Table 1. Concentration (μM) of phenolic acid metabolites assessed by GC/MS/MS in plasma after rWPP and wWPP intake.

Phenolic Acid	PubChem CID	mg rWPP/ kg BW	0h	2h	4h	6h	mg wWPP/ kg BW	0h	2h	4h	6h
m-Hydroxyphenylacetic acid	12122	50	ND *a*	ND *a*	3.011 ± 0.338 *c*	1.187 ± 0.467 *b*	50	0.733 ± 0.323 *a*	4.502 ± 1.002 *c*	3.786 ± 0.001 *b*	4.391 ± 0.122 *b*
		100	ND *a*	0.637 ± 0.261 *c*	0.830 ± 0.126 *c*	0.114 ± 0.000 *b*	100	0.961 ± 0.228 *a*	7.499 ± 0.931 *c*	4.549 ± 0.001 *b*	5.801 ± 0.812 *b*
		150	ND *a*	0.303 ± 0.055 *c*	1.172 ± 0.208 *d*	0.199 ± 0.021 *b*	150	0.961 ± 0.228 *a*	2.067 ± 1.066 *b*	2.577 ± 0.649 *b*	4.325 ± 0.726 *c*
		300	ND *a*	0.455 ± 0.153 *b*	0.562 ± 0.086 *b*	0.532 ± 0.059 *b*	300	0.961 ± 0.228 *a*	2.125 ± 0.729 *b*	3.300 ± 1.698 *c*	3.209 ± 0.630 *c*
p-Hydroxyphenylacetic acid	127	50	2.876 ± 0.148 *a*	3.029 ± 0.128 *a*	3.236 ± 0.128 *a*	3.085 ± 2.955 *a*	50	1.518 ± 0.474 *a*	1.507 ± 0.153 *a*	1.498 ± 0.001 *a*	1.500 ± 0.028 *a*
		100	3.374 ± 0.646 *ab*	5.336 ± 1.957 *ab*	6.200 ± 1.056 *c*	1.613 ± 0.905 *a*	100	1.708 ± 0.228 *b*	1.851 ± 0.051 *b*	1.295 ± 0.001 *a*	1.742 ± 0.420 *b*
		150	3.148 ± 0.420 *a*	4.116 ± 0.332 *ab*	6.742 ± 3.361 *b*	3.284 ± 1.380 *a*	150	1.755 ± 0.237 *a*	3.413 ± 1.480 *bc*	3.465 ± 0.682 *b*	4.793 ± 0.355 *c*
		300	3.383 ± 1.364 *a*	3.870 ± 0.849 *bc*	5.646 ± 0.345 *c*	3.235 ± 0.275 *b*	300	1.794 ± 0.276 *a*	2.991 ± 1.049 *b*	3.974 ± 1.963 *b*	3.868 ± 0.887 *b*
Vanillic acid	8468	50	0.762 ± 0.247 *a*	1.487 ± 0.044 *ab*	4.305 ± 1.387 *c*	2.150 ± 0.781 *b*	50	0.441 ± 0.135 *a*	1.454 ± 0.917 *c*	0.894 ± 0.001 *b*	0.919 ± 0.185 *b*
		100	1.207 ± 0.199 *a*	4.451 ± 0.220 *c*	4.793 ± 0.090 *c*	0.869 ± 0.227 *b*	100	0.546 ± 0.228 *a*	1.643 ± 0.257 *c*	1.016 ± 0.001 *b*	1.133 ± 0.103 *b*
		150	1.008 ± 0.397 *a*	3.479 ± 0.341 *b*	3.645 ± 1.830 *b*	3.261 ± 0.180 *b*	150	0.447 ± 0.029 *a*	0.754 ± 0.279 *b*	0.740 ± 0.104 *b*	0.848 ± 0.134 *b*
		300	1.008 ± 0.397 *a*	1.919 ± 0.289 *b*	2.518 ± 0.362 *b*	2.114 ± 0.112 *b*	300	0.447 ± 0.129 *a*	0.690 ± 0.198 *ab*	0.765 ± 0.288 *b*	0.890 ± 0.220 *b*
Homovallinic acid	1738	50	0.612 ± 0.017 *a*	0.539 ± 0.105 *a*	1.464 ± 0.001 *b*	0.952 ± 0.478 *ab*	50	0.055 ± 0.015 *a*	0.323 ± 0.133 *c*	0.112 ± 0.001 *d*	0.078 ± 0.007 *b*
		100	0.629 ± 0.002 *a*	1.844 ± 0.271 *b*	1.848 ± 0.155 *b*	1.444 ± 0.087 *b*	100	0.055 ± 0.015 *a*	0.346 ± 0.181 *b*	0.023 ± 0.001 *a*	0.024 ± 0.087 *a*
		150	0.596 ± 0.079 *a*	1.696 ± 0.121 *b*	1.872 ± 0.449 *b*	1.697 ± 0.088 *b*	150	0.047 ± 0.007 *a*	2.371 ± 0.113 *b*	2.379 ± 0.102 *b*	2.280 ± 0.280 *b*
		300	0.664 ± 0.298 *a*	1.403 ± 0.024 *b*	1.463 ± 0.002 *b*	1.420 ± 0.035 *b*	300	0.037 ± 0.017 *a*	1.526 ± 0.662 *b*	2.564 ± 0.561 *c*	2.854 ± 1.296 *c*
Protocatechuic acid	72	50	ND *a*	0.833 ± 0.045 *b*	1.064 ± 0.002 *c*	1.479 ± 0.606 *c*	50	0.019 ± 0.002 *a*	0.364 ± 0.186 *b*	0.176 ± 0.001 *b*	0.108 ± 0.058 *b*
		100	ND *a*	2.471 ± 0.063 *c*	1.490 ± 0.085 *d*	0.521 ± 0.054 *b*	100	0.017 ± 0.005 *a*	0.242 ± 0.066 *c*	0.177 ± 0.001 *b*	0.288 ± 0.005 *d*
		150	ND *a*	0.416 ± 0.120 *b*	1.157 ± 0.508 *c*	0.442 ± 0.380 *b*	150	0.014 ± 0.002 *a*	0.879 ± 0.136 *b*	4.636 ± 0.009 *c*	3.348 ± 0.081 *c*
		300	ND *a*	1.074 ± 0.001 *c*	2.783 ± 0.004 *d*	1.068 ± 0.003 *b*	300	0.017 ± 0.000 *a*	0.628 ± 0.360 *b*	4.712 ± 1.122 *c*	3.061 ± 0.910 *c*
Homoprotocatechuic acid	547	50	ND	ND	ND	ND	50	ND	ND	ND	ND
		100	ND	ND	ND	ND	100	ND	ND	ND	ND
		150	ND	ND	ND	ND	150	ND	ND	ND	ND
		300	0.119 ± 0.023 *a*	0.207 ± 0.000 *ab*	0.225 ± 0.014 *ab*	0.272 ± 0.042 *b*	300	ND *a*	0.065 ± 0.013 *b*	1.358 ± 0.607 *c*	0.065 ± 0.002 *b*

Phenolic Acid	PubChem CID	mg rWPP/ kg BW	0h	2h	4h	6h	mg wWPP/ kg BW	0h	2h	4h	6h
Gentisic acid	3469	50	0.131 ± 0.013 *a*	0.140 ± 0.039 *a*	0.462 ± 0.192 *b*	0.179 ± 0.001 *a*	50	ND	ND	ND	ND
		100	0.634 ± 0.502 *a*	1.340 ± 0.059 *b*	1.385 ± 0.017 *b*	1.306 ± 0.061 *b*	100	ND	ND	ND	ND
		150	0.613 ± 0.482 *a*	1.362 ± 0.052 *c*	1.743 ± 0.050 *d*	1.034 ± 0.145 *b*	150	ND *a*	0.557 ± 0.050 *c*	0.236 ± 0.077 *b*	0.249 ± 0.020 *b*
		300	0.636 ± 0.066 *a*	1.278 ± 0.042 *b*	1.272 ± 0.033 *b*	1.578 ± 0.032 *c*	300	ND *a*	0.445 ± 0.174 *b*	0.521 ± 0.011 *b*	0.403 ± 0.103 *b*
Syringic acid	10742	50	1.356 ± 0.080 *a*	3.688 ± 0.083 *b*	3.928 ± 0.683 *bc*	4.536 ± 0.353 *c*	50	ND	ND	ND	ND
		100	1.316 ± 0.120 *a*	4.728 ± 0.200 *b*	5.237 ± 0.231 *c*	4.082 ± 0.543 *b*	100	ND	ND	ND	ND
		150	1.383 ± 0.054 *a*	4.207 ± 0.121 *b*	4.553 ± 0.237 *b*	4.205 ± 0.174 *b*	150	ND *a*	1.211 ± 0.214 *b*	1.163 ± 0.024 *b*	1.106 ± 0.279 *b*
		300	1.670 ± 0.718 *a*	2.789 ± 0.383 *b*	3.305 ± 0.205 *b*	3.574 ± 0.474 *c*	300	ND *a*	0.670 ± 0.430 *b*	0.931 ± 0.587 *b*	1.383 ± 0.774 *b*
4-O-methylgallic acid	78016	50	ND	ND	ND	ND	50	0.063 ± 0.031 *a*	0.034 ± 0.019 *a*	0.069 ± 0.001 *a*	0.028 ± 0.009 *a*
		100	ND *a*	0.402 ± 0.196 *c*	0.620 ± 0.064 *d*	0.151 ± 0.039 *b*	100	0.057 ± 0.038 *a*	0.040 ± 0.022 *a*	0.049 ± 0.001 *a*	0.033 ± 0.008 *a*
		150	ND *a*	0.193 ± 0.044 *a*	0.233 ± 0.056 *b*	0.193 ± 0.041 *a*	150	0.082 ± 0.012 *a*	3.303 ± 0.952 *b*	3.319 ± 0.045 *b*	4.385 ± 1.271 *b*
		300	ND *a*	0.049 ± 0.019 *b*	0.073 ± 0.015 *c*	0.042 ± 0.007 *b*	300	0.073 ± 0.021 *a*	2.750 ± 0.324 *b*	4.765 ± 0.533 *c*	2.415 ± 0.382 *b*
3-O-methylgallic acid	19829	50	ND	ND	ND	ND	50	0.068 ± 0.009 *b*	0.062 ± 0.006 *b*	0.032 ± 0.001 *a*	0.021 ± 0.009 *a*
		100	ND	ND	ND	ND	100	0.098 ± 0.040 *b*	0.056 ± 0.038 *ab*	0.021 ± 0.001 *a*	0.022 ± 0.018 *a*
		150	ND	ND	ND	ND	150	0.098 ± 0.040 *a*	0.210 ± 0.092 *b*	0.119 ± 0.054 *ab*	0.115 ± 0.003 *ab*
		300	ND *a*	0.068 ± 0.023 *b*	0.170 ± 0.007 *d*	0.083 ± 0.001 *c*	300	0.059 ± 0.001 *a*	0.169 ± 0.071 *b*	0.289 ± 0.081 *c*	0.252 ± 0.114 *c*
Dihydro-3-coumaric acid	91	50	ND	ND	ND	ND	50	0.025 ± 0.005 *a*	0.075 ± 0.042 *b*	0.024 ± 0.001 *a*	0.014 ± 0.004 *a*
		100	ND *a*	0.448 ± 0.033 *c*	0.441 ± 0.023 *c*	0.402 ± 0.016 *b*	100	0.037 ± 0.011 *a*	0.081 ± 0.028 *b*	0.145 ± 0.001 *c*	0.265 ± 0.016 *d*
		150	ND *a*	0.395 ± 0.005 *b*	0.511 ± 0.124 *b*	0.388 ± 0.061 *b*	150	0.024 ± 0.002 *a*	0.424 ± 0.008 *c*	0.440 ± 0.020 *c*	0.317 ± 0.072 *b*
		300	0.023 ± 0.005 *a*	0.533 ± 0.107 *b*	0.691 ± 0.168 *b*	0.518 ± 0.008 *b*	300	0.041 ± 0.015 *a*	0.258 ± 0.094 *b*	0.304 ± 0.137 *b*	0.365 ± 0.036 *b*
Hydroferulic acid	14340	50	2.581 ± 0.255 *a*	6.754 ± 2.400 *b*	8.384 ± 2.936 *b*	11.998 ± 1.529 *c*	50	0.204 ± 0.031 *a*	0.236 ± 0.037 *a*	0.511 ± 0.001 *b*	0.117 ± 0.084 *a*
		100	2.778 ± 0.058 *a*	10.210 ± 2.392 *c*	11.280 ± 1.624 *c*	7.721 ± 0.013 *b*	100	0.108 ± 0.066 *a*	0.323 ± 0.151 *b*	0.332 ± 0.001 *b*	0.154 ± 0.076 *a*
		150	2.786 ± 0.050 *a*	9.653 ± 0.430 *b*	9.644 ± 2.421 *b*	9.965 ± 0.166 *b*	150	0.240 ± 0.004 *a*	1.198 ± 0.346 *b*	1.117 ± 0.105 *b*	1.103 ± 0.095 *b*
		300	3.060 ± 0.020 *a*	6.671 ± 0.156 *b*	6.898 ± 0.717 *b*	7.721 ± 0.343 *b*	300	0.169 ± 0.067 *a*	0.887 ± 0.030 *b*	0.926 ± 0.411 *b*	1.071 ± 0.223 *b*

Phenolic Acid	PubChem CID	mg rWPP/ kg BW	0h	2h	4h	6h	mg wWPP/ kg BW	0h	2h	4h	6h
Hydrocaffeic acid	348154	50	ND	ND	ND	ND	50	ND *a*	0.056 ± 0.024 *c*	0.039 ± 0.001 *b*	0.038 ± 0.010 *b*
		100	ND *a*	0.008 ± 0.000 *b*	0.095 ± 0.012 *d*	0.050 ± 0.000 *c*	100	ND *a*	0.125 ± 0.035 *b*	0.116 ± 0.001 *b*	0.118 ± 0.050 *b*
		150	ND *a*	0.076 ± 0.017 *b*	0.078 ± 0.002 *b*	0.075 ± 0.002 *b*	150	ND *a*	0.146 ± 0.047 *bc*	0.141 ± 0.006 *b*	0.162 ± 0.019 *c*
		300	ND *a*	0.029 ± 0.001 *b*	0.028 ± 0.002 *b*	0.024 ± 0.001 *b*	300	ND *a*	0.085 ± 0.027 *b*	0.116 ± 0.039 *bc*	0.162 ± 0.021 *b*
Isoferulic acid	736186	50	ND *a*	0.212 ± 0.001 *c*	0.166 ± 0.001 *b*	0.163 ± 0.001 *b*	50	0.007 ± 0.004 *a*	0.061 ± 0.004 *a*	0.044 ± 0.000 *a*	0.036 ± 0.007 *a*
		100	ND *a*	0.181 ± 0.030 *b*	0.250 ± 0.042 *c*	0.129 ± 0.014 *b*	100	ND *a*	0.274 ± 0.077 *bc*	0.288 ± 0.001 *c*	0.197 ± 0.000 *b*
		150	ND *a*	0.184 ± 0.024 *b*	0.228 ± 0.047 *b*	0.211 ± 0.010 *b*	150	0.007 ± 0.004 *a*	0.275 ± 0.069 *c*	0.110 ± 0.028 *b*	0.086 ± 0.013 *b*
		300	ND *a*	0.087 ± 0.005 *c*	0.117 ± 0.031 *d*	0.051 ± 0.017 *b*	300	0.005 ± 0.002 *a*	0.202 ± 0.024 *b*	0.434 ± 0.201 *b*	0.228 ± 0.100 *b*
Ferulic acid (trans-)	445858	50	ND	ND	ND	ND	50	ND *a*	0.030 ± 0.001 *b*	0.710 ± 0.001 *c*	0.843 ± 0.003 *d*
		100	ND *a*	0.150 ± 0.021 *b*	0.199 ± 0.030 *c*	0.113 ± 0.010 *b*	100	ND *a*	0.853 ± 0.143 *b*	0.846 ± 0.001 *b*	1.038 ± 0.041 *c*
		150	ND *a*	0.152 ± 0.017 *b*	0.184 ± 0.033 *b*	0.119 ± 0.025 *b*	150	ND *a*	0.265 ± 0.030 *b*	0.449 ± 0.037 *c*	3.041 ± 0.460 *d*
		300	0.020 ± 0.010 *a*	0.067 ± 0.004 *b*	0.165 ± 0.022 *c*	0.065 ± 0.001 *b*	300	ND *a*	1.422 ± 0.269 *b*	3.022 ± 1.064 *c*	1.135 ± 0.074 *b*
Caffeic acid (trans-)	689043	50	ND	ND	ND	ND	50	ND *a*	0.136 ± 0.079 *c*	0.061 ± 0.001 *b*	0.016 ± 0.002 *b*
		100	ND *a*	1.627 ± 0.123 *b*	1.530 ± 0.032 *b*	1.516 ± 0.010 *b*	100	ND *a*	0.398 ± 0.290 *c*	0.151 ± 0.001 *b*	0.126 ± 0.039 *b*
		150	ND *a*	1.506 ± 0.010 *b*	1.508 ± 0.004 *b*	1.509 ± 0.001 *b*	150	ND *a*	0.043 ± 0.010 *c*	0.041 ± 0.009 *c*	0.018 ± 0.009 *b*
		300	0.017 ± 0.005 *a*	1.527 ± 0.001 *b*	1.553 ± 0.012 *c*	1.530 ± 0.007 *bc*	300	ND *a*	0.067 ± 0.007 *b*	0.064 ± 0.001 *b*	0.098 ± 0.007 *c*
TOTAL		50	8.319 ± 0.064 *a*	16.682 ± 2.365 *b*	26.019 ± 2.464 *c*	25.729 ± 6.152 *c*	50	3.134 ± 0.361 *a*	8.839 ± 0.460 *b*	7.960 ± 0.001 *b*	8.109 ± 0.371 *b*
		100	9.938 ± 1.048 *a*	33.833 ± 5.759 *c*	36.197 ± 2.728 *c*	20.031 ± 0.607 *b*	100	3.587 ± 0.190 *a*	13.732 ± 0.981 *c*	9.008 ± 0.001 *b*	10.941 ± 1.288 *b*
		150	9.680 ± 0.560 *a*	27.738 ± 1.140 *b*	33.273 ± 7.202 *b*	26.582 ± 1.694 *b*	150	3.677 ± 0.524 *a*	17.222 ± 4.479 *b*	20.998 ± 1.390 *b*	26.048 ± 2.728 *c*
		300	10.601 ± 0.620 *a*	22.026 ± 1.196 *b*	27.470 ± 3.722 *c*	23.826 ± 0.364 *b*	300	3.604 ± 0.537 *a*	14.979 ± 3.359 *b*	28.044 ± 7.044 *b*	21.457 ± 1.982 *b*

Concentration of phenolic acid metabolites in plasma after red (rWPP) or white (wWPP) wine pomace products intake assessed by GC/MS/MS. Samples were collected at the indicated hours (plasma) pre- and post-administration of with rWPP or wWPP to rats at doses of 50, 100, 150 or 300 mg/kg of body weight. Data are presented as mean ± SD (n=3) and expressed as µM of each metabolite in plasma. Trends of each phenolic acid concentration along time are represented by sparklines obtained using Microsoft Office's Excel 2010 software. Significant differences ($p < 0.05$) between hours for each dose are indicated with Latin letters. ND: not detected. PubChem CID: Compound identification number in the open chemistry database at the National Institutes of Health (NIH). rWPP: red wine pomace product; wWPP: white wine pomace product.

Table 2. Concentration (µmol/mmol creatinine) of phenolic acid metabolites assessed by GC/MS/MS in urine after rWPP and wWPP intake.

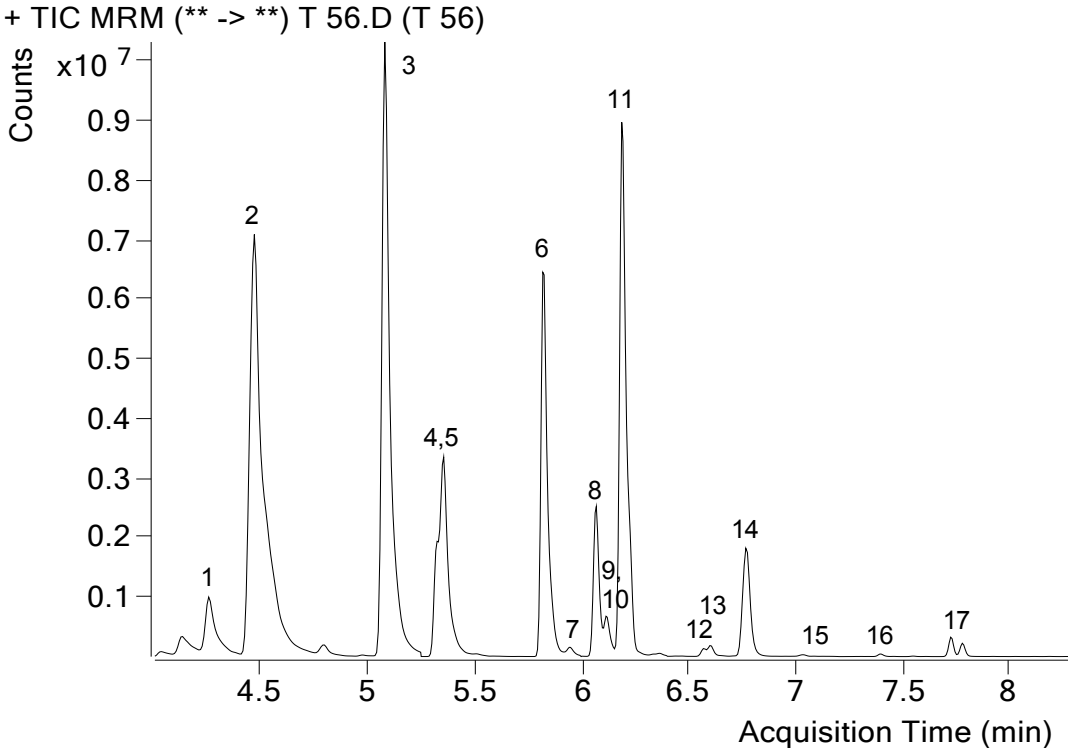
Phenolic Acid	PubChem CID	mg rWPP/ kg BW	0h	2h	4h	6h	mg wWPP/ kg BW	0h	2h	4h	6h
m-Hydroxyphenylacetic acid	12122	50	0.021 ± 0.003 *a*	0.032 ± 0.021 *a*	0.072 ± 0.011 *b*	0.010 ± 0.005 *a*	50	0.021 ± 0.007 *a*	0.033 ± 0.012 *b*	0.060 ± 0.001 *c*	0.056 ± 0.001 *c*
		100	0.024 ± 0.008 *a*	0.030 ± 0.024 *a*	0.122 ± 0.094 *ab*	0.181 ± 0.039 *b*	100	0.029 ± 0.011 *a*	0.027 ± 0.005 *a*	0.056 ± 0.001 *b*	0.049 ± 0.007 *b*
		150	0.022 ± 0.004 *a*	0.053 ± 0.022 *b*	0.058 ± 0.001 *b*	0.107 ± 0.015 *c*	150	0.023 ± 0.004 *a*	0.047 ± 0.009 *a*	0.144 ± 0.013 *b*	0.246 ± 0.058 *c*
		300	0.030 ± 0.011 *a*	0.043 ± 0.037 *a*	0.056 ± 0.031 *a*	0.085 ± 0.025 *a*	300	0.029 ± 0.011 *b*	0.009 ± 0.003 *a*	0.161 ± 0.001 *d*	0.125 ± 0.001 *c*
p-Hydroxyphenylacetic acid	127	50	0.175 ± 0.056 *a*	0.116 ± 0.073 *a*	0.435 ± 0.242 *a*	0.481 ± 0.249 *a*	50	0.080 ± 0.067 *a*	0.089 ± 0.000 *a*	0.104 ± 0.000 *a*	0.161 ± 0.071 *a*
		100	0.113 ± 0.062 *a*	0.220 ± 0.207 *a*	1.224 ± 0.776 *b*	2.189 ± 0.508 *c*	100	0.013 ± 0.001 *a*	0.024 ± 0.001 *b*	0.215 ± 0.001 *c*	0.076 ± 0.032 *b*
		150	0.119 ± 0.056 *a*	0.237 ± 0.221 *ab*	0.482 ± 0.344 *b*	0.156 ± 0.001 *a*	150	0.070 ± 0.057 *a*	0.524 ± 0.056 *b*	0.853 ± 0.470 *c*	0.332 ± 0.226 *c*
		300	0.164 ± 0.025 *a*	0.439 ± 0.235 *a*	1.771 ± 0.199 *b*	1.488 ± 0.218 *ab*	300	0.047 ± 0.034 *a*	0.289 ± 0.054 *b*	0.924 ± 0.001 *d*	0.515 ± 0.015 *c*
Vanillic acid	8468	50	0.021 ± 0.002 *a*	0.048 ± 0.026 *ab*	0.066 ± 0.025 *ab*	0.045 ± 0.003 *b*	50	ND *a*	0.363 ± 0.000 *c*	0.048 ± 0.000 *b*	0.045 ± 0.024 *b*
		100	0.041 ± 0.022 *a*	0.066 ± 0.040 *ab*	0.144 ± 0.083 *b*	0.283 ± 0.021 *c*	100	ND *a*	0.015 ± 0.001 *b*	0.043 ± 0.000 *c*	0.012 ± 0.005 *b*
		150	0.088 ± 0.014 *a*	0.138 ± 0.025 *a*	0.111 ± 0.054 *a*	1.926 ± 0.001 *b*	150	ND *a*	0.053 ± 0.019 *ab*	0.091 ± 0.040 *b*	0.107 ± 0.042 *b*
		300	0.009 ± 0.009 *a*	0.074 ± 0.061 *ab*	0.159 ± 0.040 *c*	0.082 ± 0.001 *b*	300	ND *a*	0.034 ± 0.004 *b*	0.049 ± 0.028 *b*	0.045 ± 0.010 *b*
Homovallinic acid	1738	50	0.006 ± 0.002 *a*	0.021 ± 0.009 *b*	0.066 ± 0.009 *c*	0.011 ± 0.007 *bc*	50	ND *a*	0.006 ± 0.000 *b*	0.007 ± 0.000 *b*	0.010 ± 0.002 *c*
		100	0.006 ± 0.001 *a*	0.025 ± 0.021 *a*	0.118 ± 0.065 *b*	0.184 ± 0.015 *b*	100	ND *a*	0.001 ± 0.000 *b*	0.012 ± 0.000 *d*	0.005 ± 0.000 *c*
		150	0.007 ± 0.000 *a*	0.053 ± 0.016 *c*	0.063 ± 0.030 *b*	ND *a*	150	ND *a*	0.031 ± 0.010 *ab*	0.122 ± 0.080 *bc*	0.202 ± 0.011 *c*
		300	0.007 ± 0.001 *a*	0.027 ± 0.025 *a*	0.174 ± 0.018 *b*	0.009 ± 0.008 *a*	300	ND *a*	0.010 ± 0.002 *b*	0.013 ± 0.005 *b*	0.040 ± 0.000 *c*
Protocatechuic acid	72	50	0.017 ± 0.005 *a*	0.022 ± 0.015 *a*	0.083 ± 0.016 *b*	0.014 ± 0.006 *a*	50	0.071 ± 0.071 *b*	0.153 ± 0.001 *c*	0.003 ± 0.003 *a*	0.001 ± 0.001 *a*
		100	0.015 ± 0.005 *a*	0.027 ± 0.020 *a*	0.144 ± 0.084 *a*	0.346 ± 0.165 *b*	100	0.002 ± 0.001 *a*	0.065 ± 0.010 *b*	0.146 ± 0.001 *c*	0.074 ± 0.008 *b*
		150	0.013 ± 0.004 *a*	0.100 ± 0.059 *ab*	0.035 ± 0.018 *ab*	0.071 ± 0.001 *b*	150	0.025 ± 0.001 *a*	0.034 ± 0.012 *a*	0.043 ± 0.022 *a*	0.040 ± 0.015 *a*
		300	0.018 ± 0.001 *a*	0.036 ± 0.019 *a*	0.066 ± 0.024 *b*	0.021 ± 0.014 *a*	300	0.002 ± 0.001 *a*	0.017 ± 0.001 *b*	0.079 ± 0.001 *c*	0.012 ± 0.008 *b*
Homoprotocatechuic acid	547	50	ND	ND	ND	ND	50	ND	ND	ND	ND
		100	ND	ND	ND	ND	100	ND	ND	ND	ND
		150	ND	ND	ND	ND	150	ND	ND	ND	ND
		300	0.002 ± 0.013 *a*	0.004 ± 0.002 *a*	0.017 ± 0.007 *b*	0.003 ± 0.001 *a*	300	ND	ND	ND	ND

Phenolic Acid	PubChem CID	mg rWPP/ kg BW	0h	2h	4h	6h	mg wWPP/ kg BW	0h	2h	4h	6h
Gentisic acid	3469	50	0.008 ± 0.001 *a*	0.007 ± 0.000 *a*	0.014 ± 0.004 *b*	0.008 ± 0.003 *a*	50	ND	ND	ND	ND
		100	0.011 ± 0.001 *a*	0.017 ± 0.012 *a*	0.037 ± 0.028 *ab*	0.070 ± 0.027 *b*	100	ND	ND	ND	ND
		150	0.009 ± 0.001 *a*	0.012 ± 0.002 *b*	0.018 ± 0.001 *c*	0.011 ± 0.001 *b*	150	ND *a*	0.130 ± 0.031 *c*	0.062 ± 0.000 *b*	ND *a*
		300	0.010 ± 0.001 *a*	0.012 ± 0.003 *a*	0.011 ± 0.003 *a*	0.011 ± 0.008 *a*	300	ND *a*	0.454 ± 0.117 *b*	0.335 ± 0.142 *b*	0.437 ± 0.143 *b*
Syringic acid	10742	50	0.010 ± 0.007 *a*	0.014 ± 0.006 *a*	0.015 ± 0.001 *a*	0.010 ± 0.004 *a*	50	ND	ND	ND	ND
		100	0.004 ± 0.001 *a*	0.038 ± 0.027 *a*	0.040 ± 0.015 *a*	0.093 ± 0.023 *b*	100	ND	ND	ND	ND
		150	0.017 ± 0.001 *ab*	0.043 ± 0.010 *c*	0.021 ± 0.007 *b*	0.003 ± 0.001 *a*	150	ND *a*	0.008 ± 0.006 *b*	0.016 ± 0.013 *b*	0.004 ± 0.001 *b*
		300	0.013 ± 0.004 *a*	0.027 ± 0.023 *a*	0.085 ± 0.036 *b*	ND *a*	300	ND *a*	0.002 ± 0.000 *a*	0.005 ± 0.003 *b*	0.006 ± 0.003 *b*
4-O-methylgallic acid	78016	50	ND	ND	ND	ND	50	ND	ND	ND	ND
		100	0.005 ± 0.004 *a*	0.015 ± 0.008 *ab*	0.029 ± 0.011 *bc*	0.042 ± 0.013 *c*	100	ND	ND	ND	ND
		150	0.019 ± 0.003 *bc*	0.024 ± 0.006 *c*	0.011 ± 0.002 *b*	ND *a*	150	ND *a*	0.018 ± 0.006 *b*	0.024 ± 0.002 *c*	0.018 ± 0.009 *b*
		300	0.018 ± 0.003 *a*	0.242 ± 0.144 *b*	0.009 ± 0.000 *a*	ND *a*	300	ND *a*	0.006 ± 0.002 *a*	0.010 ± 0.009 *a*	0.003 ± 0.001 *a*
3-O-methylgallic acid	19829	50	ND	ND	ND	ND	50	ND	ND	ND	ND
		100	ND	ND	ND	ND	100	ND	ND	ND	ND
		150	ND	ND	ND	ND	150	ND	ND	ND	ND
		300	0.016 ± 0.001 *a*	0.021 ± 0.005 *a*	0.039 ± 0.012 *b*	0.011 ± 0.001 *a*	300	ND	ND	ND	ND
Dihydro-3-coumaric acid	91	50	ND	ND	ND	ND	50	0.076 ± 0.022 *b*	0.145 ± 0.001 *c*	0.040 ± 0.001 *a*	0.039 ± 0.017 *a*
		100	0.009 ± 0.007 *a*	0.054 ± 0.031 *a*	0.178 ± 0.140 *ab*	0.322 ± 0.109 *b*	100	0.029 ± 0.003 *a*	0.092 ± 0.001 *b*	0.209 ± 0.001 *c*	0.090 ± 0.028 *b*
		150	0.049 ± 0.009 *ab*	0.220 ± 0.136 *b*	0.297 ± 0.098 *ab*	0.018 ± 0.001 *a*	150	0.136 ± 0.001 *a*	0.059 ± 0.015 *a*	0.220 ± 0.183 *a*	0.509 ± 0.167 *b*
		300	0.042 ± 0.024 *a*	0.057 ± 0.069 *a*	0.054 ± 0.023 *a*	0.068 ± 0.064 *a*	300	0.136 ± 0.001 *b*	0.055 ± 0.016 *a*	0.038 ± 0.012 *a*	0.138 ± 0.044 *b*
Hydroferulic acid	14340	50	0.047 ± 0.010 *a*	0.044 ± 0.020 *a*	0.105 ± 0.030 *a*	0.067 ± 0.052 *a*	50	ND *a*	0.047 ± 0.001 *b*	0.048 ± 0.001 *c*	0.071 ± 0.001 *d*
		100	0.056 ± 0.020 *a*	0.118 ± 0.097 *a*	0.147 ± 0.038 *a*	0.339 ± 0.090 *b*	100	ND *a*	0.025 ± 0.011 *c*	0.046 ± 0.001 *d*	0.012 ± 0.007 *b*
		150	0.100 ± 0.000 *a*	0.146 ± 0.048 *a*	0.121 ± 0.039 *a*	0.093 ± 0.001 *a*	150	ND *a*	0.076 ± 0.018 *b*	0.085 ± 0.018 *b*	0.073 ± 0.030 *b*
		300	0.049 ± 0.009 *a*	0.068 ± 0.045 *a*	0.141 ± 0.001 *b*	0.046 ± 0.001 *a*	300	ND *a*	0.059 ± 0.004 *b*	0.059 ± 0.027 *b*	0.068 ± 0.011 *b*

Phenolic Acid	PubChem CID	mg rWPP/ kg BW	0h	2h	4h	6h		mg wWPP/ kg BW	0h	2h	4h	6h	
Hydrocaffeic acid	348154	50	ND	ND	ND	ND		50	ND	ND	ND	ND	
		100	0.003 ± 0.001 *a*	0.014 ± 0.005 *a*	0.795 ± 0.156 *b*	0.990 ± 0.323 *b*		100	ND	ND	ND	ND	
		150	0.052 ± 0.021 *a*	0.201 ± 0.149 *a*	0.191 ± 0.086 *a*	0.046 ± 0.001 *a*		150	ND	ND	ND	ND	
		300	0.006 ± 0.004 *a*	0.081 ± 0.085 *ab*	0.118 ± 0.027 *b*	0.013 ± 0.001 *ab*		300	ND	ND	ND	ND	
Isoferulic acid	736186	50	0.031 ± 0.000 *a*	0.037 ± 0.011 *a*	0.071 ± 0.042 *b*	0.022 ± 0.008 *a*		50	ND	ND	ND	ND	
		100	0.019 ± 0.003 *a*	0.063 ± 0.029 *ab*	0.089 ± 0.033 *b*	0.151 ± 0.022 *c*		100	ND *a*	0.028 ± 0.017 *b*	0.008 ± 0.001 *a*	0.015 ± 0.009 *ab*	
		150	0.032 ± 0.002 *ab*	0.061 ± 0.029 *bc*	0.080 ± 0.023 *c*	0.003 ± 0.001 *a*		150	ND *a*	0.026 ± 0.018 *b*	0.007 ± 0.001 *ab*	0.002 ± 0.000 *a*	
		300	0.033 ± 0.002 *ab*	0.054 ± 0.035 *b*	0.030 ± 0.001 *ab*	ND *a*		300	ND *a*	0.015 ± 0.006 *b*	0.008 ± 0.001 *b*	0.024 ± 0.003 *c*	
Ferulic acid (trans-)	445858	50	ND	ND	ND	ND		50	0.003 ± 0.000 *a*	0.068 ± 0.001 *a*	0.137 ± 0.001 *ab*	0.229 ± 0.000 *b*	
		100	0.024 ± 0.006 *a*	0.048 ± 0.020 *ab*	0.077 ± 0.021 *bc*	0.111 ± 0.015 *c*		100	0.075 ± 0.009 *a*	0.073 ± 0.007 *a*	0.106 ± 0.001 *b*	0.083 ± 0.012 *a*	
		150	0.042 ± 0.013 *ab*	0.047 ± 0.021 *ab*	0.061 ± 0.016 *b*	0.024 ± 0.001 *a*		150	0.014 ± 0.000 *a*	0.022 ± 0.009 *ab*	0.155 ± 0.149 *b*	0.340 ± 0.001 *c*	
		300	0.040 ± 0.011 *a*	0.038 ± 0.028 *a*	0.024 ± 0.001 *a*	0.026 ± 0.001 *a*		300	0.014 ± 0.000 *a*	0.020 ± 0.007 *a*	0.029 ± 0.020 *a*	0.189 ± 0.001 *b*	
Caffeic acid (trans-)	689043	50	ND	ND	ND	ND		50	ND	ND	ND	ND	
		100	0.021 ± 0.008 *a*	0.021 ± 0.008 *a*	0.039 ± 0.019 *ab*	0.060 ± 0.006 *b*		100	ND	ND	ND	ND	
		150	0.035 ± 0.015 *a*	0.041 ± 0.027 *a*	0.021 ± 0.008 *a*	0.027 ± 0.001 *a*		150	ND	ND	ND	ND	
		300	0.046 ± 0.026 *a*	0.020 ± 0.006 *a*	0.021 ± 0.001 *a*	0.019 ± 0.010 *a*		300	ND	ND	ND	ND	
TOTAL		50	0.336 ± 0.057 *a*	0.342 ± 0.118 *a*	0.926 ± 0.260 *b*	0.669 ± 0.265 *a*		50	0.251 ± 0.115 *a*	0.904 ± 0.169 *c*	0.450 ± 0.007 *ab*	0.613 ± 0.095 *b*	
		100	0.352 ± 0.017 *a*	0.757 ± 0.378 *a*	3.182 ± 1.366 *ab*	5.361 ± 0.113 *b*		100	0.149 ± 0.004 *a*	0.351 ± 0.003 *b*	0.842 ± 0.007 *d*	0.417 ± 0.056 *c*	
		150	0.604 ± 0.053 *a*	1.375 ± 0.772 *a*	1.587 ± 0.599 *b*	2.485 ± 0.011 *ab*		150	0.269 ± 0.106 *a*	1.034 ± 0.124 *a*	1.822 ± 0.071 *b*	1.887 ± 0.563 *b*	
		300	0.503 ± 0.143 *a*	1.243 ± 0.283 *b*	2.776 ± 0.261 *c*	1.883 ± 0.283 *b*		300	0.230 ± 0.009 *a*	0.968 ± 0.057 *b*	1.721 ± 0.173 *d*	1.608 ± 0.154 *c*	

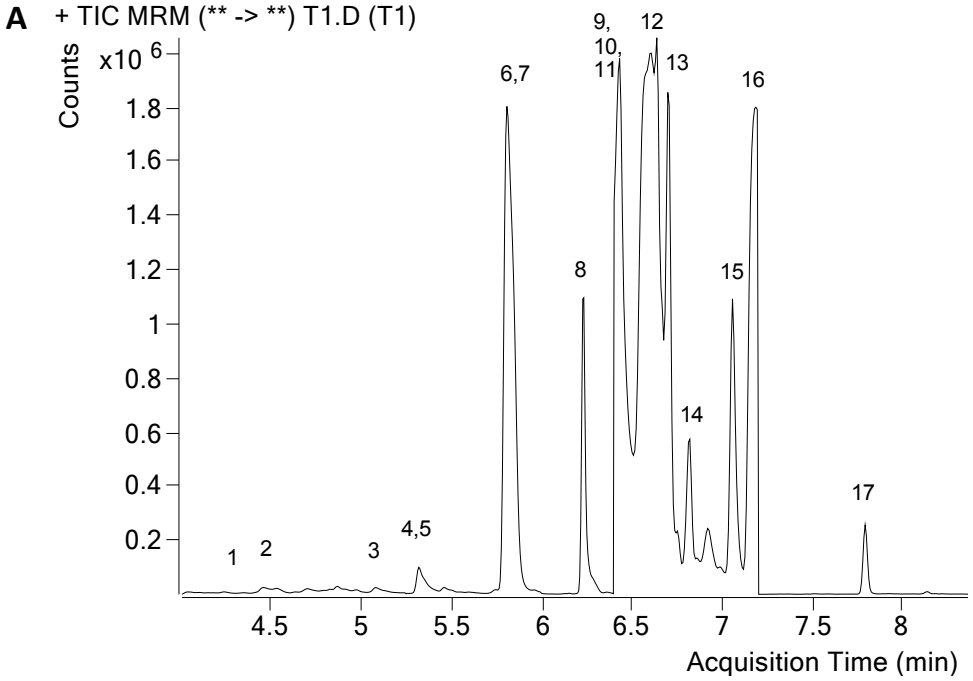
Concentration of phenolic acid metabolites in urine after red (rWPP) or white (wWPP) wine pomace products intake assessed by GC/MS/MS. Samples were collected at the indicated hours (plasma) pre- and post-administration of rWPP or wWPP to rats at doses of 50, 100, 150 or 300 mg/kg of body weight. Data are presented as mean ± SD (n=3) and expressed as µmol/mmol creatinine for each metabolite in urine. Trends of each phenolic acid concentration along time are represented by sparklines obtained using Microsoft Office's Excel 2010 software. Significant differences ($p < 0.05$) between hours for each dose are indicated with Latin letters. ND: not detected. PubChem CID: Compound identification number in the open chemistry database at the National Institutes of Health (NIH). rWPP: red wine pomace product; wWPP: white wine pomace product.

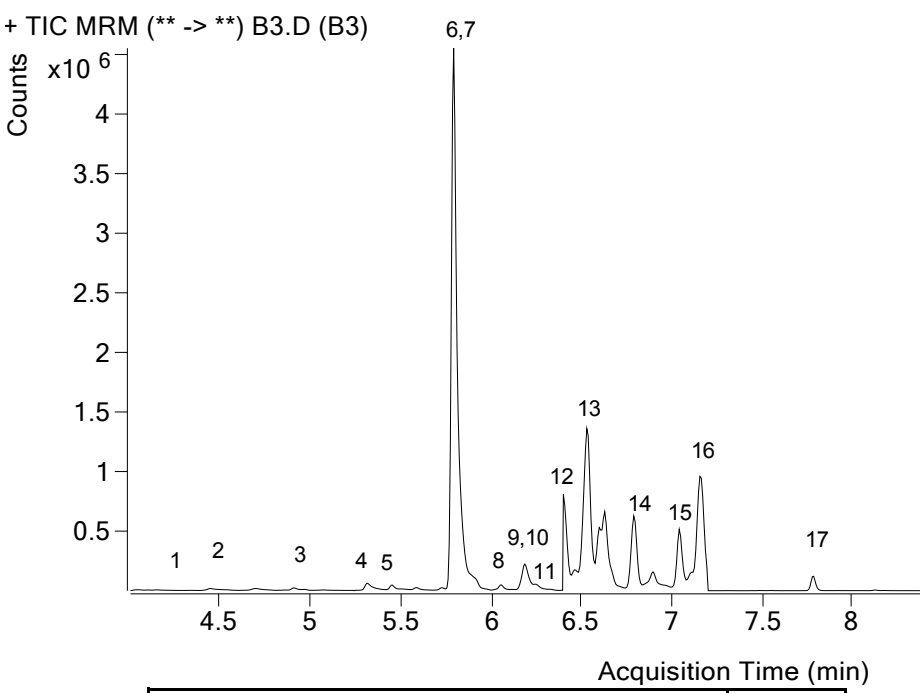
Supplementary Figure 1. Representative GC/MS/MS chromatograms and list of analyzed compounds by multiple reaction monitoring (MRM) segments, retention times, and precursor and product ions.



	Compound				Retention Time	Precursor Ion	Product ions		
	Name	PubChem CID	Molecular Weight (g/mol)	Molecular Ion					
1	m-Hydroxyphenylacetic acid	12122	152	296	4,241	295,9	147	130,5	268,5
2	p-Hydroxyphenylacetic acid	127	152	296	4,451	295,9	179,1	148,8	188,8
3	Dihydro-3-coumaric acid	91	166	310	5,078	309,9	177,1	192,1	205,1
4	Vanillic acid	8468	168	312	5,331	311,9	223,1	253	297,1
5	Homovallinic acid	1738	182	326	5,362	326,3	209,1	296,1	252,1
6	Protocatechuic acid	72	154	370	5,796	369,7	193	281,1	355
7	Homoprotocatechuic acid	547	168	384	5,842	383,9	179	118,9	340,3
8	Gentisic acid	3469	154	355	6,049	354,9	251,1	267,1	
9	4-O-methylgallic acid	78016	184	400	6,199	399,9	191,1	355,1	370
10	Hydroferulic acid	14340	196	340	6,199	339,9	191,9	209,2	222
11	Syringic acid	10742	198	342	6,205	326,8	253,1	297,1	283,1
12	3-O-methylgallic acid	19829	184	400	6,563	399,9	223,1	195	110,9
13	Hydrocaffeic acid	348154	182	398	6,605	397,9	179	267,1	280,1
14	1-Naphthol-2-carboxylic acid	6844	188	317	6,807	317,1	243,1	147,1	141
15	Isoferulic acid	736186	194	338	7,352	337,9	160,8	202,6	222,9
16	Ferulic acid (trans-)	445858	194	338	7,428	337,3	166,1	253,3	
17	Caffeic acid (trans-)	689043	180	396	7,791	395,9	191	307,2	267,1

Supplementary Figure 2. Representative GC/MS/MS chromatograms and list of analyzed compounds in the red (A) and white (B) wine pomace products.





	Compound		Retention Time
	Name	PubChem CID	
1	m-Hydroxyphenylacetic acid	12122	4.240
2	p-Hydroxyphenylacetic acid	127	4.458
3	Dihydro-3-coumaric acid	91	5.079
4	Vanillic acid	8468	5.324
5	Homovallinic acid	1738	5.354
6	Protocatechuic acid	72	5.809
7	Homoprotocatechuic acid	547	5.852
8	Gentisic acid	3469	6.243
9	4-O-methylgallic acid	78016	6.239
10	Hydroferulic acid	14340	6.228
11	Syringic acid	10742	6.234
12	3-O-methylgallic acid	19829	6.654
13	Hydrocaffeic acid	348154	6.677
14	1-Naphthol-2-carboxylic acid	6844	6.807
15	Isoferulic acid	736186	7.471
16	Ferulic acid (trans-)	445858	7.602
17	Caffeic acid (trans-)	689043	7.792

	Compound		Retention Time
	Name	PubChem CID	
1	m-Hydroxyphenylacetic acid	12122	4.231
2	p-Hydroxyphenylacetic acid	127	4.451
3	Dihydro-3-coumaric acid	91	5.074
4	Vanillic acid	8468	5.320
5	Homovallinic acid	1738	5.348
6	Protocatechuic acid	72	5.795
7	Homoprotocatechuic acid	547	5.838
8	Gentisic acid	3469	6.058
9	4-O-methylgallic acid	78016	6.173
10	Hydroferulic acid	14340	6.193
11	Syringic acid	10742	6.202
12	3-O-methylgallic acid	19829	6.564
13	Hydrocaffeic acid	348154	6.596
14	1-Naphthol-2-carboxylic acid	6844	6.807
15	Isoferulic acid	736186	7.449
16	Ferulic acid (trans-)	445858	7.592
17	Caffeic acid (trans-)	689043	7.782