

**Table S1.** Average chemical composition of ration ingredients on dry matter (%) basis (mean  $\pm$  standard deviation).

Parameter (%)	Hay	Concentrate
	Mean $\pm$ Standard Deviation	Mean $\pm$ Standard Deviation
Moisture	11.73 $\pm$ 2.57	12.77 $\pm$ 1.05
Dry Matter	88.27 $\pm$ 2.57	87.23 $\pm$ 1.05
Crude Protein	8.96 $\pm$ 3.92	15.65 $\pm$ 1.98
Ether Extract	1.52 $\pm$ 0.50	3.03 $\pm$ 0.57
Crude Fiber	34.19 $\pm$ 4.04	5.83 $\pm$ 1.02
Neutral Detergent Fiber	65.90 $\pm$ 7.49	24.16 $\pm$ 3.41
Acid Detergent Fiber	45.44 $\pm$ 4.83	9.78 $\pm$ 1.07
Acid Detergent Lignin	9.12 $\pm$ 2.18	3.98 $\pm$ 1.29
Ash	8.55 $\pm$ 1.42	6.66 $\pm$ 1.92

**Table S2.** Genotype distribution at *MSTN* locus: comparison by  $\chi^2$  test (df in square parentheses) between two different samples of Marchigiana beef cattle (relative frequencies are shown in parentheses).

	N	<i>MSTN</i> Genotype	
		+/+	+/-
Present study	78	67 (85.90%)	11 (14.10%)
Lasagna et al. [30]	279	227 (81.37%)	52 (18.63%)
Chi-square Test		$\chi^2_{[1]} = 0.86; P = 0.35$	

Numbers within square brackets indicate the degree of freedom.