Supporting information for:

pH-Sensitive Chitosan Nanoparticles for Salivary Protein Delivery

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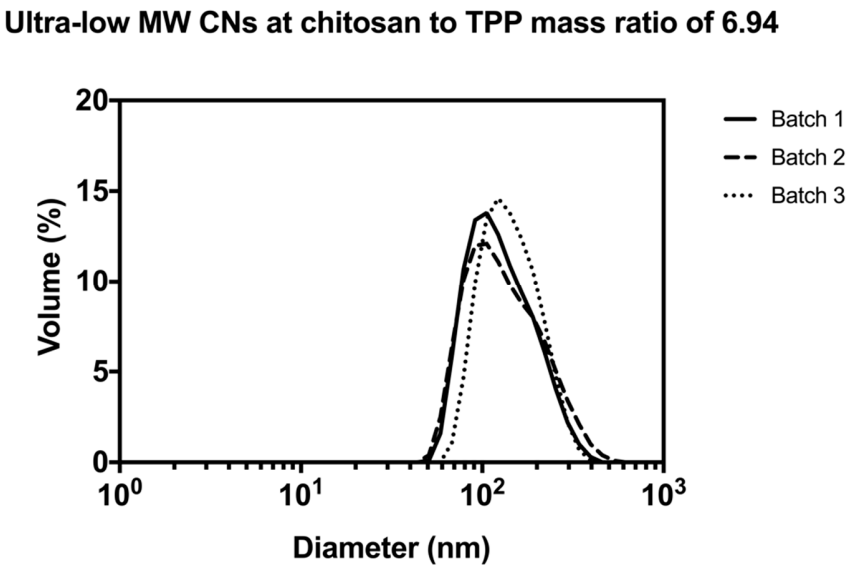

Figure S1. Volume distribution of the ultra-low MW CNs at chitosan to TPP mass ratio of 6.94. There is a small batch to batch variability.

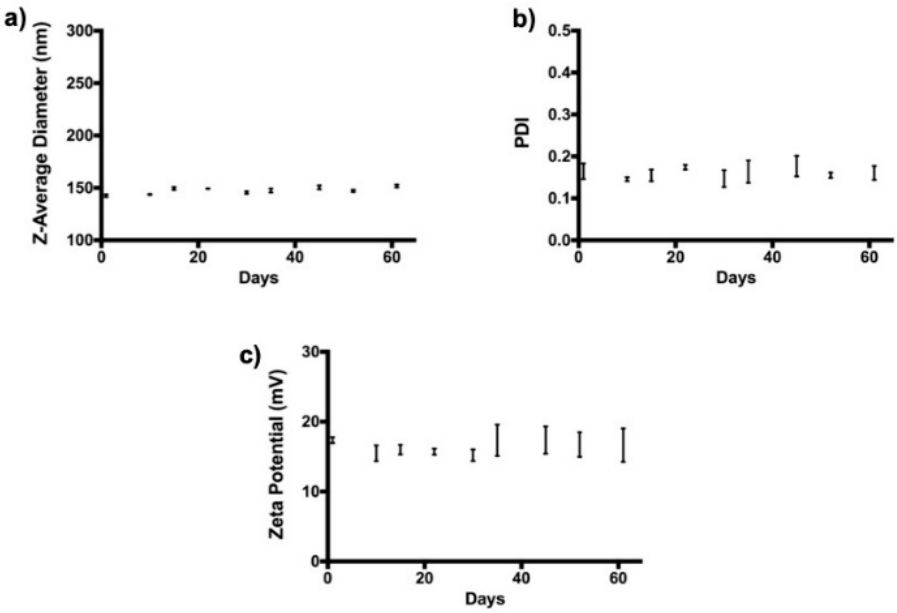

Figure S2. CNs were stored at 4°C, and three parameters including (a) Z-average diameter, (b) PDI, and (c) Zeta potential were measured by DLS routinely over the course of 60 days. The consistency of obtained data suggest the nanoparticles are stable.

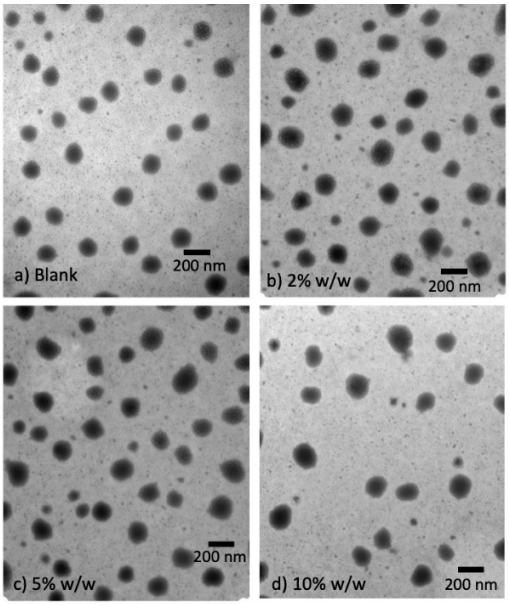

Figure S3. TEM images of (a) blank chitosan nanoparticles, (b) HTN3 loaded chitosan nanoparticles with a 2% w/w loading ratio, (c) HTN3 loaded chitosan nanoparticles with a 5% w/w loading ratio, and (d) HTN3 loaded chitosan nanoparticles with a 10% w/w loading ratio. No significant variance in size or dispersity was observed among blank chitosan nanoparticles and those with different loading ratios.

Table S1. Protein degradation over time for free HTN3 and HTN3-loaded into CNs.

	Remaining HTN3 (%)	
Time (h)	**Free HTN3**	**HTN3-loaded CNs**
0	100	100
0.1	82 ± 9	79 ± 8
0.5	34 ± 18	78 ± 9
1	18 ± 12	63 ± 2
2	6 ± 5	47 ± 8
3	1 ± 1	29 ± 8
6	0	7 ± 1