

Article

Carcass Yields and Meat Composition of Male and Female Italian Slow-Growing Chicken Breeds: *Bianca di Saluzzo* and *Bionda Piemontese*

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Supplementary materials

Table S1. Slaughter yields of *Bionda Piemontese* and *Bianca di Saluzzo* breeds at different slaughter ages (n = 8).

Items	Age at slaughter	<i>Bionda Piemontese</i>		<i>Bianca di Saluzzo</i>		SEM	<i>p</i> -value	
		Male	Female	Male	Female		Breed	Gender
Carcass yield (% SW)	5 months	60.03	60.47	57.96	59.03 ^a	0.431	0.028	0.326
	6 months	60.58	59.33	59.38	57.58 ^{ab}	0.490	0.131	0.119
	7 months	61.58	57.54	59.20	54.21 ^{bc}	0.761	0.029	0.001
	8 months	58.92	56.78	57.22	52.72 ^c	0.678	0.017	0.007
<i>p</i> -value		0.080	0.083	0.122	0.020			
Breast yield (%CC)	5 months	16.16 ^b	19.09 ^a	17.76 ^a	19.02 ^b	0.285	0.064	<0.001
	6 months	15.45 ^b	17.39 ^c	15.65 ^b	16.87 ^c	0.228	0.658	<0.001
	7 months	17.50 ^a	18.92 ^{bc}	17.72 ^a	19.63 ^{ab}	0.290	0.371	0.003
	8 months	18.09 ^a	20.99 ^a	17.91 ^a	20.67 ^a	0.324	0.556	<0.001
<i>p</i> -value		<0.001	0.002	0.002	<0.001			
Thigh yield (%CC)	5 months	38.89	33.23	38.56	32.67	0.626	0.544	<0.001
	6 months	39.03	32.46	38.41	31.59	0.654	0.118	<0.001
	7 months	38.51	32.17	38.93	32.25	0.621	0.573	<0.001
	8 months	39.95	32.41	39.96	32.39	0.714	0.989	<0.001
<i>p</i> -value		0.385	0.513	0.230	0.480			

Abbreviations: SW: slaughter weight; CC: chilled carcass weight; SEM: standard error of the mean; values with different superscript letters (a, b, c) within the same column per fixed effect (age of slaughter) differ significantly ($p < 0.05$). The effect of interaction between “Breed” and “Gender” was not significant; therefore, significance is only presented for main effects.

Table S2. Meat quality parameters of breast and thigh muscles at different slaughter ages (n = 8).

Items	Age at slaughter	<i>Bionda Piemontese</i>		<i>Bianca di Saluzzo</i>		SEM	<i>p-value</i>	
		Male	Female	Male	Female		Breed	Gender
pH breast	5 months	6.21	6.10 ^b	6.34	6.15 ^c	0.035	0.189	0.034
	6 months	6.18	6.25 ^b	6.21	6.24 ^{ab}	0.019	0.823	0.187
	7 months	6.22	6.45 ^a	6.22	6.21 ^c	0.031	0.034	0.052
	8 months	6.21	6.24 ^b	6.31	6.35 ^a	0.037	0.185	0.650
<i>p-value</i>		0.974	0.002	0.512	0.015			
pH thigh	5 months	6.21	6.10 ^b	6.34	6.15 ^c	0.035	0.189	0.034
	6 months	6.18	6.25 ^b	6.21	6.24 ^{ab}	0.019	0.823	0.187
	7 months	6.22	6.45 ^a	6.22	6.21 ^c	0.031	0.034	0.052
	8 months	6.21	6.24 ^b	6.31	6.35 ^a	0.037	0.185	0.650
<i>p-value</i>		0.974	0.002	0.512	0.015			
Breast meat								
Lightness (L*)	5 months	51.69	53.98	52.54 ^a	53.66	0.514	0.800	0.108
	6 months	50.10	53.15	50.98 ^a	54.45	0.503	0.200	0.001
	7 months	52.96	55.05	53.47 ^a	54.03	0.403	0.750	0.106
	8 months	50.12	53.42	47.55 ^b	54.36	0.644	0.366	<0.001
<i>p-value</i>		0.102	0.447	<0.001	0.931			
Redness (a*)	5 months	-0.23 ^c	-1.64 ^b	-0.30 ^b	-1.95 ^b	0.221	0.608	<0.001
	6 months	1.24 ^b	0.32 ^a	0.26 ^b	-0.13 ^a	0.278	0.205	0.248
	7 months	2.01 ^b	-0.17 ^a	1.17 ^b	-0.68 ^a	0.264	0.089	<0.001
	8 months	4.55 ^a	1.28 ^a	4.48 ^a	0.32 ^a	0.416	0.314	<0.001
<i>p-value</i>		<0.001	0.003	<0.001	0.001			
Yellowness (b*)	5 months	7.95	9.23	7.68 ^{ab}	7.68	0.274	0.092	0.231
	6 months	7.99	11.01	6.24 ^b	9.74	0.418	0.012	<0.001
	7 months	8.35	10.06	9.54 ^a	9.67	0.394	0.619	0.260
	8 months	10.18	11.29	8.96 ^a	10.33	0.426	0.206	0.151
<i>p-value</i>		0.143	0.150	0.006	0.061			
Drip losses (%)	5 months	13.82 ^a	11.38 ^a	12.15 ^a	11.77 ^a	0.542	0.557	0.205
	6 months	7.86 ^b	7.52 ^b	7.05 ^b	7.01 ^b	0.218	0.146	0.666
	7 months	6.48 ^b	4.08 ^c	6.78 ^b	4.32 ^c	0.306	0.543	<0.001
	8 months	4.31 ^c	3.26 ^c	3.85 ^c	3.19 ^c	0.132	0.224	0.001
<i>p-value</i>		<0.001	<0.001	<0.001	<0.001			

Abbreviations: SEM: standard error of the mean; values with different superscript letters (a, b, c) within the same column per fixed effect (age of slaughter) differ significantly ($p < 0.05$). The effect of interaction between “Breed” and “Gender” was not significant; therefore, significance is only presented for main effects.

Table S3. Chemical composition (g/100 g FM) and hydroxyproline content (mg/g dry weight) of breast meat at different slaughter ages (n = 8).

Items	Age at slaughter	<i>Bionda Piemontese</i>		<i>Bianca di Saluzzo</i>		SEM	<i>p-value</i>	
		Male	Female	Male	Female		Breed	Gender
Moisture	5 months	75.13 ^a	73.22 ^{ab}	74.98 ^a	73.38	0.227	0.984	<0.001
	6 months	74.63 ^{ab}	74.08 ^a	74.37 ^{ab}	73.82	0.119	0.254	0.020
	7 months	73.90 ^{bc}	72.53 ^c	73.55 ^b	73.06	0.162	0.740	0.002
	8 months	73.75 ^c	73.47 ^{ab}	73.79 ^b	73.42	0.119	0.998	0.192
<i>p-value</i>		0.03	0.03	0.011	0.294			
Crude protein	5 months	26.13	24.30	26.66 ^a	25.20	0.325	0.235	0.010
	6 months	24.20	24.62	24.36 ^c	24.52	0.115	0.901	0.223
	7 months	24.73	25.18	25.96 ^{ab}	24.93	0.220	0.264	0.514
	8 months	24.95	24.82	25.31 ^{ab}	24.72	0.136	0.642	0.197
<i>p-value</i>		0.071	0.489	0.006	0.330			
Crude fat	5 months	0.23	0.75 ^b	0.11 ^b	0.55 ^b	0.069	0.147	<0.001
	6 months	0.31	0.61 ^b	0.29 ^a	0.88 ^{ab}	0.087	0.429	0.009
	7 months	0.33	1.72 ^a	0.30 ^a	1.22 ^a	0.138	0.162	<0.001
	8 months	0.37	0.50 ^b	0.21 ^{ab}	0.35 ^b	0.038	0.033	0.056
<i>p-value</i>		0.329	<0.001	0.046	0.014			
Ash	5 months	1.14	1.22	1.13 ^b	1.22	0.013	0.819	0.004
	6 months	1.17	1.20	1.15 ^b	1.15	0.008	0.048	0.301
	7 months	1.19	1.18	1.21 ^a	1.16	0.010	1.000	0.260
	8 months	1.21	1.20	1.18 ^{ab}	1.21	0.009	0.767	0.576
<i>p-value</i>		0.250	0.769	0.036	0.065			
Hydroxy proline	5 months	1.49	2.33 ^{ab}	1.12 ^c	2.48	0.179	0.722	0.001
	6 months	1.95	1.84 ^b	1.98 ^{bc}	2.13	0.102	0.454	0.918
	7 months	2.75	3.02 ^a	3.06 ^a	3.04	0.223	0.500	0.956
	8 months	2.99	3.00 ^a	2.89 ^{ab}	3.16	0.169	0.903	0.668
<i>p-value</i>		0.075	0.013	<0.001	0.107			

Abbreviations: FM: fresh matter; SEM: standard error of the mean; values with different superscript letters (a, b, c) within the same column per fixed effect (age of slaughter) differ significantly ($p < 0.05$). The effect of interaction between “Breed” and “Gender” was not significant; therefore, significance is only presented for main effects.

Table S4. Chemical composition (g/100 g FM) of thigh meat at different slaughter ages (n = 8).

Items	Age at slaughter	<i>Bionda Piemontese</i>		<i>Bianca di Saluzzo</i>		SEM	<i>p-value</i>	
		Male	Female	Male	Female		Breed	Gender
Moisture	5 months	76.19 ^a	82.21 ^a	76.42 ^a	81.47 ^a	0.740	0.827	<0.001
	6 months	74.96 ^b	73.39 ^b	75.04 ^b	73.12 ^b	0.211	0.752	<0.001
	7 months	75.26 ^b	71.54 ^b	75.08 ^b	71.84 ^b	0.346	0.854	<0.001
	8 months	74.76 ^b	72.57 ^b	75.12 ^b	72.14 ^b	0.329	0.940	<0.001
<i>p-value</i>		0.004	<0.001	0.003	<0.001			
Crude protein	5 months	26.85	26.88	27.13	27.89	0.303	0.308	0.526
	6 months	27.11	26.35	27.38	26.19	0.186	0.873	0.008
	7 months	27.58	28.15	27.81	29.33	0.298	0.416	0.232
	8 months	27.36	27.98	27.68	28.72	0.417	0.540	0.340
<i>p-value</i>		0.682	0.359	0.747	0.018			
Crude fat extract	5 months	1.00 ^b	2.30 ^c	0.96 ^c	2.28 ^c	0.136	0.859	<0.001
	6 months	2.15 ^a	4.33 ^b	2.55 ^a	4.91 ^b	0.274	0.194	<0.001
	7 months	1.65 ^a	6.92 ^a	1.79 ^b	6.14 ^a	0.460	0.325	<0.001
	8 months	2.03 ^a	4.28 ^b	1.84 ^b	4.01 ^b	0.220	0.246	<0.001
<i>p-value</i>		<0.001	<0.001	<0.001	<0.001			
Ash	5 months	1.08	0.75 ^b	1.08	0.77 ^c	0.038	0.838	<0.001
	6 months	1.13	1.12 ^a	1.12	1.08 ^{ab}	0.009	0.227	0.121
	7 months	1.10	1.02 ^a	1.07	1.01 ^b	0.008	0.035	<0.001
	8 months	1.13	1.13 ^a	1.11	1.14 ^a	0.011	0.937	0.400
<i>p-value</i>		0.060	<0.001	0.066	<0.001			

Abbreviations: FM: fresh matter; SEM: standard error of the mean; values with different superscript letters (a, b, c) within the same column per fixed effect (age of slaughter) differ significantly ($p < 0.05$). The effect of interaction between “Breed” and “Gender” was not significant; therefore, significance is only presented for main effects.

Table S5. Saturated fatty acid profile of breast meat at different slaughter ages (g/100g of total fatty acids) (n = 8).

Items	Age at slaughter	<i>Bionda Piemontese</i>		<i>Bianca di Saluzzo</i>		SEM	<i>p-value</i>	
		Male	Female	Male	Female		Breed	Gender
C14	5 months	0.36	0.60 ^b	0.13	0.41 ^b	0.049	0.014	0.003
	6 months	0.39	0.51 ^b	0.18	0.48 ^b	0.034	0.032	0.001
	7 months	0.41	0.86 ^a	0.32	0.66 ^a	0.049	0.042	<0.001
	8 months	0.51	0.59 ^b	1.02	0.50 ^b	0.191	0.549	0.571
<i>p-value</i>		0.531	0.001	0.362	0.023			
C16	5 months	24.35 ^b	28.43 ^{bc}	24.72	26.36	0.580	0.427	0.427
	6 months	27.74 ^a	26.74 ^c	27.09	27.60	0.421	0.905	0.781
	7 months	30.05 ^a	33.27 ^a	27.07	29.10	0.656	0.003	0.023
	8 months	30.41 ^a	29.20 ^b	28.88	27.97	0.417	0.101	0.204
<i>p-value</i>		0.001	<0.001	0.171	0.103			
C17	5 months	0.24	0.32 ^{ab}	0.16	0.26	0.024	0.133	0.072
	6 months	0.25	0.20 ^c	0.16	0.30	0.022	0.942	0.269
	7 months	0.48	0.41 ^a	0.21	0.40	0.039	0.062	0.375
	8 months	0.37	0.31 ^b	0.43	0.29	0.058	0.878	0.394
<i>p-value</i>		0.123	0.003	0.352	0.106			
C18	5 months	12.79 ^b	12.77 ^a	14.06 ^b	12.73 ^a	0.249	0.207	0.168
	6 months	13.74 ^b	11.26 ^b	13.60 ^b	12.58 ^a	0.250	0.119	<0.001
	7 months	15.43 ^a	11.51 ^b	14.52 ^b	10.84 ^b	0.393	0.046	<0.001
	8 months	14.96 ^a	10.91 ^b	16.72 ^a	11.98 ^a	0.445	<0.001	<0.001
<i>p-value</i>		<0.001	0.011	<0.001	0.006			
C24	5 months	1.56 ^a	1.06	2.04	1.58 ^a	0.097	0.004	0.005
	6 months	1.20 ^{ab}	1.27	1.52	0.90 ^b	0.127	0.924	0.283
	7 months	0.87 ^{bc}	0.66	1.12	0.35 ^c	0.103	0.894	0.015
	8 months	0.67 ^c	1.15	1.15	0.78 ^b	0.087	0.725	0.736
<i>p-value</i>		0.002	0.232	0.065	<0.001			
ΣSFA	5 months	39.30 ^c	43.18 ^b	41.11 ^b	41.33	0.646	0.987	0.114
	6 months	43.33 ^b	39.98 ^c	42.55 ^b	41.87	0.487	0.547	0.035
	7 months	47.24 ^a	46.71 ^a	43.25 ^b	41.36	0.573	0.001	0.353
	8 months	46.93 ^a	42.16 ^{bc}	48.21 ^a	41.53	0.677	0.720	<0.001
<i>p-value</i>		<0.001	<0.001	0.010	0.973			

Abbreviations: SFA: saturated fatty acids; SEM: standard error of the mean; values with different superscript letters (a, b, c) within the same column per fixed effect (age of slaughter) differ significantly ($p < 0.05$). The effect of interaction between “Breed” and “Gender” was not significant; therefore, significance is only presented for main effects.

Table S6. Monounsaturated fatty acid profile of breast meat at different slaughter ages (g/100g of total detected fatty acids) (n = 8).

Items	Age at slaughter	<i>Bionda Piemontese</i>		<i>Bianca di Saluzzo</i>		SEM	<i>p-value</i>	
		Male	Female	Male	Female		Breed	Gender
C16 :1n7	5 months	1.23	1.56 ^b	0.69	1.51 ^b	0.132	0.244	0.027
	6 months	1.07	1.95 ^b	1.23	1.80 ^b	0.134	0.986	0.006
	7 months	1.17	3.71 ^a	1.10	3.24 ^a	0.239	0.260	<0.001
	8 months	1.34	2.16 ^b	0.56	1.81 ^b	0.147	0.012	<0.001
<i>p-value</i>		0.846	<0.001	0.056	<0.001			
C18 :1c9	5 months	25.46 ^b	31.20 ^c	23.34 ^b	29.87 ^c	0.804	0.157	<0.001
	6 months	28.40 ^{ab}	31.39 ^c	30.07 ^a	32.39 ^{bc}	0.706	0.340	0.063
	7 months	29.43 ^a	40.48 ^a	30.82 ^a	40.78 ^a	1.097	0.474	<0.001
	8 months	30.79 ^a	36.95 ^b	28.49 ^a	34.20 ^b	0.796	0.036	<0.001
<i>p-value</i>		0.033	<0.001	0.001	<0.001			
C20: 1	5 months	0.20	0.18	0.06	0.28	0.030	0.756	0.071
	6 months	0.38	0.15	0.09	0.34	0.037	0.392	0.913
	7 months	0.23	0.26	0.26	0.29	0.034	0.681	0.681
	8 months	0.27	0.21	0.20	0.19	0.032	0.537	0.574
<i>p-value</i>		0.224	0.605	0.229	0.403			
C24:1	5 months	0.58	0.64 ^a	0.98	0.53 ^a	0.072	0.289	0.159
	6 months	0.33	0.70 ^a	0.62	0.59 ^a	0.065	0.498	0.179
	7 months	0.56	0.15 ^b	0.42	0.21 ^b	0.088	0.808	0.085
	8 months	0.21	0.51 ^a	0.72	0.68 ^a	0.065	0.006	0.260
<i>p-value</i>		0.384	0.013	0.090	0.006			
ΣMUFA	5 months	27.46	33.58 ^c	25.08 ^b	32.20 ^c	0.871	0.155	<0.001
	6 months	30.18	34.19 ^c	32.01 ^a	35.12 ^{bc}	0.812	0.381	0.029
	7 months	31.38	44.60 ^a	32.60 ^a	44.52 ^a	0.774	0.674	<0.001
	8 months	32.62	39.83 ^b	29.97 ^a	36.89 ^b	0.902	0.033	<0.001
<i>p-value</i>		0.087	<0.001	0.003	<0.001			

Abbreviations: MUFA: monounsaturated fatty acids; SEM: standard error of the mean; values with different superscript letters (a, b, c) within the same column per fixed effect (age of slaughter) differ significantly ($p < 0.05$). The effect of interaction between “Breed” and “Gender” was not significant; therefore, significance is only presented for main effects.

Table S7. Polyunsaturated fatty acid profile of breast meat at different slaughter ages (g/100g of total detected fatty acids) (n = 8).

Items	Age at slaughter	<i>Bionda Piemontese</i>		<i>Bianca di Saluzzo</i>		SEM	<i>p-value</i>	
		Male	Female	Male	Female		Breed	Gender
C18 :2n6	5 months	15.18	13.07 ^a	15.00	13.47	0.476	0.908	0.063
	6 months	12.97	13.95 ^a	11.47	11.75	0.369	0.011	0.359
	7 months	11.71	4.71 ^b	12.69	9.49	0.762	0.015	<0.001
	8 months	13.67	11.90 ^a	13.37	11.22	0.567	0.666	0.094
<i>p-value</i>		0.256	<0.001	0.056	0.060			
C20 :2n6	5 months	0.32	0.16 ^{ab}	0.19	0.24	0.035	0.700	0.438
	6 months	0.25	0.11 ^b	0.37	0.13	0.369	0.211	0.002
	7 months	0.22	0.03 ^b	0.21	0.12	0.030	0.458	0.012
	8 months	0.23	0.28 ^a	0.39	0.18	0.037	0.735	0.276
<i>p-value</i>		0.631	0.009	0.224	0.376			
C20: 4n6	5 months	10.19 ^a	6.86 ^a	12.67 ^a	8.06 ^a	0.578	0.047	<0.001
	6 months	7.72 ^a	7.35 ^a	8.32 ^b	6.24 ^{ab}	0.501	0.803	0.243
	7 months	4.69 ^b	0.65 ^b	5.74 ^b	1.84 ^c	0.610	0.282	0.001
	8 months	2.81 ^b	1.47 ^b	1.48 ^c	4.63 ^b	0.483	0.313	0.320
<i>p-value</i>		<0.001	<0.001	<0.001	<0.001			
Σn6 PUFA	5 months	25.69 ^a	20.09 ^a	27.85 ^a	21.77 ^a	0.909	0.217	0.004
	6 months	20.94 ^b	21.43 ^a	20.15 ^b	18.25 ^{ab}	0.714	0.177	0.625
	7 months	16.62 ^b	5.41 ^c	18.64 ^b	11.48 ^c	1.240	0.028	<0.001
	8 months	16.72 ^b	13.65 ^b	15.24 ^b	16.03 ^{bc}	0.822	0.792	0.503
<i>p-value</i>		0.001	<0.001	<0.001	0.001			
C18 :3n3	5 months	0.06	0.11 ^b	0.00 ^b	0.15	0.018	0.759	0.004
	6 months	0.06	0.11 ^b	0.03 ^b	0.13	0.021	0.840	0.109
	7 months	0.09	0.10 ^b	0.14 ^a	0.19	0.020	0.109	0.506
	8 months	0.12	0.54 ^a	0.02 ^b	0.20	0.056	0.024	0.003
<i>p-value</i>		0.597	0.001	0.002	0.742			
C20 :5n3	5 months	1.21 ^a	0.36	0.71	0.40	0.201	0.571	0.159
	6 months	0.22 ^b	0.44	0.61	0.62	0.158	0.389	0.735
	7 months	0.06 ^b	0.01	0.50	0.01	0.061	0.039	0.014
	8 months	0.31 ^b	0.12	1.00	0.30	0.166	0.193	0.179
<i>p-value</i>		0.047	0.542	0.853	0.406			
C22 :5n3	5 months	1.08 ^a	0.65 ^a	1.25	0.70 ^a	0.092	0.513	0.007
	6 months	0.60 ^b	0.52 ^a	0.85	0.54 ^a	0.061	0.269	0.114
	7 months	0.40 ^b	0.05 ^b	0.77	0.15 ^b	0.087	0.124	0.003
	8 months	0.36 ^b	0.27 ^b	0.84	0.49 ^a	0.166	0.004	0.060
<i>p-value</i>		0.004	<0.001	0.353	0.005			
C22 :6n3	5 months	0.95 ^a	0.87 ^{ab}	1.14	0.66 ^{ab}	0.086	0.956	0.104
	6 months	0.56 ^b	1.15 ^a	0.72	0.73 ^{ab}	0.076	0.347	0.036
	7 months	0.38 ^b	0.08 ^c	0.61	0.18 ^b	0.071	0.199	0.007

	8 months	0.31 ^b	0.49 ^{bc}	0.80	1.13 ^a	0.127	0.027	0.296
<i>p</i>-value		0.008	<0.001	0.279	0.041			
Σn3 PUFA	5 months	3.31 ^a	1.98 ^a	3.11	1.92 ^a	0.280	0.805	0.028
	6 months	1.45 ^b	2.22 ^a	2.21	2.03 ^a	0.209	0.511	0.493
	7 months	0.93 ^b	0.24 ^b	2.03	0.54 ^b	0.168	0.008	<0.001
	8 months	1.10 ^b	1.42 ^a	2.66	2.11 ^a	0.283	0.050	0.837
<i>p</i>-value		0.002	<0.001	0.641	0.021			
ΣPUFA	5 months	29.01 ^a	22.08 ^a	30.96 ^a	23.69 ^a	1.041	0.303	0.002
	6 months	22.39 ^b	23.63 ^a	22.36 ^b	20.15 ^{ab}	0.829	0.305	0.774
	7 months	17.56 ^b	5.63 ^c	20.67 ^b	11.98 ^c	1.370	0.019	<0.001
	8 months	17.82 ^b	15.08 ^b	17.90 ^b	18.14 ^b	0.877	0.386	0.487
<i>p</i>-value		<0.001	<0.001	0.001	<0.001			

Abbreviations: PUFA: polyunsaturated fatty acids; SEM: standard error of the mean; values with different superscript letters (a, b, c) within the same column per fixed effect (age of slaughter) differ significantly ($p < 0.05$). The effect of interaction between “Breed” and “Gender” was not significant; therefore, significance is only presented for main effects.

Table S8. Saturated fatty acid profile of thigh meat at different slaughter ages (g/100g of total fatty acids) (n = 8).

Items	Age at slaughter	<i>Bionda Piemontese</i>		<i>Bianca di Saluzzo</i>		SEM	<i>p-value</i>	
		Male	Female	Male	Female		Breed	Gender
C14	5 months	0.97 ^a	1.26	0.86 ^a	1.01	0.049	0.038	0.015
	6 months	0.97 ^a	1.09	0.88 ^a	0.99	0.022	0.013	0.005
	7 months	0.84 ^{ab}	1.08	0.71 ^b	1.05	0.033	0.071	<0.001
	8 months	0.80 ^b	1.08	0.62 ^b	0.96	0.035	<0.001	<0.001
<i>p-value</i>		0.043	0.250	<0.001	0.470			
C16	5 months	32.53	36.68	30.53 ^{ab}	32.90 ^b	0.524	<0.001	<0.001
	6 months	33.27	35.58	32.16 ^a	34.84 ^{ab}	0.411	0.199	0.001
	7 months	32.96	36.27	31.42 ^a	36.42 ^a	0.486	0.277	<0.001
	8 months	31.62	36.42	29.05 ^b	34.39 ^{ab}	0.582	0.001	<0.001
<i>p-value</i>		0.494	0.542	0.002	0.023			
C17	5 months	0.45	0.38	0.51	0.47	0.018	0.024	0.090
	6 months	0.43	0.39	0.44	0.45	0.025	0.509	0.813
	7 months	0.47	0.45	0.44	0.39	0.011	0.029	0.057
	8 months	0.43	0.49	0.43	0.32	0.021	0.031	0.469
<i>p-value</i>		0.822	0.139	0.263	0.096			
C18	5 months	18.83 ^c	13.12	21.33	14.64 ^a	0.696	0.017	<0.001
	6 months	19.20 ^{bc}	12.44	18.09	13.45 ^{ab}	0.625	0.946	<0.001
	7 months	21.35 ^a	12.36	19.45	12.00 ^b	0.839	0.168	<0.001
	8 months	20.92 ^{ab}	12.50	21.05	12.86 ^{ab}	0.807	0.709	<0.001
<i>p-value</i>		0.029	0.685	0.132	0.045			
C24	5 months	0.67	0.57 ^c	0.50	0.50 ^b	0.045	0.205	0.608
	6 months	0.31	0.96 ^{bc}	0.76	0.88 ^{ab}	0.076	0.156	0.006
	7 months	0.53	1.25 ^{ab}	0.66	1.01 ^a	0.090	0.734	0.002
	8 months	0.72	1.50 ^a	0.62	1.14 ^a	0.089	0.088	<0.001
<i>p-value</i>		0.052	0.001	0.378	0.022			
ΣSFA	5 months	53.45 ^b	52.01	53.73	49.52	0.537	0.248	0.005
	6 months	54.18 ^{ab}	50.47	52.34	50.61	0.536	0.388	0.009
	7 months	56.15 ^a	51.40	52.69	50.87	0.573	0.039	0.001
	8 months	54.49 ^{ab}	51.99	51.77	49.67	0.562	0.017	0.028
<i>p-value</i>		0.148	0.324	0.657	0.798			

Abbreviations: SFA: saturated fatty acids; SEM: standard error of the mean; values with different superscript letters (a, b, c) within the same column per fixed effect (age of slaughter) differ significantly ($p < 0.05$). The effect of interaction between “Breed” and “Gender” was not significant; therefore, significance is only presented for main effects.

Table S9. Monounsaturated fatty acid profile of thigh meat at different slaughter ages (g/100g of total fatty acids) (n = 8).

Items	Age at slaughter	<i>Bionda Piemontese</i>		<i>Bianca di Saluzzo</i>		SEM	<i>p</i> -value	
		Male	Female	Male	Female		Breed	Gender
C16 :1n7	5 months	3.07 ^a	4.67	2.53 ^{ab}	3.88	0.196	0.022	<0.001
	6 months	2.95 ^a	4.46	3.27 ^a	4.24	0.174	0.865	<0.001
	7 months	2.20 ^b	4.24	2.53 ^{ab}	4.63	0.223	0.159	<0.001
	8 months	2.47 ^{ab}	4.61	1.97 ^b	3.98	0.225	0.026	<0.001
<i>p</i> -value		0.019	0.762	0.026	0.142			
C18 :1c9	5 months	34.84	36.63	32.62 ^b	37.73	0.509	0.482	<0.001
	6 months	36.44	38.98	37.41 ^a	40.04	0.511	0.288	0.011
	7 months	33.68	39.25	36.96 ^a	40.25	0.602	0.016	<0.001
	8 months	34.97	37.88	34.57 ^{ab}	40.18	0.575	0.269	<0.001
<i>p</i> -value		0.102	0.087	0.008	0.137			
C20: 1	5 months	0.40	0.39	0.53	0.55 ^a	0.024	0.002	0.849
	6 months	0.46	0.38	0.55	0.41 ^b	0.023	0.153	0.011
	7 months	0.37	0.36	0.42	0.34 ^{bc}	0.034	0.840	0.569
	8 months	0.38	0.26	0.48	0.26 ^c	0.036	0.466	0.021
<i>p</i> -value		0.686	0.344	0.548	<0.001			
C24:1	5 months	0.02 ^b	0.14	0.30	0.14	0.034	0.032	0.705
	6 months	0.37 ^a	0.25	0.18	0.19	0.041	0.138	0.468
	7 months	0.11 ^b	0.23	0.16	0.13	0.033	0.696	0.568
	8 months	0.22 ^{ab}	0.31	0.13	0.14	0.036	0.065	0.479
<i>p</i> -value		0.014	0.442	0.371	0.899			
ΣMUFA	5 months	38.34 ^{ab}	41.83	35.98 ^c	42.31	0.643	0.321	<0.001
	6 months	40.22 ^a	44.07	41.42 ^a	44.88	0.647	0.394	0.004
	7 months	36.36 ^b	44.08	40.07 ^{ab}	45.35	0.774	0.013	<0.001
	8 months	38.04 ^{ab}	43.07	37.15 ^{bc}	44.56	0.759	0.777	<0.001
<i>p</i> -value		0.049	0.230	0.020	0.148			

Abbreviations: MUFA: monounsaturated fatty acids; SEM: standard error of the mean; values with different superscript letters (a, b, c) within the same column per fixed effect (age of slaughter) differ significantly ($p < 0.05$). The effect of interaction between “Breed” and “Gender” was not significant; therefore, significance is only presented for main effects.

Table S10. Polyunsaturated fatty acid profile of thigh meat at different slaughter ages (g/100g of total fatty acids) (n = 8).

Items	Age at slaughter	<i>Bionda Piemontese</i>		<i>Bianca di Saluzzo</i>		SEM	<i>p-value</i>	
		Male	Female	Male	Female		Breed	Gender
C18 :2n6	5 months	4.59	2.98 ^a	4.92	3.07 ^a	0.316	0.716	0.006
	6 months	4.10	2.13 ^b	3.27	2.16 ^b	0.225	0.275	<0.001
	7 months	4.12	1.72 ^b	4.21	1.35 ^c	0.280	0.645	<0.001
	8 months	4.69	2.03 ^b	6.48	2.11 ^b	0.495	0.232	<0.001
<i>p-value</i>		0.719	0.001	0.110	<0.001			
C20 :2n6	5 months	0.03	0.02 ^a	0.02	0.02	0.007	0.781	0.968
	6 months	0.04	0.00 ^b	0.01	0.00	0.006	0.236	0.065
	7 months	0.00	0.00 ^b	0.01	0.00	0.002	0.165	0.165
	8 months	0.03	0.00 ^b	0.04	0.01	0.010	0.755	0.112
<i>p-value</i>		0.595	0.004	0.438	0.290			
C20: 4n6	5 months	0.46	0.49 ^a	1.80 ^a	1.13	0.210	0.017	0.427
	6 months	0.43	0.13 ^b	0.44 ^b	0.18	0.046	0.719	0.002
	7 months	0.49	0.12 ^b	0.45 ^b	0.07	0.058	0.655	0.001
	8 months	0.66	0.11 ^b	0.37 ^b	0.45	0.089	0.882	0.168
<i>p-value</i>		0.702	0.041	0.003	0.063			
Σn6 PUFA	5 months	5.08	3.49 ^a	6.73 ^a	4.23 ^a	0.358	0.056	0.002
	6 months	4.57	2.26 ^b	3.72 ^b	2.35 ^b	0.271	0.389	<0.001
	7 months	4.61	1.84 ^b	4.67 ^{ab}	1.42 ^c	0.323	0.624	<0.001
	8 months	5.39	2.14 ^b	6.90 ^a	2.56 ^b	0.502	0.207	<0.001
<i>p-value</i>		0.674	0.001	0.045	<0.001			
C18 :3n3	5 months	0.08	0.09	0.22	0.15	0.025	0.057	0.514
	6 months	0.19	0.08	0.13	0.10	0.025	0.782	0.188
	7 months	0.17	0.12	0.12	0.06	0.024	0.293	0.240
	8 months	0.13	0.09	0.05	0.03	0.018	0.061	0.468
<i>p-value</i>		0.652	0.800	0.170	0.104			
C20 :5n3	5 months	0.00	0.09	0.00	0.07	0.022	0.793	0.079
	6 months	0.00	0.29	0.07	0.06	0.064	0.542	0.281
	7 months	0.00	0.13	0.00	0.05	0.026	0.484	0.085
	8 months	0.11	0.27	0.00	0.01	0.056	0.102	0.461
<i>p-value</i>		0.407	0.757	0.407	0.693			
C22 :5n3	5 months	0.00	0.00	0.04 ^b	0.15	0.028	0.103	0.335
	6 months	0.00	0.11	0.00 ^b	0.00	0.029	0.326	0.326
	7 months	0.00	0.00	0.00 ^b	0.00	-	-	-
	8 months	0.00	0.00	0.62 ^a	0.00	0.097	0.094	0.094
<i>p-value</i>		-	0.407	0.055	0.132			
C22 :6n3	5 months	0.24 ^a	0.00	0.00 ^b	0.12	0.041	0.441	0.441
	6 months	0.00 ^b	0.12	0.00 ^b	0.00	0.030	0.326	0.326
	7 months	0.00 ^b	0.00	0.00 ^b	0.00	-	-	-

	8 months	0.00 ^b	0.00	0.94 ^a	0.00	0.146	0.090	0.090
<i>p</i>-value		0.028	0.407	0.043	0.132			
Σn3 PUFA	5 months	0.32	0.19	0.25	0.51 ^a	0.059	0.263	0.631
	6 months	0.19	0.60	0.20	0.16 ^b	0.081	0.187	0.238
	7 months	0.17	0.25	0.12	0.12 ^b	0.037	0.257	0.667
	8 months	0.24	0.36	1.60	0.04 ^b	0.242	0.262	0.126
<i>p</i>-value		0.753	0.369	0.078	0.011			
ΣPUFA	5 months	5.40	3.67 ^a	6.99 ^{ab}	4.74 ^a	0.379	0.053	0.005
	6 months	4.76	2.87 ^b	3.93 ^c	2.51 ^{bc}	0.267	0.201	0.001
	7 months	4.79	2.09 ^b	4.80 ^{bc}	1.54 ^c	0.319	0.458	<0.001
	8 months	5.63	2.50 ^b	8.50 ^a	2.60 ^b	0.564	0.052	<0.001
<i>p</i>-value		0.623	0.002	0.004	<0.001			

Abbreviations: PUFA: polyunsaturated fatty acids; SEM: standard error of the mean; values with different superscript letters (a, b, c) within the same column per fixed effect (age of slaughter) differ significantly ($p < 0.05$). The effect of interaction between “Breed” and “Gender” was not significant; therefore, significance is only presented for main effects.