

Table S2 The regression equations, limits of detections (LODs), and limits of quantity (LOQs) of eleven compounds.

Analytes	Regression equation	Linear range (ug/mL)	R	LOD (ug/mL)	LOQ (ug/mL)
lutein	$y = 11.394x + 37.369$	12.50-330	0.9993	0.045	0.148
Lutein dimyristate	$y = 8.9731x - 9.2229$	19.23-500	0.9990	0.032	0.104
Lutein myristate	$y = 9.3321x - 20.499$	19.23-500	0.9993	0.053	0.176
-palmitate					
Lutein dipalmitate	$y = 9.2704x + 16.55$	19.23-500	0.9992	0.056	0.181
Lutein palmitate- stearate	$y = 9.8217x - 34.68$	19.23-500	0.9993	0.038	0.129