Electronic Supplementary Material (ESI) for Food & Function. This journal is © The Royal Society of Chemistry 2021

**Electronic Supplementary Information (ESI)** 

High internal phase Pickering emulsions stabilized by cod proteinchitosan nanocomplex for astaxanthin delivery

Lijuan Zhang, a,b,c Chengfu Zhou, a,b,c Xiaokang Na,a,b,c Yannan Chena,b,c and Mingqian Tana,b,c\*

<sup>a</sup>Academy of Food Interdisciplinary Science, Food Science and Technology, Dalian Polytechnic University, Qinggongyuan 1, Ganjingzi District, Dalian 116034, Liaoning, China

<sup>b</sup>National Engineering Research Center of Seafood, Dalian Polytechnic University, Dalian 116034, Liaoning, China

<sup>c</sup>Collaborative Innovation Center of Seafood Deep Processing, Dalian Polytechnic University, Dalian 116034, Liaoning, China

\*To whom correspondence should be addressed. E-mail: mqtan@dlpu.edu.cn, ORCID: 0000-0002-7535-0035. Qinggongyuan 1, Ganjingzi District, Dalian, 116034, Liaoning, PR China

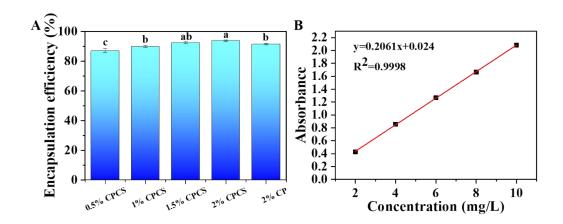


Figure S1. Encapsulation efficiency (A) of HIPPEs stabilized by nanocomplex of 0.5%, 1.0%, 1.5% and 2.0% cod protein (CP) with fixed 0.1% chitosan (CS) using the 2.0% CP as a control; Standard curve of astaxanthin (B).

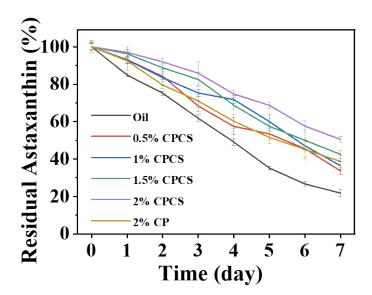


Figure S2. Residual astaxanthin levels in the HIPPEs stabilized by nanocomplex of 0.5%, 1.0%, 1.5% and 2.0% cod protein (CP) with fixed 0.1% chitosan (CS) using the 2.0% CP as a control at room temperature under the natural light.