

Supplemental Table. 1a. LPS activating time after AX treatment (TNF- α)

	1 h		3 h		6 h		12 h	
	Cont.	Pre-AX	Cont.	Pre-AX	Cont.	Pre-AX	Cont.	Pre-AX
Measurement 1 (pg/ml)	0.761	0.000	1.522	1.142	0.38057	0.761	0.381	0.000
Measurement 2 (pg/ml)	0.381	0.000	0.761	0.000	3.42513	0.000	2.664	0.381
Measurement 3 (pg/ml)	1.142	0.381	1.142	1.522	2.66399	0.000	5.328	0.381
Mean	0.761	0.127	1.142	0.888	2.157	0.254	2.791	0.254

Cytokine assay of pre-astaxanthin (AX) on TNF- α (enzyme-linked immunosorbent assay; ELISA).

Supplemental Table. 1b. LPS activating time after AX treatment (IL-6)

	12 h		24 h		120 h	
	Cont.	Pre-AX	Cont.	Pre-AX	Cont.	Pre-AX
Measurement 1 (pg/ml)	114.083	94.743	121.036	96.047	269.235	198.178
Measurement 2 (pg/ml)	83.661	62.148	127.555	100.175	266.844	197.743
Measurement 3 (pg/ml)	79.097	98.220	114.952	105.825	243.811	211.650
Mean	92.280	85.037	121.181	100.682	259.963	202.524

Cytokine assay of pre-astaxanthin (AX) on IL-6 (ELISA).