

Table S1. LC-MS Analysis: Ion Pairs, Declustering Potential, and Collision Energy Settings ^a

Amino acid	Q1 mass (Da)	Q3 mass (Da)	Retention (min)	DP (volts)	CE (volts)
Phe	166.2	120.1	2.96	28	15
Leu	132.1	86.1	3.21	55	12
Ile	132.1	44.2	3.44	55	32
Met	150.1	56.1	3.77	46	20
Val	118.1	72.1	4.32	47	13
Pro	116.1	70.1	4.44	68	20
Tyr	182.1	91.1	4.27	59	35
Ala	90.1	44.1	5.22	48	11
Thr	120.1	56.1	5.37	120	37
Cly	76.0	30.1	5.71	52	11
Glu	148.1	84.1	6.23	24	19
Asp	134.0	88.1	7.76	60	19
His	156.1	110.0	7.89	42	19
Arg	175.1	70.0	8.30	41	25
Lys	147.1	84.1	8.85	50	21
Trp	205.1	188.1	3.16	80	12
Leu-d3 ^a	135.1	89.1	3.21	34	14
Ala-d3 ^a	93.1	47.2	5.22	25	11
Lys-d4 ^a	151.1	88.1	8.85	34	19

^a isotopic internal standard

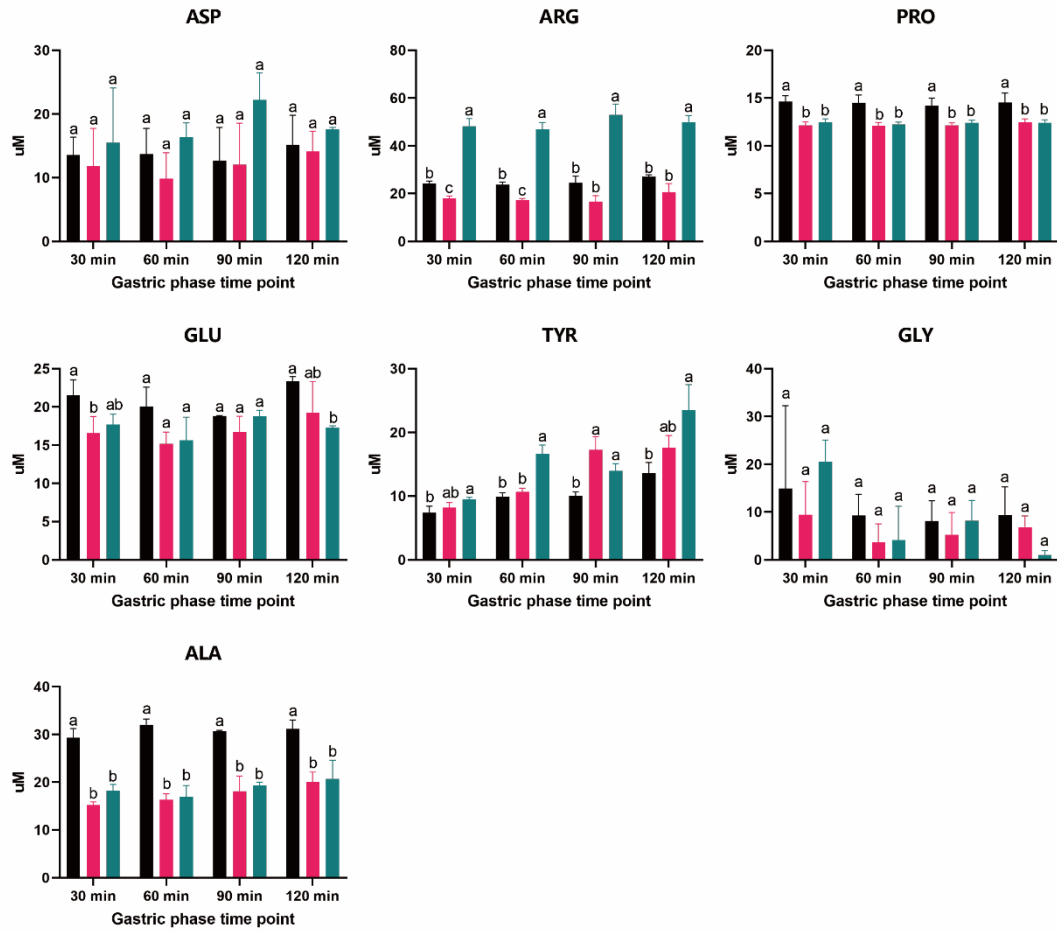


Fig.S1. Other dispensable amino acids release of YP, WPC and SP during the *in vitro* gastric phase. Error bars are SD of three individual experiments. Different letters (a-c) represent significant differences ($P < 0.05$, $n = 3$).

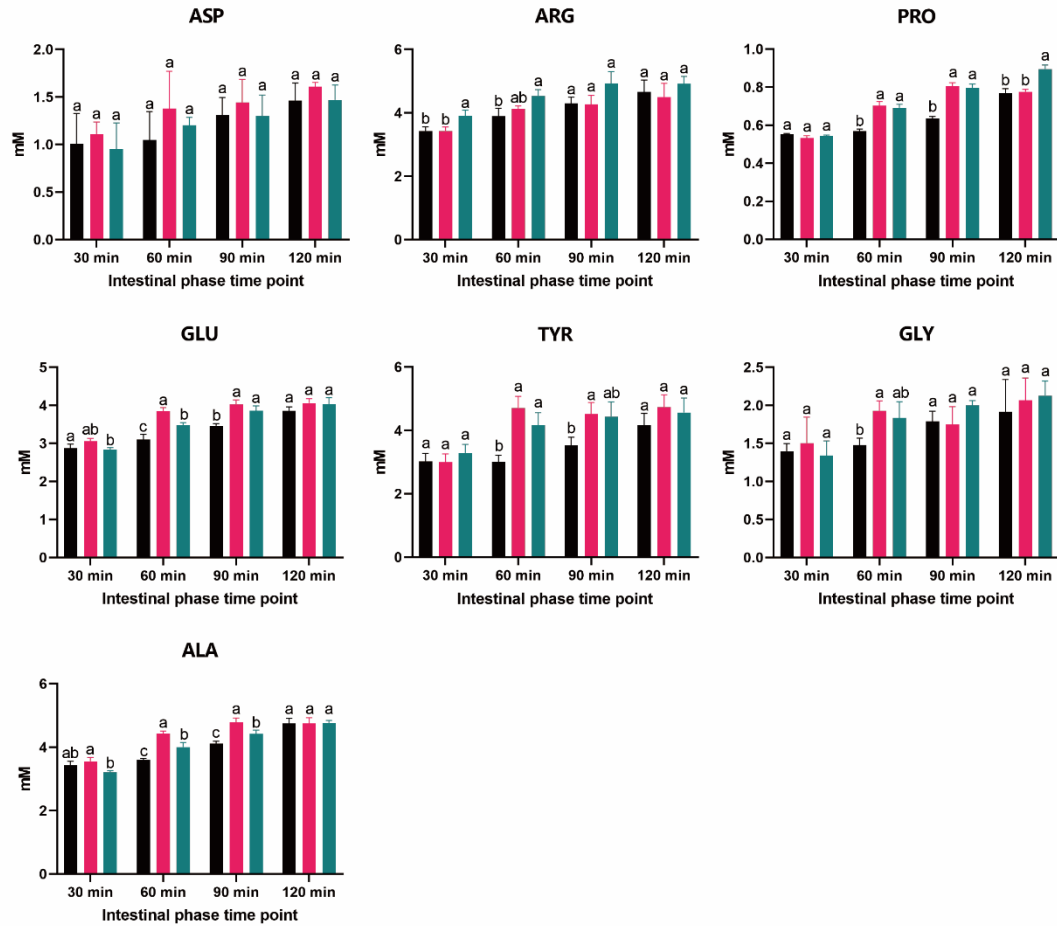


Fig.S2. Other dispensable amino acids release of YP, WPC and SP during the *in vitro* intestinal phase. Error bars are SD of three individual experiments. Different letters (a-c) represent significant differences ($P < 0.05$, $n = 3$).