

Texture of Cachena Meat

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1. INTRODUCTION



CACHENA

- One of cattle breeds, part of the Portuguese genetic heritage.
- High interest for the south Alentejo region.
- High rusticity and small animals.
- Meat is known by its excellent characteristics of texture and flavours.



MEAT QUALITY

Tenderness → Affected by complex interactions of multiple antemortem and postmortem factors.

- Animal genetics
- Age
- Handling
- Feeding
- Weight
- Slaughter process

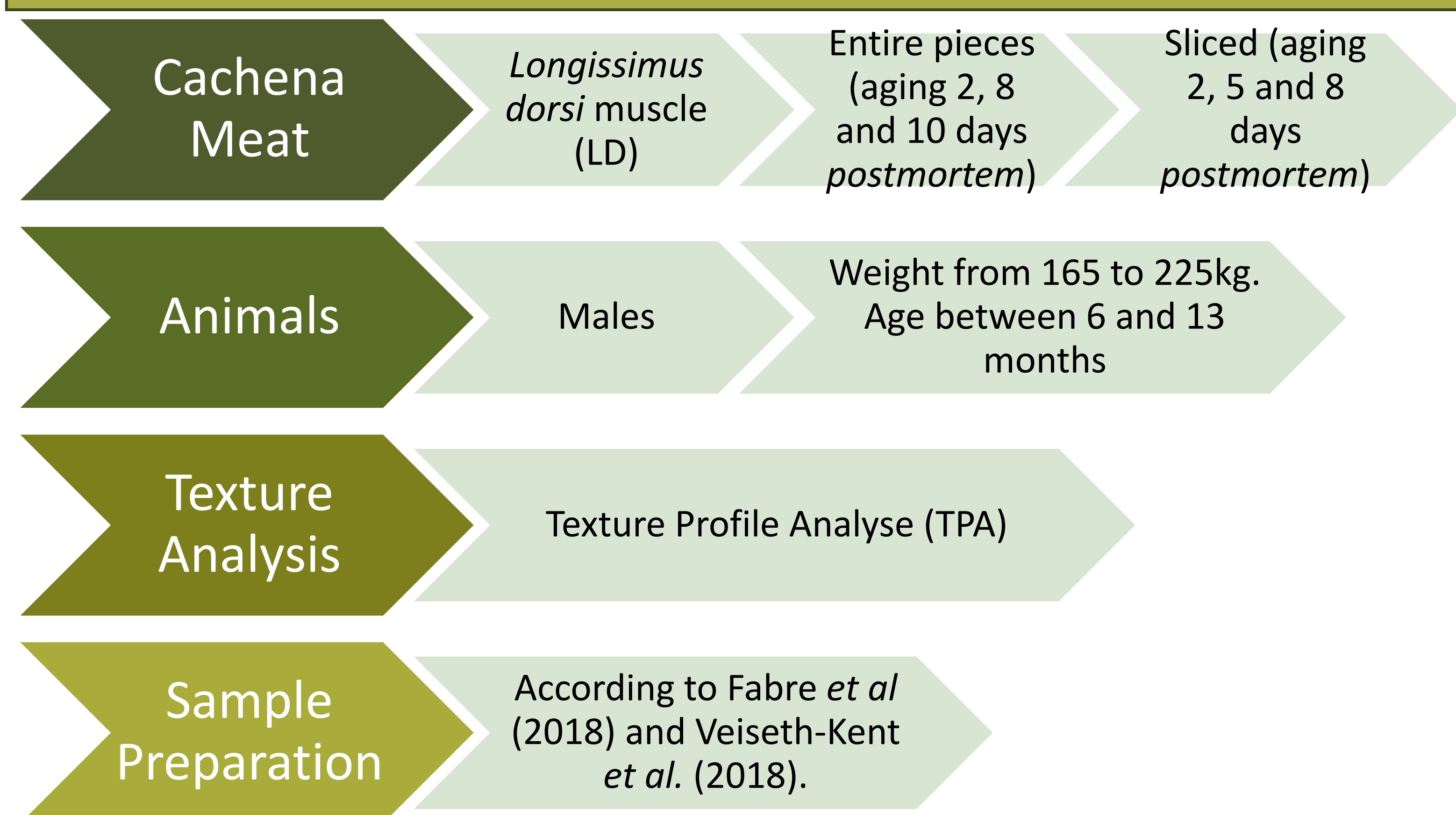
The determination of the factors that affect meat tenderness of Cachena is of extreme importance for the producers and for the industry.

2. OBJECTIVES

The goal of GO-CACHENA project is understanding the relation among the ante-mortem and post-mortem factors, with the tenderness of Cachena meat.

This research work is part of the refereed project and obtained on preliminary results useful for the persecution of the main goals.

3. MATERIAL AND METHODS



4. RESULTS AND DISCUSSION

- Entire pieces

Different letters indicate statistically differences between aging days (p < 0.05; Tukey HSD).

Aging	Tenderness (N)	Springiness (mm)	Chewiness (J)
2 days	10,38 ± 5,43	0,53 ± 0,09 a	3,76 ± 2,31
8 days	9,74 ± 4,13	0,55 ± 0,10 ab	3,51 ± 1,78
10 days	11,00 ± 5,10	0,58 ± 0,12 b	4,09 ± 2,28

The values of tenderness unexpectedly increase slightly.

The results shown the only significant difference was found in the values of SPRINGINESS

- Slices

Aging	Tenderness (N)	Springiness (mm)	Chewiness (J)
2 days	15,41 ± 5,28	0,64 ± 0,11	6,17 ± 2,48
5 days	16,31 ± 8,90	0,61 ± 0,09	6,16 ± 3,64
8 days	13,91 ± 6,23	0,62 ± 0,11	5,42 ± 2,65

There aren't significant differences for Tenderness, Springiness and Chewiness for sliced meat, however a slight decrease was noticeable.

DIFFERENCES BETWEEN ENTIRE PIECES AND SLICES:

There is a great heterogeneity of Tenderness, Springiness and Chewiness values between entire pieces and slices, which varies according to the animal.

It should be noted that the preliminary results obtained do not show that the differences may be related to weight or age.

5. CONCLUSIONS

The dramatic heterogeneity in the meat of animals may be caused by genetic factors.

This statement confirms the necessity of deep studies like that of GO-CACHENA project.

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