



UNIVERSITY OF LEEDS

This is a repository copy of *Stability, Interfacial Structure, and Gastrointestinal Digestion of β -Carotene-Loaded Pickering Emulsions Co-stabilized by Particles, a Biopolymer, and a Surfactant*.

White Rose Research Online URL for this paper:
<https://eprints.whiterose.ac.uk/181385/>

Version: Supplemental Material

Article:

Wei, Y, Zhou, D, Mackie, A orcid.org/0000-0002-5681-0593 et al. (5 more authors) (2021) *Stability, Interfacial Structure, and Gastrointestinal Digestion of β -Carotene-Loaded Pickering Emulsions Co-stabilized by Particles, a Biopolymer, and a Surfactant*. *Journal of Agricultural and Food Chemistry*, 69 (5). pp. 1619-1636. ISSN 0021-8561

<https://doi.org/10.1021/acs.jafc.0c06409>

© 2021 American Chemical Society. This is an author produced version of an article, published in American Chemical Society. Uploaded in accordance with the publisher's self-archiving policy.

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

Supplementary material

Stability, interfacial structure and gastrointestinal digestion of β -carotene loaded

Pickering emulsions co-stabilized by particle, biopolymer and surfactant

Yang Wei ^{a, b}, Dan Zhou ^a, Alan Mackie ^b, Shufang Yang ^a, Lei Dai ^a, Liang Zhang ^a,

Like Mao ^a, Yanxiang Gao ^{a}*

*^aKey Laboratory of Healthy Beverages, China National light Industry Council,
College of Food Science & Nutritional Engineering, China Agricultural University,
Beijing, 100083, P. R. China*

*^bFood Colloids and Processing Group, School of Food Science and Nutrition,
University of Leeds, Leeds LS2 9JT, UK*

*Corresponding author.

Tel.: + 86-10-62737034 Fax: + 86-10-62737986 Address: Box 112, No.17

Qinghua East Road, Haidian District, Beijing 100083, China

E-mail: gyxcau@126.com

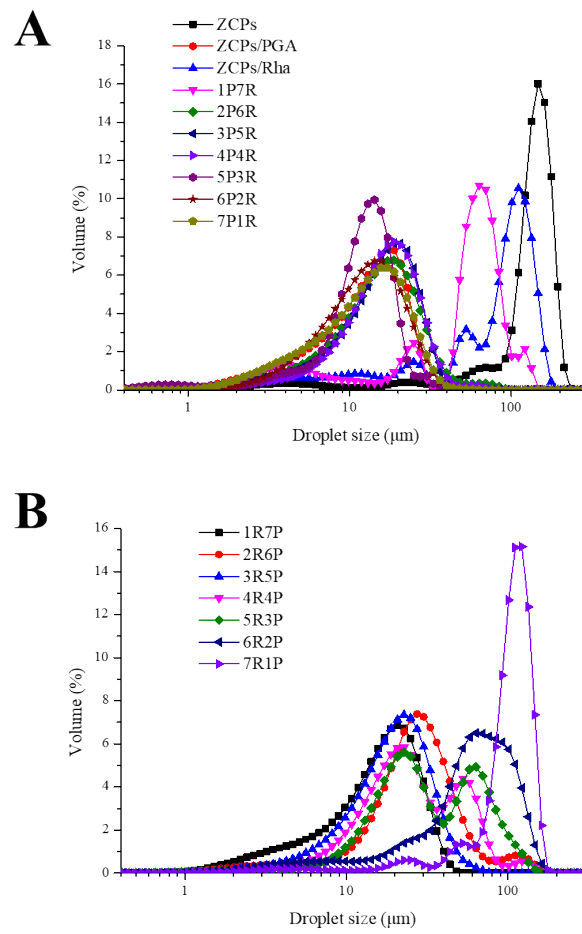


Fig. S1 Size distribution of Pickering emulsions stabilized with PGA as a second layer and Rha as a third layer (A); size distribution of Pickering emulsions stabilized with Rha as a second layer and PGA as a third layer (B).



Fig. S2 Visual appearance of Pickering emulsions (From left to right: ZCPs, ZCPs/PGA, ZCPs/Rha, 1P7R-7P1R, 1R7P-7R1P).

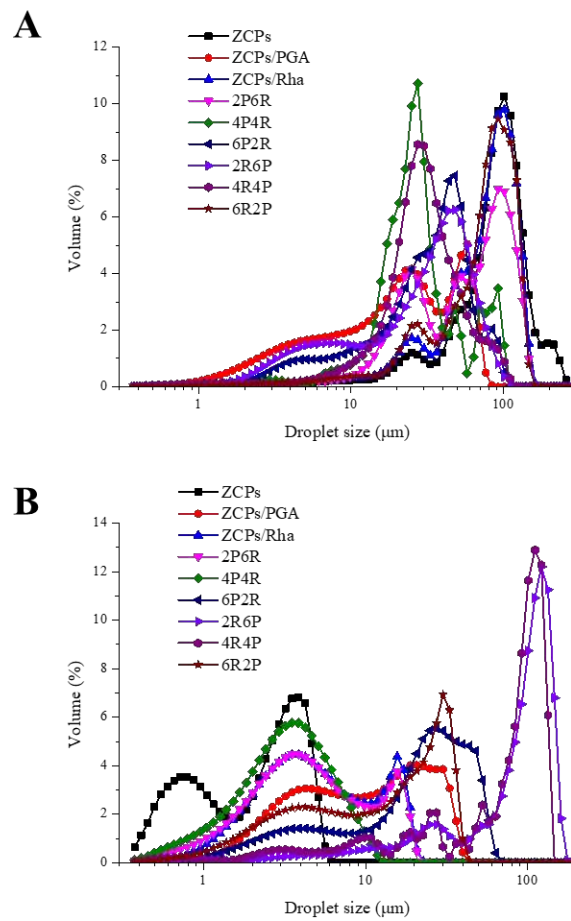


Fig. S3 Size distribution of different Pickering emulsions after gastric digestion (A); size distribution of different Pickering emulsions after small intestinal digestion (B).