Supplementary S1. Polyphenolic and carotenoid contents of carrot-based smoothies

Sample	Fl3 1	Fl3 2	Fl3 3	Other Fl3	Total Fl3	PA 1	PA 2	PA 3	PA 4	PA 5	PA 6	PA 7	PA 8	PA 9	PA 10	PA 11	P 12	P 13	Other PA	Total PA
RJ-PC	26.23±0.56 ^{b}	2.37±0.05 ^{cde}	41.41±0.88 ^{b}	14.07±0.30 ^{f}	**84.08±1.78 ^{d}**	1.05±0.02 ^{c}	35.89±0.76 ^{d}	4.59±0.10 ^{c}	2.75±0.06 ^{d}	2.40±0.05 ^{d}	1.58±0.03 ^{fg}	0.88±0.02 ^{d}	2.16±0.05 ^{hj}	nd	nd	nd	nd	nd	nd	**58.65±2.24 ^{e}**
AJ-PC	18.63±0.40 ^{de}	nd	nd	33.43±0.71 ^{j}	**52.06±1.10 ^{h}**	nd	43.54±0.92 ^{b}	5.15±0.10 ^{b}	3.96±0.08 ^{b}	2.58±0.05 ^{c}	1.49±0.03 ^{g}	0.99±0.02 ^{bc}	2.68±0.06 ^{f}	1.72±0.04 ^{b}	nd	nd	nd	nd	1.24±0.03 ^{ef}	**71.89±1.52 ^{c}**
PJ-PC	18.04±0.38 ^{e}	2.22±0.05 ^{de}	nd	9.41±0.20 ^{m}	**29.66±0.63 ^{n}**	1.07±0.02 ^{c}	40.37±0.86 ^{c}	4.09±0.00 ^{d}	4.02±0.09 ^{b}	2.78±0.06 ^{b}	1.65±0.04 ^{ef}	1.08±0.02 ^{b}	2.28±0.05 ^{ghj}	nd	nd	nd	nd	nd	2.11±0.04 ^{c}	**68.30±1.45 ^{cd}**
SJ-PC	18.92±0.40 ^{de}	4.12±0.09 ^{cd}	nd	18.30±0.39 ^{b}	**41.34±0.88 ^{kl}**	1.23±0.03 ^{b}	35.44±0.75 ^{d}	4.64±0.10 ^{c}	3.43±0.07 ^{c}	2.85±0.06 ^{b}	1.77±0.04 ^{de}	0.96±0.02 ^{cd}	2.46±0.05 ^{fgh}	nd	nd	nd	nd	nd	3.37±0.07 ^{a}	**63.92±3.36 ^{d}**
SCJ-PC	19.92±0.42 ^{d}	nd	nd	17.39±0.37 ^{hj}	**37.32±0.79 ^{lm}**	nd	39.66±0.84 ^{c}	5.35±0.11 ^{b}	3.10±0.07 ^{d}	2.75±0.06 ^{c}	1.61±0.03 ^{fg}	0.91±0.02 ^{cd}	2.56±0.05 ^{fg}	nd	5.21±0.11 ^{a}	0.99±0.02 ^{a}	nd	nd	1.64±0.03 ^{d}	**80.54±2.71 ^{b}**
PC%100	35.73±0.76 ^{a}	4.71±0.10 ^{c}	58.60±1.25 ^{a}	nd	**99.04±2.10 ^{c}**	1.94±0.04 ^{a}	72.18±1.52 ^{a}	12.13±0.25 ^{a}	7.61±0.16 ^{a}	5.82±0.12 ^{a}	3.20±0.07 ^{a}	2.35±0.05 ^{a}	5.21±0.11 ^{b}	3.78±0.08 ^{a}	0.36±0.01 ^{b}	nd	nd	1.15±0.02 ^{a}	2.68±0.06 ^{b}	**140.27±2.98 ^{a}**
RJ-WC	9.08±0.19 ^{j}	25.04±0.53 ^{b}	nd	26.54±0.57 ^{f}	**60.66±1.29 ^{g}**	0.65±0.01 ^{e}	2.77±0.06 ^{n}	0.95±0.02 ^{ef}	nd	0.33±0.01 ^{g}	0.80±0.02 ^{m}	nd	1.24±0.03 ^{l}	nd	nd	nd	0.30±0.01 ^{a}	nd	nd	**14.40±0.31 ^{n}**
AJ-WC	7.46±0.16 ^{k}	nd	nd	34.37±0.73 ^{j}	**41.83±0.89 ^{kl}**	0.52±0.01 ^{f}	9.03±0.19 ^{hj}	0.47±0.01 ^{g}	nd	0.30±0.01 ^{g}	0.88±0.02 ^{l}	nd	1.54±0.03 ^{k}	nd	nd	nd	nd	nd	nd	**21.13±0.45 ^{l}**
PJ-WC	8.82±0.19 ^{jk}	nd	nd	11.06±0.23 ^{hjkl}	**19.89±0.42 ^{p}**	0.66±0.01 ^{e}	11.85±0.25 ^{fg}	nd	nd	0.39±0.01 ^{f}	1.15±0.02 ^{hj}	nd	2.07±0.04 ^{j}	nd	nd	nd	nd	nd	nd	**25.65±0.54 ^{k}**
SJ-WC	12.35±0.26 ^{g}	nd	nd	20.85±0.44 ^{b}	**33.21±0.70 ^{m}**	nd	3.94±0.08 ^{l}	1.18±0.02 ^{e}	nd	0.34±0.01 ^{g}	1.27±0.03 ^{h}	nd	2.05±0.04 ^{j}	nd	nd	nd	nd	nd	1.17±0.02 ^{f}	**20.79±0.44 ^{lm}**
SCJ-WC	10.00±0.21 ^{hj}	nd	nd	60.84±1.29 ^{b}	**70.84±1.50 ^{ef}**	0.79±0.01 ^{d}	7.29±0.15 ^{j}	nd	nd	0.38±0.01 ^{f}	1.06±0.02 ^{jk}	nd	2.20±0.05 ^{hj}	nd	nd	nd	nd	nd	nd	**28.99±0.62 ^{k}**
WC%100	16.29±0.35 ^{f}	nd	nd	9.17±0.19 ^{hj}	**25.46±0.54 ^{ö}**	1.11±0.02 ^{c}	5.20±0.11 ^{k}	nd	nd	0.67±0.01 ^{e}	2.02±0.04 ^{b}	0.28±0.01 ^{e}	3.08±0.07 ^{e}	nd	nd	nd	nd	nd	nd	**25.01±0.53 ^{k}**
RJ-YC	17.75±0.38 ^{e}	23.86±0.51 ^{b}	nd	31.87±0.67 ^{e}	**73.48±1.56 ^{e}**	nd	3.36±0.07 ^{m}	nd	nd	nd	0.95±0.02 ^{kl}	nd	1.08±0.02 ^{m}	nd	nd	nd	nd	nd	nd	**19.16±0.41 ^{m}**
AJ-YC	11.15±0.24 ^{gh}	nd	nd	33.38±0.70 ^{j}	**44.53±0.94 ^{jk}**	0.71±0.01 ^{de}	8.57±0.18 ^{hj}	nd	nd	nd	0.81±0.02 ^{m}	nd	0.95±0.02 ^{n}	nd	nd	nd	nd	nd	nd	**25.04±0.53 ^{k}**
PJ-YC	11.49±0.24 ^{g}	nd	nd	13.55±0.29 ^{j}	**25.07±0.53 ^{ö}**	nd	10.02±0.21 ^{gh}	nd	nd	nd	0.76±0.02 ^{m}	nd	0.87±0.02 ^{n}	nd	nd	nd	nd	nd	nd	**26.65±0.57 ^{k}**
SJ-YC	15.12±0.32 ^{f}	1.67±0.04 ^{e}	nd	42.88±1.06 ^{d}	**66.44±1.41 ^{fg}**	nd	2.04±0.04 ^{ö}	1.01±0.02 ^{ef}	nd	nd	0.68±0.02 ^{n}	nd	0.69±0.01 ^{ö}	nd	nd	nd	nd	nd	1.27±0.03 ^{ef}	**21.70±0.46 ^{l}**
SCJ-YC	nd	55.92±1.19 ^{a}	nd	57.29±1.22 ^{c}	**113.22±2.40 ^{b}**	nd	5.51±0.12 ^{k}	0.86±0.02 ^{ef}	nd	nd	0.61±0.01 ^{ö}	nd	0.66±0.01 ^{ö}	nd	nd	nd	nd	nd	nd	**30.39±0.64 ^{jk}**
YC%100	23.36±0.50 ^{c}	nd	nd	6.48±0.14 ^{h}	**29.84±0.63 ^{n}**	1.91±0.04 ^{a}	5.48±0.12 ^{k}	nd	nd	0.53±0.01 ^{e}	1.86±0.04 ^{f}	nd	1.98±0.04 ^{j}	nd	nd	nd	nd	nd	nd	**29.76±0.63 ^{k}**
RJ-OC	nd	24.86±0.51 ^{d}	nd	25.13±0.54 ^{g}	**50.00±1.06 ^{hj}**	0.70±0.01 ^{a}	8.82±0.19 ^{k}	nd	nd	nd	0.89±0.02 ^{cd}	nd	4.51±0.10 ^{j}	nd	nd	nd	nd	nd	nd	**34.92±0.74 ^{hj}**

		53[b]				1[de]	[hj]				2[l]		[d]								
AJ-OC	nd	nd	nd	66.68±0.78[j]	**36.68±0.78[lm]**	0.62±0.01[e]	13.73±0.29[ef]	nd	nd	nd	0.94±0.02[kl]	nd	4.75±0.10[cd]	nd	nd	nd	nd	nd	nd	**40.51±0.86[g]**
PJ-OC	nd	nd	nd	12.14±0.26[ghj]	**12.14±0.26[s]**	nd	15.27±0.3 2[e]	nd	nd	nd	0.98±0.02[kl]	nd	4.74±0.10[cd]	nd	nd	nd	nd	nd	nd	**42.54±0.90[fg]**
SJ-OC	5.31±0.11[mn]	2.84±0.06[cde]	nd	28.59±0.60[a]	**36.74±0.78[lm]**	nd	7.41±0.16[j]	1.10±0.02[e]	nd	nd	1.06±0.02[jk]	nd	4.74±0.10[cd]	nd	nd	nd	nd	nd	1.35±0.03[e]	**38.63±0.82[gh]**
SCJ-OC	4.39±0.09[n]	57.57±1.22[a]	nd	65.97±1.40[a]	**127.93±2.71[a]**	0.67±0.01[e]	10.89±0.2 3[gh]	0.92±0.02[ef]	nd	nd	0.94±0.02[kl]	nd	5.05±0.11[bc]	nd	nd	nd	nd	nd	nd	**47.28±1.00[f]**
OC%100	6.11±0.13[m]	nd	nd	8.88±0.19[j]	**15.10±0.32[r]**	1.30±0.03[b]	15.71±0.3 3[e]	0.66±0.01[fg]	nd	0.43±0.01[f] g	1.99±0.04[bc]	0.34±0 .01[e]	8.60±0.18[a]	nd	nd	nd	nd	nd	nd	**54.05±1.15[e]**

Table 3. continue

Sample	F1	F2	F3	Total F	A1	A2	A3	A4	A5	A6	A7	Total A	Procyanidins	DP	Total P	C1	C2	C3	C4	Total C
RJ-PC	4.64±0.10[de]	nd	nd	**4.64±0.10[d]**	2.01±0.04[b]	12.83±0.27[d]	5.60±0.12[cd]	nd	1.25±0.03[de]	nd	nd	**21.70±0.46[d]**	**12.08±0.26[f]**	9.50	**190.77 [d]**	nd	nd	nd	nd	**nd**
AJ-PC	nd	nd	nd	**nd**	1.80±0.04[c]	nd	5.34±0.11[d]	12.56±0.27[b]	1.11±0.02[de]	nd	nd	**20.81±0.44[d]**	**9.42±0.20[g]**	6.46	**150.96 [e]**	0.03±0.00[a]	21.93±0.47[a]	0.27±0.01[a]	nd	**22.22±0.47[a]**
PJ-PC	nd	nd	nd	**nd**	1.21±0.03[d]	nd	4.76±0.10[e]	10.77±0.23[c]	0.85±0.02[e]	nd	nd	**17.59±0.37[e]**	**4.26±0.09[l]**	6.31	**135.56 [f]**	nd	nd	0.10±0.00[b]	0.78±0.02[e]	**0.88±0.02[def]**
SJ-PC	4.28±0.09[e]	nd	nd	**4.28±0.09[d]**	1.82±0.04[c]	nd	6.04±0.13[c]	13.21±0.28[b]	8.43±0.18[c]	nd	nd	**29.51±1.63[c]**	**16.75±0.36[d]**	nd	**177.64 [d]**	nd	nd	nd	0.98±0.02[d]	**0.98±0.02[de]**
SCJ-PC	8.48±0.18[a]	30.31±0.64[a]	nd	**38.79±0.82[c]**	1.69±0.04[c]	21.98±0.47[b]	6.01±0.13[c]	13.22±0.28[b]	1.04±0.02[e]	7.42±0.16[b]	nd	**51.35±3.09[a]**	**25.56±0.54[a]**	1.59	**173.29 [d]**	nd	nd	nd	0.63±0.01[fg]	**0.63±0.01[efg]**
PC%100	nd	nd	nd	**nd**	2.65±0.06[a]	nd	8.30±0.18[b]	17.30±0.37[a]	1.62±0.03[d]	nd	nd	**29.87±0.63[c]**	**4.49±0.10[l]**	4.01	**278.06 [b]**	nd	nd	nd	2.14±0.05[a]	**2.14±0.05[b]**
RJ-WC	4.39±0.09[de]	nd	nd	**4.39±0.09[d]**	nd	13.82±0.29[cd]	nd	nd	nd	1.39±0.03[c]	2.06±0.04[a]	**17.27±0.37[e]**	**11.56±0.25[f]**	3.54	**108.28 [h]**	nd	nd	nd	nd	**nd**
AJ-WC	nd	nd	nd	**nd**	nd	nd	nd	nd	nd	nd	nd	**nd**	**8.18±0.17[gh]**	4.47	**71.14 [k]**	nd	nd	nd	nd	**nd**
PJ-WC	nd	nd	nd	**nd**	nd	nd	nd	nd	nd	nd	nd	**nd**	**5.12±0.11[k]**	4.73	**50.66 [n]**	nd	nd	nd	nd	**nd**
SJ-WC	3.54±0.08[f]	nd	nd	**3.54±0.08[d]**	nd	nd	nd	nd	9.11±0.19[b]	nd	nd	**9.11±0.19[f]**	**15.77±0.33[d]**	nd	**82.42 [i]**	nd	nd	nd	nd	**nd**
SCJ-WC	8.38±0.	31.49±	43.21±	**83.08±1.**	nd	23.31	9.34±0.2	nd	nd	nd	nd	**32.65±0.**	**22.62±0.48[b]**	1.60		nd	nd	nd	nd	**nd**

	18^{a}	0.67^{a}	0.92^{a}	**76^{a}**		±0.49^{ab}	0^{a}					**69^{b}**			**238.18 ^{c}**					
WC%100	nd	nd	nd	**nd**	nd	nd	nd	nd	nd	nd	nd	**nd**	**3.83±0.08^{m}**	nd	**54.30 ^{m}**	nd	nd	nd	nd	**nd**
RJ-YC	4.81±0.10^{d}	nd	nd	**4.81±0.10^{d}**	nd	13.37 ±0.28^{cd}	nd	nd	nd	1.44±0.03^{c}	1.96±0.04^{a}	**16.77±0.36^{e}**	**14.28±0.30^{e}**	4.39	**128.50 ^{f}**	nd	nd	nd	0.45±0.01^{h}	**0.45±0.01^{fg}**
AJ-YC	nd	nd	nd	**nd**	nd	nd	nd	nd	nd	nd	nd	**nd**	**8.13±0.17^{gh}**	5.09	**77.70 ^{j}**	nd	nd	nd	0.24±0.01^{k}	**0.24±0.01^{g}**
PJ-YC	nd	nd	nd	**nd**	nd	nd	nd	nd	nd	nd	nd	**nd**	**5.50±0.12^{jk}**	4.98	**60.18 ^{l}**	nd	nd	nd	0.29±0.01^{jk}	**0.29±0.01^{g}**
SJ-YC	3.30±0.07^{f}	nd	nd	**3.30±0.07^{d}**	nd	nd	nd	nd	8.85±0.19^{bc}	nd	nd	**8.85±0.19^{f}**	**15.66±0.33^{d}**	nd	**115.95 ^{g}**	nd	nd	nd	0.59±0.01^{g}	**0.59±0.01^{efg}**
SCJ-YC	8.41±0.18^{a}	30.73±0.65^{a}	42.52±0.90^{a}	**81.65±1.73^{a}**	nd	22.56 ±0.48^{b}	nd	nd	nd	8.30±0.18^{a}	nd	**30.86±0.65^{bc}**	**23.08±0.49^{b}**	1.68	**279.20 ^{b}**	nd	nd	nd	0.51±0.01^{h}	**0.51±0.01^{efg}**
YC%100	nd	nd	nd	**nd**	nd	nd	nd	nd	nd	nd	nd	**nd**	**2.59±0.05^{n}**	nd	**62.19 ^{l}**	nd	nd	nd	1.31±0.03^{c}	**1.31±0.03^{cd}**
RJ-OC	5.42±0.12^{c}	nd	nd	**5.42±0.12^{d}**	nd	14.72 ±0.31^{c}	nd	nd	nd	1.47±0.03^{c}	2.08±0.04^{a}	**18.27±0.39^{e}**	**9.38±0.20^{g}**	3.06	**117.99 ^{g}**	nd	nd	0.06±0.00^{c}	0.51±0.01^{h}	**0.57±0.01^{efg}**
AJ-OC	nd	nd	nd	**nd**	nd	nd	nd	nd	nd	nd	nd	**nd**	**7.86±0.17^{h}**	4.74	**85.05 ^{i}**	nd	nd	nd	0.33±0.01^{j}	**0.33±0.01^{g}**
PJ-OC	nd	nd	nd	**nd**	nd	nd	nd	nd	nd	nd	nd	**nd**	**5.71±0.12^{j}**	4.33	**60.39 ^{l}**	nd	nd	nd	0.37±0.01^{j}	**0.37±0.01^{g}**
SJ-OC	4.16±0.09^{e}	nd	nd	**4.16±0.09^{d}**	nd	nd	nd	nd	9.79±0.21^{a}	nd	nd	**9.79±0.21^{f}**	**16.34±0.35^{d}**	nd	**105.66 ^{h}**	nd	nd	nd	0.66±0.01^{fg}	**0.66±0.01^{efg}**
SCJ-OC	7.61±0.16^{b}	27.40±0.58^{b}	41.86±0.89^{a}	**76.87±1.63^{b}**	nd	24.23 ±0.51^{a}	nd	nd	nd	8.48±0.18^{a}	nd	**32.70±0.69^{b}**	**20.01±0.42^{c}**	1.50	**304.79 ^{a}**	nd	nd	nd	0.70±0.01^{ef}	**0.70±0.01^{efg}**
OC%100	nd	nd	nd	**nd**	nd	nd	nd	nd	nd	nd	nd	**nd**	**2.68±0.06^{n}**	nd	**71.83 ^{k}**	nd	nd	nd	1.65±0.04^{b}	**1.65±0.04^{c}**

Polyphenols. and carotenoids-mg/100 ml; values (mean of three replications) followed by the same letter within the same column were not significantly different (p ≤0.05) according to Tukey's test. FL3 – flavan-3-ols; Fl3 1 – procyanidin B2; Fl3 2 – procyanidin B4; Fl3 3 – (-)-epicatechin; PA – phenolic a chlorogenic acid; PA 2 - 5-O-caffeoylquinic acid; PA 3 - 4-O-caffeoylquinic acid; PA 4 - ferulic acid-hexoside; PA 5 - 3-O-feruloylquinic acid; PA 6 - 4-O-feruloylquinic acid; PA 7 - caffeic acid –hexoside; PA 8 - di-ferulic acid derivative; PA 9 - dicaffeoylquinic acid; PA 10 - cis-5-p-coumaroylquinic acid; PA 11 – acid; PA 12 - 3-O-caffeoylquinic acid; PA 13 - ferulic acid di-hexoside; F – flavonols, F 1 - quercetin-3-galactoside; F 2 – genistin; A - anthocyanins; A2 - cyanidin-3-O-xylosyl-glucosylgalactoside; A1 - cyanidin-3-O-xylosyl-galactoside; A3 - cyanidin-3-O-xylosyl-cinpoyl-glucosylgalactoside; A4 - cyanidin-3 feruloyl-glucosylgalactoside; A5 - cyanidin-3-O-xylosyl-p-coumaroylglucosyl-galactoside; A6 - cyanidin-3-O-glucosyl-rutinoside; A7 - cyanidin-3-arabinoside; TP – total polyphenolic compounds; C1 - α-cryptoxanthin (zeinoxanthin); C2 – β-carotene; C3 - pheophytin a; C4 – lutein; TC – totacl carotenoi detected.