

Fig. S1. Metabolite identification of a representative plant-based egg (PS6) after *in vitro* digestion. *1, Linoleic acid; 2, Oleic acid; 3, Palmitic acid; 4, Ile; 5, Leu; 6, Val; 7, Ala; 8, Arg; 9, Thr; 10, Pro; 11, Gln; 12, Met; 13, Cys; 14, Asp; 15, Abu; 16, Asn; 17, Choline; 18, Gly; 19, Maltose; 20, Ser; 21, Fructose; 22, β -D-Glucose; 23, α -D-Glucose; 24, Sucrose; 25, Tyr; 26, Phe; 27, Trp; 28, His. *PS6 refers to plant-based liquid egg with the addition of 6% potato starch (w/w).

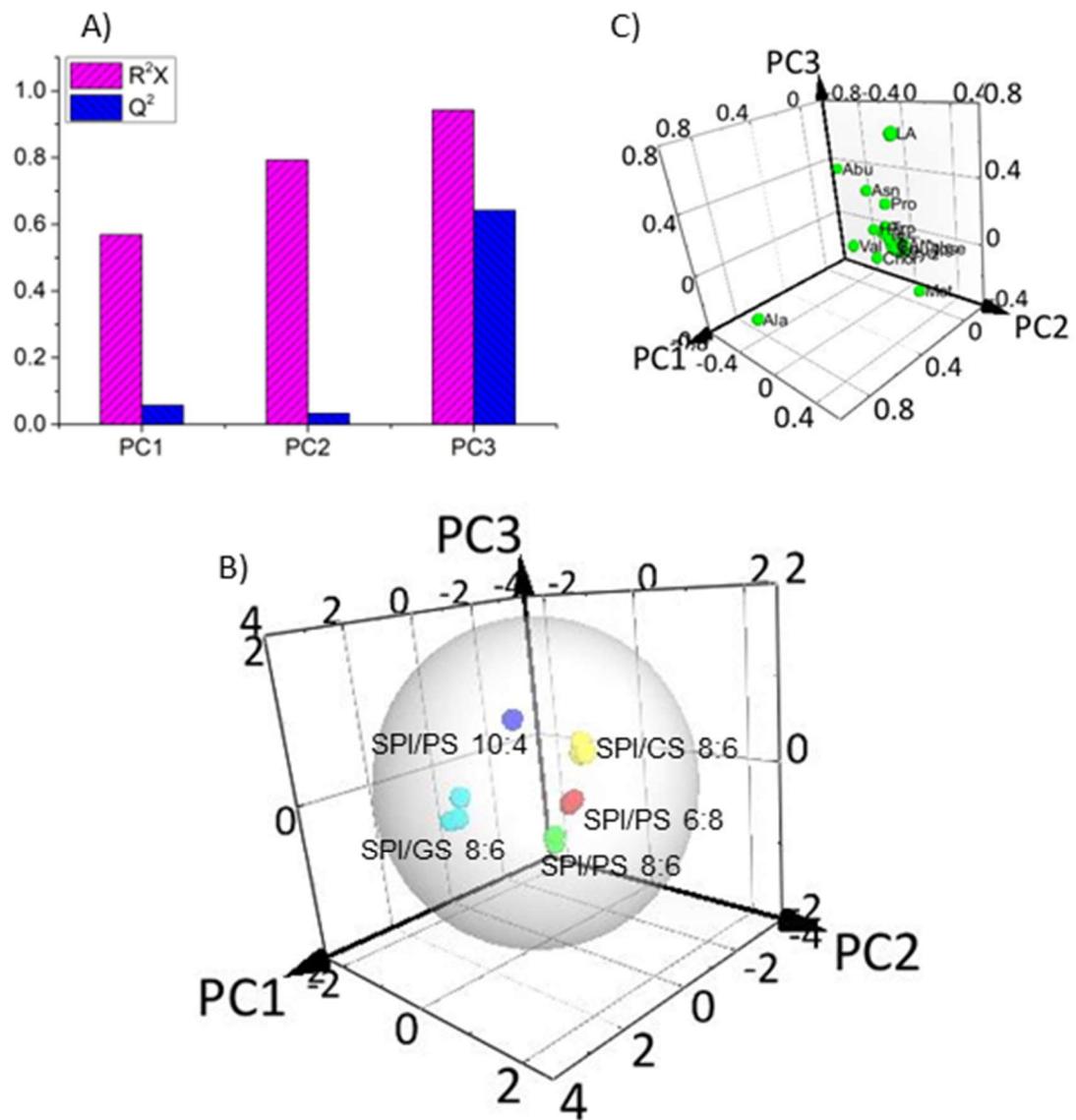


Fig. S2. (A) Principal components that explained the variances in principal components analysis (PCA); (B) PCA score plot; (C) PCA loading plot. *LA, linoleic acid; OA, oleic acid; PA, palmitic acid; Ile, isoleucine; Leu, leucine; Val, valine; Ala, alanine; Arg, arginine; Thr, threonine; Pro, proline; Gln, glutamine; Met, methionine; Cys, cysteine; Asp, aspartic acid; Abu, aminobutyric acid; Asn, asparagine; Chol, choline; Gly, glycine; Ser, serine; β -D-glc, β -D-glucose; α -D-glc, α -D-glucose; Tyr, tyrosine; Phe, phenylalanine; Trp, tryptophan; His, histidine. *SPI/PS 8:6, SPI/CS 8:6, SPI/GS 8:6, SPI/PS 10:4, and SPI/PS 6:8 refer to the plant-based eggs with the addition of 8% soy protein isolate and 6% potato starch, 8% soy protein isolate and 6% corn starch, 8% soy protein isolate and 6% glutinous rice starch, 10% soy protein isolate and 4% potato starch, and 6% soy protein isolate and 8% potato starch (w/w), respectively.

Table S1. Metabolites identified in the plant-based eggs after *in vitro* digestion.

	Metabolites	Assignments	¹H chemical shifts (ppm) and multiplicity*	¹³C chemical shifts (ppm)
1	Linoleic acid	C ₉ H; C ₁₀ H; C ₁₂ H; C ₁₃ H; C ₁₁ H ₂ ; C ₂ H ₂ ; C ₈ H ₂ ; C ₁₄ H ₂ ; C ₃ H ₂ ; C ₄ H ₂ -C ₇ H ₂ ; C ₁₅ H ₂ -C ₁₇ H ₂ ; C ₁₈ H ₃	5.37 (m); 2.76 (t); 2.36 (t); 2.01 (m); 1.65 (m); 1.28 (m); 0.89 (t)	129.7; 25.6; 33.9; 27.2; 24.5; 31.7, 29.0, 22.7; 14.1
2	Oleic acid	C ₁₁ H ₂ ; C ₃ H ₂ ; C ₈ H ₂ ; C ₁₁ H ₂ ; C ₉ H; C ₁₀ H; C ₄ H ₂ -C ₇ H ₂ ; C ₁₂ H ₂ -C ₁₆ H ₂ ; C ₁₈ H ₃	2.36 (t); 1.65 (m); 2.01 (m); 5.34 (m); 1.28 (m); 0.89 (t)	33.9; 24.5; 27.2; 129.7; 31.7, 29.0, 22.7; 14.1
3	Palmitic acid	C ₂ H ₂ ; C ₃ H ₂ ; C ₄ H ₂ -C ₁₅ H ₂ ; C ₁₆ H ₃	2.36 (t); 1.65 (m); 1.28 (m); 0.89 (t)	33.9; 24.5; 31.7, 29.0, 22.7; 14.1
4	Isoleucine	α CH; β CH; γ CH ₂ ; γ' CH ₃ ; δ CH ₃	3.67 (d); 1.95 (m); 1.46 (m); 0.96 (d); 0.93 (t)	62.6; 38.6; 25.6; 18.0; 14.0
5	Leucine	α CH; β CH ₂ ; γ CH; δ CH ₃ ; δ' CH ₃	3.72 (m); 1.70 (m); 0.96 (t)	55.7; 40.5, 26.5; 23.0, 21.6
6	Valine	α CH; β CH; γ CH ₃ ; γ' CH ₃	3.60 (d); 2.25 (m); 0.98 (d); 1.04 (d)	63.0; 31.5; 18.0; 20.1
7	Alanine	α CH; β CH ₃	3.78 (q); 1.48 (d)	53.5; 17.5
8	Arginine	α CH; β CH ₂ ; γ CH ₂ ; δ CH ₂	3.76 (t); 1.91 (dd); 1.68 (m); 3.24 (t)	57.3; 30.5; 26.5; 43.3
9	Threonine	α CH; β CH; γ CH ₃	3.60 (d); 4.26 (m); 1.56 (d)	63.10; 68.93; 22.89
10	Proline	CH; β CH ₂ ; γ CH ₂	4.12 (dd); 2.33, 2.12 (m); 2.02 (m)	63.4; 31.5; 26.9
11	Glutamine	α CH; β CH ₂ ; γ CH ₂	3.77 (m); 2.15 (m); 2.44 (m)	57.2; 28.9; 31.5
12	Methionine	α CH; β CH ₂ ; γ CH ₂ ; SCH ₃	3.76 (dd); 2.17 (m); 2.56 (t); 2.13 (m)	57.17; 32.68; 31.58; 16.84
13	Cysteine	NCH; SCH ₂	3.97 (dd); 2.76 (m)	58.88; 26.18
14	Aspartic acid	α CH; β CH ₂	3.81 (dd); 2.67 (m), 2.82 (m)	55.1; 38.7
15	γ -aminobutyric acid	α CH ₂ ; β CH ₂ ; γ CH ₂	2.28 (t); 1.90 (m); 3.13 (t)	39.27; 26.33; 41.99
16	Asparagine	α CH; β CH ₂	3.99 (q); 2.88 (dd)	54.0; 36.4
17	Choline	-N-(CH ₃) ₃ ; -N-CH ₂ ; -O-CH ₂	3.21 (s); 3.52 (m); 4.01 (m)	54.9; 69.7; 56.2
18	Glycine	CH ₂	3.55 (s)	46.3

19	Maltose	¹ C ₁ H; ¹ C ₂ H; ¹ C ₃ H; ¹ C ₄ H; ¹ C ₅ H; ¹ C ₆ H ₂ ; ² C ₁ H; ² C ₂ H; ² C ₃ H; ² C ₄ H; ^{2αβ} C ₅ H; ² C ₆ H ₂	5.24 (d); 3.70 (m); 3.54 (t); 3.42 (t); 3.68 (m); 3.76 (m); 5.42 (dd); 3.33 (t); 3.91 (m); 3.70 (m); 3.67, 3.83 (m); 3.82 (m)	96.2; 73.3 ; 74.8 ; 72.4 ; 75.5 ; 63.5 ; 102.5 ; 75.3 ; 73.9 ; 75.4 ; 71.6 , 69.9 ; 62.6
20	Serine	αCH; βCH ₂	3.83 (t); 3.94 (m)	60.7 ; 62.4
21	Fructose	C ₁ H ₂ ; C ₂ H; C ₃ H; C ₄ H; C ₆ H ₂	3.63 (m); 3.93 (m); 3.87 (m); 3.89 (d); 3.71 (d)	62.3 ; 71.9 ; 68.0 ; 73.3 ; 67.2
22	β-D-Glucose	C ₁ H ₂ ; C ₂ H; C ₃ H; C ₄ H; C ₅ H; C ₆ H	3.70 (m); 3.52 (m); 3.46 (m); 3.39 (m); 3.24 (dd); 4.45 (d)	63.4 ; 74.6 ; 77.5; 72.4 ; 76.4; 96.5
23	α-D-Glucose	C ₁ H ₂ ; C ₂ H; C ₃ H; C ₄ H; C ₅ H; C ₆ H	3.78 (m); 3.82 (m); 3.49 (m); 3.71 (m); 3.70 (m); 5.24 (d)	62.5 ; 72.6 ; 72.7 ; 73.7 ; 63.1 ; 92.2
24	Sucrose	¹ C ₁ H; ¹ C ₂ H; ¹ C ₃ H; ¹ C ₄ H; ¹ C ₅ H; ¹ C ₆ H ₂ ; ² C ₁ H ₂ ; ² C ₂ H; ² C ₃ H; ² C ₄ H; ² C ₅ H; ² C ₆ H ₂	5.42 (d); 3.47 (t); 3.55 (dd); 3.42 , 3.51 (t); 3.84 (m); 3.59 (dd); 3.59 (dd); 3.93 (m); 4.05 (t); 4.21 (d); 3.57 (dd)	92.2 ; 71.9 ; 75.4 ; 71.8 , 71.0 ; 73.1 ; 62.4 ; 64.0 ; 82.0; 76.7; 76.9 ; 72.6
25	Tyrosine	C ₁ H; C ₂ H ₂ ; C ₄ H; C ₅ H	3.90 (dd); 3.01 (m), 3.17 (dd); 7.19 (d); 6.90 (m)	58.9 ; 39.0 ; 131.1 ; 116.2
26	Phenylalanine	C ₁ H; C ₂ H ₂ ; C ₄ H; C ₅ H; C ₆ H	3.97 (m); 3.27 (m); 7.31 (m); 7.41 (m); 7.36 (m)	56.7 ; 40.5 ; 130.1 ; 129.1 ; 128.6
27	Tryptophan	C ₁ H; C ₂ H ₂ ; NC ₄ H; C ₆ H; C ₇ H; C ₈ H; C ₉ H	4.01 (dd); 3.46 (m), 3.29 (dd); 7.71 (d); 7.53 (d); 7.31 (s); 7.23 (m); 7.20 (m)	56.2; 29.10 ; 118.7; 112.5 ; 127.1 ; 121.9; 119.4 ;
28	Histidine	αCH; βCH ₂ ; NCHC; NCHN	4.00 (dd); 3.15 (d); 7.12 (s); 7.92 (s)	57.10 ; 30.5 ; 119; 138

*Multiplicity: s, singlet; d, doublet; t, triplet; q, quartet; dd, doublet of doublets; m, multiplet.

*Bold chemical shifts indicate an identified peak in the spectra.