

# PORTUGUESE CONSUMERS' PREFERENCE REGARDING THREE PROTECTED DESIGNATION OF ORIGIN TRANSMONTANO GOATLING BUTCHER PIECES

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## 1. Introduction

The objective of the work was focused on the complete valorization of the cuts developed in the goatling carcass. Each half carcass was divided into three pieces: a rib, a shoulder, and a leg (Figures 1 to 3).

What would be the consumer's preference regarding any of these butcher's items?

Did the consumers value the three pieces differently?



Figure 1 - Rib



Figure 2 - Shoulder



Figure 3 - Leg

## 2. Methodology

A questionnaire was developed using the price analysis method proposed by Van Westendorp (1976). Van Westendorp's price sensitivity meter provides a set of specific prices that can help decide at what price you should introduce a new product to the market. The method uses quantitative data from respondents who answer four questions about the product:

- 1) What price would consumers consider the product a bargain (a good quality/price ratio)?
- 2) What price would consumers consider the product so cheap that they would doubt its quality?
- 3) What price would consumers consider the product slightly more expensive, but still consider purchasing it?
- 4) What price would consumers consider the product so expensive that they would not consider purchasing it?

A sample of 118 individuals was collected at the National Agriculture Fair (Ribatejo Fair), held from June 3 to 11, 2023, at the National Exhibition Center in Santarém, Portugal.

Data collection took place on June 3, 4, and 5 with visitors to the fair who, when questioned, decided to participate in the study voluntarily. The questionnaire took no more than ten minutes to complete and did not require personal identification to guarantee the respondent's anonymity. The research questionnaire was developed at the Sensory Analysis Laboratory of the Agriculture School, Polytechnic Institute of Bragança, and submitted for approval by Capriserra (producers' association) technicians.

Data analysis involved the use of statistical software suitable for the Social Sciences. Descriptive statistics were used to calculate central tendency and dispersion measures for the quantitative variables, as well as absolute (n) and relative (%) frequencies for the qualitative variables. The Friedman test was used to compare the probability of the consumer purchasing the different butcher pieces (rib, shoulder, and leg), and in situations where significant statistical differences were identified, multiple comparisons were made with the Wilcoxon test to identify the differences at a significance level of 5%. Data were subjected to Van Westendorp price analysis using Excel software.

## 3. Results and discussion

The sample consisted of individuals aged between 20 and 81 years. The average was 54.1 years ( $\pm 14.498$ ). As can be seen in Table 1, most respondents were aged between 25 and 64 years old (72.9%), male (69.5%), had secondary (25.4%) or higher (36.4%) education, lived in households of 2 (40.7%) or three people (23.7%) with a monthly income between 1,001 and 3,000 (44.9%) or 3,001 and 5,000 euros (21.2%). Figure 4 shows that most consumers lived in the districts of Santarém (30.5%), Lisboa (15.3%), and Leiria (11.0%).

Table 1 - Sample characterization

Variable	Group	Frequencies	
		n	%
Gender	Male	82	69.5
	Female	36	30.5
Age group	18 to 24 years	5	4.2
	25 to 64 years	86	72.9
	65 or more years	27	22.9
	Missing	0	0.0
Educational qualifications	Incomplete 1st cycle	1	0.8
	1 <sup>st</sup> Cycle (4 years)	14	11.9
	2 <sup>nd</sup> Cycle (6 years)	12	10.2
	3 <sup>rd</sup> Cycle (9 years)	18	15.3
	Secondary (12 years)	30	25.4
	Higher Education	43	36.4
Household monthly net income	< 500 euros	5	4.2
	501 to 1,000 euros	23	19.5
	1,001 to 3,000 euros	53	44.9
	3,001 to 5,000 euros	25	21.2
	> 5,000 euros	6	5.1
	Missing	6	5.1
Household size	1 person	8	6.8
	2 people	48	40.7
	3 people	28	23.7
	4 people	25	21.2
	> 4 people	9	7.6
	Missing	0	0.0

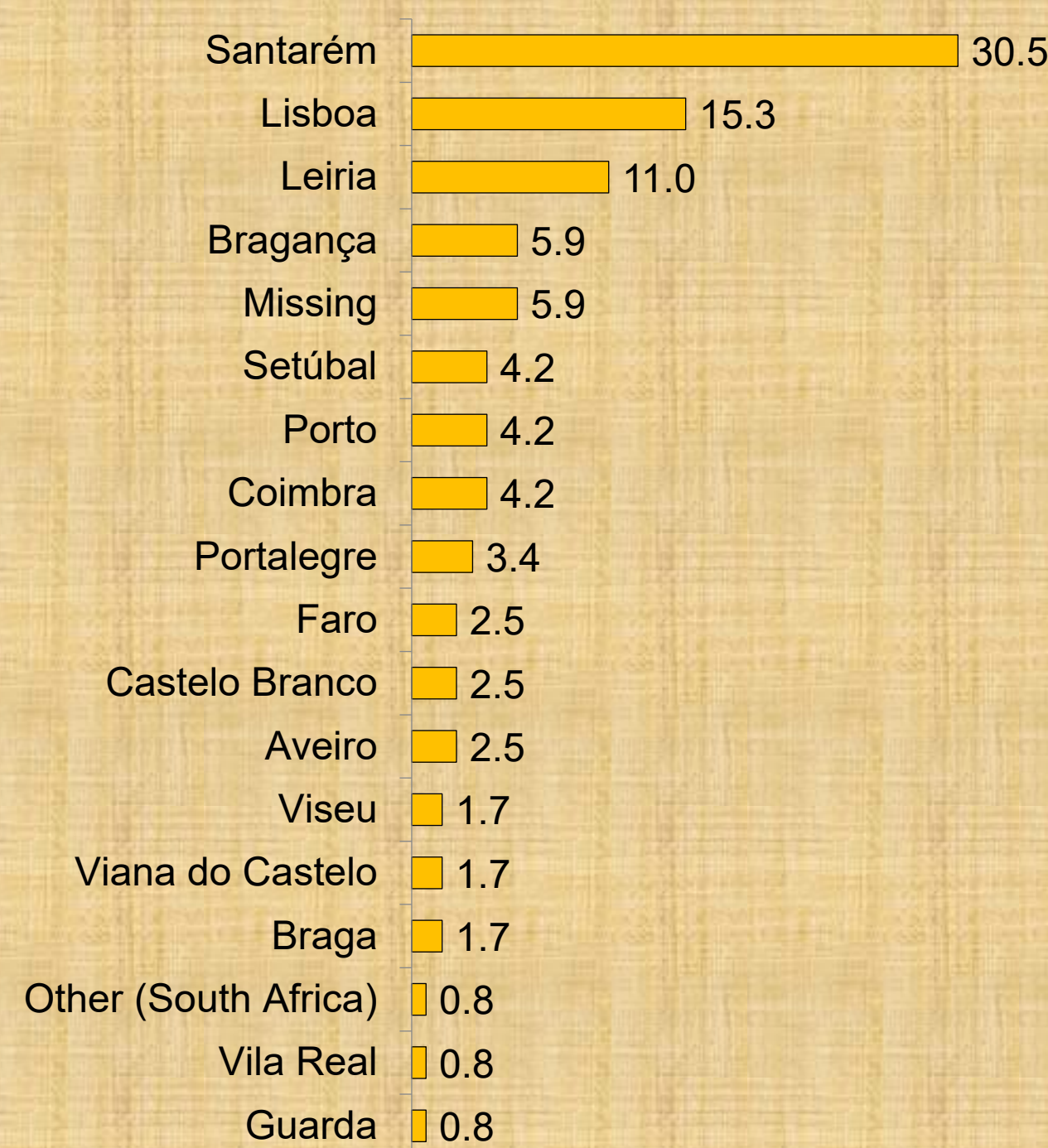


Figure 4 - District of residence (%)

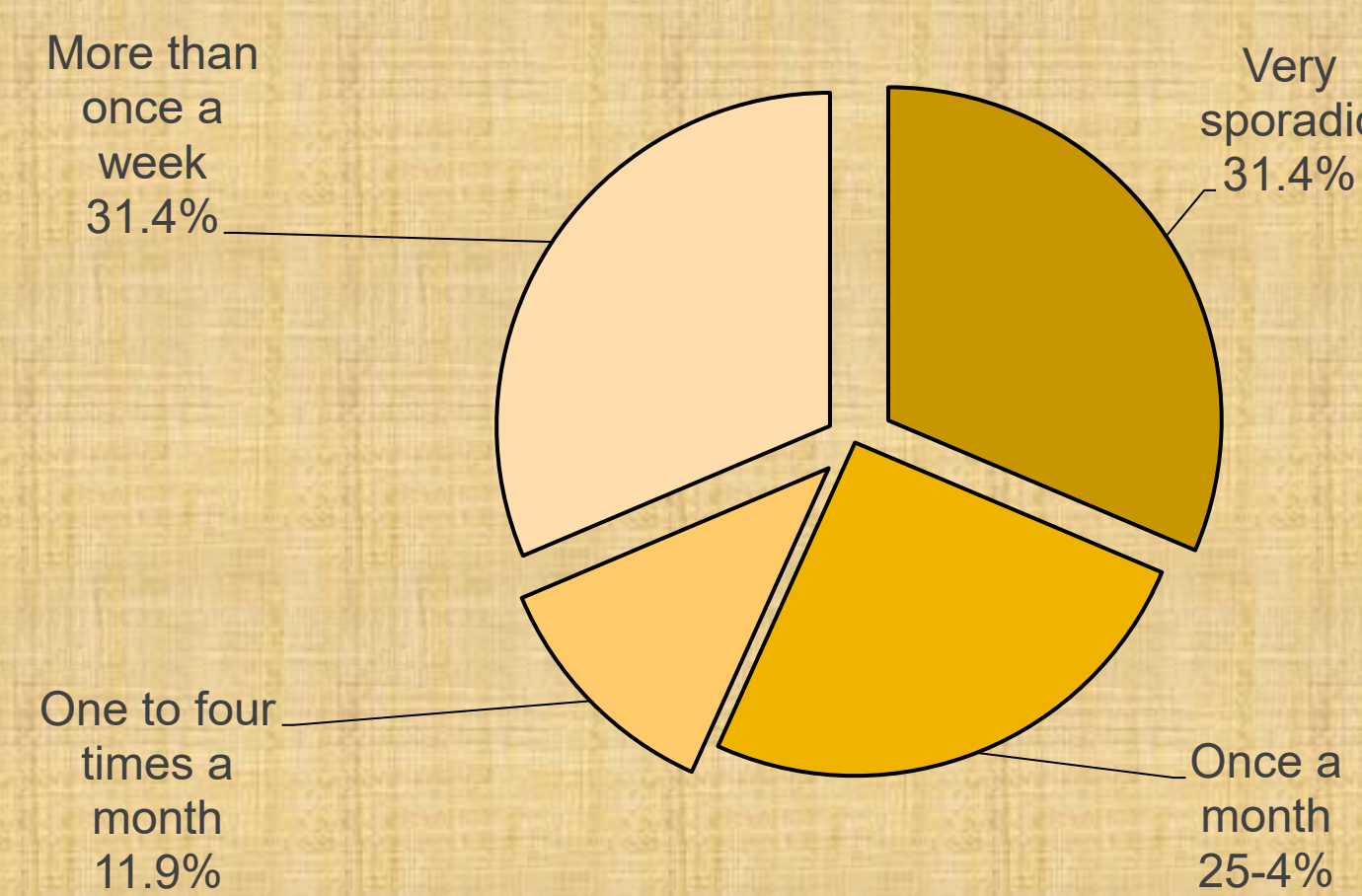


Figure 5 - Frequency of goatling meat consumption



Figure 6 - Trás-os-Montes region

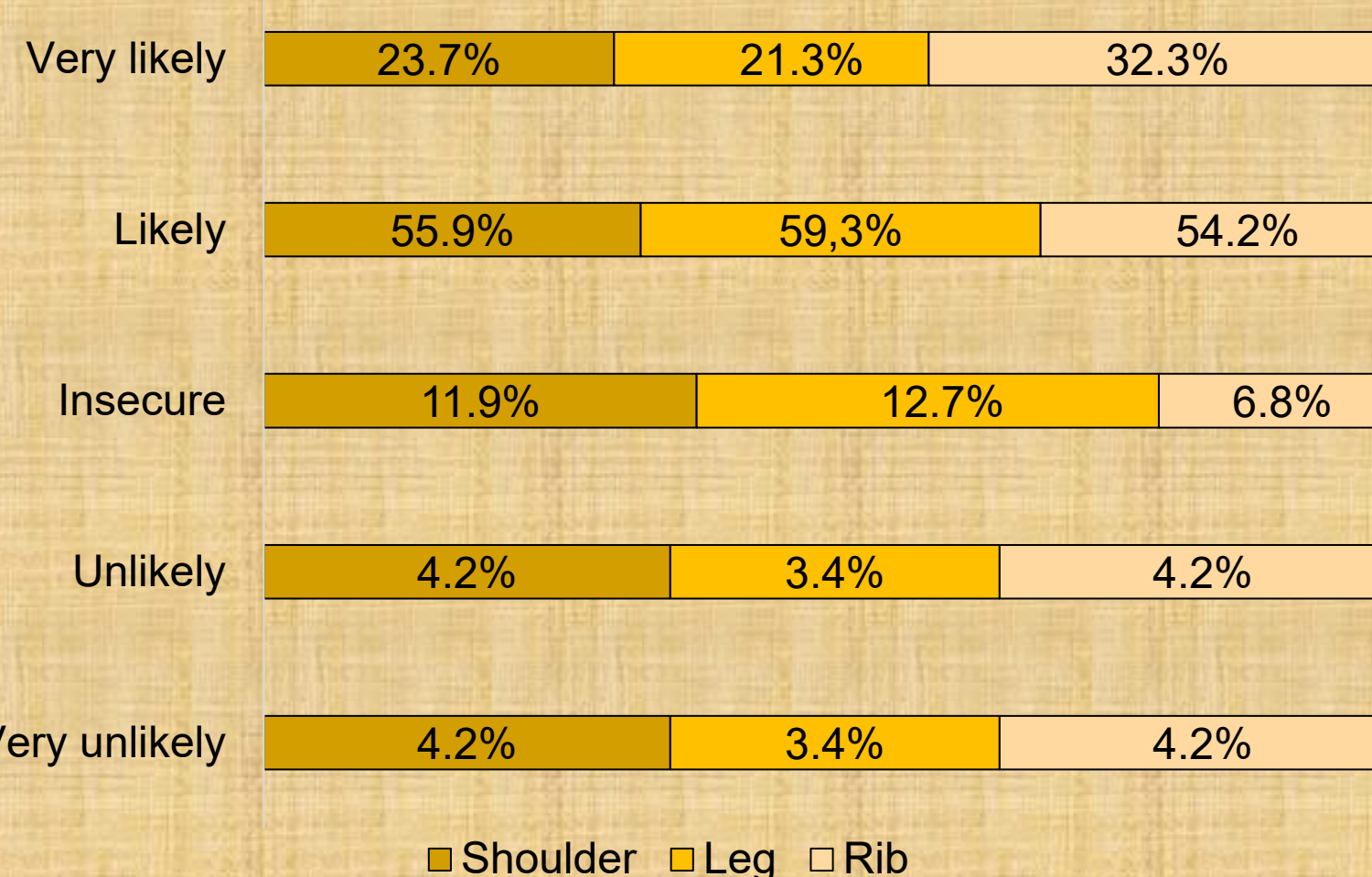


Figure 7 - Probability of purchasing the different butcher pieces

Goatling meat is a high-quality product that is recognized as such by consumers. However, the price the consumer is willing to pay is still not sufficiently high to make it an attractive activity in terms of profitability, considering the decrease in the number of farms that produce goatling meat (Fernandes et al., 2015).

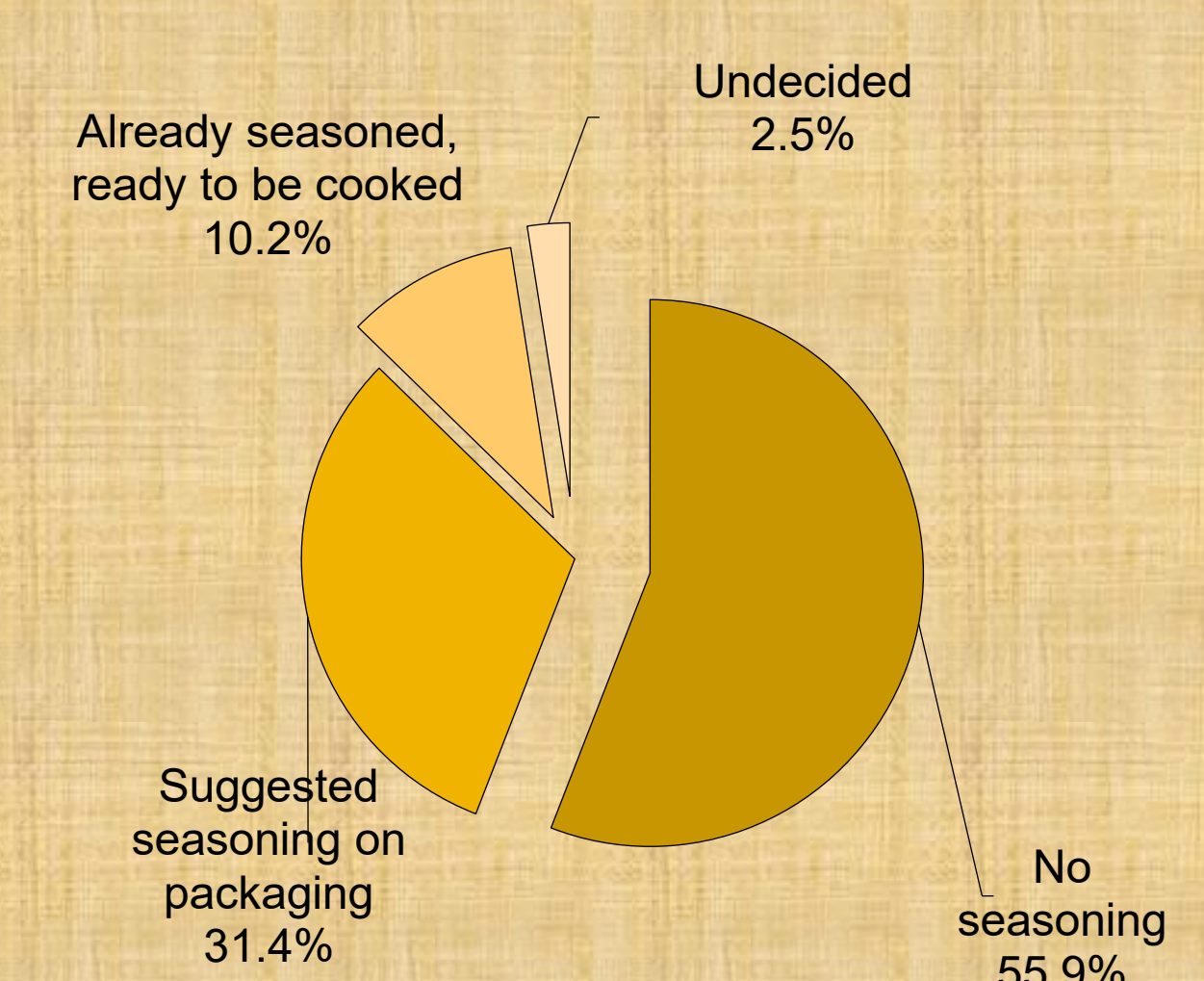


Figure 8 - Seasoning preferences

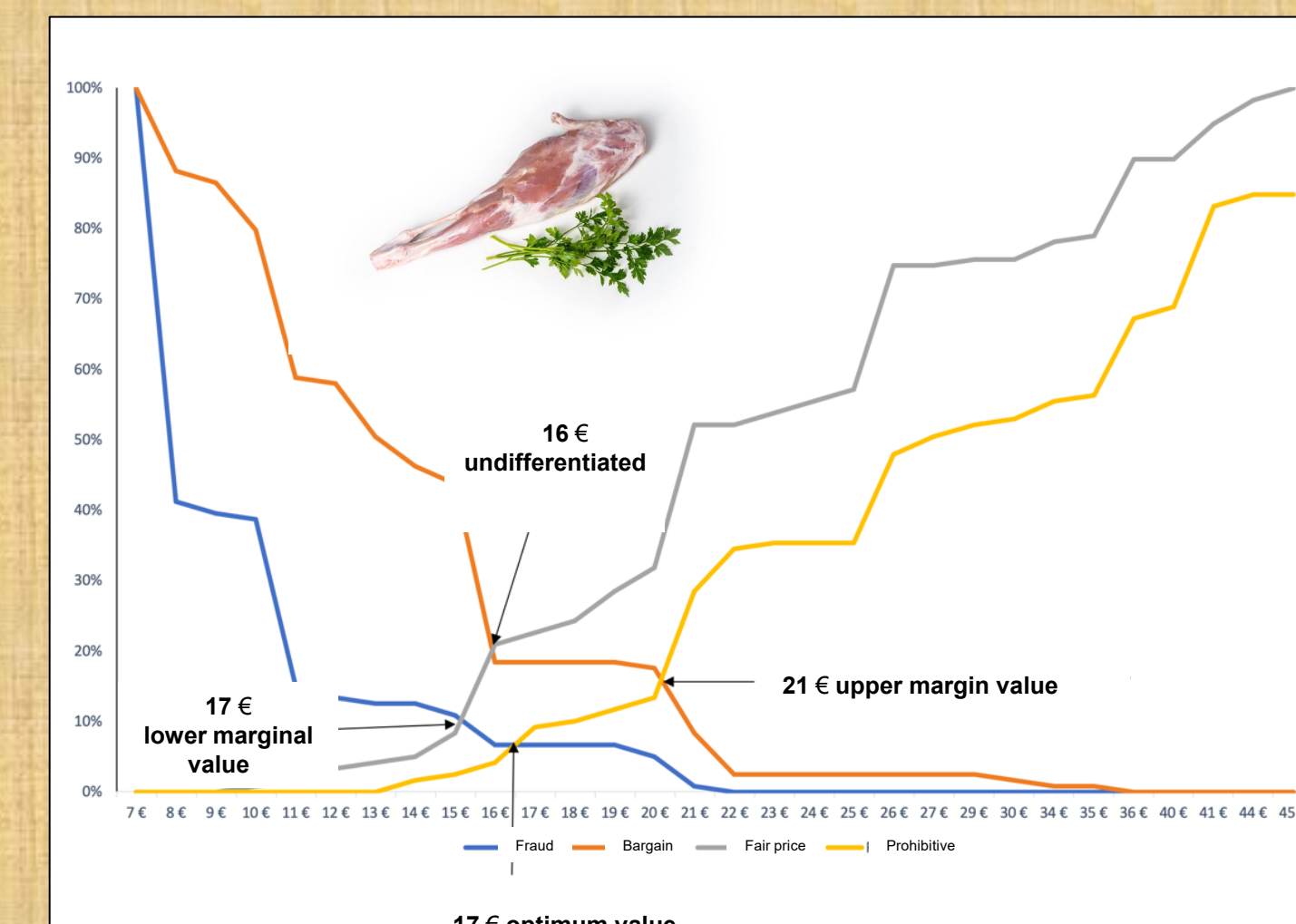


Figure 9 - Van Westendorp sensitivity meter for the leg

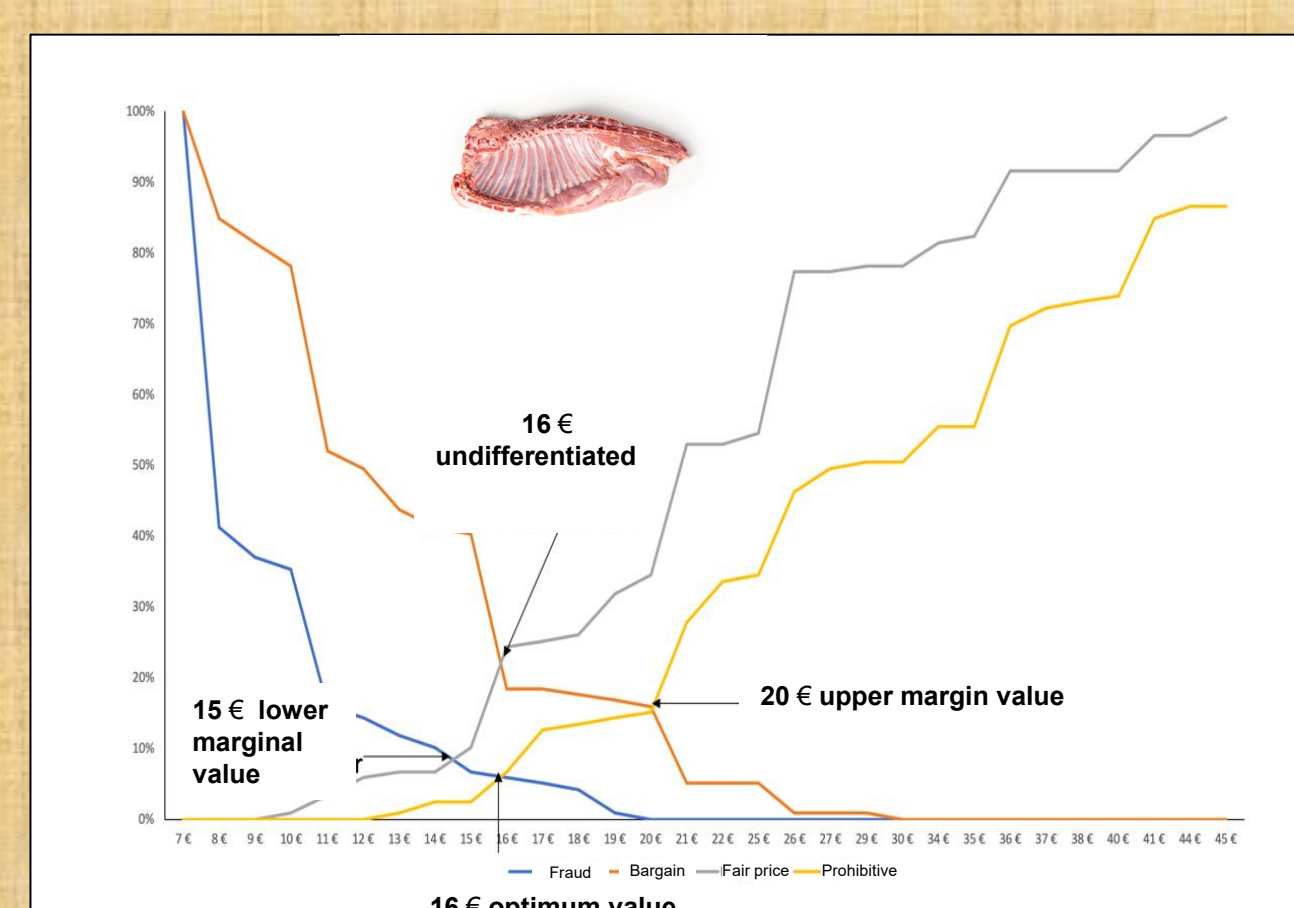


Figure 10 - Van Westendorp sensitivity meter for the shoulder

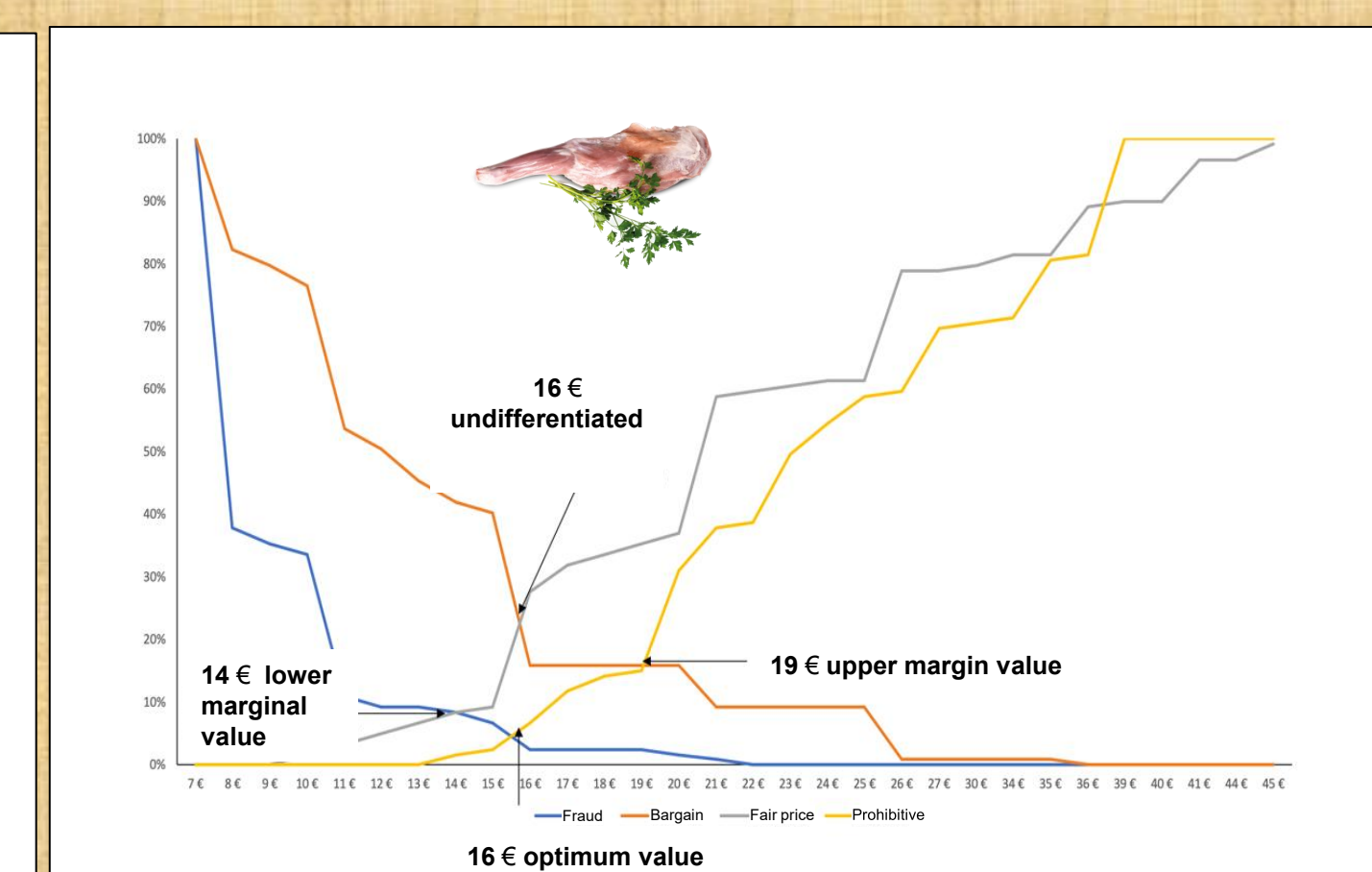


Figure 11 - Van Westendorp sensitivity meter for the rib

## 4. Conclusions

The consumers interviewed expressed a slight preference for the rib cut, which, according to the cut proposed by Calheiros and Neves (1968), includes the loin, chop, front chop, rib flap, and neck. The leg, which is also part of the saddle, did not receive any special preference compared to the shoulder.

The value that consumers place on the three butchers' pieces under analysis presents similar values, which probably denotes the habit of valuing the whole goatling carcass. So, it is recommended that the goatling producers association follow this market strategy that involves selling goatling meat by the piece to reach more sophisticated consumers, that is, with more educational qualifications and higher net monthly income.

