Supplementary material

Table S1 The release model fitting of free β-carotene and in the delivery system

		Equation	R^2
β-carotene	Zero order model	M_t/M_∞=4.68 t+0.021	0.96259
	First order model	$\ln(1- (-2.6\times10^{-5}) M_t/M_\infty)=9.38\times10^{-7}$ t	0.18659
	Higuchi model	M_t/M_∞=0.57 $t^{1/2}$+1.36	0.8869
	Korsmeyr-Peppas model	M_t/M_∞=0.88 $t^{0.44666}$	0.87067
10 min βc-DSP	Zero order model	M_t/M_∞=2.24 t+0.010	0.97162
	First order model	$\ln(1-(0.15) M_t/M_\infty)$= -0.00631 t	0.89042
	Higuchi model	M_t/M_∞=0.29 $t^{1/2}$+0.43	0.98321
	Korsmeyr-Peppas model	M_t/M_∞=0.41 $t^{0.45486}$	0.97858
30 min βc-DSP	Zero order model	M_t/M_∞= 2.31 t+0.0084	0.96999
	First order model	$\ln(1- (0.17) M_t/M_\infty)$= -0.00782 t	0.83459
	Higuchi model	M_t/M_∞=0.24 $t^{1/2}$+0.84	0.98203
	Korsmeyr-Peppas model	M_t/M_∞=0.53 $t^{0.4941}$	0.97498