

# **International Scientific Meeting on Colostrum**

## **Book of Abstracts**



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**Title: Effect of parity and age in dairy cows' colostrum quality**

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Abstract: Colostrum from primiparous cows is usually regarded as low-quality colostrum when compared to multiparous cows. This study's main objective was to compare colostrum quality between primiparous (P) and multiparous (M) dairy cows. Samples of fresh colostrum were obtained from 709 cows between 2020 and 2022 in a dairy farm located in Alentejo, Portugal. Colostrum quality was assessed with a digital Brix refractometer in fresh samples and the results were compared between parity and age. Data did not follow a normal distribution; thus, non-parametric tests were employed. The mean and median of Brix were, respectively,  $25.3 \pm 4.9$  and 25.0% and ranged from 11.0 to 42.0%. In total, 73% of the samples were above the threshold of high-quality colostrum (22%). There were no significant differences in the Brix measurements between P and M ( $P=0.384$ ; median of 25.0% in both P and M; mean of 25.5 and 25.2% in P and M colostrum, respectively). The age analysis revealed a significant difference between the Brix median values ( $P<0.001$ ), showing that colostrum from cows with 3 years of age had lower Brix than colostrum from cows with 5 and 9 years. Furthermore, colostrum from cows aged four years had inferior Brix readings than cows 9 years old. These results show that colostrum from primiparous cows should not be deemed as lower-quality colostrum and that colostrum from second-parity cows may have lower quality, as shown in previous literature.

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