

Supplements

Suppl 1. pH of the slurry water after the steeping period

Steeping (hours)	Genotypes ^a				
	1	2	3	4	5
Control (water)	6.8 ± 0.0 a	6.8 ± 0.0 a	6.8 ± 0.0 a	6.8 ± 0.0 a	6.8 ± 0.0 a
0.25	6.7 ± 0.0 a	6.9 ± 0.0 a	6.3 ± 0.0 b	6.7 ± 0.1 a	6.3 ± 0.0 b
24	4.9 ± 0.0 c	4.9 ± 0.1 c	4.8 ± 0.1 c	5.2 ± 0.1 b	5.0 ± 0.0 c
72	5.3 ± 0.0 b	5.2 ± 0.0 b	4.0 ± 0.0 d	5.4 ± 0.0 b	4.8 ± 0.4 c
120	5.3 ± 0.3 b	5.2 ± 0.1 b	4.3 ± 0.1 c	5.5 ± 0.0 b	5.1 ± 0.3 c

^aColumns not connected by the same letter indicate significant difference according to Tukey's HSD test (P < 0.05)

Suppl 2. Carotenoid retention during wet cooking (% of starting content)

Carotenoid ^b	Genotypes ^a				
	1	2	3	4	5
All- <i>trans</i> -lutein	88 ± 6 a	75 ± 2 a	72 ± ND a	88 ± 3 a	72 ± 5 a
all- <i>trans</i> -zeaxanthin	89 ± 5 ab	72 ± 2 b	84 ± ND ab	101 ± 4 a	79 ± 5 b
β-cryptoxanthin	79 ± 3 a	61 ± 2 bc	62 ± ND abc	72 ± 2 ab	57 ± 3 c
Z-β-BC	47 ± ND a	43 ± 2 a	47 ± ND a	56 ± 1 a	43 ± 3 a
all- <i>trans</i> -β-BC	35 ± 3 a	25 ± 1 bc	30 ± 3 abc	34 ± 1 ab	25 ± 2 c
Xanthophylls	89 ± 3 ab	72 ± 2 b	85 ± 7 ab	99 ± 4 a	76 ± 4 b
Provitamin A	41 ± 3 ab	34 ± 1 b	45 ± 6 ab	54 ± 3 a	38 ± 2 b
Total carotenoid content	81 ± 1 ab	69 ± 4 b	83 ± 7 ab	95 ± 5 a	73 ± 4 b

^aDifferent superscript letters within a row indicate significant difference according to Tukey's HSD test (P<0.05)

^bAll data are expressed as percentage of retention. ND, not data