

S1 Table. Astaxanthin total intake and output of all diet groups.

Group	Astaxanthin Intake (mg/day)	Astaxanthin Output (mg/day)	Astaxanthin Total absorption (mg/day)
Normal	ND	ND	ND
Control	ND	ND	ND
1.6 FFAP	1.44 ± 0.17 ^b	0.30 ± 0.01 ^b	1.14 ± 0.16 ^b
3.2 FFAP	2.78 ± 0.16 ^a	0.37 ± 0.14 ^{ab}	2.41 ± 0.30 ^a
8.0 FFAP	3.67 ± 0.73 ^a	0.51 ± 0.04 ^a	3.16 ± 0.77 ^a

Normal: Normal diet; Control: Normal diet + 0.2 % cholesterol; 1.6FFAP: control diet + 1.6 %FFAP; 3.2FFAP: control diet + 3.2 % FFAP; 8.0FFAP: control diet + 8.0 %FFAP. All values are mean ± SD (n = 9), and in the same column values not sharing a common superscription letters are significantly different from one another by Duncan's rang test (p < 0.05). Total ASTA intake was calculated using the formula shown below: Total ASTA intake (g) = Food intake (g) x FFAP (%) x 1% (ASTA concentration in FFAP)