

# SPANISH AND BRAZILIAN CONSUMERS' ATTITUDES ON PURCHASE AND CONSUMPTION OF BEEF

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**Abstract - The behavior of Spanish and Brazilian consumers about the frequency of beef consumption, the place of purchase and changes in its consumption in the last two years was analyzed using an online questionnaire sent to the Northeast of Spain ( $n = 436$ ) and four cities in different states of Southeastern and Southern Brazil ( $n = 1.696$ ). A chi square test was used to analyze the data. Brazilian people consume more beef than Spanish. For most consumers in both countries, the consumption of beef has not changed in the last two years. The main cause of increase is due to consumers liking meat. The main reasons for the decrease are the unhealthy nutritional composition and high prices.**

**Key Words - Changes in consumption, establishment of purchase, beef frequency of consumption.**

## I. INTRODUCTION

Beef consumption is a contemporary and increasingly controversial issue: many consumers in developed and developing countries have changed their meat consumption habits in recent years, or even intend to do so in the near future. The reasons maybe based on numerous factors such as concern for health and food safety, among others [1, 2]. The objective of this study was to investigate the behavior of Spanish and Brazilian consumers on the frequency of consumption of beef, establishment of purchase and changes in beef consumption in the last two years.

## II. MATERIALS AND METHODS

An online questionnaire with five closed-ended questions was sent to the Northeast of Spain ( $n = 436$ ) and to four cities in different states of Southeastern and Southern of Brazil ( $n = 1.696$ ), with the intention of analyzing the frequency of beef consumption, place of purchase preference and changes in consumption in the last two years and reasons for increasing or decreasing consumption. A chi-square analysis was applied to the five questions in the questionnaire.

## III. RESULTS AND DISCUSSION

The studied Spanish and Brazilian population comprised an average of 60% females and 40% males, the largest age group was between 18 and 35 years old (62.0%), the majority with university education (63.7%) and a diversified income. The results of this study are shown in Table 1.

Brazilian people consume beef more often than Spanish ones. The usual place to buy beef is directly in the butcher, but Spanish consumers prefer to go to the traditional butchery while Brazilian consumers go to the supermarket butcher. Most Spanish and Brazilian consumers have a positive view of beef and have not stopped consuming it in the last two years. Those respondents who have increased consumption do so mostly because they like it. The satisfaction in eating beef is one of the most robust correlations found in studies of meat consumption preference [3].

However, a considerable percentage of the population studied in both countries started to consume less in the last two years and the main reasons are due to the nutritional composition of unhealthy beef (27.9% Spanish and 23.0% Brazilian). Consumers relate red meat to cancer and cardiovascular disease [2, 4]. Other studies claim that lean red meat is a nutritious food that can help maintain a healthy life [3]. Another reason is the high price, mainly for Brazilian consumers (21.1% in Spain and 55.9% in Brazil). In comparison with other sources of protein, beef is considered expensive [5].

Table 1 Chi square analysis for factors related to the consumption and purchase of beef by Spanish ( $n = 436$ ) and Brazilian ( $n = 1,696$ ) consumers (%)

<i>Frequency of beef consumption</i>	Spain	Brazil	<i>P value</i>
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Two or more times per week	28.0	82.3	
Once a week	44.5	11.8	<0.001
Once every 15 days	17.0	3.9	
Once a month or less	10.6	2.0	
<i>Establishment of purchase of beef</i>			
Traditional butcher's shop	48.9	26.5	<0.001
Butcher at the supermarket	20.9	54.0	
Shelf Supermarket	27.3	15.3	
Other	3.0	4.2	
<i>Change in meat consumption in the last two years</i>			
More quantity	8.0	13.9	<0.001
Less quantity	36.9	29.5	
The same	55.0	56.6	
<i>Within people who consume more, why</i>			
Increase in family size	8.7	27.1	0.003
It is nutritious / healthy	31.2	14.3	
Product with greater food safety	2.5	2.8	
We like it	55.0	48.9	
Greater budget	2.5	7.1	
<i>Within people who consume less, why</i>			
Decrease in family size	28.8	11.2	<0.001
Unhealthy due to its nutritional composition	27.9	23.0	
Presence of waste	2.9	2.4	
We do not like it	9.2	7.1	
High price	21.1	55.9	
Do not know	11.9	0.0	

#### IV. CONCLUSION

Brazilian people consume more beef than Spanish consumers. For most consumers in both countries the consumption of beef has not changed in the last two years. The cause of increase is due to consumers liking meat and the decrease for unhealthy nutritional composition and high prices.

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