

## SUPPORTING INFORMATION

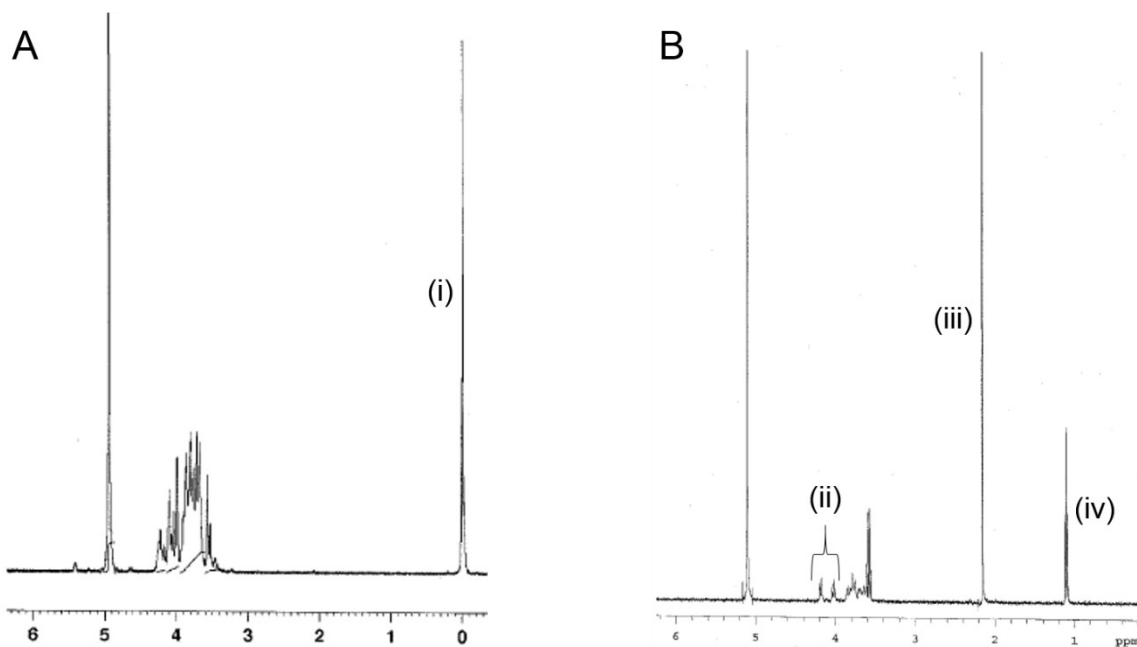


Figure S1. Representative nuclear magnetic resonance spectra for (A) unmodified inulin in pure deuterium oxide and (B) acetalated inulin degraded in 10% v/v deuterium chloride in deuterium oxide. Individual peaks are labeled as follows: (i) tetramethylsilane internal control, (ii) two fructose ring protons, (iii) acetone, and (iv) ethanol.

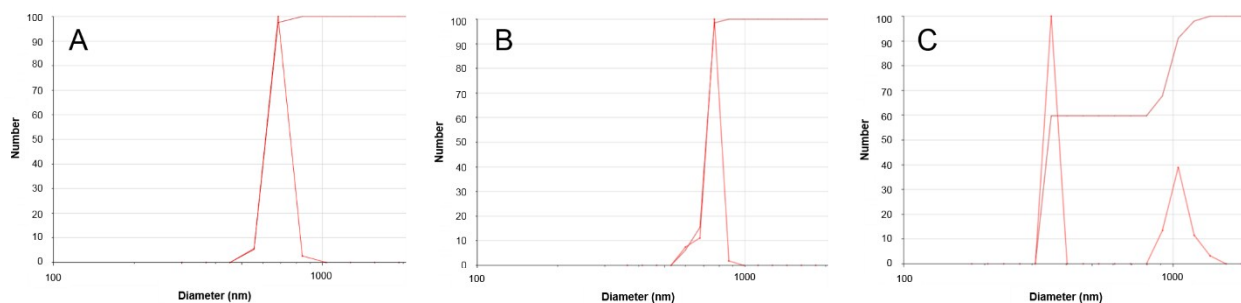


Figure S2. Representative number-weighted size distributions of acetalated inulin (Ace-IN) microparticles with polymer relative cyclic acetal coverages of (A) 0.4% (B) 20.4%, and (C) 26.7%, as determined by dynamic light scattering.

Treatment	Microparticle Concentration ( $\mu\text{g/mL}$ )				
	50	100	250	500	1000
Ace-IN(0.4%) MPs	$0.25 \pm 0.44$	N/D	N/D	N/D	$0.08 \pm 0.13$
Ace-IN(20.4%) MPs	N/D	N/D	N/D	N/D	N/D
Ace-IN(26.7%) MPs	N/D	N/D	N/D	N/D	N/D
LPS	$5.34 \pm 0.33$				
Unmodified Inulin	N/D				
Untreated Cells	N/D				

Table S1. Nitrite concentration ( $\mu\text{M}$ ) released by RAW macrophages after treatment for 48 hrs with Ace-IN(0.4%), Ace-IN(20.4%), and Ace-IN(26.7%) MPs (percent refers to polymer relative cyclic acetal coverage), and unmodified inulin. Unmodified inulin treatment was 1000  $\mu\text{g/mL}$ . Lipopolysaccharide treatment (10  $\mu\text{g/mL}$ ) for 8 hr. N/D = not detectable. Data are presented as mean  $\pm$  standard deviation (n = 3).