

## Supporting Information

### *Chlorella Pyrenoidosa* Polysaccharides as a Prebiotic to Modulate Gut Microbiota: Physicochemical Properties and Fermentation Characteristics *in Vitro*

Kunling Lv <sup>1,2,†</sup>, Qingxia Yuan <sup>2,†</sup>, Hong Li <sup>2</sup>, Tingting Li <sup>2</sup>, Haiqiong Ma <sup>2</sup>,  
Chenghai Gao <sup>2</sup>, Siyuan Zhang <sup>1,\*</sup>, Yonghong Liu <sup>2</sup> and Longyan Zhao <sup>2,\*</sup>

<sup>1</sup> College of Light Industry and Food Engineering, Guangxi University, Nanning 530004, P. R. China; kunlinglv@foxmail.com

<sup>2</sup> Institute of Marine Drugs, Guangxi University of Chinese Medicine, Nanning 530200, P. R. China; qingxiayuan@163.com (Q.Y.); hongli12212022@163.com (H.L.); li15578909861@126.com (T.L.); MHQ18878839254@163.com (H.M.); gaochh@gxTCMU.edu.cn (C.G.)

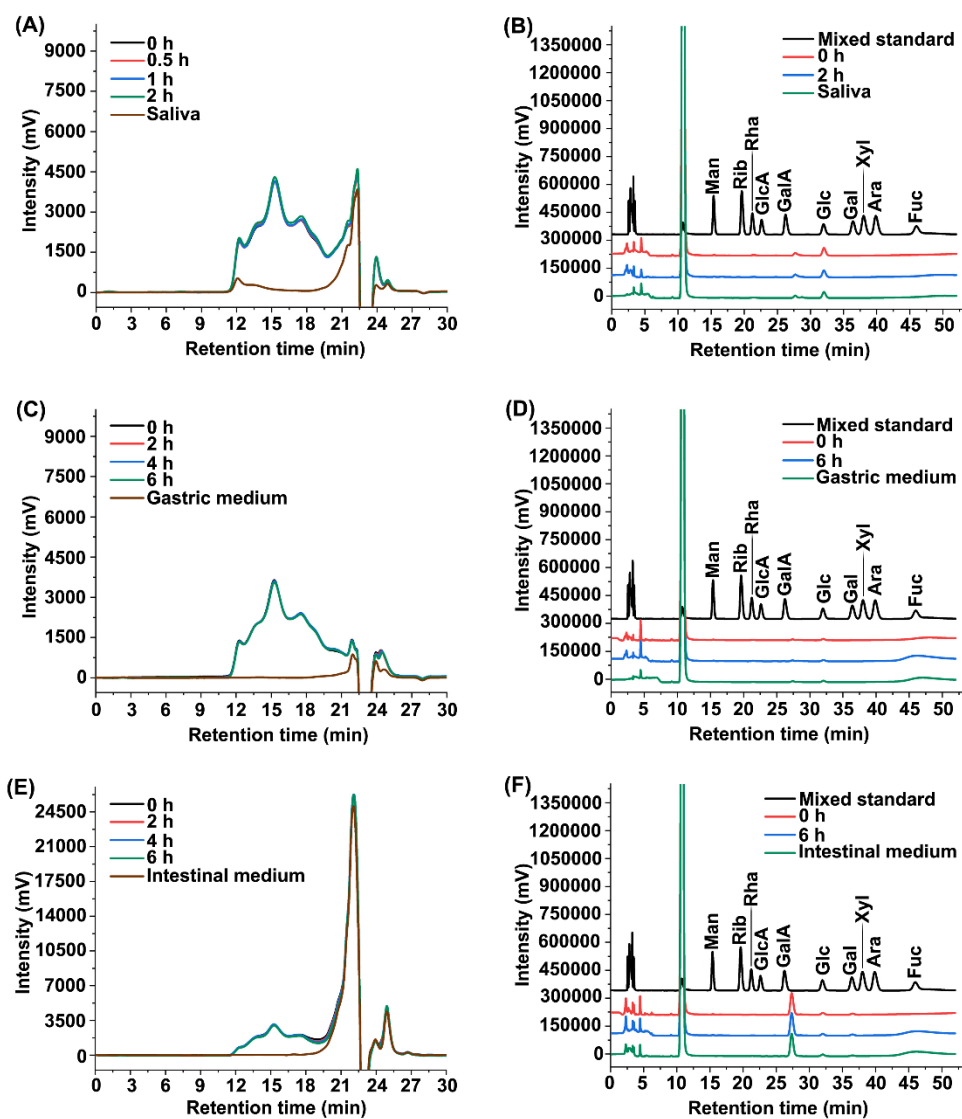
\* Correspondence: zhangsiyuangx@sina.com (S.Z.); longyanzhao@gmail.com (L.Z.)

† These authors contributed equally to this work.

**Table S1.** Content changes of total carbohydrates and reducing sugars during digestion.

Processes	Digestion time (h)	Total carbohydrates (%)	Reducing sugars (%)
Saliva digestion	0	100.00 ± 2.91 <sup>a</sup>	100.00 ± 0.59 <sup>a</sup>
	0.5	102.61 ± 1.94 <sup>a</sup>	101.04 ± 0.59 <sup>a</sup>
	1	106.04 ± 3.30 <sup>a</sup>	101.14 ± 1.61 <sup>a</sup>
	2	102.47 ± 2.91 <sup>a</sup>	99.79 ± 0.59 <sup>a</sup>
Gastric digestion	0	100.00 ± 0.00 <sup>a</sup>	100.00 ± 1.68 <sup>a</sup>
	2	99.67 ± 0.47 <sup>a</sup>	97.63 ± 1.68 <sup>a</sup>
	4	105.34 ± 1.89 <sup>a</sup>	100.00 ± 1.68 <sup>a</sup>
	6	103.67 ± 4.24 <sup>a</sup>	98.82 ± 3.35 <sup>a</sup>
Gastrointestinal digestion	0	100.00 ± 2.21 <sup>a</sup>	100.00 ± 0.46 <sup>a</sup>
	2	100.34 ± 0.16 <sup>a</sup>	99.08 ± 0.69 <sup>a</sup>
	4	102.80 ± 0.47 <sup>a</sup>	100.49 ± 1.15 <sup>a</sup>
	6	101.79 ± 0.32 <sup>a</sup>	99.02 ± 0.92 <sup>a</sup>

In each column, values that do not share a common letter superscript represent significant differences at  $p < 0.05$ .



**Figure S1.** Changes of molecular weight and released free monosaccharides of CPP during simulated digestion (saliva digestion, A & B; gastric digestion, C & D; small intestine digestion, E & F).