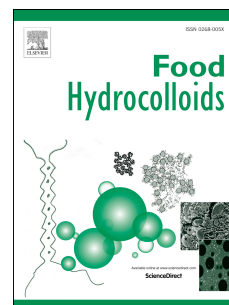


Accepted Manuscript

The cryoprotectant effect of xylooligosaccharides on denaturation of peeled shrimp (*Litopenaeus vannamei*) protein during frozen storage

Bin Zhang, Gui-juan Hao, Hui-juan Cao, He Tang, Yang-yang Zhang, Shang-gui Deng



PII: S0268-005X(16)31081-5

DOI: [10.1016/j.foodhyd.2017.09.038](https://doi.org/10.1016/j.foodhyd.2017.09.038)

Reference: FOOHYD 4085

To appear in: *Food Hydrocolloids*

Please cite this article as: Bin Zhang, Gui-juan Hao, Hui-juan Cao, He Tang, Yang-yang Zhang, Shang-gui Deng, The cryoprotectant effect of xylooligosaccharides on denaturation of peeled shrimp (*Litopenaeus vannamei*) protein during frozen storage, *Food Hydrocolloids* (2017), doi: 10.1016/j.foodhyd.2017.09.038

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

1 **Research highlights**

- 2 ✧ Cryoprotective roles of xylooligosaccharides in frozen shrimp were investigated.
- 3 ✧ Incorporation of these oligosaccharides improves the water-holding capacity of
- 4 frozen shrimp.
- 5 ✧ These oligosaccharides replace the water molecules around myosin surface.
- 6 ✧ These oligosaccharides decrease the total interaction energy between myosin and
- 7 the water molecules, thereby improving the stability of myosin.

Download English Version:

<https://daneshyari.com/en/article/6986231>

Download Persian Version:

<https://daneshyari.com/article/6986231>

[Daneshyari.com](https://daneshyari.com)