

Table 1, Supporting Information. Composition and total antioxidant capacity (TAC) of seedless red wine pomace product (rWPP) and white wine pomace product (wWPP) and their gastrointestinal (WPGI) and colonic fermentation (WPF) digested fractions.

Nutrient/Compound	Content/100g of WPPs	
	rWPP	wWPP
Moisture (mL)	6.93 ± 2.26	4.92 ± 0.28
Total fat (g)	4.7 ± 1.6	6.59 ± 0.22
Total protein (g)	14.1 ± 1.9	12.8 ± 0.2
Ash (g)	6.36 ± 1.01	6.29 ± 0.11
Minerals (g)		
Potassium	2.33 ± 0.69	2.75 ± 0.08
Sodium	0.06 ± 0.01	0.05 ± 0.01
Calcium	0.34 ± 0.15	0.24 ± 0.01
Total polyphenols (g GAE)		
Undigested	2.00 ± 0.08	0.95 ± 0.05 *
WPGI	0.68 ± 0.07	0.42 ± 0.08 *
WPF	0.72 ± 0.09	0.73 ± 0.19
Total anthocyanins (g Malv-3GE)	0.27 ± 0.22	0.05 ± 0.01
Total proanthocyanidins (g P-B1E)	4.18 ± 3.58	24.6 ± 0.8
Total catechins (g D-CatE)	3.31 ± 0.11	1.87 ± 0.19
Total Antioxidant Capacity (TAC)		
Q-ABTS (mmol TE)		
Undigested	15.8 ± 1.5	9.2 ± 1.6 *
WPGI	19.5 ± 0.1	8.8 ± 0.7 *
WPF	40.1 ± 8.3	41.8 ± 6.0
Q-FRAP (mmol Fe(II)E)		
Undigested	38.5 ± 0.3	27.6 ± 0.2 *
WPGI	3.3 ± 0.1	3.2 ± 0.1
WPF	3.2 ± 0.2	3.0 ± 0.1

¹ Values represents mean (n=3) ± SD.

² Significant difference between red (rWPP) and white (wWPP) pomace products are indicated with asterisk (*) (Student's test, p<0.05).

³ GAE: Gallic acid equivalents; Malv-3GE: Malvidin-3-O-glucoside; P-B1E: Procyanidin B1 equivalents; D-CatE: D-Catechin equivalents; ABTS: 2,2'-Azinobis 3-ethylbenzothiazolines-6-sulfonic acid; GAE: gallic acid equivalent; FRAP: Ferric reducing ability of plasma; TE: Trolox equivalent.

Table 2, Supporting Information. Phenolic composition of the red (rWPP) and white (wWPP) wine pomace products assayed by GC/MS/MS and HPLC/DAD.

	$\mu\text{g/g}$ rWPP	$\mu\text{g/g}$ wWPP	
Phenolic acids			
m-Hydroxyphenylacetic acid	3.10 $\pm$ 0.17	4.10 $\pm$ 0.45	
p-Hydroxyphenylacetic acid	3.19 $\pm$ 0.23	14.9 $\pm$ 0.46	*
Vanillic acid	3.19 $\pm$ 0.16	11.5 $\pm$ 0.56	*
Homovanillic acid	2.45 $\pm$ 0.01	2.89 $\pm$ 0.06	*
Protocatechuic acid	18.1 $\pm$ 1.50	7.79 $\pm$ 0.13	*
Homoprotocatechuic acid	13.9 $\pm$ 0.10	52.3 $\pm$ 2.46	*
Gentisic acid	27.9 $\pm$ 0.01	29.4 $\pm$ 0.06	*
Syringic acid	3.08 $\pm$ 0.34	14.0 $\pm$ 3.39	*
4-O-methylgallic acid	1.16 $\pm$ 0.01	2.48 $\pm$ 0.31	*
3-O-methylgallic acid	7.19 $\pm$ 0.08	20.1 $\pm$ 1.35	*
Dihydro-3-coumaric acid	1.95 $\pm$ 0.02	2.17 $\pm$ 0.03	*
Hydroferulic acid	2.24 $\pm$ 0.01	5.19 $\pm$ 0.09	*
Hydrocaffeic acid	9.50 $\pm$ 0.01	11.2 $\pm$ 0.04	*
Isoferulic acid	3.87 $\pm$ 0.01	4.52 $\pm$ 0.14	*
Ferulic acid (trans-)	3.68 $\pm$ 0.47	5.76 $\pm$ 0.69	*
Caffeic acid (trans-)	10.7 $\pm$ 0.40	35.7 $\pm$ 2.42	*
<i>Total Phenolic acids</i>	115 $\pm$ 1.08	224 $\pm$ 7.00	*
Stilbenes			
t-piceid	0.64 $\pm$ 0.11	0.63 $\pm$ 0.02	
t-resveratrol	4.58 $\pm$ 0.55	1.21 $\pm$ 0.01	*
<i>Total Stilbenes</i>	5.22 $\pm$ 0.65	1.85 $\pm$ 0.01	*
Flavanols			
Catechin	11.5 $\pm$ 3.11	68.7 $\pm$ 5.67	*
Epigallocatechin	146 $\pm$ 28.4	76.2 $\pm$ 23.1	*
Epicatechin	15.6 $\pm$ 2.25	44.5 $\pm$ 5.67	*
Procyanidin B1	13.3 $\pm$ 0.06	54.6 $\pm$ 17.7	*
Procyanidin B2	33.5 $\pm$ 0.77	32.8 $\pm$ 3.18	
<i>Total Flavanols</i>	220 $\pm$ 24.5	277 $\pm$ 5.28	*
Flavonols			
Myricetin-3-O-rhamnoside	50.9 $\pm$ 2.76	27.9 $\pm$ 2.43	*
Kaempferol-3-O-rutinoside	211 $\pm$ 19.7	194 $\pm$ 31.9	
Kaempferol-3-O-glucoside	32.8 $\pm$ 2.98	29.8 $\pm$ 3.47	
Quercetin-3-O-rutinoside	23.1 $\pm$ 5.59	26.6 $\pm$ 4.81	
<i>Total Flavonols</i>	318 $\pm$ 28.0	278 $\pm$ 32.3	
Anthocyanins			
Delphinidin-3-O-glucoside	244 $\pm$ 22.3	ND	*
Cyanidin-3-O-glucoside	14.9 $\pm$ 2.85	ND	*
Petunidin-3-O-glucoside	263 $\pm$ 17.4	ND	*
Peonidin-3-O-glucoside	41.6 $\pm$ 1.12	ND	*
Malvidin-3-O-glucoside	954 $\pm$ 1.98	ND	*
<i>Total Anthocyanins</i>	1518 $\pm$ 1.21	ND	*
Total Phenolic compounds	2176 $\pm$ 66.6	781 $\pm$ 36.0	*

¹ The totals are the sum of each of the individual phenolic compounds.

² Values are expressed as $\mu\text{g/g}$ rWPP or wWPP.

³ Data are presented as mean $\pm$ SD (n=3).

⁴ Significant differences ($p < 0.05$) between rWPP and wWPP are indicated with an asterisk (*). (Student's test, $p < 0.05$).

⁵ ND: not detected.

Table 3, Supporting Information. Phenolic composition of the red (rWPP) and white (wWPP) wine pomace products digested fractions assayed by GC/MS/MS.

	Content (µg per g rWPP)		Content (µg per g wWPP)	
	rWPGI	rWPF	wWPGI	wWPF
Phenolic acids				
Hydroxybenzoic acids				
m-Hydroxyphenylacetic acid	5,09 ± 1,15 ^a	13,5 ± 2 ^{ab}	29,4 ± 4,1 ^c	24,2 ± 8,5 ^{bc}
p-Hydroxyphenylacetic acid	22,0 ± 7,2 ^b	16,2 ± 4,1 ^b	26,9 ± 4,3 ^b	36,0 ± 11,4 ^b
Vanillic acid	9,14 ± 1,62 ^a	11,3 ± 2,8 ^a	4,20 ± 0,46 ^a	8,48 ± 4,6 ^a
Homovanillic acid	2,67 ± 0,17 ^a	2,72 ± 0,08 ^a	3,17 ± 0,82 ^a	2,65 ± 0,14 ^a
Protocatechuic acid	26,4 ± 4,31 ^a	11,3 ± 4,3 ^a	12,7 ± 1,0 ^a	7,93 ± 2,73 ^a
Homoprotocatechuic acid	24,0 ± 3,4 ^a	45,1 ± 10,9 ^a	22,6 ± 0,8 ^a	36,0 ± 16,0 ^a
Gentisic acid	37,0 ± 4,4 ^a	53,1 ± 4,55 ^{ab}	38,2 ± 1,8 ^a	66,7 ± 9,6 ^b
Syringic acid	14,2 ± 4 ^a	4,33 ± 2,09 ^a	18,0 ± 3,0 ^a	3,01 ± 1,34 ^a
4-O-methylgallic acid	1,70 ± 0,57 ^a	1,65 ± 0,28 ^a	1,64 ± 0,06 ^a	1,56 ± 0,31 ^a
3-O-methylgallic acid	16,7 ± 6,9 ^{ab}	27,1 ± 6,3 ^b	11,4 ± 0,4 ^a	18,6 ± 3,65 ^{ab}
Total Hydroxybenzoic acids	159 ± 11 ^a	186 ± 27 ^{ab}	154 ± 8 ^a	218 ± 6 ^b
Hydroxycinnamic acids				
Dihydro-3-coumaric acid	1,82 ± 0,19 ^a	16,5 ± 4,7 ^b	2,27 ± 0,44 ^a	12,9 ± 7,5 ^b
Hydroferulic acid	2,86 ± 0,39 ^a	13,6 ± 3,6 ^b	3,51 ± 0,19 ^a	15,7 ± 3,9 ^b
Hydrocaffeic acid	10,1 ± 0,35 ^a	10,6 ± 0,5 ^a	13,1 ± 4 ^a	10,3 ± 0,6 ^a
Isoferulic acid	3,80 ± 0,35 ^a	5,47 ± 0,37 ^a	77,1 ± 11,6 ^b	26,3 ± 21,6 ^{ab}
Ferulic acid (trans-)	10,5 ± 4,4 ^{ab}	26,5 ± 11 ^b	16,2 ± 0,6 ^{ab}	5,65 ± 1,83 ^a
Caffeic acid (trans-)	13,1 ± 1,6 ^a	16,5 ± 1,11 ^a	23,2 ± 2,4 ^b	11,7 ± 3 ^a
Total Hydroxycinnamic acids	42,2 ± 5,8 ^a	89,1 ± 15,8 ^b	135 ± 8 ^c	93 ± 25 ^b

¹ The totals are the sum of each of the individual phenolic compounds.

² Values are expressed as µg/g of each digested fraction.

³ Data are presented as mean ± SD (n=3).

⁴ Significant differences (p < 0.05) between fractions are indicated with Latin letters (ANOVA, p < 0.05).