

# **Textural, sensory and volatile compounds analyses in formulations of sausages analogue elaborated with edible mushrooms and soy protein isolate as meat substitute**

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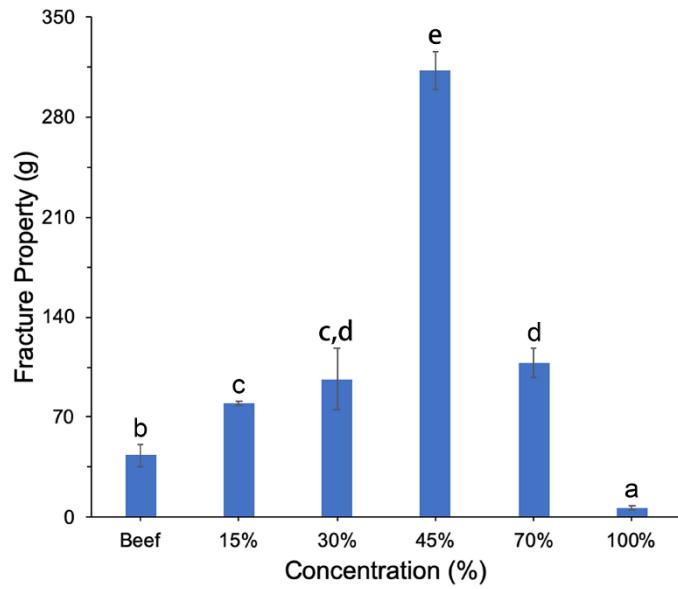


Figure S1 Fracture properties of meat analogues

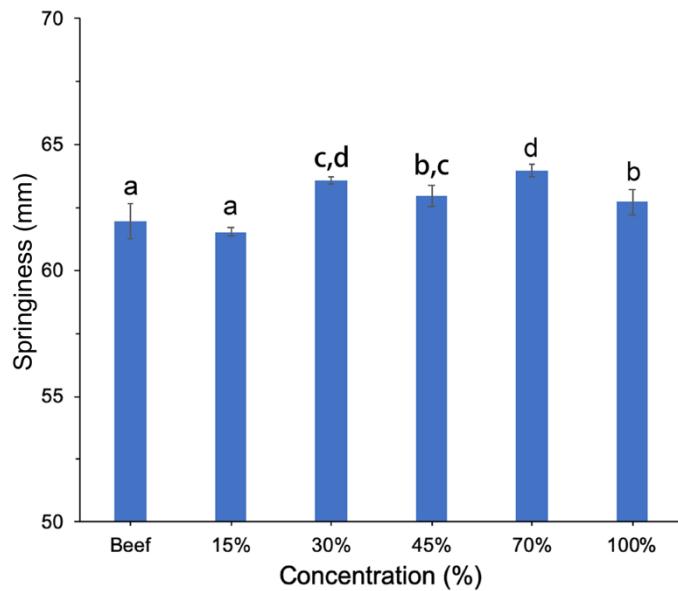


Figure S2 Springiness of meat analogues

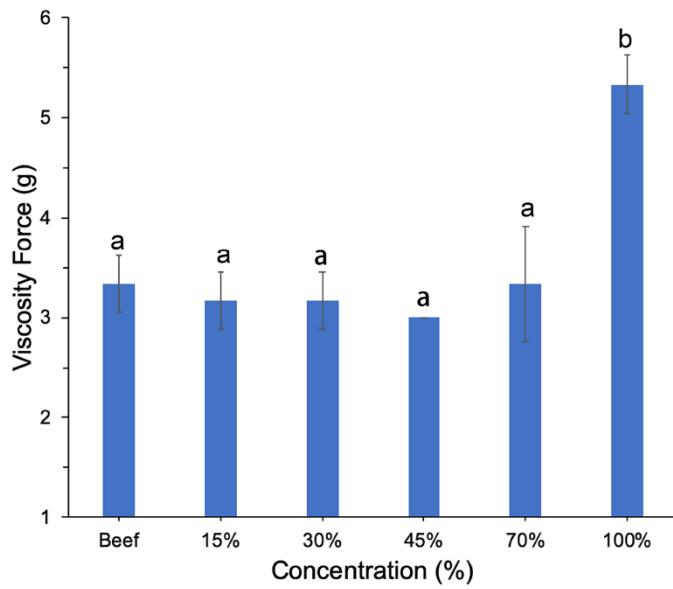


Figure S3 Viscosity of meat analogues

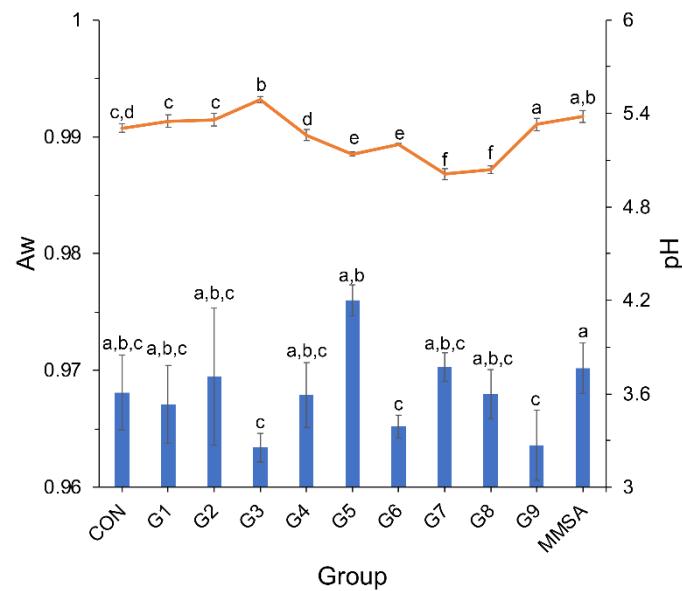


Figure S4 The  $a_w$  and pH of uncooked meat sausage analogues



Figure S5 The picture of MMSA taken by a camera under sunlight.

Table S1. Changes in L\*, a\*, b\* values of sausage analogues.

Treatments	L*	a*	b*
Control	41.66 ± 0.31	6.78 ± 0.06	16.44 ± 0.17
G1	38.76 ± 0.30	8.72 ± 0.16	13.89 ± 0.34
G2	38.94 ± 0.51	10.83 ± 0.21	13.48 ± 0.47
G3	39.29 ± 0.34	13.89 ± 0.23	17.08 ± 0.26
G4	33.46 ± 0.58	12.24 ± 0.47	16.02 ± 0.55
G5	39.60 ± 0.30	11.69 ± 0.32	15.76 ± 0.17
G6	38.90 ± 0.31	11.25 ± 0.30	14.40 ± 0.35
G7	41.50 ± 0.09	11.71 ± 0.08	17.36 ± 0.15
G8	33.62 ± 0.52	9.73 ± 0.11	14.09 ± 0.16
G9	43.89 ± 0.35	12.50 ± 0.22	19.59 ± 0.08
MMSA	36.53 ± 0.04	20.50 ± 0.06	16.59 ± 0.07
Treatments	Pre-cooked weight (g)	Cooked weight (g)	Cook yield (%)

Table S2 Sensory analysis of key factors at different level.

Treatments	Egg white powder	Meat flavour powder	Oil	Red yeast rice	Scores
Control	0	0	0	0	28.03
1	1 (3%)	1 (0.1%)	1 (17%)	1 (0.01%)	30.97
2	1 (3%)	2 (0.2%)	2 (19%)	2 (0.02%)	32.1
3	1 (3%)	3 (0.3%)	3 (21%)	3 (0.03%)	35.61
4	2 (4%)	1 (0.1%)	2 (19%)	3 (0.03%)	39.55
5	2 (4%)	2 (0.2%)	3 (21%)	1 (0.01%)	29.45
6	2 (4%)	3 (0.3%)	1 (17%)	2 (0.02%)	33.45
7	3 (5%)	1 (0.1%)	3 (21%)	2 (0.02%)	34.97
8	3 (5%)	2 (0.2%)	1 (17%)	3 (0.03%)	37.42
9	3 (5%)	3 (0.3%)	2 (19%)	1 (0.01%)	33.87
I	98.68	105.49	101.84	94.29	
II	102.45	98.97	105.52	100.52	
III	106.26	102.93	98.93	112.58	
K1j	32.89	35.16	33.95	31.43	
K2j	34.15	32.99	35.17	37.97	
K3j	35.42	34.31	32.98	37.53	
R	2.53	2.17	2.19	6.54	

Table S3. Cook yield of sausage analogues.

Treatments	Pre-cooked weight (g)	Cooked weight (g)	Cook yield (%)
Control	20.45	21.48	105.04
G1	21.08	21.88	103.80
G2	19.50	20.08	102.99
G3	20.11	20.50	101.93
G4	20.02	20.62	103.02
G5	18.67	19.05	102.05
G6	19.94	20.18	101.22
G7	21.85	22.14	101.33
G8	20.70	22.12	106.89
G9	20.47	21.66	105.82
MMSA	20.31	21.02	103.50