

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 nausea	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

