Supplementary Information

Media-dependent morphology of supramolecular aggregates of β -cyclodextrin-grafted chitosan and insulin through multivalent interactions

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¹³C NMR of BCC

In the ¹³C NMR spectrum of BCC (Figure S1), the signals attributed to chitosan carbons (**a**, **e**, **f**, **h**, **i**, **j**, and **l**), cyclodextrin carbons (**d**, **g**, **m**, and **CyD carbons**), and linker carbons (**b** and **c**, and **n**) were observed, which suggested production of BCC.



Figure S1. ¹³C NMR of BCC.

FT-IR spectrum of BCC

In the FT-IR spectrum of BCC, absorption peaks attributed to amide bonds were observed at 1647 cm⁻¹ (Amide I) and 1556 cm⁻¹ (Amide II). These absorption peaks due to the amide bond were observed in the spectrum of chitosan as well, because of the residual *N*-acetyl groups in chitosan. However, the peak of Amide II was significantly shifted, suggesting presence of different amide bond from that of chitosan.



Figure S2. IR spectra of BCC and chitosan.