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## ANIMAL MANAGEMENT & HEALTH [M] Poster CMNSI.23

**EU Project "Assessment of Genetic Variation in Meat Quality and the evaluation of role of candidate genes in beef characteristics with a view to breeding for improved product quality" - First production and carcass quality results**

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Some previous data on production and carcass quality results from 8 European cattle breeds (*Asturiana de la Montana*, *Asturiana de los Valles*, *Avilena-Nigra Iberica*, *Charolais*, *Limousine*, *Marchigiana*, *Piemontese*, *Pirenaica*) are presented. These results are part of an ongoing larger EU Project, which contains a total of 450 animals from 15 different breeds; meat quality parameters are measured in all animals. The aim of this Project is to relate quality parameters and molecular gene information of the same animals. Animals were reared intensively in the same conditions with concentrate *ad libitum* and cereal straw.

Results show variability between the European breeds studied and also important variability within the same breed, which could give good information to improve their quality.

Animals were slaughtered at about 15 months of age (from 428 d to 469 d) and at final weights varied between 444.0 and 624.7 kg kilogrammes.

Average daily gain was between 1.191 and 1.530 kilogrammes. The rustic types had longer legs and poorer conformation scores, however fatness fat percentage was higher in this type of breed.

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## Poster CMNSI.24

**Effect of housing system on meat quality of Piemontese young bulls**

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Thirty hypertrophied Piemontese young bulls were divided in two groups: 15 subjects were tie stalled, 15 were housed in pens. The animals were fed hay and concentrate and were slaughtered at an average weight of 560 kg. After 7 days of cooling, from the right side of each carcass, samples of *longissimus thoracis et lumborum* (LT), *semitendinosus* (St), and *supraspinatus* (Ss) were taken to perform chemical, physical and sensorial analyses. The results indicate that the housing system and muscle had a significant influence on water, hydroxyproline, haeme iron content and lightness. Moreover, there was a significant effect of housing system on collagen solubility, while the muscle affected fat content, shear force, drip and cooking losses. The meat from animals reared in pens had a higher water, hydroxyproline and haeme iron content, collagen solubility, but a lower lightness. Concerning muscles, LT showed the lowest values for water and hydroxyproline, lightness, shear force, drip and cooking losses. On the contrary, Ss had the highest fat and haeme iron content. The interaction housing system by muscle was significant for protein, redness and yellowness. Ss showed the same protein content in both the housing systems, while LT and St had a protein content lower in meat from animals reared in pens. In these latter, redness and yellowness values were higher in Ss and lower in LT and St.