Table S1. Shear force (mean ± SD) of m. semimembranosus from young bulls during storage in feeding groups (F1, F2).

Time of storage [days]	**Shear force - WBSF [N]**					
	Feeding 1 (F1)			**Feeding 2 (F2)**		
	1.1	1.2.	Overall mean (n=4)	2.1	2.2	Overall mean (n=4)
3	70.74 ± 17.30^{a}	88.77 ± 32.52^{a}	79.76 ± 27.41^{Ae}	50.33 ± 2.20^{a}	62.18 ± 6.92^{a}	56.26 ± 14.27^{a}
7	59.25 ± 7.12^{bB}	78.48 ± 5.73^{b}	68.87 ± 6.80^{Bb}	40.32 ± 6.45^{b}	55.97 ± 5.74^{a}	48.15 ± 10.87^{b}
14	52.90 ± 3.80^{Cc}	52.60 ± 23.45^{c}	52.75 ± 13.78^{c}	44.38 ± 4.92^{ba}	37.19 ± 3.03^{b}	40.79 ± 7.81^{c}
28	37.52 ± 1.59^{d}	40.05 ± 4.70^{d}	38.79 ± 3.19^{d}	42.89 ± 1.89^{ba}	36.17 ± 0.36^{b}	39.53 ± 4.23^{c}

$^{a-d}$ - mean in rows with different letters differ significantly at, p≤0.01; $^{A-B}$ – mean in rows with different letters differ significantly at, p≤0.05

Table S2. Cooking loss (mean ± SD) of m. semimembranosus from young bulls during storage in feeding groups (F1, F2).

Time of storage [days]	**Cooking loss [%]**					
	Feeding 1 (F1)			**Feeding 2 (F2)**		
	1.1	1.2.	Overall mean (n=4)	2.1	2.2	Overall mean (n=4)
3	26.41 ± 0.91^{a}	27.65 ± 1.87^{a}	27.03 ± 1.40^{a}	26.16 ± 0.38^{a}	29.34 ± 0.19^{a}	27.75 ± 1.85^{a}
7	26.32 ± 0.75^{a}	29.28 ± 1.84^{a}	27.80 ± 2.06^{a}	31.47 ±0.40^{bB}	28.66 ±2.43^{a}	30.06 ± 2.16^{a}
14	29.53 ± 0.06^{b}	29.20 ± 1.57^{a}	29.36 ± 0.93^{a}	30.33 ± 2.35^{Cd}	28.05 ± 0.25^{a}	29.19 ± 1.90^{a}
28	21.29 ± 0.11^{c}	22.31 ± 0.94^{b}	21.80 ± 0.80^{b}	24.04 ± 2.47^{e}	21.36 ±0.86^{b}	22.70 ± 2.16^{b}

$^{a-e}$ - mean in rows with different letters differ significantly at, p≤0.01; $^{B-C}$ – mean in rows with different letters differ significantly at, p≤0.05

Table S3. Electrical parameters – Z,Y,Cp,Cs (mean ± SD) for feeding 1 (F1), measured at f=100 Hz–100 kHz in electrode configurations T and L.

Time of storage [days]	Electrode configurations: T (F1)				Electrode configurations: L (F1)			
	f=100 Hz	f=1 kHz	f=10 kHz	f=100 kHz	f=100 Hz	f=1 kHz	f=10 kHz	f=100 kHz
	Z [Ω]							
3	57.44 ± 23.87	50.81 ± 20.83	45.97 ± 17.25	32.21 ± 5.72	90.73 ± 5.11	86.34 ± 4.56	83.87 ± 3.50	74.98 ± 1.51
7	55.04 ± 20.80	50.52 ± 18.30	45.50 ± 15.03	32.50 ± 5.17	88.27 ± 4.67	85.13 ± 4.72	81.92 ± 3.70	74.44 ± 2.00
14	48.27 ± 15.21	45.33 ± 13.68	41.08 ± 11.27	31.31 ± 3.96	88.11 ± 4.23	83.72 ± 3.93	82.20 ± 2.99	74.87 ± 1.68
28	46.72 ± 12.69	42.23 ± 11.36	38.57 ± 9.68	31.10 ± 3.57	80.74 ± 3.66	78.32 ± 3.18	76.02 ± 2.62	70.42 ± 1.57
	Y [mS]							
3	21.10 ± 8.75	24.03 ± 9.80	25.43 ± 9.55	32.34 ± 5.75	11.08 ± 0.63	11.45 ± 0.64	11.89 ± 0.52	13.38 ± 0.27
7	21.17 ± 8.33	23.13 ± 8.93	24.42 ± 8.65	31.86 ± 5.10	11.30 ± 0.58	11.78 ± 0.66	12.23 ± 0.54	13.45 ± 0.36
14	24.08 ± 7.53	25.89 ± 7.81	27.70 ± 7.59	32.99 ± 4.17	11.38 ± 0.56	11.97 ± 0.55	12.18 ± 0.45	13.37 ± 0.30
28	25.43 ± 7.09	26.05 ± 7.03	27.88 ± 6.81	33.14 ± 3.80	12.41 ± 0.56	12.79 ± 0.52	13.17 ± 0.45	14.21 ± 0.31
	Cp [nF]							
3	6330.33 ± 3261.54	224.65 ± 45.71	33.08 ± 13.32	11.04 ± 5.88	1219.74 ± 209.99	39.74 ± 5.65	8.18 ± 1.88	1.74 ± 0.22
7	5126.33 ± 2283.65	187.65 ± 14.44	32.61 ± 13.70	10.92 ± 5.52	1124.10 ± 258.72	37.62 ± 5.18	7.20 ± 1.56	1.59 ± 0.19
14	4941.67 ± 1736.50	182.41 ± 4.23	31.62 ± 13.36	10.34 ± 5.17	1163.81 ± 195.99	36.16 ± 4.98	6.12 ± 1.25	1.48 ± 0.15
28	4911.33 ± 1829.47	183.41 ± 10.10	29.35 ± 12.49	9.51 ± 4.77	1297.00 ± 239.03	39.12 ± 3.82	6.05 ± 1.17	1.50 ± 0.16
	Cs [uF]							
3	182.65 ± 54.98	67.28 ± 39.10	8.65 ± 7.20	0.40 ± 0.29	260.00 ± 18.17	89.17 ± 21.92	4.83 ± 1.51	0.28 ± 0.05
7	223.00 ± 75.75	80.81 ± 50.72	8.29 ± 7.78	0.45 ± 0.30	278.85 ± 25.39	99.69 ± 22.88	5.95 ± 1.75	0.29 ± 0.05
14	289.58 ± 79.29	98.11 ± 52.46	10.10 ± 7.70	0.46 ± 0.29	294.99 ± 22.23	107.81 ± 23.74	6.63 ± 1.78	0.31 ± 0.05
28	305.10 ± 50.11	99.97 ± 46.15	10.57 ± 7.87	0.51 ± 0.31	299.18 ± 26.49	111.83 ± 19.88	7.51 ± 1.97	0.34 ± 0.05

Z – impedance, Y – admittance, Cp - parallel equivalent capacitance, Cs - series equivalent capacitance, f - frequency

Table S4. Electrical parameters – Z,Y,Cp,Cs (mean ± SD) for feeding 2 (F2) measured at f=100 Hz–100 kHz in electrode configurations T and L.

Time of storage [days]	Electrode configurations: T (F2)				Electrode configurations: L (F2)			
	f=100 Hz	f=1 kHz	f=10 kHz	f=100 kHz	f=100 Hz	f=1 kHz	f=10 kHz	f=100 kHz
	Z [Ω]							
3	83.99 ± 21.38	70.01 ± 18.84	60.08 ± 14.10	35.47 ± 1.91	108.54 ± 16.39	104.45 ± 13.81	93.82 ± 8.95	78.19 ± 1.08
7	74.55 ± 19.15	64.87 ± 15.23	53.96 ± 11.11	34.48 ± 1.22	104.17 ± 15.72	103.09 ± 11.96	95.75 ± 7.44	78.83 ± 1.54
14	66.31 ± 14.31	59.32 ± 12.18	53.27 ± 9.55	34.47 ± 1.52	104.28 ± 14.37	103.17 ± 12.22	95.37 ± 8.01	79.85 ± 0.40
28	57.74 ± 5.40	51.14 ± 4.79	46.96 ± 3.79	33.54 ± 0.33	99.78 ± 11.80	95.27 ± 10.22	91.30 ± 6.96	77.22 ± 0.73
	Y [mS]							
3	12.48 ± 3.32	15.06 ± 4.31	17.33 ± 4.33	28.26 ± 1.51	9.38 ± 1.45	9.72 ± 1.34	10.73 ± 0.98	12.80 ± 0.17
7	14.07 ± 3.80	14.55 ± 3.74	19.05 ± 3.71	29.04 ± 1.01	9.75 ± 1.37	9.80 ± 1.20	10.49 ± 0.84	13.03 ± 0.79
14	15.58 ± 3.45	17.40 ± 3.80	19.22 ± 3.68	29.08 ± 1.29	9.71 ± 1.29	9.80 ± 1.24	10.54 ± 0.89	12.52 ± 008
28	17.43 ± 1.63	19.67 ± 1.83	21.39 ± 1.75	29.59 ± 0.49	10.12 ± 1.20	10.58 ± 1.11	10.66 ± 0.80	12.96 ± 0.12
	Cp [nF]							
3	4630.40 ± 1529.61	256.92 ± 50.48	48.86 ± 7.52	15.66 ± 3.05	901.04 ± 167.34	50.41 ± 23.13	12.28 ± 7.44	2.41 ± 0.88
7	3467.60 ± 743.32	209.63 ± 5.84	47.04 ± 9.26	16.11 ± 3.37	781.86 ± 111.59	45.45 ± 20.28	12.08 ± 6.65	2.45 ± 0.89
14	3414.76 ± 519.92	205.85 ± 8.53	45.59 ± 7.85	15.01 ± 2.59	767.93 ± 99.99	43.26 ± 18.70	11.68 ± 6.06	2.30 ± 0.81
28	4082.07 ± 319.51	215.68 ± 4.39	41.05 ± 4.99	13.35 ± 1.47	795.98 ± 53.21	42.87 ± 18.31	10.66 ± 6.00	2.38 ± 0.84
	Cs [uF]							
3	94.35 ± 16.37	24.06 ± 8.36	2.02 ± 1.10	0.129 ± 0.04	296.66 ± 128.33	71.91 ± 50.11	3.32 ± 2.25	0.19 ± 0.07
7	150.02 ± 46.72	36.01 ± 15.14	2.25 ± 1.21	0.144 ± 0.04	329.27 ± 127.21	77.85 ± 50.84	3.67 ± 2.34	0.20 ± 0.07
14	182.68 ± 52.75	40.77 ± 14.48	2.616 ± 1.25	0.163 ± 0.04	320.58 ± 120.32	83.00 ± 51.98	3.78 ± 2.52	0.20 ± 0.07
28	191.33 ± 20.53	45.52 ± 7.60	2.905 ± 0.84	0.180 ± 0.02	342.84 ± 110.90	85.54 ± 51.23	3.88 ± 2.68	0.21 ± 0.07

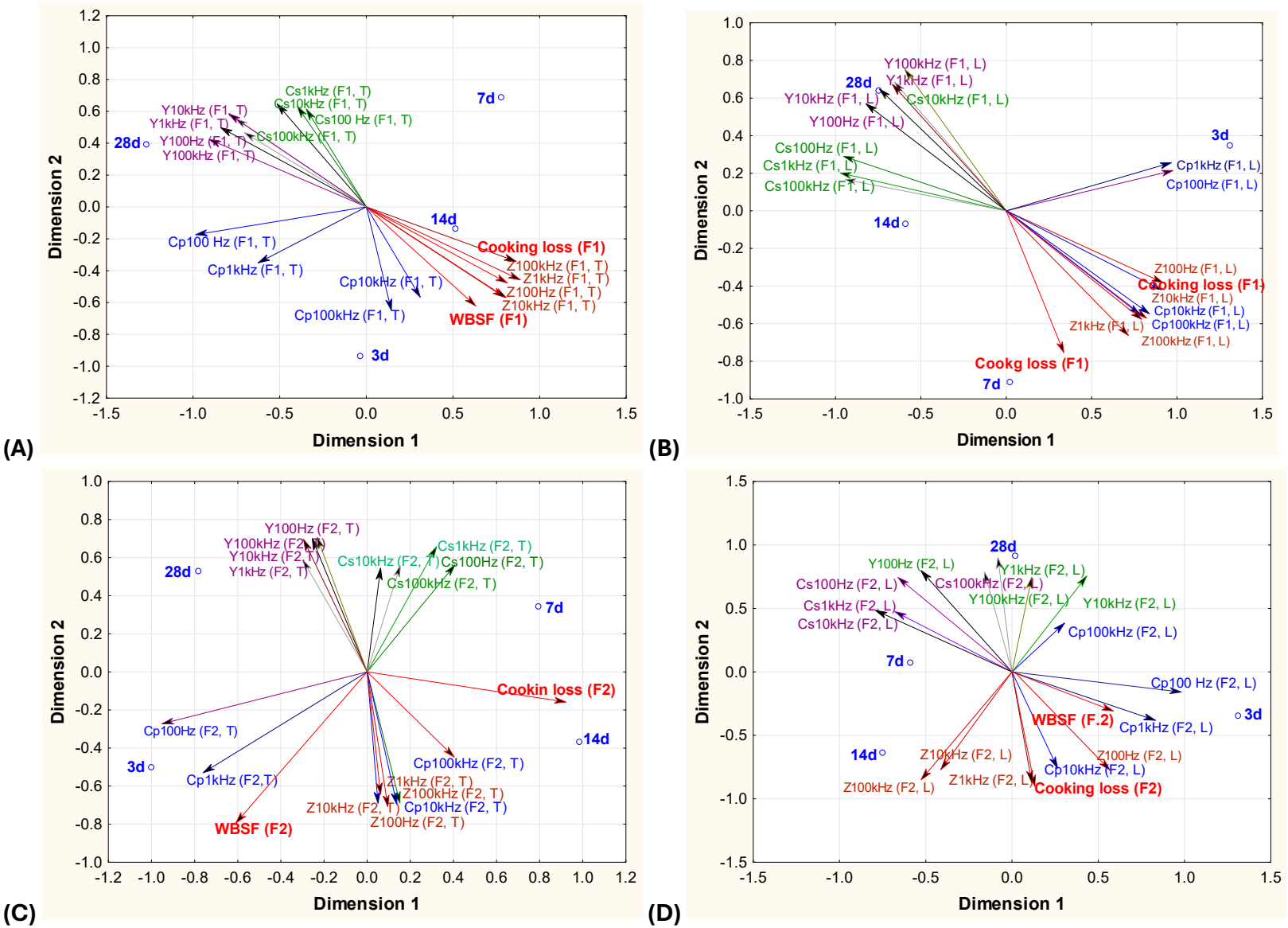


Figure S1. PROFIT analysis of the relationships between electrical parameters (Z, Y, Cp, Cs) and technological traits (WBSF, cooking loss) during beef ageing (3, 7, 14, and 28 days; VAC; 4 ± 1 °C). (A): F1, electrode configuration T (transverse, across fibres); (B): F1, electrode configuration L (longitudinal, along fibres); (C): F2, electrode configuration T; (D): F2, electrode configuration L.
Points represent beef steak samples at successive ageing times, and vectors indicate the direction and strength of the relationships between variables.