	-1,666 250	967 (148, 1,784)	-1,201 (-3,639, 1,238)	-165 (-823, 543)	0.794	0.097	
4'-Hydroxyphenylacetic acid		1,329	1,856	945	2,221 1,429	-1,776 755	8,157	976	-2,545 990	3,727 1,496	-1,837 792	4,401 (1,622, 7,180)	-1,506 (-5,708, 2,695)	61 (-2,160, 2,282)	0.369	0.011	
3',4'-Dihydroxyphenylacetic acid	694	423	-432	173	-477 95	-298 136	477	257	-227 181	-431 100	-206 142	-205 (-710, 301)	-46 (-324, 233)	-92 (-490, 306)	0.432	0.796	
4'-hydroxy-3'-methoxyphenylacetic acid (Homovanillic acid)	768	72	127	58 15	162 69 -40 17	-60 60 -26 15	872 180	66 15	-219 61 -29 16	37 72	-313 63 -5 16	92 (-78, 263) 42 (-3, 87)	125 (-78, 328)	256 (79, 432)	0.019	0.287	
3'-Methyoxyphenylacetic acid-4'-sulfate (Homovanillic acid sulfate)	201	16	13	15	-40 17	-26 15	180	15	-29 16	-13 18	-5 16	42 (-3, 87)	-27 (-76, 23)	-20 (-64, 24)	0.926	0.017	
Phenylpropionic acids	24,678	0.040	-649	1.001	445 4404	-1,004 937	26,611	1,262	-2,499 1,143	522 1,173	-2,576 981	1,849 (-1,353, 5,052)	-936 (-4,225, 2,352)	1,572 (-1,177, 4,321)	0.518	0.121	
3-(4"-Hydroxyphenyl)propanoic acid 3-(3"-Hydroxyphenyl)propanoic acid		571		1,091 283	-415 1,121 105 420	-1,004 937 -689 322	2,520	491	-2,499 1,143 -1,006 296	522 1,173 -703 440	-658 337	-40 (-871, 790)	808 (-424, 2,041)	-31 (-975, 913)	0.493	0.293	
2-(4'-Hydroxyphenoxy)propanoic acid	69	16	-13	6	36 18	11 13	71	11	-1,000 290	-7 18	-23 14	-3 (-22, 15)	43 (-9, 94)	34 (-5, 74)	0.112	0.066	
3-(4'-Hydroxy-3'-methoxyphenyl)propanoic acid (Dihydroferulic acid)	127	42	9	41	-11 37	74 40	122	52	-42 33	11 39	-10 41	51 (-42, 144)	-22 (-130, 86)	84 (-32, 200)	0.228	0.339	
3-(3'.4'-Dihydroxyphenyl)propangic acid (Dihydrocaffeic acid)	23	9	-9	5	0 8	-2 5	9	4	-8 5	13 9	15 5	0 (-14, 14)	-13 (-38, 12)	13 (-1, 27)	0.965	0.126	
3-(3'-Methoxyphenyl)propanoic acid-4'-glucuronide (Dihydroferulic acid 4-O-6-D-glucuronide)	144	26	114	22	213 43	251 51	66	12	41 9	212 51	37 7	64 (11, 117)	34 (-110, 179)	212 (92, 331)	0.004	0.035	
3-(4'-Methoxyphenyl)propanoic acid-3'-sulfate (Dihydro isoferulic acid 3-O-sulfate)	10	2	2	1	8 3	3 1	10	1	-2 1	-3 3	-3 1	5 (1, 8)	11 (3, 18)	6 (2, 10)	< 0.001	0.223	
3-(3'-Methoxyphenyl)propanoic acid-4'-sulfate (Dihydroferulic acid 4-O-sulfate)	19	5	-9	3	25 8	-7 3	22	5	-8 3	-7 9	-11 3	0 (-10, 9)	32 (7, 56)	4 (-5, 13)	0.021	0.009	
3-(4'-Methoxyphenyl)propanoic acid-3'-glucuronide (Dihydro isoferulic acid 3-O-B-D-glucuronide)	107	21	-16	8	13 13	-17 9	51	10	-54 8	-33 14	-33 9	38 (14, 62)	47 (7, 86)	16 (-10, 42)	< 0.001	0.350	
3-(4'-Hydroxyphenyl)propanoic acid-3'-sulfate (Dihydrocaffeic acid 3-O-sulfate)	125	13	17	11	-9 9	9 9	115	10	9 11	-9 10	-1 10	7 (-24, 39)	0 (-27, 27)	10 (-16, 37)	0.577	0.816	
3-(4'-Hydroxyphenyl)propanoic acid-3'-glucuronide (Dihydrocaffeic acid 3-O-6-D-glucuronide)	79	14	-30	8	-23 12	-8 10	93	16	-29 8	-7 12	-25 10	-1 (-25, 22)	-16 (-50, 19)	17 (-11, 45)	0.994	0.154	
3-(3'-Hydroxy-4'-methoxyphenyl)propanoic acid (Dihydroisoferulic acid)	99	28	-47	24	12 41	-42 12	53	14	32 25	115 43	-46 12	-78 (-148, -8)	-103 (-225, 19)	4 (-30, 38)	0.022	0.154	
Benzaldehydes																	
4-Hydroxybenzaldehyde	112	11	-16	8	1 8	-6 7	104	10	-25 8	-23 8	-15 8	9 (-14, 31)	24 (1, 47)	9 (-13, 31)	0.078	0.440	
3,4-Dihydroxybenzaldehyde	51	9	4	7	9 7	8 8	31	8	4 8	3 8	26 8	-1 (-22,21)	7 (-15, 28)	-18 (-42, 6)	0.636	0.155	
Benzene diols and triols																	
2-hydroxybenzene-1-sulfate (Catechol-O-sulfate)	212	44	41	37	34 39	25 33	181	22	-112 38	64 40	-29 35	153 (46, 260)	-31 (-144, 83)	55 (-43, 152)	0.120	0.021	
2-Hydroxybenzene-1-glucuronide (Catechol-O-1-glucuronide)	27	5	3	5	10 6	-7 4	27	4	-11 5	13 6	-2 4	14 (1, 27)	-3 (-19, 14)	-5 (-15, 6)	0.646	0.082	
Flavonols	500	50	•	20	8 27	20 52	004	40	87 21	04 00	447 0:	04 (00 440)	70 (450.0)	04/474 0	2011	0.050	
Quercetin	596	50	6	20	8 27	32 30	601	42	87 21	81 28	117 31	-81 (-22, -140)	-73 (-152, 6)	-84 (-171, 3)	0.014	0.950	
Phenyl-y-valerolactones and Phenylvaleric acids	2.4	0.7	0.0	0.0	0.4 0.7	0.0 0.7	2.5	4.0	0.0 4.0	4.4 0.7	0.0	00(07.07)	45(04.04)	0.0 / 0.4 0.0	0.500	0.450	
5-(phenyl)-y-valerolactone-4'-glucuronide 5-(4'-hydroxyphenyl)-y-valerolactone-3'-glucuronide	2.4 10.1	0.7 3.4	0.0	0.9 1.8	0.4 0.7 -0.7 1.8	0.0 0.7 -1.1 1.7	3.5 3.9	1.0	0.0 1.0 -3.5 1.9	-1.1 0.7 -3.0 1.9	0.0 0.8 -2.4 1.7	0.0 (-2.7, 2.7) 3.5 (-2.0, 9.0)	1.5 (-0.4, 3.4) 2.3 (-3.1, 7.7)	0.0 (-2.1, 2.3) 1.3 (-3.6, 6.3)	0.528 0.162	0.458 0.827	
5-(4 -nydroxyphenyl)-y-valerolactone-sulfate (3',4' isomers)	29.8	7.9	-4.8	2.8	4.3 8.1	-1.1 1.7 -0.1 5.6	15.7	4.7	-3.5 1.9 -12.4 2.9	-3.0 1.9 -9.0 8.3	-2.4 1.7 -8.3 5.7	7.6 (-0.7, 15.8)	13.3 (-10.5, 37.1)	8.2 (-8.1, 24.5)	0.162	0.827	
5-(nydroxypnenyi)-y-valerolactone-suitate (3 ,4 isomers) 5-(phenyl)-y-valerolactone-3'-suitate	1.3	0.5	-0.7	0.2	4.3 8.1 0.0 0.7	-0.1 5.6	1.4	0.8	-12.4 2.9 -0.7 0.2	-9.0 8.3 0.6 0.8	-8.3 5.7 0.0 0.5	0.1 (-0.4, 0.5)	-0.6 (-2.8, 1.5)	-0.4 (-1.6, 0.9)	0.552	0.840	
5-(phenyl)valeric acid-sulfate-glucuronide isomer	1.5	0.4	-0.7	0.5	0.8 1.3	-0.5 0.6	3.4	1.5	-0.7 0.2	-0.2 1.4	-0.3 0.6	0.1 (-1.1, 1.3)	1.0 (-2.9, 4.8)	-0.2 (-1.9, 1.6)	0.725	0.782	
a-three Milane or a-angle-Ancolouing isolite.	1.0	J.4	-0.3	V.0	0.0 1.3	-0.0 0.6	3.4	1.0	-U.4 U.5	-0.2 1.4	-U.S U.B	0.1 (*1.1, 1.3)	1.0 (-2.3, 4.0)	-U.Z (-1.0, 1.0)	0.720	0.702	

- 23 Supplemental TABLE S5 Analysis of 74 (poly)phenol metabolites detected in 24 h urine samples after consumption of cranberry
- or placebo. Data are expressed as total μ mol collected over 24 h, after adjusted for volume of urine excreted. Differences represent
- 25 mean estimated effect of cranberry over control and 95% confidence intervals. Statistical analyses are based on repeated
- 26 measurements analysis of covariance.

	day	Cranb	erry 1 n			Control day 1 1 mo			Cranbe Delta 1		Control Delta 1 mo	Difference (Cranberry vs Control) at day 1 (acute)			Difference (Cranberry vs Control) at 1 mo (chronic)				Difference (Cranberry vs Control) Delta 1 mo (change metabolites acute vs chronic)			
	Mean	SEM	Mean	SEM	Mean	SEM	Mean	SEM	Mean	SEM	Mean SEM	mean	lower	upper p	mean	lower	upper	ρ	mean	lower	upper	ρ
Total polyphenois Hippuric acids	3808	549	6566	933	6190	974	4198	547	2758	1054	-1992 957	-2382	-4587	-176 <i>0,035</i>	2368	133	4603	0,038	4750	1857	7642	0,002
Hippuric acid	101,0	12,6	98,3	14,1	115,3	16,6	91,5	14,5	-2,7	13,5	-23,8 12,6	-14,3	-56,0	27,4 0,493	6,8	-34,0	47,6	0,739	21,1	-16,4	58,5	0,263
2-(benzoylamino)-2-hydroxyacetic acid (α-hydroxyhippuric acid)	517,9	71,6	656,2	122,7	625,1	86,5	519,1	53,7	138,3	99,4	-105,9 80,1	-107,1	-332,2	118,0 0,342	137,1	-142,2		0,328	244,2	-16,6	504,9	0,066
2"-Hydroxyhippuric acid 3"-Hydroxyhippuric acid	15,7	2,2	39,1 88.7	8,6 19.6	17,6 114.1	4,4 24.1	13,0 59.8	2,2 12.1	23,5	9,0 22.2	-4,6 4,0 -54,3 27,1	-1,9	-11,5	7,7 0,688 35.2 0.428	26,1	7,4		0,007	28,1	7,6	48,5	0,008
3'-Hydroxyhippuric acid 4'-Hydroxyhippuric acid	47.7	7.1	53.1	19,6	61,0	8.9	59,8 44.7	5.5	5.5	9.8	-54,3 27,1 -16,3 9,2	-23,1 -13.3	-81,5 -36.1	35,2 0,428 9,4 0,243	28,9 8,4	-18,6 -18,0		0,226	52,0 21,8	-18,1 -5,4	122,2 49.0	0,142
Benzoic acids	41,1		00,1	11/4	01,0	0,0	450	0,0	0,0	0,0	10,0 0,2	15,5	30,1	3,4 0,243	0,4	10,0	54,5	O,DEE	22,0	3,4	45,0	0,115
Benzoic acid	2,0	0,5	2,9	0,9	2,4	0,7	1,9	0,6	0,9	0,9	-0,5 0,4	-0,3	-2,0	1,3 0,679	1,0	-1,1		0,343	1,4	-0,6	3,4	0,166
2,3-Dihydroxybenzoic acid	0,0	0,0	0,0 8.7	0,0	0,0 4.0	0,0	0,0 3.2	0,0	0,0 4.1	0,0	0,0 0,0 -0.7 0.8	0,0	0,0	0,0 0,907	0,0	0,0		0,008	0,0	0,0	0,1	0,020
2,5-Dihydroxybenzoic acid 2-Hydroxybenzoic acid	4,6 0.1	0,6	0,2	1,6	0,1	0,8	0.1	0,5	0,1	1,8	0,0 0,0	0,6	-1,4 0,0	2,6 0,537 0,1 0,548	5,4 0,1	-0,1		0,003	4,8 0.0	0,6 -0,1	0,2	0,501
3-Hydroxybenzoic acid	0,1	0,0	0,1	0,0	0,1	0,0	0,1	0,0	0,0	0,0	0,0 0,0	0,0	-0,1	0,1 0,748	0,0	-0,1		0,784	0,0	-0,1	0,1	0,742
3,4-Dihydroxybenzoic acid (Protocatechuic acid)	1,4	0,2	1,7	0,2	1,8	0,3	1,7	0,2	0,3	0,3	-0,1 0,4	-0,3	-1,1	0,4 0,379	0,0	-0,6		0,899	0,4	-0,6	1,3	0,436
3-Methoxybenzoic acid-4-sulfate (Vanillic acid-4-O-sulfate) 4-Hydroxy-3-methoxybenzoic acid (Vanillic acid)	38,2	6,7 3,8	25,4 37,1	4,2 7,3	42,3 27,1	5,8 4,6	28,2 26,2	3,8 5,0	-12,8 16,9	6,3 8,7	-14,1 6,7 -0,9 6,3	-4,1 -6,9	-22,1 -18,8	13,8 0,644 5.0 0,250	-2,8 10,9	-14,3 -7,2		0,620	1,3 17,8	-17,2 -4,3	19,8 40,0	0,887
4-riyaroxy-3-memoxybenzoic acid (vanilic acid) 3-Hydroxy-4-methoxybenzoic acid (Isovanillic acid)	7.1	1,2	8,6	2.1	11,0	2,2	5.1	0,9	16,9	2,3	-5,9 2,6	-3,9	-8.8	1.1 0.121	3.5	-1,2		0,231	7,3	0.4	14,3	0,039
3,4,5-Trihydroxybenzoic acid (Gallic acid)	0,1	0,0	0,1	0,1	0,0	0,0	0,0	0,0	0,0	0,1	0,0 0,0	0,1	0,0	0,2 0,099	0,0	-0,1		0,475	0,0	-0,2	0,1	0,402
4-Hydroxybenzoic acid-4-sulfate	1663,8	340,6	3739,2	857,6	2381,1	460,0	1910,4	382,3	2075,4	923,9	-470,6 544,5	-717,3	-1859,1	424,5 0,212	1828,8	-128,2		0,066	2546,1	329,0	4763,1	0,025
4-Hydroxybenzoic acid-3-glucuronide (Protocatechuic acid-3-O-8-D-glucuronide) 3-Hydroxy-4-methoxybenzoic acid-5-sulfate (4-Methylgallic acid-3-O-sulfate)	0,1 3.5	0,0	0,2 4.8	0,0	0,2 3,1	0,0	0,1	0,0	0,1	0,0	0,0 0,0 -1,2 0,5	-0,1 0,4	-0,1 -1.5	0,0 0,075 2,2 0,694	0,1	0,0		0,077 0,021	0,1 2.6	0,0 -0.4	0,2 5,6	0,033
3-Hydroxy-4-memoxybenzoic acid-5-suriate (4-memyigallic acid-3-0-suriate) 4-Hydroxy-3,5-dimethoxybenzoic acid (Syringic acid)	7.1	1.9	4,8	1,0	5,1	1.0	2.8	0,6	-3.0	1,3	-1,2 0,5 -2.6 1.1	1.7	-1,5	6,1 0,443	1.3	-1.0		0.262	-0.4	-0,4	3.6	0,847
Cinnamic acids		- 1,0		-,,-		-,,+			*,*	- 10	2,0 1,1	-,-	-,-	0,2 0,110	-,-	-,-		-,	-,-	,-	-,-	
4'-Hydroxy-3'-methoxycinnamic acid (Ferulic acid)	1,5	0,3	1,0	0,2	2,4	0,6	1,2	0,3	-0,5	0,4	-1,2 0,6	-0,9	-2,2	0,4 0,173	-0,2	-0,9		0,460	0,6	-0,8	2,1	0,366
3'-Hydroxy-4'-methoxycinnamic acid (Isoferulic acid) 3'.4'-Dihydroxycinnamic acid (Caffeic acid)	24,2	6,2 0.1	14,6	5,1 0.2	31,3 0.7	10,4	18,3	6,1	-9,7 0,5	6,0	-13,0 5,9 0,2 0,2	-7,0 -0,1	-31,0 -0,4	16,9 0,557 0,2 0,483	-3,7 0.2	-19,8 -0,3		0,640	3,3 0.3	-13,7 -0,3	20,3	0,699
5-Q-Caffeovlouinic acid (Chlorogenic acid)	0,6	0.1	0.4	0,2	0,7	0,1	0.3	0,2	-0.3	0,2	-0.1 0.1	0.3	0.0	0,2 0,483	0,2	-0,3		0.232	-0.2	-0,3	0,9	0.165
4'-Hydroxycinnamic acid (p-Coumaric acid)	0,2	0,0	0,2	0,0	0,2	0,0	0,1	0,0	0,0	0,1	-0,1 0,0	0,0	-0,1	0,1 0,589	0,1	0,0	0,2	0,030	0,1	0,0	0,2	0,097
2'-Hydroxycinnamic acid (o-Coumaric acid)	0,2	0,1	0,3	0,1	0,2	0,0	0,2	0,0	0,0	0,1	0,0 0,1	0,0	-0,1	0,2 0,525	0,1	-0,1		0,198	0,1	-0,1	0,3	0,460
3'-Hydroxycinnamic acid (m-Coumaric acid) 3'-Methoxycinnamic acid-4'-glucuronide (Ferulic acid 4-0-6-D-glucuronide)	1,0	0,2	0,9	0,2	1,0	0,2	0,8	0,1	-0,1 0.2	0,2	-0,2 0,2 -0.2 0.1	0,0 -0.1	-0,4 -0.4	0,5 0,859 0.1 0,241	0,1	-0,4		0,697	0,1	-0,6 0.0	0,7	0,820
3'-Methoxycinnamic acid-4'-sulfate (Ferulic acid 4-0-sulfate) 3'-Methoxycinnamic acid-4'-sulfate (Ferulic acid 4-0-sulfate)	88.7	18,6	98,9	15,6	137,4	22,7	101.1	18,0	10,1	13.9	-0,2 0,1 -36.4 18.7	-0,1 -48,7	-0,4	10,0 0,102	-2,2	-50,1		0,110	46,5	0,0	93,0	0,052
4'-Methoxycinnamic acid-3'-glucuronide (Isoferulic acid 3-O-ß-D-glucuronide)	36,8	8,1	18,1	3,5	20,3	4,6	20,5	4,6	-18,8	8,9	0,2 5,6	16,5	-2,8	35,8 0,092	-2,5	-14,1		0,669	-19,0	-40,7	2,8	0,086
4'-Methoxycinnamic acid-3'-sulfate (Isoferulic acid 3-O-sulfate)	1,2	0,3	1,3	0,2	1,1	0,2	1,0	0,2	0,1	0,3	-0,1 0,2	0,1	-0,6	0,7 0,861	0,4	-0,2		0,189	0,3	-0,4	1,0	0,400
4'-Hydroxycinnamic acid-3'-glucuronide (Caffeic acid 3-O-8-D-glucuronide)	2,4	0,6	1,7	0,3	1,5	0,3	0,9	0,2	-0,7	0,7	-0,6 0,3	0,9	-0,5	2,3 0,208	0,8	0,1		0,028	-0,1	-1,7	1,6	0,942
3'-Hydroxycinnamic acid-4'-glucuronide (Caffeic acid 4-O-8-D-glucuronide) Cinnamic acid-4'-glucuronide (p-Coumaric acid-4-O-8-D-glucuronide)	2,5	0,5	2,3	0,4	2,6 0.5	0,5	2,5 0.3	0,6	-0,2 0,0	0,6	-0,1 0,7 -0.2 0,1	0,0	-1,4 -0.1	1,3 0,949 0.5 0,228	-0,2 0,4	-1,6 0,2		0,791	-0,1 0,2	-1,9 -0.1	1,6	0,880
4'-Hydroxy-3',5'-dimethoxycinnamic acid (Sinapic acid)	2,6	0,5	2,3	0,4	1,5	0,2	1,2	0,2	-0,3	0,6	-0,3 0,3	1,1	-0,1	2,3 0,070	1,0	0,1		0,037	-0,1	-1,4	1,2	0,922
Phenylacetic acids																						
Phenylacetic acid	97,5	18,7	37,3	10,9	46,7	10,5	64,1	17,4	-60,2	19,7	17,5 20,0	50,9	6,4	95,3 0,026	-26,8	-67,5		0,190	-77,7	-134,5	-20,9	0,009
3-Hydroxyphenylacetic acid 4-Hydroxyphenylacetic acid	624,7 380.6	147,8 72.6	507,9 697.3	100,5	1332,4 653.3	335,9 130.3	417,2 661,7	117,8 148.2	-116,8 316,7	173,3 149.0	-915,2 358,5 8.4 131.0	-707,7 -272,8	-1426,2 -566,9	10,7 0,053 21,4 0,068	90,7 35,6	-220,2 -371,3		0,559 0.861	798,4 308,3	16,6 -95,3	1580,2 712,0	0,046
3.4-Dihydroxyphenylacetic acid	38,6	7.3	30,3	6.0	49,3	7.8	27.5	3.7	-8.3	9.3	-21.8 9.4	-10,7	-32,2	10.8 0.321	2.8	-11.7		0,699	13.5	-13.2	40.2	0,313
Homovanillic acid	15,8	2,7	18,2	2,6	18,5	2,5	15,6	2,5	2,4	3,1	-2,9 2,1	-2,7	-10,2	4,9 0,478	2,7	-4,6		0,465	5,3	-2,4	13,1	0,174
Homovanillic acid sulfate	6,9	1,0	7,2	1,2	10,0	1,4	6,4	1,0	0,3	1,5	-3,6 1,6	-3,1	-6,6	0,4 0,084	0,8	-2,3	3,9	0,598	3,9	-0,6	8,4	0,085
Phenylpropionic acids 3-(4'-Hydroxyphenyl)propanoic acid	18,7	5.5	18,0	3,9	14,4	3,0	10,3	2,5	-0.7	6,3	-4,1 3,5	4,3	-8,6	17,2 0,504	7,7	-1,8	17,2	0,109	3,4	-11,5	18,4	0,647
3-(3'-Hydroxyphenyl)propanoic acid	2,5	0,9	3,0	0,6	2,8	0,6	3,3	1,1	0,5	1,1	0,5 1,3	-0,3	-2,5	1,9 0,795	-0,3	-2,8		0,828	0,0	-3,3	3,4	0,984
2-(4'-Hydroxyphenoxy)propanoic acid	3,4	0,6	2,9	0,6	5,3	1,1	2,2	0,7	-0,5	8,0	-3,1 1,1	-1,9	-4,4	0,6 0,134	0,7	-1,2	2,6	0,458	2,6	-0,2	5,4	0,064
3-(4'-Hydroxy-3'-methoxyphenyl)propanoic acid (Dihydroferulic acid)	1,3	0,3	5,2	1,1	3,4	1,0	1,1	0,3	3,9	1,1	-2,3 1,0	-2,1	-4,1	-0,1 0,038	4,0	1,7		0,001	6,1	3,1	9,2	0,000
3-(3',4'-Dihydroxyphenyl)propanoic acid (Dihydrocaffeic acid) 3-(3'-Methoxyphenyl)propanoic acid-4'-glucuronide (Dihydroferulic acid 4-0-8-D-glucuronide)	1,6 16,2	0,4 3,1	2,3 33,9	6,8	1,3 37,4	9,5	2,4 21,5	0,7 3.5	0,7 17,7	0,6 8.0	1,1 0,9 -15,9 8,3	0,3 -21,3	-0,8 -40,7	1,4 0,579 -1.8 0,033	-0,1 12,4	-1,8 -3,5		0,888 0,123	-0,4 33,7	-2,5 10.4	1,6 56,9	0,666
3-(4'-Methoxyphenyl)propanoic acid-3'-sulfate (Dihydro isoferulic acid 3-O-sulfate)	12,4	2,2	17,3	2,7	23,0	3,3	16,4	2,5	4,9	3,2	-6,6 3,1	-10,6	-18,4	-2,9 0,009	0,9	-6,6		0,806	11,6	2,5	20,6	0,014
3-(3'-Methoxyphenyl)propanoic acid-4'-sulfate (Dihydroferulic acid 4-O-sulfate)	0,3	0,1	0,5	0,1	0,6	0,2	0,5	0,1	0,3	0,1	-0,1 0,2	-0,4	-0,7	0,0 0,044	0,1	-0,3		0,701	0,4	-0,1	0,9	0,090
3-(4*-Methoxyphenyl)propanoic acid-3*-glucuronide (Dihydro isoferulic acid 3-O-8-D-glucuronide_	22,8	4,4	25,1	4,5	45,9	12,2	38,1	9,4	2,3	4,6	-7,8 14,9	-23,1	-48,4	2,3 0,073	-13,0	-33,5		0,208	10,1	-20,1	40,4	0,503
3-(4'-Hydroxyphenyl)propanoic acid-3'-sulfate (Dihydrocaffeic acid 3-O-sulfate) 3-(4'-Hydroxyphenyl)propanoic acid-3'-glucuronide (Dihydrocaffeic acid 3-O-8-D-glucuronide)	12,8	1,9	16,4	2,9	20,4	3,3	14,3	0.2	3,6	2,9 0.5	-6,1 2,2 -1.3 0.5	-7,6 -1,2	-15,1 -2.2	-0,1 0,047 -0,1 0,028	2,0	-5,4 0.3		0,584	9,6 2.4	2,2 1.1	17,1 3,7	0,012
Benzaldehydes	1/4	0,2	2,5	0,4	2,0	0,0	1,0	0,2	1,1	0,0	1,5 0,5	-1,2	-2,2	-0,1 0,028	1,2	0,3	2,2	0,012	2,4	4,1	3,7	0,001
3-Hydroxybenzaldehyde	0,2	0,1	0,3	0,2	0,1	0,1	0,0	0,0	0,0	0,2	-0,1 0,1	0,1	-0,2	0,5 0,361	0,3	-0,1	0,6	0,202	0,1	-0,4	0,6	0,704
4-Hydroxybenzaldehyde	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0 0,0	0,0	0,0	0,0 0,063	0,0	0,0		0,301	0,0	0,0	0,0	0,301
3,4-Dihydroxybenzaldehyde	6,6	1,0	9,5	1,6	9,0	1,6	5,7	0,7	2,8	1,9	-3,3 1,6	-2,3	-6,2	1,5 0,231	3,8	0,0	7,5	0,047	6,1	1,1	11,1	0,017
Benzene diols and triols 2-hydroxybenzene-1-sulfate (Catechol-O-sulfate)	2.0	0.3	2.4	0.4	2.0	0.3	1,6	0.3	0,4	0.5	-0.4 0.2	0,0	-0,9	1.0 0.912	0,8	-0,2	1.9	0,109	0,8	-0,4	1,9	0,177
2-Hydroxybenzene-1-glucuronide (Catechol-O-1-glucuronide)	6,3	1,3	6,6	1,3	2,4	0,5	1,5	0,3	0,3	1,2	-0,8 0,3	3,9	1,1	6,7 0,008	5,0	2,2		0,001	1,2	-1,5	3,8	0,387
2-Hydroxy-4-methylbenzene-1-sulfate/2-Hydroxy-5-methylbenzene-1-sulfate (4-Methylcatechol-1-sulfate)		1,5	3,0	0,6	2,9	0,7	1,8	0,5	-1,9	1,4	-1,1 0,8	2,0	-1,4	5,3 0,241	1,2	-0,5	2,8	0,154	-0,8	-4,2	2,6	0,637
5,6-Dihydroxybenzene-1-sulfate (Pyrogallol-1-O-sulfate)	0,1	0,0	0,1	0,0	0,1	0,0	0,1	0,0	0,0	0,0	0,0 0,0	0,0	-0,1	0,0 0,532	0,0	-0,1		0,724	0,0	-0,1	0,1	0,955
3-Hydroxy-2-methoxybenzene-1-sulfate (2-Methylpyrogallol-1-sulfate) 2.6-Dihydroxybenzene-1-sulfate (Pyrogallol-2-O-sulfate)	14.0	0,3	0,3 15.0	0,2	0,4 24.8	0,1 4.1	0,2 17.5	0,1 3.2	-0,1 1.0	0,2	-0,2 0,1 -7.3 3.8	0,0	-0,6 -20,4	0,5 0,924 -1.1 0,030	0,1	-0,3 -11.5		0,622	0,1 8.3	-0,2 -1.3	0,5 17.8	0,504
2-Hydroxy-6-methoxybenzene-1-sulfate/3-Hydroxy-2-methoxybenzene-1-sulfate (1-Methylpyrogallol-2		0,1	0,3	0,1	0,4	0,1	0,3	0,1	0,0	0,1	-0,1 0,0	-0,1	-0,2	0,1 0,346	0,0	-0,1		0,661	0,1	-0,1	0,3	0,230
Flavonols																						
Kaempferol	0,6	0,2	0,4	0,2	0,3	0,1	0,6	0,4	-0,2	0,2	0,3 0,3	0,3	-0,1	0,6 0,124	-0,2	-1,0		0,599	-0,5	-1,2	0,3	0,209
Quercetin Kaempferol-3-O-6-D-qlucuronide	0,1	0,0	0,1	0,0	0,1	0,0	0,1	0,0	0,1 -0,1	0,0	0,0 0,0 -0,1 0,1	0,0	-0,1 -0,2	0,0 0,188 0,4 0,557	0,1	0,0		0,014	0,1	0,0	0,2	0,007
Kaempterol-3-O-8-D-glucuronide Quercetin 3-sulfate	0,3	0,1	0,2	0,0	0,2	0,1	0,1	0,0	-0,1 0.0	0,2	-0,1 0,1 0.0 0,0	0,1	-0,2	0,4 0,557 0,1 0,420	0,1 0,1	0,0		0,167	0,0	-0,4 0.0	0,4	0,959
Quercetin-7-O-8-D-glucuronide	0,1	0,0	0,1	0,0	0,1	0,0	0,1	0,0	0,0	0,0	0,0 0,0	0,0	-0,1	0,0 0,128	0,1	0,0		0,002	0,1	0,0	0,1	0,032
Phenyl-y-valerolactones and Phenylvaleric acids																						
5-(phenyl)-y-valerolactone-sulfate-glucuronide isomer (3′,4′)	5,6	1,5	4,7	1,0	2,6	1,0	1,3	0,3	-0,6	1,4	-1,5 0,9	2,9	-0,8	6,7 0,121	3,4	1,0		0,006	0,9	-2,6	4,3	0,616
5-(phenyl)-y-valerolactone-4'-glucuronide 5-(4'-hydroxyphenyl)-y-valerolactone-3'-glucuronide	1,3	0,2 3,5	1,1 6,8	1,1	0,6 5,7	1,9	0,6 3.4	0,1	-0,1 -3,2	0,2 2,9	-0,1 0,2 -2,7 1,8	0,6 4,9	0,0 -3,4	1,3 0,042 13,3 0,241	0,5 3,5	-0,1 0,3		0,087 0,031	-0,1 -0,5	-0,7 -7,5	0,5 6,5	0,803
5-(4 -nydroxyphenyl)-y-valerolactone-3 -glucuronide 5-(3'-hydroxyphenyl)-y-valerolactone-4'-glucuronide	2,9	1,0	2,1	0,4	1,7	0,6	1,1	0,9	-0,6	0,8	-2,7 1,8	1,2	-1,2	3,6 0,308	1,0	-0,1		0,031	0,0	-7,5	1,9	0,886
5-(phenyl)-y-valerolactone-3'-glucuronide	0,6	0,2	0,5	0,1	0,6	0,2	0,2	0,0	0,0	0,2	-0,4 0,2	0,0	-0,5	0,5 0,994	0,3	0,0	0,6	0,048	0,4	-0,1	0,9	0,144
5-(hydroxyphenyl)-y-valerolactone-sulfate (3',4' isomers)	5,3	2,1	4,2	1,3	1,8	0,9	2,1	0,9	-0,8	2,1	0,1 0,6	3,5	-1,3	8,3 0,145	2,1	-1,3		0,222	-0,9	-5,6	3,7	0,686
5-(phenyl)-y-valerolactone-3'-sulfate 5-(phenyl)valeric acid-sulfate-glucuronide isomer	1.0	0,1	0,2	0,1	0,1	0,0	0,1	0,0	0,0 -0.1	0,1	0,0 0,0 -0.1 0.2	0,1	-0,1 -0.1	0,3 0,180 0.5 0,272	0,1	-0,1 -0.4		0,289	0,0 -0.1	-0,3 -0.5	0,3	0,823
2 Buenkilkmene gera annate Bracaroniae isonia	1,0	0,1	0,0	0,1	0,0	0,1	0,0	U,E	70,1	V,1	*V,1 V,E	0,2	-0,1	0,3 0,272	0,0	70,4	0,4	0,030	-0,1	-0,5	0,3	0,722

28 SUPPLEMENTAL FIGURE LEGENDS

- 29 **Supplemental Figure S1:** Dose-response between total cranberry polyphenols
- 30 consumed with cranberry juice. The amount of total (poly)phenols (TP) to be
- 31 consumed to achieve half-maximal effects (ED₅₀) at 2 h after consumption was 442
- 32 mg (based on data previously published in (18)). The grey dotted lines designate the
- 33 top (1.7%) and bottom of the best fit curve. The grey symbol indicates 2h increase
- 34 with cranberry powder in present study.

37 Supplemental FIGURE S1

