

MARKETING STRATEGIES FOR ANIMAL WELFARE MEAT IDENTIFICATION: COMPARISON OF PREFERENCES BETWEEN MILLENNIAL AND CONVENTIONAL CONSUMERS

Stefano MASSAGLIA¹

assistant professor, "University of Turin", Grugliasco (TO), Italy, stefano.massaglia@unito.it

Valentina Maria MERLINO

research fellow, "University of Turin", Grugliasco (TO), Italy, valentina.merlino@unito.it

Danielle BORRA

assistant professor, "University of Turin", Grugliasco (TO), Italy, danielle.borra@unito.it

ABSTRACT

A survey was carried out on preferences by Italian consumers about marketing strategies applicable to animal welfare beef meat recognition in the market. An *ad hoc* questionnaire was developed and submitted to 514 individuals, which were divided into two types of consumers: millennial and conventional consumers. The characteristics and preferences of the two considered sample groups were defined to better understand their attitudes during beef purchase. Additionally, the criteria used during meat choice and animal-friendly values associated with products deriving from high animal welfare standards were analysed. Finally, the most important methods for animal welfare beef meat recognition have been studied and compared between the two considered samples. Our study revealed varying perceptions about animal welfare by different generations of consumers during beef meat purchase. Both millennial and conventional consumers acknowledged that having detailed labels helps to easily recognise animal welfare meat on the market.

KEYWORDS

millennial consumers, conventional consumers, beef meat label, animal welfare-values communication

INTRODUCTION

The modern consumer has become increasingly interested in animal welfare assurance in the production of food and other products for human consumption, according to research by several European experts (Clark *et al.*, 2016; Toma *et al.*, 2012; Troy and Kerry, 2010). Being animal welfare-conscious and its ethical connotations can be differently defined to the consumer (Pettersson *et al.*, 2016; Cembalo *et al.*, 2016; Browne *et al.*, 2000). Additionally, labelling communication for product characteristics related to animal welfare is becoming an increasingly common marketing strategy, giving labels such as "animal welfare" and "animal-friendly" a higher quality association during meat choice (Heerwagen *et al.*, 2015; Van Wezemael *et al.*, 2010; Napolitano *et al.*, 2010; Janssen and Hamm, 2012). In this context, quality certifications based on animal welfare represent an important tool for farmers to reassure consumers of the ethical treatment of animals. The study of consumer perception, as well as their preferences related to meat, must be involved in marketing strategies. For example, voluntary certifications related to animal welfare, which normally involve more restrictive standards, imply major investments in product communication. These investment strategies should largely be based on consumers preference, who basing their choice on more widespread rules associated with greater ethical production, efficient breeding production, higher food safety, product quality and environmental sustainability. Society addresses the animal welfare issue considering the context of how animals are bred and used for food production (Knight and Barnett, 2008). Animals useful to humans are usually positioned around the middle of the hierarchical when people accept the use of breeding as a food source. However, there is a number of people expressing an entirely contrary opinion, believing that bred animals should be given a better life than the one they are forced to experience on a daily basis (De Backer and Hudders, 2015; Macdiarmid *et al.*, 2016). In fact, the ethical influence of not eating meat is translating into an increasing number of vegetarians and vegans in many European countries, including Italy (Ponzio *et al.*, 2015; Marangon *et al.*, 2016; Janssen *et al.*, 2016). This negative trend, which especially involves beef meat (Clonan *et al.*, 2016), is influencing producers to establish new business marketing strategies and paying more attention at innovative schemes during the production process to enhancing the product quality, as well as product security guarantee (Barge *et al.*, 2013). The new marketing strategies express the correlation between animal welfare and product safety, higher quality and taste, biological brands, eco-sustainable productions and extrinsic cues in quality perception. Additionally, consumer attitudes at the time of purchase has an impact on breeding practices, product management and an influence on the different final product characteristics (nutritional, organoleptic, packaging, etc.). The study of consumer perception and preferences are essential to understanding purchasing behaviour (Merlino *et al.*, 2017). For this purpose, a survey was conducted on Italian consumer preferences related to marketing strategies applicable to animal welfare meat recognition on the market. Preferences and behaviour were compared between different consumer targets, namely millennials and conventional consumers. The research was carried out in the following phases: first, the definition of characteristics and preferences of the two considered sample groups were evaluated and compared to understand their attitudes during beef meat purchase; secondly, an analysis was performed on important criteria used during meat choice and the animal-friendly values associated with products deriving from high animal welfare standards; finally, the most important methods for animal welfare beef meat recognition were studied and compared between the two sample groups.

1. MATERIALS AND METHODS

In order to investigate purchasing behaviour and attitudes towards animal welfare meat perception and recognition of consumers in North-West of Italy, an *ad hoc* questionnaire was developed and submitted among two types of consumers: millennial and

¹ Corresponding author: Stefano Massaglia. Department of Agricultural, Forest and Food Sciences, University of Torino Largo Paolo Braccini, 2 10095 - Grugliasco (TO) ITALY

conventional. No consensus exists on the precise definition for both types of consumers, and the range of birth years differs slightly among studies reported in literature (Donnison, 2007; Rich, 2008; Niemelä-Nyrhinen, 2007). However, the current study defines millennials as people born between 1975 and 2005, while the conventional consumers were people born between 1937 and 1974. A total of 514 individuals participated in the study. Participants involved in the research included students from different disciplines at the University of Turin. Paper questionnaires were distributed in the classrooms at the beginning of the 2 hour lessons and collected at its conclusion. In addition, face-to-face interviews were conducted using paper questionnaires alternating between genders at two points of sale of meat. Two meat points of sale at two mass retail chains included the selling of fresh, packaged and processed meats. Interviews were conducted in 2015 between April and July, Monday thru Sunday, during two time slots (9 a.m. to 1 p.m. and 4 p.m. to 8 p.m.). The questionnaire was subdivided into three main sections. The first section included questions related to socio-demographical characteristics: age (under <20, from 21 to 25, from 26 to 40, from 41 to 55, from 56 to 70, over 71), gender (female or male) and educational status (primary school, lower secondary school, upper secondary school, master's degree). Consumer's socio-habitual characteristics were also investigated by proposing questions related to ownership of pets, opinion towards hunting, familiarity with animal breeding and slaughterhouse practices. The correlation between these latter questions as well as the perception and sensibility about animal welfare topics were examined. The habitual quantitative meat consumption, in particular of beef meat, was examined in the central part of the questionnaire. The analysis looked into the weekly consumption of beef and the habitual point of meat purchase. The weekly frequency of meat consumption was used to define consumer profiles and to distinguish small, medium and large meat consumers: from 1 to 5, from 6 to 10, and up to more than 10 times a week. The final part of the questionnaire focused on the animal welfare topic, which required a more in-depth description of the animal welfare concept. Thus, we compiled a variety of definitions provided by respondents belonging to the two considered sample groups and illustrated the definitions in word clouds by using the most common words that appeared in the text. The perception and attitude of consumers about beef producing with high standards of animal welfare was measured using a 5-point Likert-type scale by subjecting a series of statements about the product and asking to express the degree of agreement or disagreement with respect to each statement (Bernués *et al.*, 2012; Di Vita *et al.*, 2017; Davidson *et al.*, 2003; O'Donovan and McCarthy, 2002). The interviewee could choose between "strongly agree", "agree", "disagree", "strongly disagree", "I do not know" about the following topics of statements: healthier, better quality, better taste, more profitable for farmers, more environmentally sustainable, and higher ethical value. Finally, the questionnaire asked to indicate which among the following methods could be the best to recognize meat products deriving from high animal welfare standards: information labels with adequate details on the topic, logo on the product packaging, classification or scoring system (e.g. five "stars" of well-being for the best products, to one "star" for the worst products), information posters in the shop or colour designations on the product packaging, provide a truthful image of the production system (e.g. laying hens outdoors rather than in tight cages). Respondents could choose up to two alternatives.

2. RESULTS

Out of the 514 respondents involved in the study, 76% were students belonging to the millennial (sample A) and 24% were conventional consumers (sample B). The socio-demographic characteristics of the respondents of sample A and B are reported in Table 1.

Table 1. Consumer socio-demographic characteristics of sample A (millennial) and sample B (conventional consumers)

		SAMPLE A (N=390)	SAMPLE B (N=124)
Gender	Women	54%	52%
	Men	46%	48%
Age	Under 20 years old	26%	2%
	From 21 to 25 years old	68%	6%
	From 26 to 40 years old	6%	42%
	From 41 to 55 years old	/	25%
	From 56 to 70 years old	/	22%
	Above 71 years old	/	3%
Educational level	Primary School	/	5%
	Lower Secondary School	/	25%
	Upper Secondary School	78%	49%
	Master's Degree	22%	21%

In both samples A and B, the majority of survey respondents were female (54% and 52% respectively). Millennials were predominantly represented by ages between 21 and 25 years old (68%) as well as under 20 (26%). On the contrary, sample B was distributed among a different age group, with a majority of respondents ranging from 41 to 70 years old (47%). The educational level differed between the two sample groups: 21% of sample B had a Master's degree, 49% had an upper secondary school certificate, 25% had a lower secondary school certificate, while 5% of considered consumers were characterized by a primary school certificate. In the case of sample A, the majority of interviewees were represented by graduates from upper secondary school, or university students (78%). In Table 2 the answers are reported from the questions on the consumer-animal-environment nexus comparing samples A and B. The majority of consumers owned pets, especially the millennials represented by sample A. It was also the student demographics who had more direct experience on animal farms. In fact, 85% of sample A declared to have visited an animal farm compared to only 68% of respondents from sample B. A similar situation emerged from the answers related to slaughterhouse visits: in both samples, most of them have never been to a slaughterhouse (64% and 69% from samples A and B, respectively). Opinions

about animal hunting from the two sample groups revealed majority to be contrary to this practice. Some of the millennials (36%) replied that they were in favour while 11% were undecided. This latter position (answered “I don’t know”) was rated less among the interviewees from sample B. Instead, 15% of the conventional consumers declared to be indifferent to the topic.

Table 2. Consumer socio-demographic characteristics of sample A (millennials) and sample B (conventional consumers)

		Sample A	Sample B
Do you have pets?	No	30%	49%
	Yes	70%	51%
Have you ever visited a farm?	No	15%	32%
	Yes	85%	68%
Have you ever visited a slaughterhouse?	No	64%	69%
	Yes	36%	31%
Are you in favour of hunting?	No	51%	59%
	I do not care	2%	15%
	I don't know	11%	5%
	Yes	36%	21%

Differences in the frequency of beef meat consumption emerged between the two samples (Table 3). In this case, 78% of sample B were small beef consumers because they ate meat only 1-5 times per week. A small residual part of the group (5%) consumed large amounts of meat, totalling more than 11 times a week. In comparison; a fair amount of students (sample A) consumed meat 6-10 times per week (34% representing medium consumers), while the majority (54%) were small consumers (1-5 times a week). Millennials were also characterized by a relevant percentage of consumers who ate meat more than 11 times per week.

Table 3. Weekly beef consumption of consumers interviewed

	Sample A	Sample B
1-5 times	54%	78%
6-10 times	34%	17%
11-15 times	10%	4%
More than 15 times	2%	1%

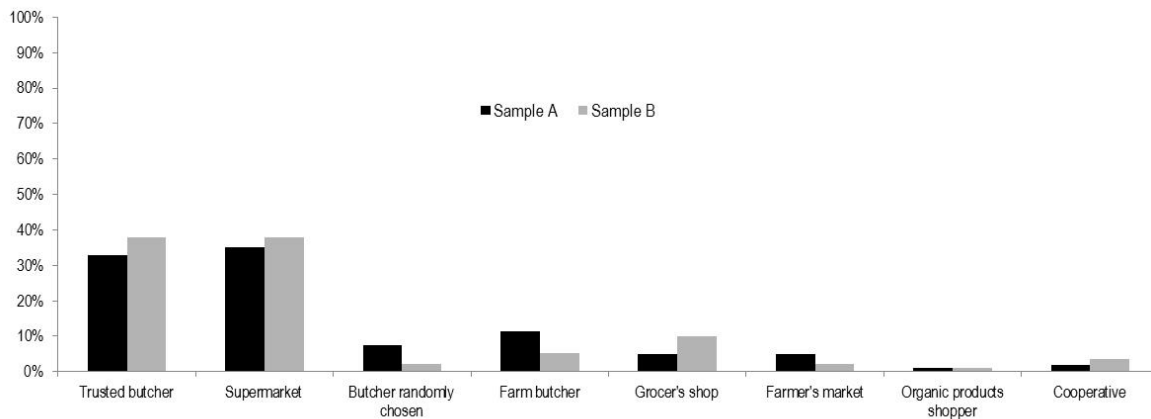


Figure 1. Points of meat purchase chosen by consumers interviewed

Points of meat purchase indicated by respondents are reported in Figure 1. Respondents of sample B equally choose supermarkets and trusted butchers as places of meat purchase (38% of responses in both cases). On the contrary, trusted butchers were preferred by the millennials as the favoured point of meat purchase (35%), followed by large retail chains (33%). Only 8% of sample A preferred to buy meat at butchers randomly chosen and 11% preferred at farm butchers. Grocery shops are preferred by conventional consumers who instead have minimally considered farmers' markets as a point of meat purchase.

Word clouds were generated by analysing animal welfare definitions provided by the two considered sample groups (Figure 2). In examining their answers, some differences emerged among the 50 recurring words related to animal welfare. The word “health” was the most widely used to define animal welfare by millennial consumers. A direct correlation between animal welfare and human health emerged from sample A respondents, highlighting an anthropocentric vision for animal welfare. Secondly, animal welfare was linked to a “no-stress” condition during the production process. The terms “respect”, “need” and “space” were equally recurrent. Other words such as “feed”, “mistreated”, and “freedom” linked with animal management, was least recurrent among definitions.



Sample A (millennials)



Sample B (conventional consumers)

Figure 2. Word clouds generated using animal welfare definitions provided by respondents of sample A and B.

For conventional consumers, an “acceptable condition” of animal breeding was synonymous with animal welfare. Therefore, the correct management by breeders plays a fundamental role in animal welfare assurance, as well as avoiding animal “suffering”. Even in this case, “space”, “food” and “environment” were recurrent words.

Each sample group was provided with statements about animal welfare beef meat, resulting in varying levels of agreement, as seen in Figures 3 and 4. Highest quality and greater health were recognized as distinguishing characteristics of animal welfare beef meat by sample A consumers. From the data analysis, conflicting opinions emerged on the attribution of a better taste: 73% of millennials stated they “agree” and “very agree”, while the rest of the sample disagreed with this statement or occupied a position of indecision. In a similar situation, statements related to the opinion about the ethical value of animal welfare meat, as well as its environmental sustainability, also garnered a significant number of undecided responses. The most disagreeing opinions were related to the statement concerning greater profitability for breeders deriving from animal welfare products.

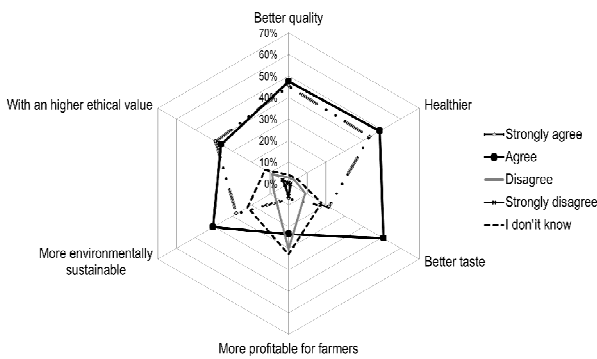


Figure 3. Level of agreement of millennial consumers (sample A) with respect to each statement about animal welfare beef meat.

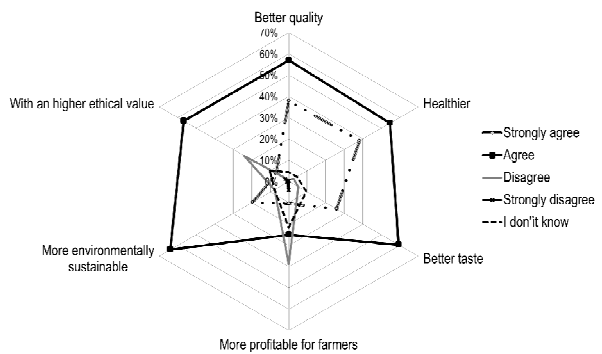
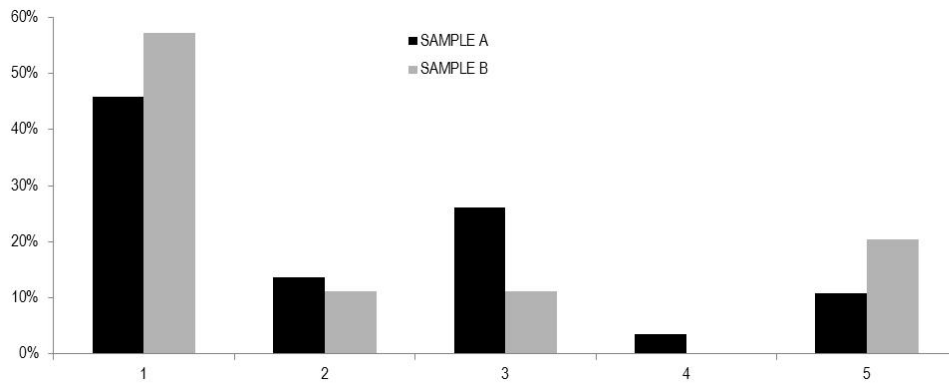


Figure 4. Level of agreement of conventional consumers (sample B) with respect to each statement about animal welfare beef meat.

Differences were found between the preferences of millennial and conventional consumers on the identification methods of animal welfare products on the market (Figure 5). Both samples A and B considered the application of labels with adequate and detailed information as the best method to recognize animal welfare meat. Sample B respondents selected a truthful picture of breeding in second place, and subsequently the logo and a classification method or scoring system of animal welfare levels (e.g. five “stars” of well-being for the best products, and one “star” for the worst products). On the contrary, the millennials placed the classification method and subsequently the logo after the labelling. The idea of information posters presented inside the store was discarded by both the samples A and B.



- 1: Information labels with adequate details on the topic
- 2: Logo on the product packaging
- 3: Classification or scoring system (e.g. five "stars" of well-being for the best products, a "star" for the worst products)
- 4: Information posters in the shop or a colouring scale on the product packaging
- 5: Provide a truthful picture of the production system (e.g. laying hens outdoors rather than in battery).

Figure 5. Differences in opinion by samples A and B about the best criterion used to identify a product made in compliance with animal welfare standards

3. DISCUSSION AND CONCLUSIONS

Meat labelling is considered an important instrument to inform the consumer on the quality attributes of meat (Bernués *et al.*, 2003). Among meat characteristics, animal welfare values became most important aspects of the quality attributes considered by consumers during the purchasing process. The research has highlighted perceptions of animal welfare, consumer behaviour, and habits of consumers in Piedmont, Italy. By comparing two generations of consumers, millennial and conventional, the aim was to understand which marketing strategies can be applied by farmers to better characterize animal welfare products in the market, with beef meat as a primary focus. A preliminary analysis was conducted on animal welfare perception of Italian consumers by understanding the characteristics of two sample groups. Although some studies on this topic have shown that the perception of consumers regarding animal welfare does not vary significantly according to socio-demographic variables (Carlsson *et al.*, 2007; Tonsor *et al.*, 2009), our data clearly contradicts this trend. Dissimilarities in terms of age group and educational level determined some differences of consumer behaviour and animal welfare perception. The interviewees were almost equally represented by male and female genders, so this feature did not influence the answers provided by the samples. The differences in terms of educational level were in line with the average age of the two sample groups, so it was no surprise that sample A was represented by mostly university students.

The part of the questionnaire that investigated the animal-environment-human nexus revealed that more young people own pets and have visited a farm. The two considered sample groups were comparable in their answers on the visit to a slaughterhouse and the number of opponents against hunting. Furthermore, differences emerge on the number instead of favourable to the hunting practice (especially millennials at 35% vs. 21%), and the disinterested (especially conventional consumers 15% vs. 3%). From this latter analysis, a negative correlation emerged between the tendency to care for a pet and age. Concerning beef meat consumption, the conventional consumers ate less. In fact, 78% of them were small consumers (eating meat 1 to 5 times a week). Respondents in Sample A counted for 12% of consumers who eat meat more than 10 times a week (big consumers). This result is in line with what is reported in literature, namely it is a common tendency for people older in age to reduce their red meat consumption in favour of other meat types (white) or alternative protein sources for a healthier diet.

Differences emerge between the two considered sample groups in relation to the point of meat purchase, especially regarding the choice of butcher farms for meat purchase and butchers randomly chosen, selected above all by sample A respondents. In both cases, however, consumers first chose the supermarket and then trusted butchers. Both samples, when choosing to buy meat direct from the farmer, prefer on-farm purchasing (buy meat at the farm) than off-farm purchasing (farmers market in urban areas) consistent with Corsi *et al.*, 2018. The large-scale retail chains are considered places to find safe, guaranteed products with a good quality / price ratio.

The correlation between educational level and consumer's sensitivity to animal welfare was confirmed by an analysis of answers to the following question: *What does "animal welfare" mean in your opinion?* The majority of sample A consumers based the definition on giving importance to some recurring topics such as the stress absence, environment sustainability, feeding, adequate space. Suffering absence, animal dignity and respect were also recurrent words among millennials. Animal welfare for the youngest consumers was linked to good breeding conditions in order to guarantee a higher quality product.

The most frequent response by the consumer is taken from an anthropocentric standpoint; a healthy animal diet and general animal welfare conditions at livestock seems to be associated with the health and nutritional quality of the meat. Therefore, the consumer would then seem to think about the quality of the final product and not as much of the state of the animal during its life on the farm. Different opinions emerged among conventional consumers who defined animal welfare as acceptable conditions of the animal during breeding. In this case, the anthropocentric view is less concerned about aspects related to animal management by farmers, which is responsible for the overall condition of the animal. Words such as "suffering", "management", "space", "nutrition" "environment", "outdoor" were the most recurrent words chosen by sample B respondents.

The research also shows how interviewees associated animal welfare with higher quality products, which assumes an added value for consumer acceptance. The two considered sample groups were substantially in agreement to consider animal welfare products

as healthy with higher quality, but not necessarily more profitable for the producer. Expectations are high for quality meat products resulting from breeding with high standards of animal welfare. Additionally, expectations are diversified according to the cultural context and age generation. Differences emerge between the two generations on the taste-related aspect as well as environmental sustainability, with conventional consumers ranking the latter as more important when compared to sample A respondents. This last result confirms how ethics are closely linked to animal welfare for conventional consumers, but not so important for millennials. Finally, both sample groups A and B declared the disagreement with the statement concerning greater profitability for breeders deriving from animal welfare products.

The last part of the questionnaire investigated which methods of product identification the consumers prefer to better identify an animal welfare product. The two sample groups rated a detailed and truthful labelling system as most important as a means of communicating the characteristics of the product and its compliance with animal welfare standards. The contribution on questionnaire “adequate details on the topic” on meat labelling was also identified as an important feature during the respondents’ assistance to the format filling. Other studies about which format of a food label is best understood by consumers were made to differentiate between healthy food and to understand if these changes in perceived health qualities result in changes of food choice (Feunekes *et al.*, 2008). The feeling of only partially understanding the meaning of the information on the label was expressed by consumers, even in the case of no other topics such as carbon labelling, or the value of emission footprints (Upham *et al.*, 2011). Although classification methods are not new (Rahkovsky *et al.*, 2013) and are perceived by consumers as very comprehensible (Feunekes, Gortemaker, Willems, Lion, & van den Kommer, 2008), respondents from sample B preferred the providing of truthful images of the production system to animal welfare products recognition (outdoor and cage-free images, for example). This marketing tool can encourage consumers to buy animal welfare beef meat because it demonstrates that, on average, consumers not only had a positive attitude towards more animal welfare husbandry systems with outdoor access and space allowance, but were also willing to pay a premium price for products from such systems (Janssen *et al.*, 2016). On the contrary, millennials believe that a classification system has an immediate effect of recognizing animal friendly product. This is also affirmed by other literature on the topic. For example, an existing successful certification scheme for meat products known as the “Better Life Hallmark”, certified by the Dutch Society for the Protection of Animals (DSPA), indicates by one, two or three stars on the product label, filling the gap between mainstream and organic standards (de Jonge *et al.*, 2015). Our study confirms the different perceptions about animal welfare by different generations of consumers during beef meat purchase. However, millennial and conventional consumers were in accordance with the methods to better recognise these products on the market: a detailed and informative label. European consumers denounce the lack of information on animal welfare standards, together with the lack of recognition of products that respect welfare (European Commission, 2009). Products that are branded as “animal friendly”, but lack in providing additional and explanatory information on the conditions of the animals on the farm, are not recognized by consumers during the point of purchase.

The negative trends in consumption of red meat are motivating producers to establish strategies of reassurance through quality certifications, such as voluntary communicating animal welfare in meat products. These certifications imply the satisfaction of quality standards more restrictive than those established by the binding legislation, but guarantee an added value to the product. At the same time, the major investments in product communication must be studied according to the requests of the consumer who do not purchase the brand just as a priority but follows certain values, such as the visual aspect (colour, format, etc.) or convenience. Investments in branding and key messaging are therefore an important tool that should be aligned with packaging and labelling of meat products.

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