

SUPPLEMENTARY MATERIAL

Table S1. Carotenoids dietary intake ($\mu\text{mol/day}$).

	Total sample (n=29)	Fruit group (n=14)	Vegetable group (n=15)
Lutein + zeaxanthin			
Basal	2.26 ± 1.31 [1.88] ^a	2.16 ± 1.03 [2.15]	2.35 ± 1.56 [1.88]
Final	4.42 ± 3.43 [3.45] ^b	6.06 ± 3.88 [4.18] ^A	3.09 ± 1.99 [2.73] ^B
β -cryptoxanthin			
Basal	1.25 ± 1.07 [0.93] ^a	1.52 ± 1.15 [1.73]	2.00 ± 0.97 [0.87]
Final	1.13 ± 1.04 [0.96] ^b	2.00 ± 0.78 [1.71]	0.33 ± 0.35 [1.71]
α -carotene			
Basal	0.89 ± 1.51 [0.40]	0.86 ± 1.80 [0.34]	0.92 ± 1.24 [0.40]
Final	0.50 ± 0.62 [0.19]	0.47 ± 0.48 [0.24]	0.56 ± 0.75 [0.20]
β -carotene			
Basal	4.00 ± 3.78 [2.58]	3.67 ± 4.54 [2.52]	4.30 ± 3.03 [3.88]
Final	3.83 ± 3.72 [2.71]	3.94 ± 2.96 [3.16]	4.00 ± 4.45 [2.44]
Lycopene			
Basal	20.21 ± 27.75 [5.97] ^a	3.04 ± 2.12 [2.61] ^A	36.24 ± 31.07 [29.29] ^B
Final	12.64 ± 14.94 [5.09] ^b	3.94 ± 1.92 [3.76] ^A	22.25 ± 16.86 [20.11] ^B

Different superscript letters indicate significant difference between basal and final concentrations (^a columns) and between groups (^A rows).

Difference between fruit and vegetable groups at baseline: lycopene (<0.001).

Differences between baseline and end of the study: a) total sample: lutein+zeaxanthin (0.002), β -cryptoxanthin (<0.001) and lycopene (0.009); b) between fruit and vegetable groups: lutein+zeaxanthin (0.012) and lycopene (<0.001)

Table S2. Contrast threshold at different degrees of visual angle, without and with glare (means \pm SD).

Visual angle of the stimulus (°)	Total sample (n=29)	Fruit group (n=14)	Vegetable group (n=15)
<i>Without glare</i>			
6.3			
Basal	0.018 \pm 0.013	0.020 \pm 0.016	0.015 \pm 0.008
Final	0.015 \pm 0.007	0.016 \pm 0.010	0.014 \pm 0.005
4.0			
Basal	0.022 \pm 0.013	0.025 \pm 0.015	0.020 \pm 0.012
Final	0.020 \pm 0.011	0.020 \pm 0.010	0.020 \pm 0.012
2.5			
Basal	0.030 \pm 0.018	0.033 \pm 0.021	0.027 \pm 0.015
Final	0.031 \pm 0.019	0.033 \pm 0.020	0.028 \pm 0.018
1.6			
Basal	0.056 \pm 0.034	0.057 \pm 0.034	0.054 \pm 0.034
Final	0.057 \pm 0.043	0.063 \pm 0.043	0.051 \pm 0.043
1.0			
Basal	0.122 \pm 0.083	0.125 \pm 0.080	0.120 \pm 0.090
Final	0.131 \pm 0.092	0.145 \pm 0.090	0.112 \pm 0.094
0.7			
Basal	0.273 \pm 0.156	0.280 \pm 0.161	0.268 \pm 0.154
Final	0.287 \pm 0.150	0.296 \pm 0.156	0.278 \pm 0.146
<i>With glare</i>			
6.3			
Basal	0.014 \pm 0.005	0.014 \pm 0.005	0.013 \pm 0.005
Final	0.015 \pm 0.006	0.016 \pm 0.007 ^A	0.013 \pm 0.005 ^B
4.0			
Basal	0.022 \pm 0.026	0.027 \pm 0.036	0.016 \pm 0.008
Final	0.018 \pm 0.010	0.020 \pm 0.011 ^A	0.015 \pm 0.008 ^B
2.5			
Basal	0.030 \pm 0.015	0.028 \pm 0.015	0.026 \pm 0.015
Final	0.019 \pm 0.017	0.032 \pm 0.015	0.026 \pm 0.018
1.6			
Basal	0.058 \pm 0.039	0.061 \pm 0.043	0.055 \pm 0.035
Final	0.059 \pm 0.040	0.059 \pm 0.031	0.059 \pm 0.048
1.0			
Basal	0.127 \pm 0.082	0.124 \pm 0.078	0.130 \pm 0.090
Final	0.143 \pm 0.106	0.155 \pm 0.109	0.133 \pm 0.104
0.7			
Basal	0.300 \pm 0.106	0.290 \pm 0.149	0.309 \pm 0.139
Final	0.302 \pm 0.162	0.295 \pm 0.165	0.309 \pm 0.029