

Supporting Information

Table S1. Free OSA content of OSA modified starches detected by ¹H NMR

Samples	Peak area of methyl proton		Free OSA content (mmol)
	Mesitylene	OSA modified starches	
3%OSA@NS	18.10	2.95	0.3522±0.0105
3%OSA@PS	20.17	3.12	0.3338±0.0065

^aValues are given as mean ± standard deviation.

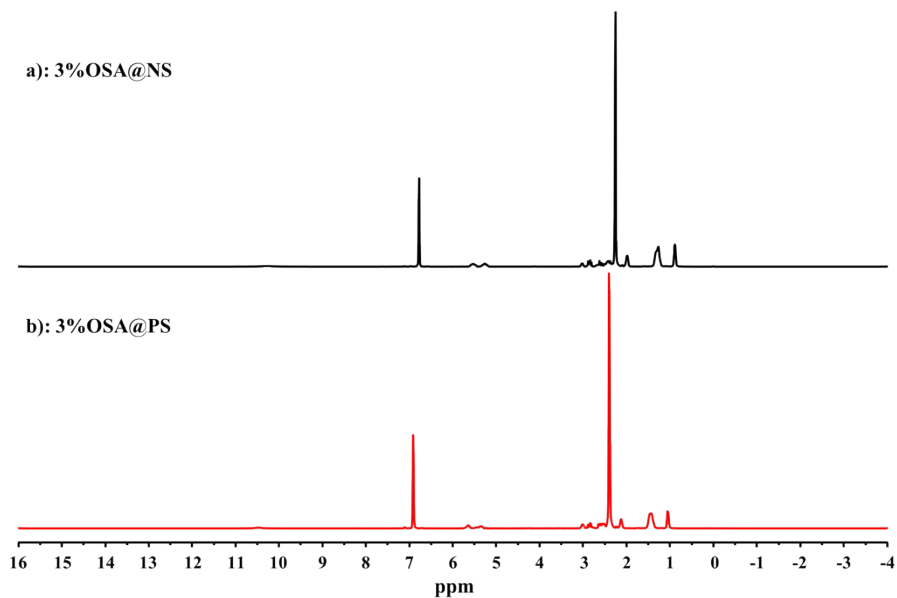


Figure S1. The ¹H NMR spectra of free OSA (mesitylene as an internal standard) of 3%OSA@NS (a) and 3%OSA@PS (b).

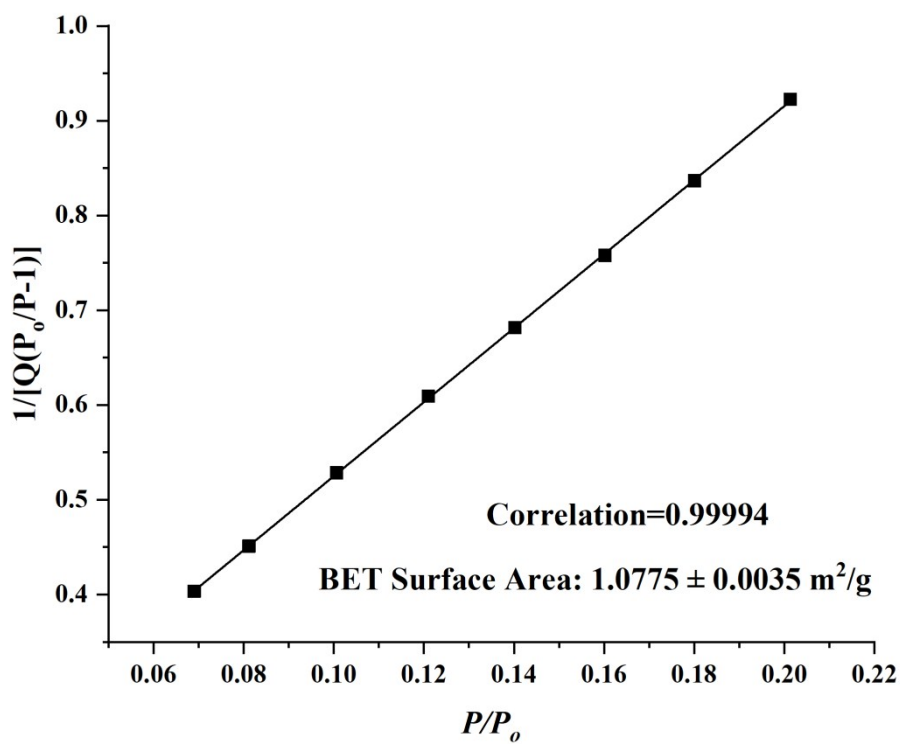


Figure S2. BET surface area plot for PS calculated from the isotherm.

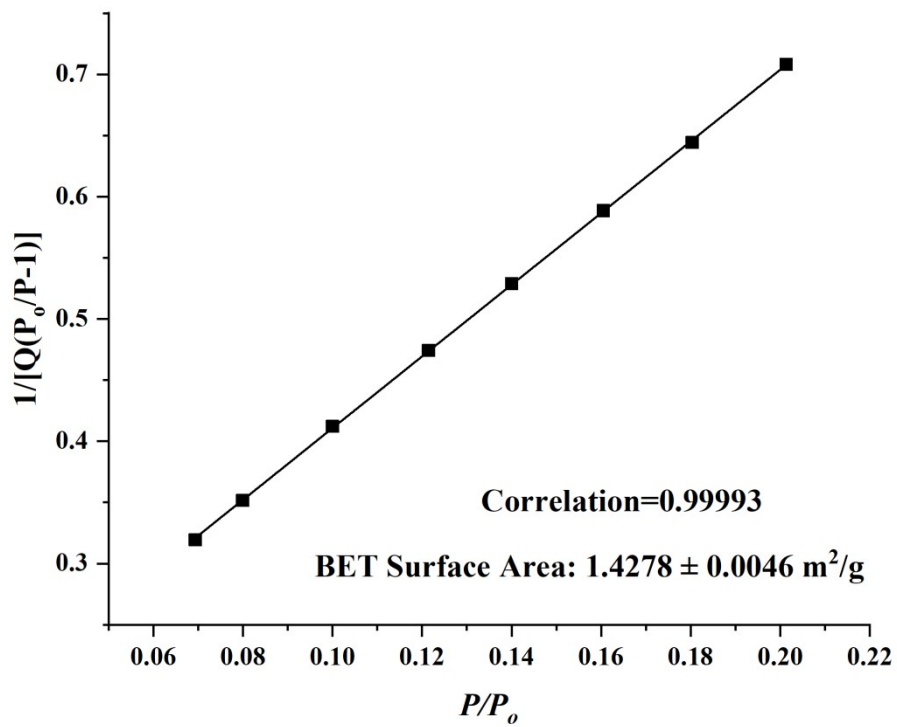


Figure S3. BET surface area plot for 5%OSA@PS calculated from the isotherm.

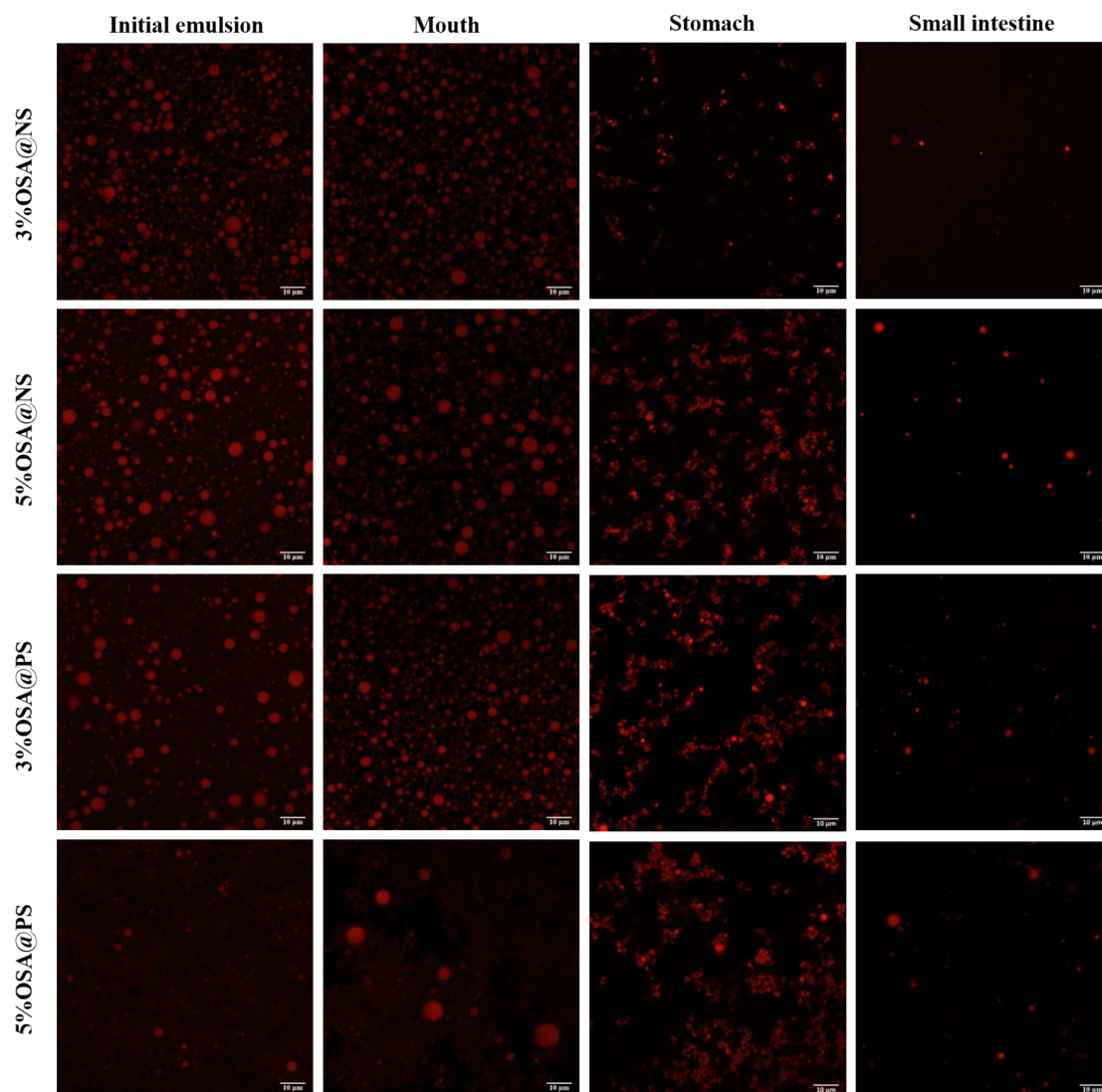


Figure S4. Changes in the microstructure (determined by CLSM) of emulsions containing β -carotene during in vitro digestion

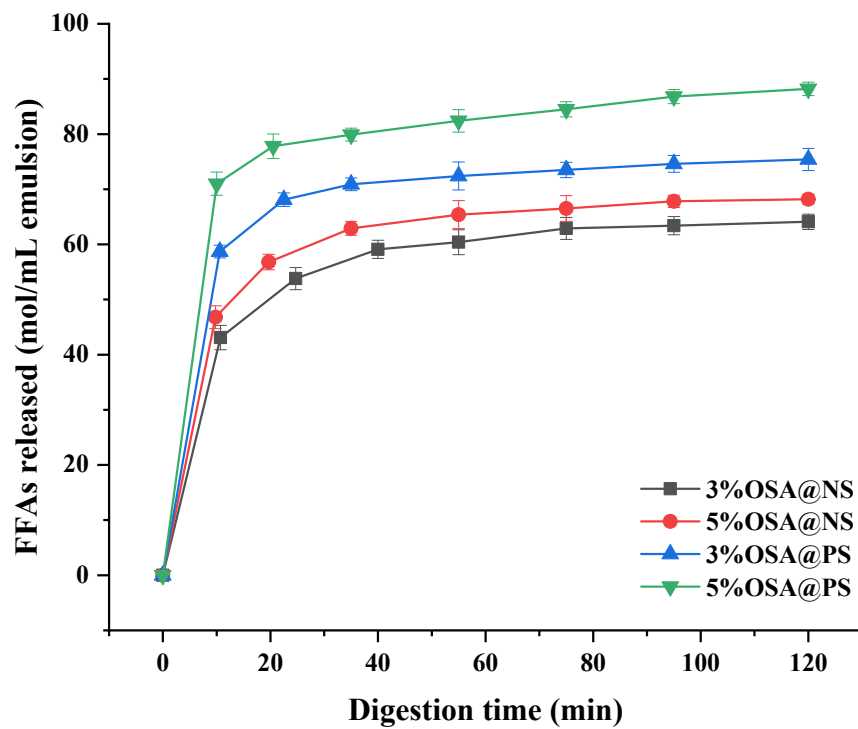


Figure S5. FFAs release profiles from emulsions stabilized as a function of small intestine digestion time.