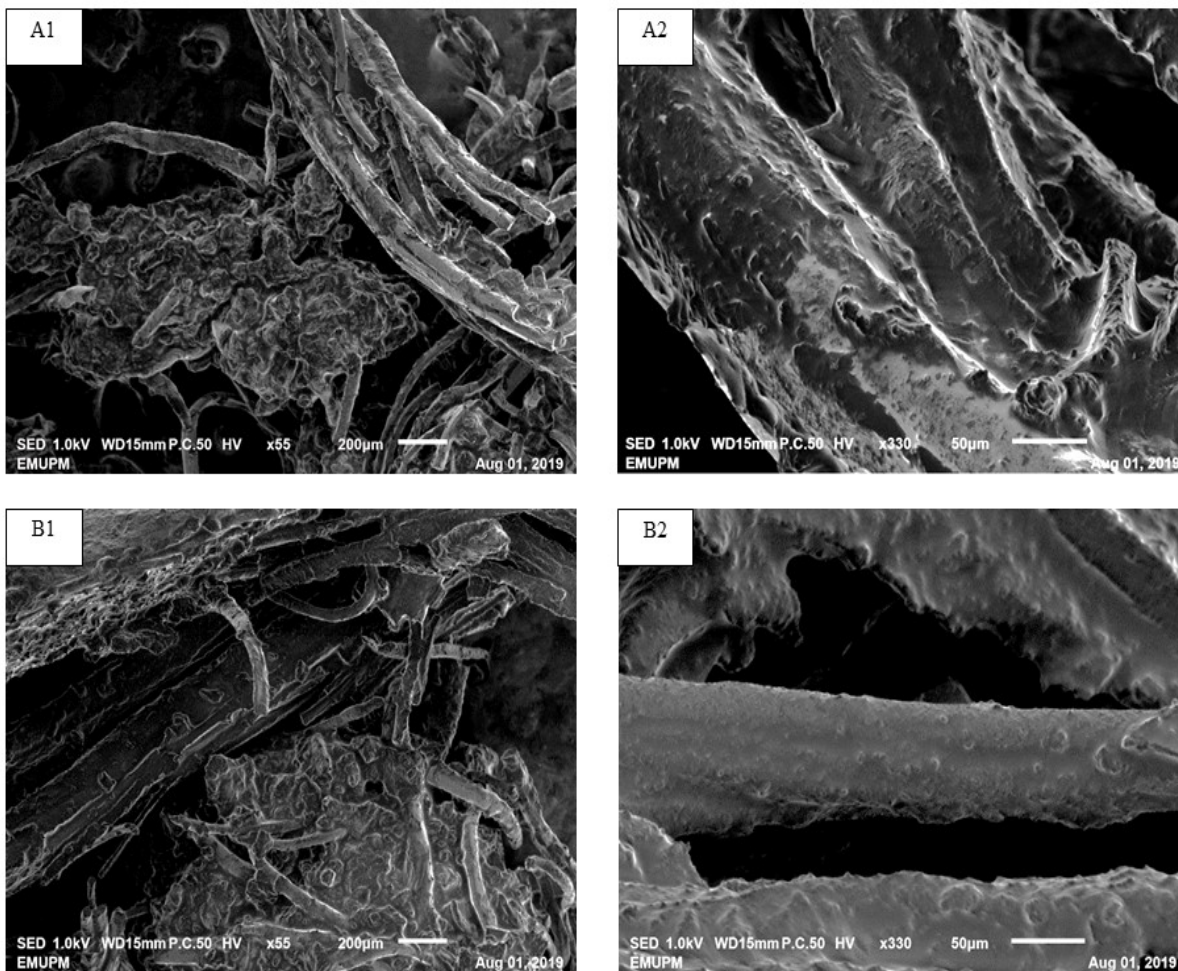


1 **Supplementary information**

2 Hazrati Wazir<sup>1,2</sup>, Chay Shyan Yea<sup>1</sup>, Nor Afizah Mustapha<sup>4</sup>, Wan Zunairah Wan Ibadullah<sup>1</sup> and Nazamid Saari<sup>1\*</sup>

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4

5 **Fig. 1.** SEM images of chicken *serunding* (CS) samples: (A1) CS at magnification  $\times 55$ ; (A2) CS at magnification  
6  $\times 330$ ; (B1) CS added with BHA at magnification  $\times 55$ ; (B2) CS added with BHA at magnification  $\times 330$ .

7

9 **Table S1:** General linear model of the colour values (L\*) of the chicken *serunding* incubated at 25, 40 and 60 °C  
 10 in 24 weeks of storage.

**General Linear Model: L\* versus P, MT, Time, DegC**

Factor	Type	Levels	Values
P	fixed	2	1, 2
MT	fixed	2	1, 2
Time	fixed	15	0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20, 24
DegC	fixed	3	25, 40, 60

Analysis of Variance for L\*, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
P	1	45.85	45.85	45.85	88.90	0.000
MT	1	4.71	4.71	4.71	9.13	0.003
Time	14	7615.60	7615.60	543.97	1054.77	0.000
DegC	2	28795.39	28795.39	14397.69	27917.42	0.000
P*MT	1	2.74	2.74	2.74	5.31	0.021
P*Time	14	57.43	57.43	4.10	7.95	0.000
P*DegC	2	6.43	6.43	3.22	6.24	0.002
MT*Time	14	265.81	265.81	18.99	36.81	0.000
MT*DegC	2	108.39	108.39	54.20	105.09	0.000
Time*DegC	28	2816.35	2816.35	100.58	195.03	0.000
P*MT*Time	14	40.36	40.36	2.88	5.59	0.000
P*MT*DegC	2	29.58	29.58	14.79	28.67	0.000
MT*Time*DegC	28	251.83	251.83	8.99	17.44	0.000
Error	2576	1328.51	1328.51	0.52		
Total	2699	41368.97				

S = 0.718139 R-Sq = 96.79% R-Sq(adj) = 96.64%

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12

13 **Abbreviations:**

14 P: Packaging type (P1: type A, PET/PE/MPET (High Barrier)/LLDPE or P2: type B, PET/PE/ALU/LLDPE)

15 MT: Samples treatment (1: samples without BHA addition, 2: samples with BHA addition)

16 Time: Storage weeks (0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20 and 24)

17 DegC: Storage temperature (25, 40 and 60 °C)

18

19 **Table S2:** General linear model of the colour values (a\*) of the chicken *serunding* incubated at 25, 40 and 60 °C  
 20 in 24 weeks of storage.  
 21

**General Linear Model: a\* versus P, MT, Time, DegC**

Factor	Type	Levels	Values
P	fixed	2	1, 2
MT	fixed	2	1, 2
Time	fixed	15	0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20, 24
DegC	fixed	3	25, 40, 60

Analysis of Variance for a\*, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
P	1	8.05	8.05	8.05	50.35	0.000
MT	1	45.89	45.89	45.89	286.87	0.000
Time	14	3186.34	3186.34	227.60	1422.69	0.000
DegC	2	12533.48	12533.48	6266.74	39173.06	0.000
P*MT	1	2.12	2.12	2.12	13.25	0.000
P*Time	14	49.38	49.38	3.53	22.05	0.000
P*DegC	2	4.11	4.11	2.06	12.85	0.000
MT*Time	14	132.26	132.26	9.45	59.05	0.000
MT*DegC	2	40.52	40.52	20.26	126.64	0.000
Time*DegC	28	1447.74	1447.74	51.71	323.21	0.000
P*MT*Time	14	17.87	17.87	1.28	7.98	0.000
P*MT*DegC	2	1.53	1.53	0.76	4.78	0.008
MT*Time*DegC	28	75.77	75.77	2.71	16.92	0.000
Error	2576	412.10	412.10	0.16		
Total	2699	17957.16				

S = 0.399970 R-Sq = 97.71% R-Sq(adj) = 97.60%

22

23 **Abbreviations:**

24 P: Packaging type (P1: type A, PET/PE/MPET (High Barrier)/LLDPE or P2: type B, PET/PE/ALU/LLDPE)

25 MT: Samples treatment (1: samples without BHA addition, 2: samples with BHA addition)

26 Time: Storage weeks (0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20 and 24)

27 DegC: Storage temperature (25, 40 and 60 °C)

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36 **Table S3:** General linear model of the colour values (b\*) of the chicken *serunding* incubated at 25, 40 and 60°C  
 37 in 24 weeks of storage.  
 38

**General Linear Model: b\* versus P, MT, Time, DegC**

Factor	Type	Levels	Values
P	fixed	2	1, 2
MT	fixed	2	1, 2
Time	fixed	15	0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20, 24
DegC	fixed	3	25, 40, 60

Analysis of Variance for b\*, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
P	1	32.15	32.15	32.15	119.00	0.000
MT	1	1.56	1.56	1.56	5.76	0.016
Time	14	8108.73	8108.73	579.20	2143.85	0.000
DegC	2	40416.21	40416.21	20208.11	74798.98	0.000
P*MT	1	1.80	1.80	1.80	6.65	0.010
P*Time	14	90.35	90.35	6.45	23.89	0.000
P*DegC	2	8.99	8.99	4.49	16.63	0.000
MT*Time	14	677.84	677.84	48.42	179.21	0.000
MT*DegC	2	263.71	263.71	131.85	488.04	0.000
Time*DegC	28	4408.59	4408.59	157.45	582.79	0.000
P*MT*Time	14	108.48	108.48	7.75	28.68	0.000
P*MT*DegC	2	1.59	1.59	0.80	2.95	0.053
MT*Time*DegC	28	382.06	382.06	13.64	50.51	0.000
Error	2576	695.95	695.95	0.27		
Total	2699	55197.99				

S = 0.519774 R-Sq = 98.74% R-Sq(adj) = 98.68%

39

40 **Abbreviations:**

41 P: Packaging type (P1: type A, PET/PE/MPET (High Barrier)/LLDPE or P2: type B, PET/PE/ALU/LLDPE)  
 42 MT: Samples treatment (1: samples without BHA addition, 2: samples with BHA addition) Time: Storage weeks  
 43 (0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20 and 24)  
 44 DegC: Storage temperature (25, 40 and 60 °C)  
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47 **Table S4:** General linear model of the total colour difference ( $\Delta E_{0-24}$ ) of the effect of antioxidant addition in the  
 48 chicken *serunding* incubated at 25, 40 and 60 °C in 24 weeks of storage.  
 49

**General Linear Model: Colour Difference versus Packaging, Treatment, ...**

Factor	Type	Levels	Values
Packaging	fixed	2	1, 2
Treatment	fixed	2	1, 2
Temperature	fixed	3	25, 40, 60

Analysis of Variance for Colour Difference, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F
Packaging	1	0.94	0.94	0.94	3.83
Treatment	1	94.78	94.78	94.78	383.91
Temperature	2	6914.78	6914.78	3457.39	14004.67
Packaging*Treatment	1	0.46	0.46	0.46	1.88
Packaging*Temperature	2	1.99	1.99	1.00	4.03
Treatment*Temperature	2	1.84	1.84	0.92	3.73
Packaging*Treatment*Temperature	2	1.05	1.05	0.53	2.13
Error	168	41.47	41.47	0.25	
Total	179	7057.33			

Source	P
Packaging	0.052
Treatment	0.000
Temperature	0.000
Packaging*Treatment	0.172
Packaging*Temperature	0.019
Treatment*Temperature	0.026
Packaging*Treatment*Temperature	0.122
Error	
Total	

50

S = 0.496864 R-Sq = 99.41% R-Sq(adj) = 99.37%

51

Packaging	Treatment	Temperature	N	Mean	Grouping
1	2	60	15	19.066	A
2	2	60	15	18.906	A
2	1	60	15	17.568	B
1	1	60	15	17.214	B
2	2	40	15	10.967	C
1	2	40	15	10.698	C
2	1	40	15	9.527	D
1	1	40	15	8.950	D
2	2	25	15	3.614	E
1	2	25	15	3.593	E
1	1	25	15	2.534	F
2	1	25	15	2.342	F

Means that do not share a letter are significantly different.

52

**53 Abbreviations:**

54 Packaging: (P1: type A, PET/PE/MPET (High Barrier)/LLDPE or P2: type B, PET/PE/ALU/LLDPE)

55 Treatment: Samples treatment (1: samples without antioxidant, 2: samples with antioxidant addition)

56 Temperature: Storage temperature (25, 40 and 60 °C)

57

58 **Table S5:** General linear model of the total colour difference ( $\Delta E_{0-24}$ ) of the different packaging materials used  
 59 to pack chicken *serunding* incubated at -80 and 25 °C in 24 weeks of storage.  
 60

**General Linear Model: Dcolour versus Cp, T, DegC**

Factor	Type	Levels	Values
Cp	fixed	3	1, 2, 3
T	fixed	2	1, 2
DegC	fixed	2	-80, 25

Analysis of Variance for Dcolour, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
Cp	2	41.114	41.114	20.557	111.34	0.000
T	1	0.681	0.681	0.681	3.69	0.057
DegC	1	180.830	180.830	180.830	979.43	0.000
Cp*T	2	4.072	4.072	2.036	11.03	0.000
Cp*DegC	2	6.607	6.607	3.304	17.89	0.000
T*DegC	1	4.163	4.163	4.163	22.55	0.000
Cp*T*DegC	2	8.650	8.650	4.325	23.42	0.000
Error	108	19.940	19.940	0.185		
Total	119	266.057				

S = 0.429684 R-Sq = 92.51% R-Sq(adj) = 91.74%

61

Cp	T	DegC	N	Mean	Grouping
3	1	25	10	5.0900	A
3	2	25	10	4.3369	B
1	2	25	10	3.5731	C
2	2	25	10	3.5383	C
1	1	25	10	2.4398	D
2	1	25	10	2.3489	D
3	2	-80	10	1.6020	E
3	1	-80	10	1.5873	E
2	1	-80	10	1.0384	E F
1	1	-80	10	1.0051	E F
1	2	-80	10	0.7526	F
2	2	-80	10	0.6108	F

Means that do not share a letter are significantly different.

62

63

**64 Abbreviations:**

65 Cp: Control packaging

66 Cp1: Metallized packaging type A, PET/PE/MPET (High Barrier)/LLDPE

67 Cp2: Metallized packaging type B, PET/PE/ALU/LLDPE

68 Cp3: Control clear packaging

69 DegC: Storage temperature of -80 and 25 °C

70 T: Different samples treatment (T1: samples without BHA addition and T2: samples with BHA addition)

71 **Table S6:** General linear model of the lipid extraction of the chicken *serunding* incubated at 25, 40 and 60°C in  
 72 24 weeks of storage.

**General Linear Model: LE versus Pack, MT, Time, Temp**

Factor	Type	Levels	Values
Pack	fixed	2	1, 2
MT	fixed	2	1, 2
Time	fixed	15	0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20, 24
Temp	fixed	3	25, 40, 60

|  
 Analysis of Variance for LE, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
Pack	1	37.335	37.335	37.335	43.19	0.000
MT	1	249.546	249.546	249.546	288.71	0.000
Time	14	3481.532	3481.532	248.681	287.70	0.000
Temp	2	852.300	852.300	426.150	493.02	0.000
Pack*MT	1	13.120	13.120	13.120	15.18	0.000
Pack*Time	14	148.971	148.971	10.641	12.31	0.000
Pack*Temp	2	25.377	25.377	12.688	14.68	0.000
MT*Time	14	149.857	149.857	10.704	12.38	0.000
MT*Temp	2	13.677	13.677	6.838	7.91	0.000
Time*Temp	28	283.167	283.167	10.113	11.70	0.000
Pack*MT*Time	14	69.233	69.233	4.945	5.72	0.000
Pack*MT*Temp	2	6.691	6.691	3.346	3.87	0.022
MT*Time*Temp	28	122.207	122.207	4.365	5.05	0.000
Error	416	359.575	359.575	0.864		
Total	539	5812.588				

S = 0.929711 R-Sq = 93.81% R-Sq(adj) = 91.98%

73

74 **Abbreviations:**

75 Pack: Packaging type (P1: type A, PET/PE/MPET (High Barrier)/LLDPE or P2: type B, PET/PE/ALU/LLDPE)

76 MT: Samples treatment (1: samples without BHA addition, 2: samples with BHA addition) Time: Storage weeks  
 77 (0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20 and 24)

78 Temp: Storage temperature (25, 40 and 60 °C)

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84 **Table S7:** General linear model of the conjugated dienes (CD) of the chicken *serunding* incubated at 25, 40 and  
 85 60°C in 24 weeks of storage.

**General Linear Model: CD versus Pack, MT, Time, Temp**

Factor	Type	Levels	Values
Pack	fixed	2	1, 2
MT	fixed	2	1, 2
Time	fixed	15	0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20, 24
Temp	fixed	3	25, 40, 60

Analysis of Variance for CD, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
Pack	1	132.1364	132.1364	132.1364	599.71	0.000
MT	1	0.7652	0.7652	0.7652	3.47	0.063
Time	14	29.0974	29.0974	2.0784	9.43	0.000
Temp	2	22.3176	22.3176	11.1588	50.65	0.000
Pack*MT	1	52.4431	52.4431	52.4431	238.02	0.000
Pack*Time	14	7.0730	7.0730	0.5052	2.29	0.005
Pack*Temp	2	2.8568	2.8568	1.4284	6.48	0.002
MT*Time	14	9.2132	9.2132	0.6581	2.99	0.000
MT*Temp	2	8.5381	8.5381	4.2691	19.38	0.000
Time*Temp	28	21.2924	21.2924	0.7604	3.45	0.000
Pack*MT*Time	14	2.9733	2.9733	0.2124	0.96	0.490
Pack*MT*Temp	2	1.2972	1.2972	0.6486	2.94	0.054
MT*Time*Temp	28	11.8856	11.8856	0.4245	1.93	0.004
Error	416	91.6588	91.6588	0.2203		
Total	539	393.5481				

S = 0.469397 R-Sq = 76.71% R-Sq(adj) = 69.82%

86

87 **Abbreviations:**

88 Pack: Packaging type (P1: type A, PET/PE/MPET (High Barrier)/LLDPE or P2: type B, PET/PE/ALU/LLDPE)

89 MT: Samples treatment (1: samples without BHA addition, 2: samples with BHA addition) Time: Storage weeks  
 90 (0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20 and 24)

91 Temp: Storage temperature (25, 40 and 60 °C)

92

93



94 **Table S8:** General linear model of the malondialdehydes (TBARS) of the chicken *serunding* incubated at 25, 40  
 95 and 60°C in 24 weeks of storage.  
 96

**General Linear Model: TBARS versus Pack, MT, Time, Temp**

Factor	Type	Levels	Values
Pack	fixed	2	1, 2
MT	fixed	2	1, 2
Time	fixed	15	0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20, 24
Temp	fixed	3	25, 40, 60

Analysis of Variance for TBARS, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
Pack	1	8.4337	8.4337	8.4337	513.21	0.000
MT	1	2.8979	2.8979	2.8979	176.34	0.000
Time	14	153.6545	153.6545	10.9753	667.88	0.000
Temp	2	446.4204	446.4204	223.2102	13582.94	0.000
Pack*MT	1	0.9013	0.9013	0.9013	54.85	0.000
Pack*Time	14	1.9717	1.9717	0.1408	8.57	0.000
Pack*Temp	2	1.6833	1.6833	0.8416	51.22	0.000
MT*Time	14	0.8620	0.8620	0.0616	3.75	0.000
MT*Temp	2	0.8705	0.8705	0.4353	26.49	0.000
Time*Temp	28	86.9034	86.9034	3.1037	188.87	0.000
Pack*MT*Time	14	0.6078	0.6078	0.0434	2.64	0.001
Pack*MT*Temp	2	0.5042	0.5042	0.2521	15.34	0.000
MT*Time*Temp	28	1.7531	1.7531	0.0626	3.81	0.000
Error	416	6.8362	6.8362	0.0164		
Total	539	714.2999				

S = 0.128192 R-Sq = 99.04% R-Sq(adj) = 98.76%

97

**98 Abbreviations:**

99 Pack: Packaging type (P1: type A, PET/PE/MPET (High Barrier)/LLDPE or P2: type B, PET/PE/ALU/LLDPE)  
 100 MT: Samples treatment (1: samples without BHA addition, 2: samples with BHA addition) Time: Storage weeks  
 101 (0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20 and 24)  
 102 Temp: Storage temperature (25, 40 and 60 °C)  
 103  
 104

105 **Table S9:** General linear model of the protein solubility (PS) of the chicken *serunding* incubated at 25, 40 and  
 106 60°C in 24 weeks of storage.  
 107

**General Linear Model: PS versus Pack, MT, Time, Temp**

Factor	Type	Levels	Values
Pack	fixed	2	1, 2
MT	fixed	2	1, 2
Time	fixed	15	0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20, 24
Temp	fixed	3	25, 40, 60

Analysis of Variance for PS, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
Pack	1	1019.40	1019.40	1019.40	330.03	0.000
MT	1	111.40	111.40	111.40	36.07	0.000
Time	14	7568.09	7568.09	540.58	175.01	0.000
Temp	2	25931.20	25931.20	12965.60	4197.60	0.000
Pack*MT	1	26.07	26.07	26.07	8.44	0.004
Pack*Time	14	444.78	444.78	31.77	10.29	0.000
Pack*Temp	2	99.03	99.03	49.51	16.03	0.000
MT*Time	14	135.46	135.46	9.68	3.13	0.000
MT*Temp	2	44.19	44.19	22.09	7.15	0.001
Time*Temp	28	3271.70	3271.70	116.85	37.83	0.000
Pack*MT*Time	14	110.29	110.29	7.88	2.55	0.002
Pack*MT*Temp	2	21.89	21.89	10.94	3.54	0.030
MT*Time*Temp	28	156.26	156.26	5.58	1.81	0.008
Error	416	1284.95	1284.95	3.09		
Total	539	40224.70				

S = 1.75750 R-Sq = 96.81% R-Sq(adj) = 95.86%

108

**109 Abbreviations:**

110 Pack: Packaging type (P1: type A, PET/PE/MPET (High Barrier)/LLDPE or P2: type B, PET/PE/ALU/LLDPE)  
 111 MT: Samples treatment (1: samples without BHA addition, 2: samples with BHA addition) Time: Storage weeks  
 112 (0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20 and 24)  
 113 Temp: Storage temperature (25, 40 and 60 °C)

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116 **Table S10:** General linear model of the tryptophan content (TC) of the chicken *serunding* incubated at 25, 40 and  
 117 60°C in 24 weeks of storage.  
 118

**General Linear Model: TC versus Pack, BHA, Week, T**

Factor	Type	Levels	Values
Pack	fixed	2	1, 2
BHA	fixed	2	1, 2
Week	fixed	7	0, 4, 8, 12, 16, 20, 24
T	fixed	3	25, 40, 60

Analysis of Variance for TC, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
Pack	1	21156.7	21156.7	21156.7	226.15	0.000
BHA	1	23.5	23.5	23.5	0.25	0.617
Week	6	321309.6	321309.6	53551.6	572.42	0.000
T	2	3496.5	3496.5	1748.3	18.69	0.000
Pack*BHA	1	988.1	988.1	988.1	10.56	0.001
Pack*Week	6	27998.2	27998.2	4666.4	49.88	0.000
Pack*T	2	1090.5	1090.5	545.3	5.83	0.004
BHA*Week	6	1269.8	1269.8	211.6	2.26	0.040
BHA*T	2	2067.7	2067.7	1033.9	11.05	0.000
Week*T	12	12347.6	12347.6	1029.0	11.00	0.000
Pack*BHA*Week	6	3050.3	3050.3	508.4	5.43	0.000
Pack*BHA*T	2	2394.2	2394.2	1197.1	12.80	0.000
Pack*Week*T	12	9526.2	9526.2	793.8	8.49	0.000
BHA*Week*T	12	1559.6	1559.6	130.0	1.39	0.174
Error	180	16839.6	16839.6	93.6		
Total	251	425118.1				

119

S = 9.67231 R-Sq = 96.04% R-Sq(adj) = 94.48%

120

**121 Abbreviations:**

122 Pack: Packaging type (P1: type A, PET/PE/MPET (High Barrier)/LLDPE or P2: type B, PET/PE/ALU/LLDPE)

123 BHA: Samples treatment (1: samples without BHA addition, 2: samples with BHA addition)

124 Week: Storage weeks (0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20 and 24)

125 T: Storage temperature (25, 40 and 60 °C)

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134 **Table S11:** General linear model of the protein carbonyl (PC) of the chicken *serunding* incubated at 25, 40 and  
 135 60°C in 24 weeks of storage.  
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**General Linear Model: PC versus MT, P, Week, T**

Factor	Type	Levels	Values
MT	fixed	2	1, 2
P	fixed	2	1, 2
Week	fixed	8	0, 1, 4, 8, 12, 16, 20, 24
T	fixed	3	25, 40, 60

Analysis of Variance for PC, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
MT	1	200.51	200.51	200.51	31.26	0.000
P	1	79.88	79.88	79.88	12.45	0.001
Week	7	6472.08	6472.08	924.58	144.15	0.000
T	2	11688.08	11688.08	5844.04	911.10	0.000
MT*P	1	4.02	4.02	4.02	0.63	0.430
MT*Week	7	255.87	255.87	36.55	5.70	0.000
MT*T	2	204.17	204.17	102.08	15.92	0.000
P*Week	7	50.84	50.84	7.26	1.13	0.347
P*T	2	2.58	2.58	1.29	0.20	0.818
Week*T	14	5854.72	5854.72	418.19	65.20	0.000
MT*P*Week	7	166.38	166.38	23.77	3.71	0.001
MT*P*T	2	12.44	12.44	6.22	0.97	0.382
P*Week*T	14	89.59	89.59	6.40	1.00	0.460
Error	124	795.37	795.37	6.41		
Total	191	25876.52				

|  
 S = 2.53264 R-Sq = 96.93% R-Sq(adj) = 95.27%

137

138 **Abbreviations:**

139 P: Packaging type (P1: type A, PET/PE/MPET (High Barrier)/LLDPE or P2: type B, PET/PE/ALU/LLDPE)

140 MT: Samples treatment (1: samples without BHA addition, 2: samples with BHA addition)

141 Week: Storage weeks (0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20 and 24)

142 T: Storage temperature (25, 40 and 60 °C)

143 **Table 12:** General linear model of the Schiff base (SB) of the chicken *serunding* incubated at 25, 40 and 60°C in  
 144 24 weeks of storage

145

**General Linear Model: SB versus Pack, BHA, Week, T**

Factor	Type	Levels	Values
Pack	fixed	2	1, 2
BHA	fixed	2	1, 2
Week	fixed	7	0, 4, 8, 12, 16, 20, 24
T	fixed	3	25, 40, 60

Analysis of Variance for SB, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
Pack	1	1525.4	1525.4	1525.4	24.95	0.000
BHA	1	0.0	0.0	0.0	0.00	1.000
Week	6	110684.4	110684.4	18447.4	301.75	0.000
T	2	18919.3	18919.3	9459.6	154.73	0.000
Pack*BHA	1	63.0	63.0	63.0	1.03	0.311
Pack*Week	6	1289.9	1289.9	215.0	3.52	0.003
Pack*T	2	3120.1	3120.1	1560.1	25.52	0.000
BHA*Week	6	1606.8	1606.8	267.8	4.38	0.000
BHA*T	2	15.0	15.0	7.5	0.12	0.885
Week*T	12	5706.0	5706.0	475.5	7.78	0.000
Pack*BHA*Week	6	1478.4	1478.4	246.4	4.03	0.001
Pack*BHA*T	2	52.1	52.1	26.0	0.43	0.654
Pack*Week*T	12	3753.1	3753.1	312.8	5.12	0.000
BHA*Week*T	12	3670.4	3670.4	305.9	5.00	0.000
Error	180	11004.3	11004.3	61.1		
Total	251	162888.1				

146

147 S = 7.81890 R-Sq = 93.24% R-Sq(adj) = 90.58%

148 **Abbreviations:**

149 Pack: Packaging type (P1: type A, PET/PE/MPET (High Barrier)/LLDPE or P2: type B, PET/PE/ALU/LLDPE)

150 BHA: Samples treatment (1: samples without BHA addition, 2: samples with BHA addition)

151 Week: Storage weeks (0, 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20 and 24)

152 T: Storage temperature (25, 40 and 60 °C)

153