

# Effect of the diet, fatness degree and ageing on meat sensory quality

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# 48 young Pirenaica breed bulls

**3 diets**

Control (*barley, maize, soya bean meal*)

5% linseed seed

5% linseed seed + 200 IU vit E/Kg

**2 fatness degrees**

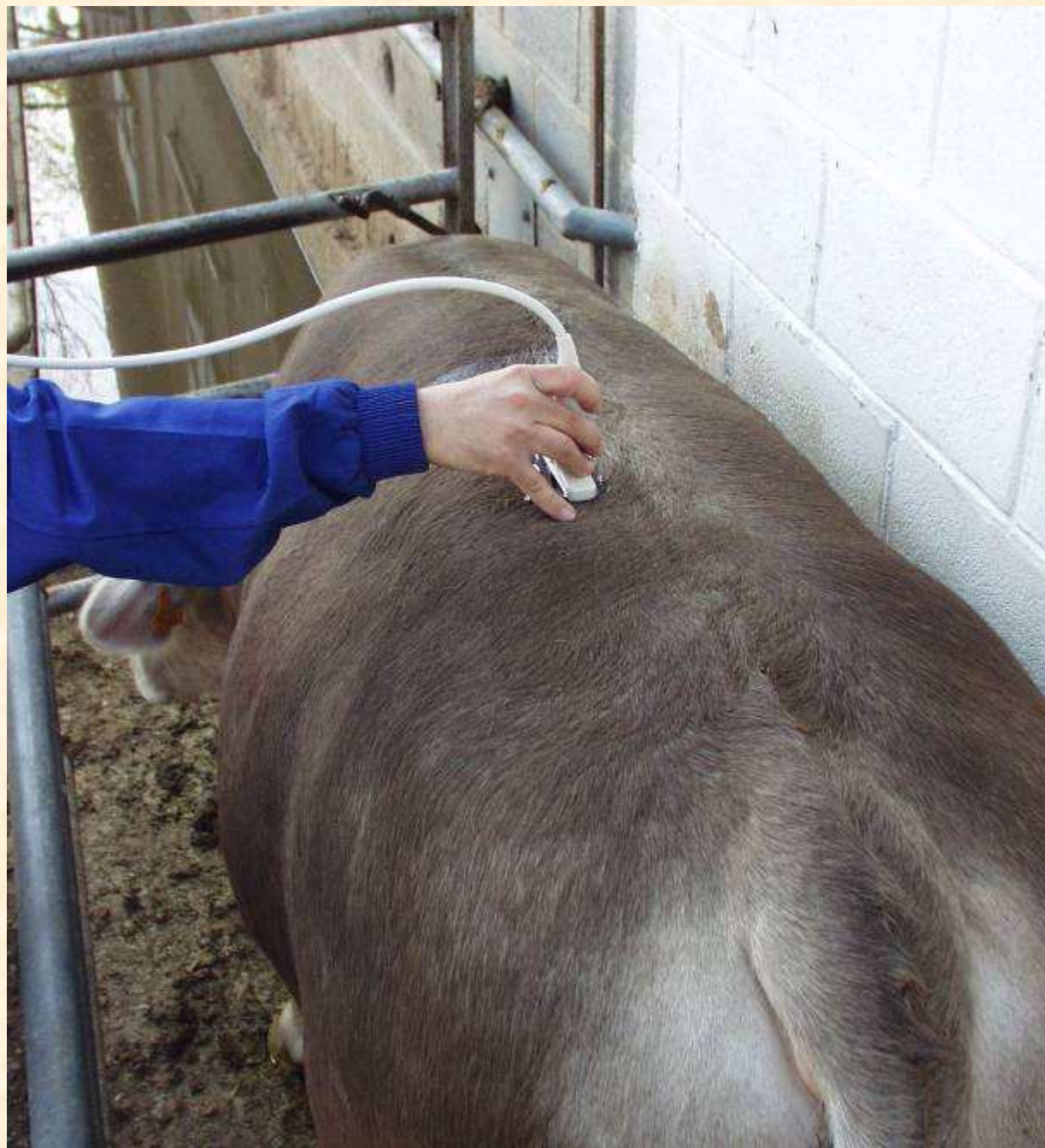
3 mm subcutaneous fat

4 mm subcutaneous fat

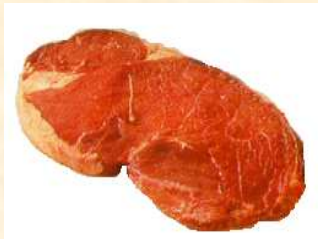
**2 ageing periods**

2 days of ageing

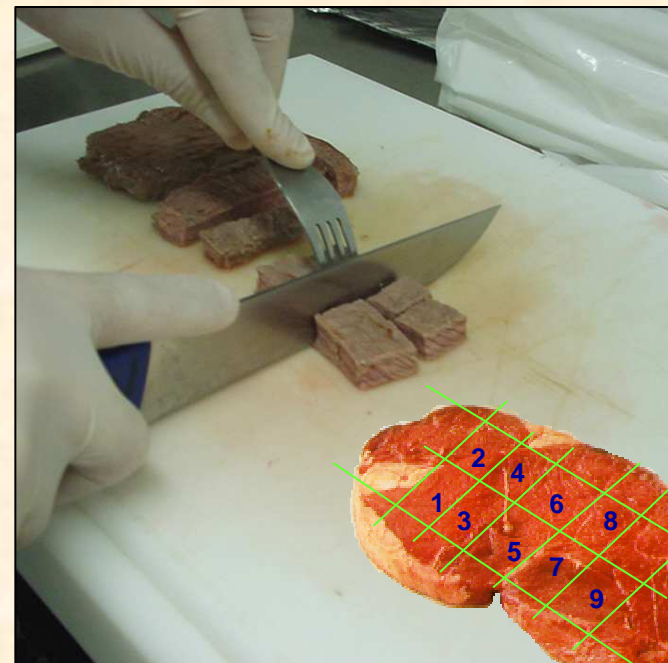
14 days of ageing







2 cm thickness



9 trained members

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Beef odour \_\_\_\_\_

Milk odour \_\_\_\_\_

Rancid odour \_\_\_\_\_

Tenderness \_\_\_\_\_

Juiciness \_\_\_\_\_

Fibrosity \_\_\_\_\_

Beef flavour \_\_\_\_\_

Metallic flavour \_\_\_\_\_

Acid flavour \_\_\_\_\_

Rancid flavour \_\_\_\_\_

Overall appraisal \_\_\_\_\_

	<u>3 mm</u>	<u>4 mm</u>	
Beef odour	4.73	4.78	
Milk odour	1.45	1.53	
Rancid odour	0.98	1.15	↑
Tenderness	4.31	4.93	↑
Juiciness	3.99	4.21	↑
Fibrosity	5.95	5.69	↓
Beef flavour	5.31	5.47	↑
Metallic flavour	3.17	3.20	
Acid flavour	2.82	2.95	↑
Rancid flavour	1.24	1.31	
Overall appraisal	4.11	4.27	

## Fatness

*Fattener implies:*

More flavoured (good and bad)

More tender

More juice

	<u>Control</u>	<u>Linseed</u>	<u>Linseed+ vitE</u>
Beef odour	4.80	4.76	4.70
Milk odour	1.57	1.48	1.42
Rancid odour	1.09	1.03	1.07
Tenderness	4.60	4.67	4.59
Juiciness	4.03	4.12	4.15
Fibrosity	5.88	5.81	5.78
Beef flavour	5.40	5.36	5.41
Metallic flavour	3.15	3.14	3.27
Acid flavour	2.90	2.87	2.90
Rancid flavour	1.22	1.27	1.33
Overall appraisal	4.23	4.18	4.14

**Diet**

**No differences  
between diets**

	<u>2 days</u>	<u>14 days</u>	
Beef odour	4.70	4.81	
Milk odour	1.44	1.55	
Rancid odour	1.02	1.11	
Tenderness	4.23	5.01	↑
Juiciness	4.07	4.13	
Fibrosity	6.06	5.59	↓
Beef flavour	5.29	5.49	↑
Metallic flavour	3.16	3.21	
Acid flavour	2.82	2.96	↑
Rancid flavour	1.20	1.35	↑
Overall appraisal	4.11	4.26	

# Ageing

More time implies:

More tender  
More flavoured (good and bad)

# Conclusions

- **Diet did not affected sensorial meat characteristics, but ageing period and fatness degree did.**
- **As ageing period increased or fatness degree increased, meat became more tender and more flavoured.**
- **A balance between the benefits of ageing on tenderness and the development of adverse flavours with fatness would be desirable.**





*Thank you*