

Supplement Table1
Effect of dehydration on retention and *in vitro* bioaccessibility of carotenoids from dried pumpkin slices

		IMVD (Moisture content,%)						HAD (Moisture content,%)				
□		Fresh	75	55	35	15	5	75	55	35	15	5
Carotenoids content (µg/g)	(all-E)-lutein	68.7±2.0 ^a	58.4±3.6 ^b	54.3±2.5 ^b	48.7±2.0 ^{bc}	47.7±1.7 ^{bc}	48.1±4.5 ^{bc}	42.1±0.5 ^d	27.5±6.2 ^e	35.2±1.9 ^f	24.2±2.2 ^{fg}	18.2±1.0 ^g
	(all-E)-α-carotene	201.4±5.4 ^a	183.2±8.2 ^b	162.3±9.5 ^c	151.1±12.3 ^c	153.1±9.5 ^c	151.1±5.0 ^c	136.9±8.0 ^c	92.0±5.3 ^d	78.4±7.5 ^d	70.3±7.0 ^{ef}	62.1±8.2 ^f
	(all-E)-β-carotene	390.5±4.4 ^a	351.8±15.2 ^b	336.2±14.8 ^c	326.0±25.8 ^{bc}	330.4±336.3 ^{bc}	314.0±14.1 ^c	269.1±16.4 ^d	196.4±14.1 ^e	137.5±14.4 ^f	130.0±13.7 ^f	117.9±10.5 ^f
	(Z)-β-carotene	95.2±5.6 ^a	22.2±1.4 ^b	17.3±3.6 ^b	18.0±2.1 ^b	20.2±3.0 ^b	19.9±2.2 ^b	21.4±1.5 ^b	22.1±2.7 ^b	20.5±3.7 ^b	19.7±4.5 ^b	23.7±1.2 ^b
	Lutein esters	206.6±3.6 ^a	192.6±8.7 ^b	186.8±5.8 ^b	176.6±10.7 ^b	172.1±6.6 ^b	162.4±7.0 ^{bc}	156.0±19.4 ^{bc}	121.7±11.6 ^d	96.5±7.9 ^e	89.3±12.0 ^e	83.7±11.2 ^e
Liberation ratio (µg/g)	(all-E)-lutein	5.7±1.0 ^f	42.0±1.7 ^b	44.7±2.7 ^a	34.5±4.3 ^{ab}	32.1±3.8 ^b	20.4±2.0 ^c	12.6±1.1 ^d	10.7±0.6 ^c	12.2±1.3 ^{cd}	4.9±0.3 ^e	4.7±0.4 ^d
	(all-E)-α-carotene	11.9±5.6 ^g	125.3±7.5 ^a	65.9±5.4 ^b	46.1±1.4 ^c	43.8±1.8 ^d	35.8±2.4 ^e	23.7±5.5 ^f	28.4±3.8 ^c	10.7±1.3 ^f	7.2±0.8 ^g	5.0±0.3 ^g
	(all-E)-β-carotene	13.7±9.4 ^e	113.6±13.7 ^a	109.9±13.8 ^a	113.8±12.4 ^a	53.3±10.6 ^{bc}	51.5±11.9 ^{bc}	64.9±13.7 ^b	63.4±13.4 ^a	25.2±3.2 ^b	18.3±1.17 ^c	10.4±0.5 ^d
	(Z)-β-carotene	4.6±1.5 ^f	9.4±1.0 ^b	6.2±0.2 ^{bc}	5.8±1.0 ^c	6.0±0.1 ^{bcd}	4.7±0.2 ^d	2.6±0.8 ^e	10.6±0.4 ^a	6.5±1.1 ^c	n.d.	n.d.
	Lutein esters	18.4±3.5 ^f	103.2±7.5 ^a	90.6±1.7 ^a	68.9±2.8 ^b	56.1±5.9 ^c	39.6±4.5 ^d	25.1±6.6 ^e	51.8±1.8 ^b	24.8±2.4 ^d	n.d.	n.d.
Micellized ratio (µg/g)	(all-E)-lutein	5.8±1.0 ^d	25.6±1.9 ^a	9.1±1.4 ^c	5.6±1.6 ^{cd}	4.4±0.8 ^d	3.6±1.0 ^d	18.3±0.4 ^a	8.3±1.32 ^b	6.6±1.2 ^c	1.0±0.5 ^e	0.7±0.2 ^e
	(all-E)-α-carotene	n.d.	5.7±2.6 ^a	2.6±0.5 ^b	n.d.	n.d.	n.d.	2.5±1.2 ^b	n.d.	n.d.	n.d.	n.d.
	(all-E)-β-carotene	8.2±10.5 ^d	61.2±4.2 ^a	15.1±3.7 ^c	3.9±0.7 ^d	4.3±2.0 ^{de}	2.5±0.9 ^e	13.6±5.9 ^a	6.9±2.2 ^c	1.8±0.6 ^e	0.8±0.3 ^e	0.4±0.1 ^f
	(Z)-β-carotene	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
	Lutein esters	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

Note: Data are expresses as µg/g DW.