

A. Chemical composition (% dry matter, average $\pm$ standard error, n=3) of the raw material used in the experiment.

Name	Chicken feed	ASW
Dry matter (% FM)	90.11 $\pm$ 0.01	25.56 $\pm$ 1.89
Ash	7.07 $\pm$ 0.12	61.70 $\pm$ 0.13
Lipids	2.90 $\pm$ 0.07	0.42 $\pm$ 0.01
Protein	20.93 $\pm$ 0.07	19.50 $\pm$ 1.06
NFC	56.77 $\pm$ 0.43	4.15 $\pm$ 1.09
Hemicellulose	7.63 $\pm$ 0.28	6.17 $\pm$ 0.23
Cellulose	3.80 $\pm$ 0.11	1.39 $\pm$ 0.14
lignine	0.92 $\pm$ 0.05	6.68 $\pm$ 0.22
Nitrogen	3.38 $\pm$ 0.25	3.19 $\pm$ 0.05
Carbon	44.33 $\pm$ 0.11	22.92 $\pm$ 0.16
Sulphur	0.34 $\pm$ 0.02	1.71 $\pm$ 0.03
C/N	13.28 $\pm$ 0.97	7.18 $\pm$ 0.06
Gross energy (kJ/g)	18.22 $\pm$ 0.05	8.17 $\pm$ 0.08

B. Fatty acid profile (% total fatty acid, average $\pm$ standard error, n=3) of the raw material used in the experiment.

Fatty acid	Name	Chicken feed	ASW
12:0	Lauric acid	0.23 ± 0.00	<0.005
14:0	Myristic acid	0.22 ± 0.01	5.38 ± 0.13
16:0	Palmitic acid	16.50 ± 0.04	30.70 ± 0.17
16:1	Palmitoleic acid	0.15 ± 0.01	5.03 ± 0.05
17:0	Margaric acid	<0.005	1.04 ± 0.02
18:0	Stearic acid	2.61 ± 0.02	12.73 ± 0.19
18:1n9t	Elaidic acid	0.16 ± 0.01	<0.005
18:1n9c	Oleic acid	25.21 ± 0.06	16.42 ± 0.28
18:2n6c	Linoleic acid	50.97 ± 0.02	5.66 ± 0.14
18:3n3	Alpha-linolenic acid	2.80 ± 0.01	<0.005
20:0	Arachidic acid	0.29 ± 0.00	3.05 ± 0.13
20:1	Gondoic acid	0.26 ± 0.01	1.60 ± 0.04
20:2	Eicosadienoic acid	0.14 ± 0.00	<0.005
20:5n3	EPA	<0.005	1.53 ± 0.05
22:0	Behenic acid	0.29 ± 0.00	5.57 ± 0.35
22:6n3	DHA	<0.005	5.28 ± 0.15
24:0	Lignoceric acid	0.16 ± 0.00	3.25 ± 0.29
24:1	Nervonic acid	<0.005	2.78 ± 0.02
SFA	SFA	20.31 ± 0.06	61.72 ± 0.52
UFA	UFA	79.69 ± 0.06	38.28 ± 0.52
MUFA	MUFA	25.78 ± 0.05	25.82 ± 0.32
PUFA	PUFA	53.91 ± 0.02	12.46 ± 0.22
n-6	PUFA n-6	51.11 ± 0.02	5.66 ± 0.14
n-3	PUFA n-3	2.80 ± 0.01	6.80 ± 0.10

C. Amino-acid profile (% crude protein, average $\pm$ standard error, n=3) of the raw material used in the experiment.

Amino acid	Chicken feed	ASW
Taurine	<0.5	<0.5
Aspartic acid	3.53 $\pm$ 0.01	3.65 $\pm$ 0.09
Theronine	4.89 $\pm$ 0.04	4.48 $\pm$ 0.07
Serine	22.50 $\pm$ 0.03	7.36 $\pm$ 0.13
Glutamic acid	4.35 $\pm$ 0.02	5.74 $\pm$ 0.09
Glycine	4.65 $\pm$ 0.02	5.46 $\pm$ 0.27
Alanine	4.83 $\pm$ 0.01	3.98 $\pm$ 0.07
Valine	1.61 $\pm$ 0.06	1.62 $\pm$ 0.11
Cysteine	1.31 $\pm$ 0.08	0.96 $\pm$ 0.02
Methionine	5.76 $\pm$ 1.58	2.72 $\pm$ 0.05
Isoleucine	7.92 $\pm$ 0.04	4.77 $\pm$ 0.03
Leucine	3.31 $\pm$ 0.02	2.27 $\pm$ 0.07
Tyrosine	4.90 $\pm$ 0.02	3.17 $\pm$ 0.06
Phenilalanine	2.56 $\pm$ 0.03	1.47 $\pm$ 0.03
Histidine	5.01 $\pm$ 0.05	3.32 $\pm$ 0.06
Lysine	2.06 $\pm$ 0.02	2.93 $\pm$ 0.02
Arginine	6.26 $\pm$ 0.03	3.19 $\pm$ 0.01
Hydroxyproline	<0.5	1.21 $\pm$ 0.07
Proline	6.45 $\pm$ 0.04	3.57 $\pm$ 0.13

D. Microbial counts (CFU/g, average $\pm$ standard error, n=3) recorded the raw material used in the experiment.

Parameter	Chicken feed	ASW
Total Viable Count	4.22 ± 0.17	6.80 ± 0.19
Yeasts and Moulds	2.43 ± 0.19	2.55 ± 0.09
Enterobacteriaceae	1.76 ± 0.07	3.80 ± 0.11
<i>E. coli</i>	<1	<1
<i>C. perfringens</i>	3.09 ± 0.40	5.93 ± 0.03
<i>Staphylococcus spp.</i>	2.61 ± 0.11	1.26 ± 0.45