

Consumer preferences for pasture-raised local beef meat in restaurants: are willing to eat and pay and, why?

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Beef cattle production is associated with high greenhouse gas emissions and animal welfare concerns, related to housing conditions and breed usage. Pasture-raised cattle production is seen as a potential solution to improve sustainability in livestock production because it is the most natural system offering benefits for animal welfare, human health, and the environment. In this extensive system, farmers prefer to use traditional breeds because they are better adapted. However, producing meat under higher animal welfare and environmental standards incurs greater production costs, potentially increasing consumer prices if not subsidized by the government. Thus, understanding consumer preferences and willingness-to-pay (WTP) is crucial to ensure the viability of this extensive production system.

The aim of the study was to investigate consumers' preferences and WTP for pasture-raised beef meat from local breeds, focusing on the autochthonous breeds from the Aragonese Pyrenees, using a natural field experiment in a restaurant setting. We studied the factors that explain the choice and the WTPs for the pasture-raised beef when eating in a full-service restaurant. The research was conducted in the capital city of the region.

Participants were recruited in a previous experiment where they received a €20 voucher to dine at a well-known restaurant. In this experiment, participants could choose from two menus offering a starter, main and dessert, where the main dish offered either a regular beef steak or a pasture-raised beef steak from a local breed. On the menu, the pasture-raised steak was offered with a supplement price (one per treatment, €2, €4 or €6) that participants should pay at the end of the lunch/dinner in case they chose the pasture-raised steak. After dining, participants completed a questionnaire covering their steak choice, hedonic preferences, beef consumption habits, perceptions of pasture-raised beef meat, stated WTP, and socio-demographic characteristics. The choice of the pasture-raised steak was analyzed using a probit model, and the stated WTP using a censored Tobit model at 0 and 6 (minimum and maximum stated WTP).

Results revealed that the probability of choosing pasture-raised beef meat depends on the supplement to pay (€2, €4 or €6), consumer's characteristics such as age and household size, and consumer's perceptions of taste and price for the pasture-raised beef meat relative to other beef meat. The probability of choosing the pastured-raised steak is the highest for a supplement of €2. Younger consumers and those living in smaller households were more likely to choose the pasture-raised steak. The perception that this beef meat is tastier than other beef meats had a positive influence on the probability of choosing while the perception of being more expensive had a negative effect. Factors influencing stated WTP included the previous steak choice, the supplement paid, hedonic preferences, gender, and perceived benefits of consuming pasture-raised meat. Participants who chose the pasture-raised steak, participated in higher supplement treatments, showed higher hedonic valuations, and perceived higher benefits, stated higher WTP, while being female also favored a higher stated WTP.