

INNOVATION IN TRADITIONAL TRÁS-OS-MONTES PRODUCTS: CONSUMER PERCEPTION ABOUT NEW PRODUCTS DERIVED FROM *ALHEIRA*

Letícia Estevinho¹; Maria Isabel Ribeiro²; António Fernandes³; Fernando Sousa^{4,5}

^{1,2,3,4} Institute Polytechnic of Bragança - Agriculture School. ⁵ Sensory Analysis Laboratory of the Department of Animal Science – School of Agriculture.
^{1,2,3} Mountain Research Center. Campus de Santa Apolónia - 5300-253 Bragança.
¹leticia@ipb.pt; ²xilote@ipb.pt; ³toze@ipb.pt; ⁴fsousa@ipb.pt

1. Introduction

Innovation is a key factor to generate profitability and growth ensuring that companies succeed and remain in the market even in difficult economic and financial periods (Nielsen, 2015). Companies need to be continually innovating to be competitive. In this context, many companies invest in the development of new products to gain a greater market share and to achieve higher profits. Consumers have a strong appetite for innovation and demand quantity, quality and variety of products. Sociodemographic characteristics have a significant influence on consumer behavior regarding the adoption of new products (Wang, Dou and Zhou, 2008). This work is part of a project developed under ProDeR, measure 4.1 - Cooperation for innovation, dedicated to the development of new products derived from *alheira*, namely, snacks with *alheira* filling. The project results from a partnership between a research unit and an industrial company.

2. Material and Methods

In December 2017, tastings were held at *Intermarché* located in Bragança city. The new product was presented to the consumer with two types of presentation, namely, croissant brioche dough with *alheira* filling and small rectangular portions of brioche dough with *alheira* filling (Figure 1). Consumers were invited to participate in the tasting on a voluntary basis. After the tasting of the product, participants were asked to complete a questionnaire with the objective to assess the product on a scale from 1 (very unpleasant) to 5 (very pleasant), requesting the indication of a reason justifying the evaluation; to know the intention to buy on



Figure 1 - Snacks with *alheira*

a scale from 1 (I would not buy it for sure) to 5 (I would buy it for sure); and to know the most appealing shape of presentation of the product from the perspective of the consumer. In addition, questions were asked about age, gender and occupation. Data were processed using SPSS 23.0 software. Data analysis involved the calculation of descriptive statistics and, in order to

compare the consumers' assessment of the product taking into account socioeconomic factors, the Mann-Whitney (gender) and Kruskal-Wallis tests (age and occupation) were used at the 5% level of significance.

3. Results

This study included 129 individuals aged between 18 and 90 years old with a mean age of 56.4 years old (SD = 16.2). The majority of the respondents were female (63.6%), 38.8% were dependent workers and 38.8% were retired (Table 1).

Table 1 – Consumers' characteristics

Variable	Categories	n	%	p-value
Gender	Male	82	63.6	0.865
	Female	47	36.0	
Age	18 to 25 years	9	7.0	0.877
	26 to 64 years	78	60.6	
	> 65 years	42	32.6	
Professional occupation	Dependent worker	50	38.8	0.319
	Independent worker	9	7.0	
	Unemployed	11	8.5	
	Retired	50	38.8	
	Student	3	2.3	
	Domestic	6	4.7	

The overwhelming majority considered that the product tasted was pleasant (45.7%) or very pleasant (46.5%) (Figure 2).



Figure 2 - Assessment of the product

The reasons justifying the assessment were, in order of importance, to be tasty (38.0%), to have a bittersweet flavor (29.5%), to be perfect, soft, smooth, good (8.5%), to have the same traditional flavor of *alheira* (5.4%), to have a great appearance and tasty dough (3.9%) and also to be a perfect and harmonious combination of dough and filling (2.3%). There were no consumers considering the product unpleasant or very unpleasant (Figure 3).

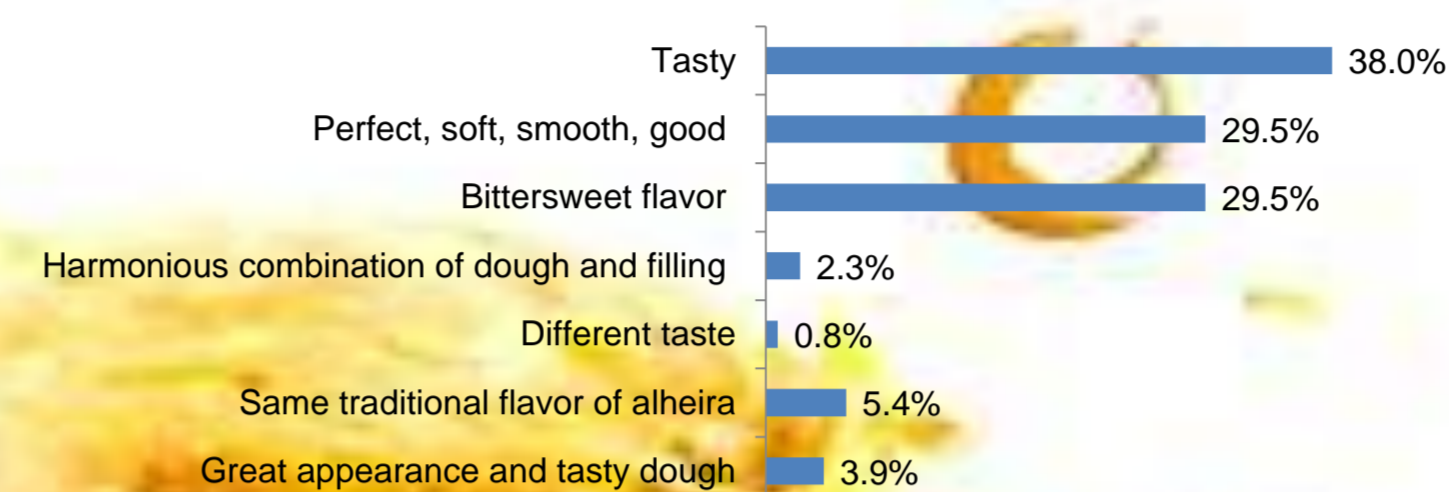


Figure 3 - Positive reasons justifying the assessment

The participants who were indifferent to the product (7.8%), that is, consumers who thought the product was neither pleasant nor unpleasant, presented the following reasons: the dough was not sufficiently light or crunchy (2.3%); the dough was excessively sweet (2.3%); do not appreciate bittersweet taste (1.6%); do not appreciate the product when served cold (0.8%); would have detected a flavor and taste of mold and smoke (1.6%); do not like the dough and prefer another type of dough such as the puff pastry (0.8%) (Figure 4).

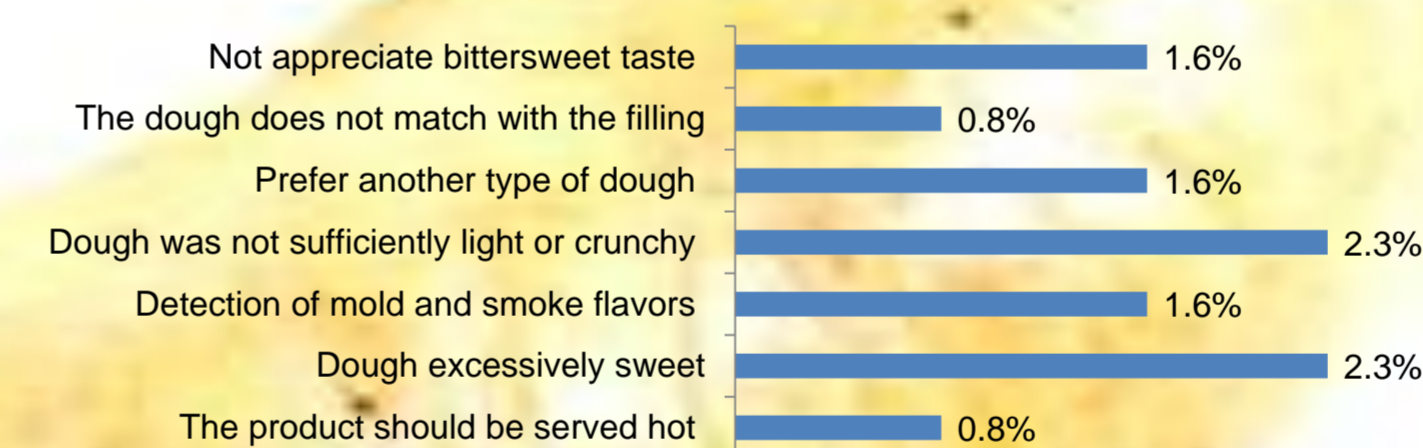


Figure 4 - Negative reasons justifying the assessment

Regarding the intention to buy the product (Figure 5), 45.0% of participants consider buying it or buying it for sure (37.2%) when the product becomes available for sale. Only 3.9% consider not buying the product or do not know if they would actually buy it (14.0%).

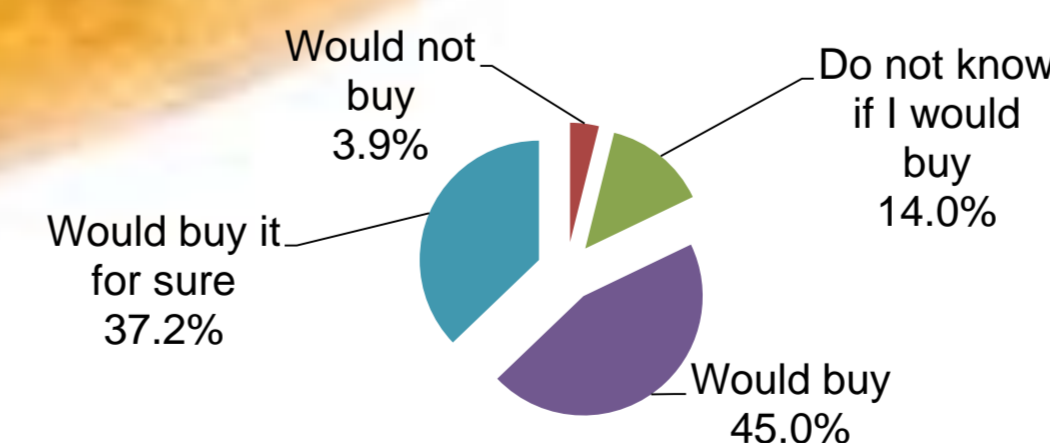


Figure 5 - Intention to buy

Regarding the presentation of the product (Figure 6), consumers prefer single small portions in a rectangular shape

(68.2%) because, in their opinion, it is particularly suitable for appetizer. The croissant shape was more appealing to 24.8% of consumers, who found it particularly suitable for snacking. About 5% of the participants would opt for both forms (4.7%) depending on whether consumed as an appetizer, snack or at breakfast with coffee.

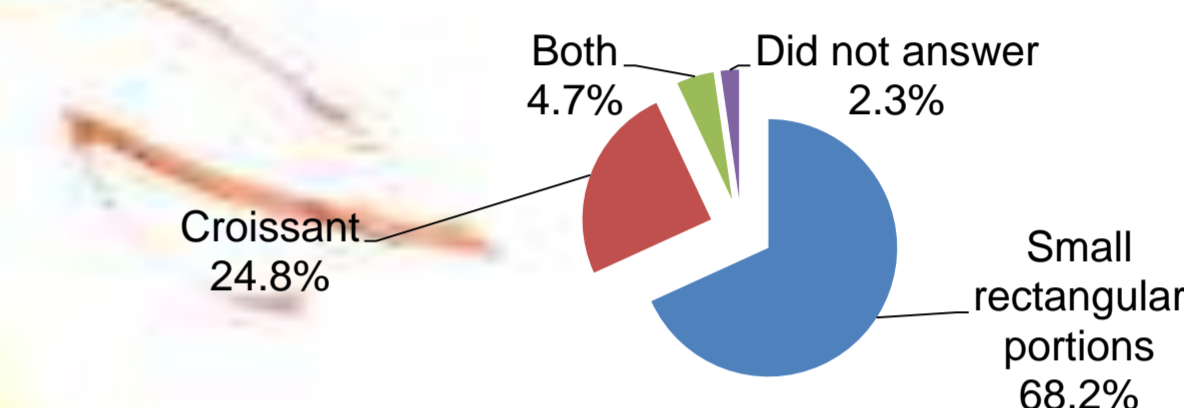


Figure 6 - Presentation of the product

When compared the consumers' assessment of the product taking into consideration gender, age and occupation, it was verified the absence of statistically significant differences (p-value > 0.05) (Table 1).

4. Conclusion

The results show that there is a great acceptability of the product by the consumer, regardless of the shape of presentation. This product increases the diversity of the industry's supply, resulting in the conquest of new consumers and, consequently, greater market share and higher profits. Finally, given the homogeneous behavior of consumers towards the product tested, in the effort of communication with the consumer, there will be no need to segment the market.

5. References

Nielsen (2015) Looking to achieve new product success? Listen to your consumers, The Nielsen Company.
Wang G, Dou W, Zhou N (2008) Consumption attitudes and adoption of new consumer products: a contingency approach, European Journal of Marketing, 42 (1/2): 238-254.

Acknowledgments

The authors are grateful to the Foundation for Science and Technology (FCT, Portugal) and FEDER under the PT2020 program for financial support to CIMO (UID/AGR/00690/2013) and ProDeR, measure 4.1. Cooperation for Innovation (Project reference: 020570056343).