

Supplementary Materials

Table S1. Pearson's correlations between selected parameters of fermented beef and camel sausages

	Beef sausage											
	TBAR	Aw	pH	DH	LAB	α -Glucosidase	α -Amylase	DPPH	ABTS	ACE	Caco2	MCF7
TBAR		-0.424 <i>0.001</i> ¹⁾	-0.438 <i>0.001</i>	-0.074 <i>0.574</i>	0.132 <i>0.315</i>	-0.271 <i>0.036</i>	-0.234 <i>0.073</i>	0.152 <i>0.246</i>	0.183 <i>0.162</i>	-0.222 <i>0.088</i>	-0.454 <i>0.000</i>	-0.052 <i>0.692</i>
Aw	0.108 <i>0.410</i>		0.414 <i>0.001</i>	-0.195 <i>0.136</i>	0.008 <i>0.949</i>	0.045 <i>0.733</i>	-0.004 <i>0.974</i>	0.065 <i>0.622</i>	-0.015 <i>0.911</i>	0.141 <i>0.284</i>	0.196 <i>0.133</i>	0.022 <i>0.868</i>
pH	0.053 <i>0.689</i>	-0.039 <i>0.767</i>		0.199 <i>0.128</i>	0.037 <i>0.779</i>	0.650 <i><.0001</i>	0.585 <i><.0001</i>	-0.682 <i><.0001</i>	-0.668 <i><.0001</i>	0.539 <i><0.0001</i>	0.662 <i><.0001</i>	0.594 <i><.0001</i>
DH	0.082 <i>0.536</i>	0.225 <i>0.084</i>	0.736 <i><.0001</i>		-0.177 <i>0.176</i>	0.289 <i>0.025</i>	0.246 <i>0.058</i>	-0.424 <i>0.001</i>	-0.280 <i>0.030</i>	0.430 <i>0.001</i>	0.122 <i>0.354</i>	0.310 <i>0.016</i>
MRS	0.037 <i>0.782</i>	0.520 <i><.0001</i>	-0.429 <i>0.001</i>	-0.050 <i>0.706</i>		0.074 <i>0.573</i>	-0.085 <i>0.517</i>	-0.292 <i>0.024</i>	-0.228 <i>0.080</i>	-0.263 <i>0.043</i>	-0.021 <i>0.875</i>	0.031 <i>0.813</i>
α -Glucosidase	0.249 <i>0.055</i>	0.265 <i>0.041</i>	0.244 <i>0.060</i>	0.381 <i>0.003</i>	0.285 <i>0.027</i>		0.701 <i><.0001</i>	-0.808 <i><.0001</i>	-0.750 <i><.0001</i>	0.547 <i><.0001</i>	0.713 <i><.0001</i>	0.393 <i>0.002</i>
α -Amylase	0.134 <i>0.307</i>	0.063 <i>0.632</i>	0.372 <i>0.003</i>	0.489 <i><.0001</i>	-0.078 <i>0.553</i>	0.513 <i><.0001</i>		-0.580 <i><.0001</i>	-0.441 <i>0.000</i>	0.650 <i><.0001</i>	0.733 <i><.0001</i>	0.380 <i>0.003</i>
DPPH	0.151 <i>0.249</i>	0.075 <i>0.571</i>	0.191 <i>0.143</i>	0.296 <i>0.022</i>	0.072 <i>0.583</i>	0.376 <i>0.003</i>	0.406 <i>0.001</i>		0.893 <i><.0001</i>	-0.388 <i>0.002</i>	-0.594 <i><.0001</i>	-0.522 <i><.0001</i>
ABTS	0.085 <i>0.520</i>	-0.009 <i>0.945</i>	0.279 <i>0.031</i>	0.303 <i>0.019</i>	-0.058 <i>0.659</i>	0.486 <i><.0001</i>	0.501 <i><.0001</i>	0.735 <i><.0001</i>		-0.215 <i>0.099</i>	-0.567 <i><.0001</i>	-0.395 <i>0.002</i>
ACE	0.203 <i>0.121</i>	0.063 <i>0.630</i>	0.217 <i>0.950</i>	0.372 <i>0.003</i>	-0.119 <i>0.346</i>	0.356 <i>0.005</i>	0.726 <i><.0001</i>	0.165 <i>0.208</i>	0.234 <i>0.071</i>		0.346 <i>0.045</i>	0.217 <i>0.240</i>
Caco2	0.183 <i>0.162</i>	0.399 <i>0.002</i>	0.337 <i>0.009</i>	0.592 <i><.0001</i>	0.346 <i>0.007</i>	0.700 <i><.0001</i>	0.647 <i><.0001</i>	0.450 <i>0.000</i>	0.510 <i><.0001</i>	0.678 <i>0.003</i>		0.289 <i>0.025</i>
MCF7	0.251 <i>0.053</i>	0.098 <i>0.459</i>	0.511 <i><.0001</i>	0.588 <i><.0001</i>	-0.098 <i>0.457</i>	0.397 <i>0.002</i>	0.502 <i><.0001</i>	0.427 <i>0.001</i>	0.483 <i><.0001</i>	0.532 <i>0.002</i>	0.625 <i><.0001</i>	
	TBAR	Aw	pH	DH	MRS	α -Glucosidase	α -Amylase	DPPH	ABTS	ACE	Caco2	MCF7
	Camel sausage											

¹⁾ The probability of the correlation.

TBAR, lipid peroxidation; Aw, water activity; pH, pH values; DH, degree of hydrolysis; LAB, lactic acid bacteria population; DPPH, 1,1-diphenyl-2-picrylhydrazyl; ACE, angiotensin-converting enzyme; ABTS, 2,2'-azino-bis(3-ethylbenzo-thiazoline-6-sulphonic acid); MRS, De Man, Rogosa and Sharpe; Caco2, human colon adenocarcinoma cell line; MCF7, breast cancer cell line.

Table S2. Analysis of variance (ANOVA)

Sources ¹⁾	DF	TBAR	Aw	pH	DH	LAB	TPA	TPC	Glucosidase	Amylase	DPPH	ABTS	Caco-2	MCF
Meat	1	8.24 ²⁾	171.25	10.43	127.67	159.69	51.87	148.45	110.77	6.45	597.93	185.89	455.77	85.24
		0.0053 ³⁾	<.0001	0.0018	<.0001	<.0001	<.0001	<.0001	<.0001	0.0131	<.0001	<.0001	<.0001	<.0001
Bacteria	4	3.51	2.11	22.19	18.36	23.58	17.08	3.85	21.17	53.05	2.38	28.34	65.53	119.04
		0.0108	0.0874	<.0001	<.0001	<.0001	<.0001	0.0065	<.0001	<.0001	0.0581	<.0001	<.0001	<.0001
Meat×bacteria	4	2.76	2.54	9.4	4.17	4.89	10.92	0.16	0.68	1.62	15.67	8.87	13.65	26.43
		0.0331	0.0462	<.0001	0.0041	0.0014	<.0001	0.956	0.6068	0.1777	<.0001	<.0001	<.0001	<.0001
Storage	3	8.42	13.76	181.89	23.41	128.22	19.34	132.66	83.35	48.85	71.41	81.3	241.14	93.54
		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
Meat×storage	3	5.78	31.14	31.23	21.1	60.89	8.49	37.5	4.12	2.04	175.07	264.61	24.15	6.49
		0.0013	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.009	0.1144	<.0001	<.0001	<.0001	0.0006
Bacteria×storage	12	1.68	0.49	3.05	1.61	2.55	2.43	0.59	4.93	0.76	4.92	12.86	6.86	9.96
		0.0879	0.918	0.0014	0.1066	0.0066	0.0096	0.8433	<.0001	0.6874	<.0001	<.0001	<.0001	<.0001
Meat×bacteria ×storage	12	0.69	1.59	3.99	0.7	2.8	2.41	0.96	0.56	3.24	2.56	18.12	7.18	13.4
		0.7537	0.111	<.0001	0.7424	0.003	0.0101	0.4933	0.8643	0.0008	0.0064	<.0001	<.000	<.0001

¹⁾ Factors and interactions as sources of errors.

²⁾ F-values.

³⁾ Probability: source with $p < 0.05$ had significant impact.

DF, Degree of freedom; TBAR, lipid peroxidation; Aw, water activity; pH values; DH: degree of hydrolysis; LAB, lactic acid bacteria population; DPPH, 1,1-diphenyl-2-picrylhydrazyl; ABTS, 2,2'-azino-bis(3-ethylbenzo-thiazoline-6-sulphonic acid); TPC, total plate count; TPA, texture profile analysis; Caco2, human colon adenocarcinoma cell line; MCF7, breast cancer cell line.