

Supplementary information

Figure legends

Figure S1. Quantification of heat stable allergens in Western blotting by ImageJ.

A. Quantification in simulated gastric digestion.

B. Quantification in simulated duodenum digestion after gastric digestion.

Control, the sample after cooking and before digestion.

Table S1. Specific IgE levels in patients in relation to the shrimp.

ID	Age	Sex ^a	Symptom	Specific IgE (kU /L)
05172	27	F	eczema	0.6
05211	18	F	urticaria	≥100.0
05212	37	F	- ^b	≥100.0
05267	27	F	anaphylactic rhinitis	≥100.0
05281	31	F	- ^b	≥100.0
05303	34	F	- ^b	≥100.0
05679	21	M	pruritus and nuasea	97.3
05183	23	F	dermatitis	78.6
68417	20	F	anaphylactic rhinitis	32.1
11974	26	F	asthma and dyspnea	82.5
92907	27	F	asthma	79.8
34258	27	M	- ^c	0.2

Note: ^a- M, male; F, female. ^b- means symptoms not obvious. ^c- means food allergy-free.

Table S2. The particle diameter of shrimp muscle protein.

Samples	Z-Average (d.nm)	PDI
Control (Raw)	1 138.0±82.8	1.000
Control (Boiled)	666.1±78.3	0.489
Control (Pressure treated)	638.9±81.9	0.745
CD sample (Raw)	184.5±14.8	0.486
CD sample (Boiled)	285.3±11.6	0.400
CD sample (Pressure treated)	527.1±20.9	0.550

Note: Control, the sample after cooking and before digestion; DD sample, the sample after continuous simulated gastrointestinal digestion.

Figure S1

