

## POTENTIAL CONSUMPTION OF TURKEY MEAT: A CONTINGENT VALUATION STUDY

Laura Danae Villalobos-Torres, Juan Hernández-Ortíz\*, Dixia Dania Vega-Valdivia

Universidad Autónoma Chapingo. Km. 38.5 Carretera México-Texcoco, Chapingo, Estado de México, México. 56230.

\*Corresponding author: jhdzo@yahoo.com.mx

### ABSTRACT

This study conducted in 2022 in the Texcoco region, aimed to estimate willingness to pay (WTP) for guajolote (native Mexican turkey) meat, using the Contingent Valuation Method (CVM). A structured survey was administered to a sample of 150 residents, selected using simple random probability sampling, assuming an infinite population. Amassed data were analyzed using a Logit econometric model, which identified that age, education, and income positively influence WTP, whereas a price increase has negative impact. Regarding WTP, respondents were willing to pay an average of 145.61 MXN per kilogram of meat, with 51% of them willing to pay more than 110 MXN for an organic, hormone-free, Mexican-origin product. Regarding product attributes, consumers primarily valued flavor (33%), followed by low cholesterol and fat content (23%) and texture (13%). These findings align with current trends favoring healthy, high-quality, and sustainably produced foods. This study reinforces the relevance of guajolote as a traditional product with economic potential, identifying key factors in consumer preferences that may influence marketing strategies.

**Keywords:** consumer preferences, organic food, willingness to pay.

### INTRODUCTION

The guajolote (*Meleagris gallopavo*) represents much more than an animal; as a symbol it is deeply rooted in Mexico's cultural identity. Native to Mesoamerica, this bird was domesticated and widely distributed thanks to the key role played by pre-Hispanic civilizations in its management and breeding (Medina *et al.*, 2020). Since then, the guajolote has been part of Mexican diet, traditions, and history, affirming itself as a living legacy of the region's agricultural and cultural practices (Herrera *et al.*, 2024). However, despite its historical and cultural importance, guajolote meat consumption in Mexico has been relegated to a secondary role because of the increase in imported turkey, a product that, paradoxically, has its roots in the same species native to Mesoamerica. Today, Mexico holds the title of the world's largest importer of turkey meat. According to data from the Food and Agriculture Organization of the United Nations (FAO, 2021), between 1993 and 2020, the country imported 3,844,931 tons of turkey meat, reaching its peak in 2008 with a record volume of 194,726 tons.

**Citation:** Villalobos-Torres LD, Hernández-Ortíz J, Vega-Valdivia DD. 2026. Potential consumption of turkey meat: a contingent valuation study. *Agricultura, Sociedad y Desarrollo*. <https://doi.org/10.22231/asyd.v23i1.1775>

ASyD(23): 112-127

**Editor in Chief:**  
Dr. Benito Ramírez Valverde

Received: April 14, 2025.  
Approved: 30 de julio de 2025.

**Estimated publication date:**  
January 2, 2026.

This work is licensed  
under a Creative Commons  
Attribution-Non-Commercial  
4.0 International license.



Although turkeys and guajolotes are commonly considered to be the same animal, there are notable differences between the two birds. Turkeys have been genetically modified by producers in the United States, resulting in significant changes to their coloration, size, disease resistance, and eggshell color (Mexican Meat Council, 2021).

In contrast, Canales (2020) emphasizes that the guajolote originated from the subspecies *Meleagris gallopavo*, whose genetics have been preserved over time thanks to the traditional management practices of indigenous communities. This management has allowed for the conservation of the guajolote's original characteristics that differentiate it from the commercial turkey and are closely related to Mexico's biodiversity and food culture.

Traditional production in indigenous communities allows meat from this animal to be considered an organic product, as breeding is undertaken using natural practices and avoiding chemical inputs, such as pesticides or synthetic fertilizers, in conformity with criteria established by the Ministry of Agriculture and Rural Development (SADER, 2019).

This form of production has a favorable impact on the decisions of consumers, who value traditional foods because they consider them to be healthy, of high quality, and with greater nutritional value (Antonelli and Viganó, 2018).

Guajolote meat is also characterized by its leanness, due to its low fat content that ranges from 0.60% to 16%, its low cholesterol levels, high protein content, as well as minerals and vitamins A, B1, and B12 (Montoya *et al.*, 2015). These characteristics enable guajolote meat to meet the standards of current consumers, who according to Nazzaro *et al.* (2025) seek foods that promote health and lifestyle benefits.

Several studies, such as those by Cervantes *et al.* (2020), Hernández *et al.* (2022) and Mustapa *et al.* (2025), have shown that attributes linked to traditional, organic and healthy production, such as those presented by guajolote meat, improve the consumer's perception and valuation, which translates into greater willingness to pay a premium.

Considering the above, this research arises from the need to conserve and promote the marketing of traditionally produced guajolote in the Texcoco region of the State of Mexico, by comprehending consumer preferences.

Therefore, the main objective of this research was to estimate the Willingness to Pay (WTP) of the inhabitants of the Texcoco region for guajolote meat, by means of the contingent valuation method.

In accordance with the stated objective, we formed the hypothesis that willingness to pay a premium for turkey meat is determined by knowledge of its intrinsic attributes, such as its traditional production, its organic nature and its health benefits, as well as by socioeconomic variables.

## THEORETICAL FRAMEWORK

According to Becerra (2022), the Contingent Valuation Method (CVM) is a key tool among environmental economic valuation methods that is especially useful for estimating the value of goods and services that lack an obvious market. This method is based on the creation of hypothetical scenarios that allow for the simulation of market conditions for non-tradable goods.

Unlike methods based on revealed preferences, CVM is based on declared preferences, where individuals express their valuations based on hypothetical scenarios, constructed using surveys that assess changes in well-being, without the need to observe real behavior in the market (Sartori, 2006; Labandeira *et al.*, 2007; Rodríguez, 2024).

According to Riera (1994), these simulations allow us to identify changes in individuals' well-being in response to hypothetical variations in the quantity or quality of an environmental asset. Thus, it is possible to estimate both willingness to pay (WTP) in order to conserve or improve an asset, and willingness to be compensated for its loss or deterioration.

In this context, the use of statistical models such as logit and probit enable greater precision for estimating willingness to pay (WTP) within the consumer choice model (CCM), as they help establish a relationship between the attributes that characterize individuals and the probability that they will make a particular choice (Buckland *et al.*, 1999; Alamilla and Arauco, 2009). These models are especially useful in surveys with dichotomous formats, as they consider factors such as the sociodemographic characteristics of individuals and their attitudes toward the risks and benefits associated with differentiated goods, thus facilitating a more comprehensive analysis of willingness to pay. The estimation of willingness to pay (WTP) represents one of the central aspects of value-added modeling (VAM), as it allows for the assignment of a monetary value to goods, whose function is perceived but does not represent a trade factor in the market. According to Stobierski (2020), WTP can be understood as the maximum amount of money an individual would be willing to pay that reflects their subjective valuation and the utility they associate with the resource.

Furthermore, willingness to pay (WTP) is influenced by factors such as income level, environmental awareness, perception of ecological risk, and cultural attachment to the natural resource, justifying the need to incorporate explanatory variables into the econometric models used (Mitchell and Carson, 1989). In this sense, the use of logit and probit models not only allows us to estimate the probability of an affirmative response to a payment scenario, but also to analyze how different individual characteristics affect that decision, thus providing more precise estimates.

International studies, such as that by Bao *et al.* (2017), show how consumer preferences can be influenced by factors that improve their health or have

positive environmental impacts. These findings are especially relevant when analyzing differentiated goods, where price does not only reflect the product's cost.

Research such as that of Hernández *et al.* (2023) highlights that although consumers perceive risks related to the use of hormones in food products, there is a clear willingness to pay more for those that guarantee safety and well-being.

Similarly, studies such as that by Barrera *et al.* (2021) have shown that sociodemographic characteristics, such as gender and educational level, determine consumers' willingness to pay more for plant or animal-based products. These sociodemographic factors influence how individuals value the benefits associated with these products, highlighting the need to consider these variables in order to obtain more accurate estimates.

Finally, national research, such as that by Valero *et al.* (2024), demonstrates how attributes related to culture and traditions have a significant impact on willingness to pay. In this context, consumers are not only willing to pay for products that offer tangible benefits, but also for those that align with their cultural values and are perceived as traditional.

## METHODOLOGY

This research was carried out in 2022, in the eastern part of the State of Mexico, specifically in the municipality of Texcoco.

The Municipal Development Planning Committee (COPLADEM, 2015) highlights that this municipality is located 2,300 meters above sea level (masl), although maximum elevations are at 4,000 masl, presenting semi-cold and temperate climates.

In terms of population, according to INEGI (2020), the 2020 Population and Housing Census recorded a total population of 277,562 people, with a population density of 648.30 inhabitants per km<sup>2</sup>. The population of this municipality is comprised of 51.40% women and 48.60% men. Of the total population, 44.80% of people aged 15 and over have completed primary education, 28.20% have completed upper secondary education, and 24.40% have completed higher education. Principal social deficiencies relate to limited access to social security, health services, and food.

In this study, the Contingent Valuation Method was applied, as this helps to value benefits by assigning a monetary amount that potential consumers are willing to pay (Osorio and Correa, 2009). In this research, this method was used to determine willingness to pay per kilogram of Mexican guajolote meat, produced using traditional methods.

The methodology was divided into five stages: the first was the selection of the Contingent Valuation Method for measuring the economic value of guajolote

meat. This method was chosen because the product does not have a defined market and individual preferences are not clear. The second stage consisted of obtaining the sample size, calculated using simple random sampling for an infinite population, with a maximum permissible error of 8% and a 95% confidence level. For this, we used the formula described by López and Fachelli (2015):

$$n = \frac{Z_{\alpha}^2 \cdot p \cdot q}{e^2} \tag{1}$$

where  $n$ : sample size;  $Z$ : Statistical parameter that depends on confidence level;  $e$ : maximum acceptable error of estimate;  $p$ : percentage of the population that conforms to the study characteristic;  $q$ : percentage of the population that does not conform to the study characteristic.

Where  $Z_{\alpha}=1.96$  corresponds to the critical value for a 95% confidence level,  $p=0.50$  and  $q=0.50$  represent the foreseeable proportions required to maximize variability,  $e$ : 0.08 maximum acceptable error of estimate. Substituting the values resulted in:

$$n = \frac{(1.96)^2 \cdot 0.5 \cdot 0.5}{(0.08)^2} = 150.06 \tag{2}$$

Therefore, a sample size of 150 surveys was determined, rounded up to the nearest whole number.

During the third stage, the survey was designed and implemented (Table 1). The questionnaire was divided into four sections: introduction, evaluation of commercially produced turkey, evaluation of traditionally produced guajolote meat and socioeconomic characteristics. The first section included the interviewer's name and the purpose of the interview. The second section

**Table 1.** Survey application form.

Place	Texcoco Region
Sample size	150 surveys
Type of sample	Random sampling among an infinite population
Maximum permissible error	8%
Efficacy	24 surveys
Application form	Personal and virtual
Number of sections	4
Number of questions	23
Questionnaire	Open and multiple choice

Source: self-elaborated, 2022.

contained questions about the consumption of turkey meat substitutes and questions for analyzing the consumption of commercially produced guajolote meat. The third section described traditionally produced guajolote meat, included questions to ascertain the preferences of potential consumers, and added a question about willingness to pay. Finally, the fourth section contained questions for gathering information about the socioeconomic characteristics of the respondents.

The fourth stage constituted a graphic analysis of data using econometric models. The econometric model was established using binomial logistic regression, which relates a binary dependent variable, taking values of 0 and 1, to different independent variables. These models are characterized by transforming the problem of predicting probabilities into a problem of predicting the probability ratio of the occurrence of an event. According to Ibarra and Michalus (2010) and Moreno (2011), the binomial logistic equation is defined as:

$$\text{Ln}\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_n x_n + e_i \quad (3)$$

where  $P$ : probability;  $\beta_0$ : intercept;  $\beta_1, \beta_2, \dots, \beta_n$ : regression coefficients associated with the independent variables;  $x_1, x_2, \dots, x_n$ : independent variables;  $e_i$ : error term.

For this research, the dependent variable is Willingness to Pay with values of 1 for yes and 0 for no.

The fifth and final stage was the estimation of Willingness to Pay and its elasticity. According to Tudela and Leos (2017), WTP is obtained by summing the coefficients of the independent variables, multiplying them by their value, and then dividing the total by the coefficient of the price variable with a negative sign.

To obtain the average Willingness to Pay, we applied the following formula (Hanneman, 1984):

$$WTP = \frac{\alpha}{-\beta} \quad (4)$$

where  $WTP$ : Willingness to pay;  $\alpha$ : coefficients of independent variables;  $\beta$ : coefficient of the price variable, which has a negative sign.

Finally, the marginal effects of willingness to pay were calculated using the statistical software Nlogit 4.0.

## RESULTS

The following results were obtained from surveys conducted in the Texcoco region: the most representative age group is 20 to 29 years old, comprising 29.33% of all respondents. The second largest group is 40 to 49 years old, comprising 21.33% of respondents.

Regarding gender distribution, a marked predominance of females was observed. According to the data collected, 76.67% of the participants were women, whereas 23.33% were men.

With respect to monthly income (Table 2), of the 150 respondents, 33.33% reported monthly incomes between \$3,000 and \$6,000; representing the largest group. This is followed by 26% with incomes between \$6,001 and \$9,000, and 20% who reported earning between \$9,001 and \$12,000 per month. Finally, only 20% indicated having incomes exceeding \$12,000 per month. This profile suggests a predominance of middle and lower socioeconomic levels among the participants, because more than half of them (59.33%) reported monthly incomes below \$9,000.

Regarding the respondents' educational level, 52.67% have a bachelor's degree, whereas 34% have completed high school or preparatory studies. The lowest percentage, at just 7%, corresponds to those with postgraduate studies, indicating that while the majority has a university education, only a minority has continued with higher education.

If this information is broken down by gender, apparently men have the highest percentage of university studies, with 54.28%, compared to 52.17% of women, which represents a difference of 2.11 percentage points.

Furthermore, men also account for a larger number of people with postgraduate degrees: 20% of the men interviewed hold a master's or doctorate degree, while only 3.47% of the women reported this level of education. This difference reflects a significant gap in access to or continuation of postgraduate studies between the men and women surveyed.

**Table 2.** Income of those interviewed .

Age	Frequency	Percentage
<20	16	10.67
20 -29	44	29.33
30-39	30	20.00
40-49	32	21.33
50-59	21	14.00
60<	7	4.67

Source: self-elaborated with data from those interviewed, 2022.

### Product characteristics

According to survey data, the most valued attributes of turkey meat reflect specific consumer preferences for this product. Figure 1 shows that the primary attribute identified was flavor, comprising 33% of responses, underscoring the importance of this factor in purchasing decisions.

Secondly, low cholesterol and fat content was highlighted by 23% of respondents, underscoring consumers' growing concern for health and their search for foods that contribute to a balanced and healthy diet.

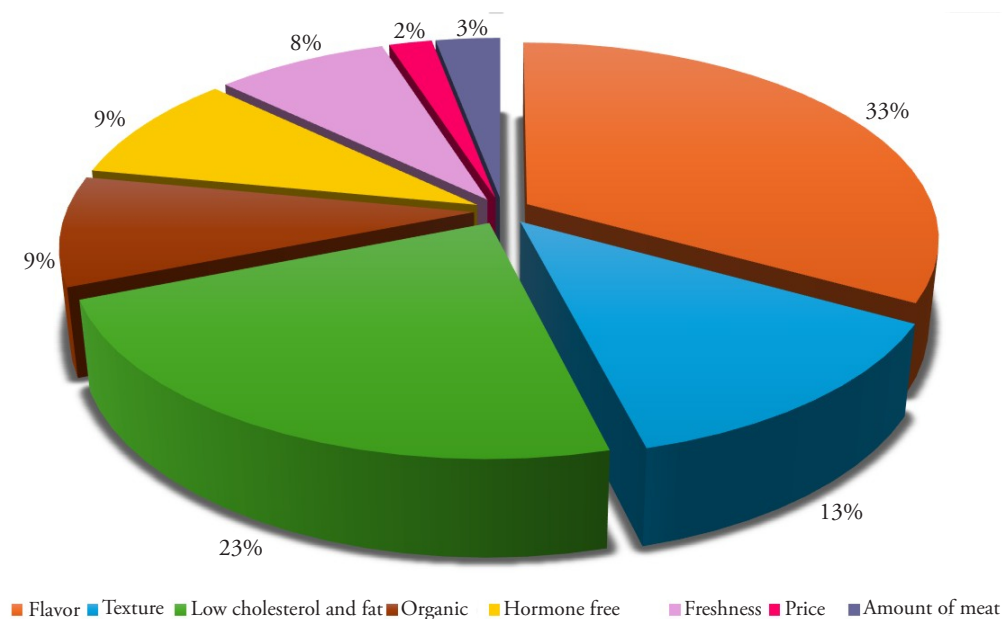
Finally, 13% mentioned the texture of the meat indicating that consumers value its tenderness and quality, when cooking and tasting the product.

In terms of willingness to pay, 51% of those surveyed stated they were willing to pay more than \$110 MXN per kilogram of guajolote meat, understanding that it represents an organic, hormone-free product of Mexican origin.

### Econometric Model

The variables used for estimating the econometric model were: Price, Age, Education, Income, and Willingness to Pay (Table 3).

$$WTP = \beta_0 + \beta_1 (Price) + \beta_2 (Age) + \beta_3 (Education) + \beta_4 (Income) + e \quad (5)$$



Source: prepared by the author using data collected in the survey, 2022.  
**Figure 1.** Attributes of turkey meat.

**Table 3.** Variables used in the model.

Variable	Definition	Type
Price	This refers to the extra monetary amount above the market price	Independent
Age	Age of interviewees	Independent
Education	Highest academic level obtained by the interviewees (Education)	Independent
Income	Monthly amount of money in Mexican pesos that the respondents and their families receive	Independent
Willingness to pay	Positive or negative reaction to paying an extra amount for a kg of guajolote meat	Dependent

Source: self-elaborated, 2022.

From which the following results were obtained (Table 4):  
 The final model was:

$$WTP = -4.14 - 0.20(Price) + 0.04(Age) + 1.21(Education) + 0.75(Income) \tag{6}$$

Regarding these indicators, we obtained a McFadden’s R<sup>2</sup> of 0.30, suggesting an adequate model fit within the acceptable range (0.20 - 0.40). This value indicates that the model has reasonable explanatory power, in the context of the analysis performed.

Results from the study reflect a clear relationship between certain sociodemographic factors and willingness to pay for guajolote meat in Texcoco. First, age has a positive impact, indicating that as consumers get older, their willingness to purchase this product increases. This finding suggests a direct relationship between age and purchase decision, which may be reflected in a higher rate of acceptance as age increases.

**Table 4.** Logit model estimate.

Variable	Coefficient	Standard error	b/St.Er.	P[ Z >z]
Constant	-4.1362	1.7072	-2.423	0.0154
Price	-0.0204	0.0079	-2.578	0.0099
Age	0.0412	0.0169	2.426	0.0153
Education	1.2086	0.3229	3.742	0.0002
Income	0.7446	0.1722	4.323	0

Source: elaborated by the author using data obtained from statistical software, 2022.

Likewise, educational level and income play a determining role in consumers' willingness to pay a price that exceeds the market price. Firstly, educational level influences the perception and valuation of the product, because as people achieve higher levels of education, they develop greater knowledge about the food they consume, which can translate into greater appreciation for this type of meat and, consequently greater inclination to pay higher prices.

This study indicates that consumers with a bachelor's degree and an income between 3,000 and 6,000 pesos are significantly more likely to pay a higher price, compared to those with only a primary education. For example, at a price of 120 pesos, the estimated probability that a consumer with a bachelor's degree would be willing to pay is 62.85%, whereas in the case of a consumer with only a primary education, this probability decreases to just 4.29%. As the price increases, this difference persists. At a price of 200 pesos, the probability of payment in the group with a bachelor's degree is 25.46%, remaining relatively high, whereas in the group with only a primary education, the probability of payment is zero, representing a value of 0%

Regarding income level, it is apparent that this factor directly influences the purchase decision, although to a lesser extent than educational level. As consumers have greater purchasing power, their ability to access a wider range of goods and services, including varied or higher quality products, also increases.

When comparing willingness to pay among consumers with bachelor's degrees and different income levels, it is noteworthy that those with incomes between 12,001 and 15,000 pesos show a higher probability of paying, across all price ranges. For example, at a price of 120 pesos, the estimated probability of payment is 94.13%. Although this probability decreases as the price increases, it remains relatively high, reaching 72.63% at a price of 210 pesos. In contrast, the group with an income between 3,000 and 6,000 pesos show a lower probability of payment as the price rises, dropping from 65.85% at 120 pesos to 21.85% at 210 pesos.

Finally, the product's price has a negative effect on willingness to pay, indicating that if the cost increases, demand may decrease significantly. This demonstrates that price is a determining factor in product acceptance and that is essential to define an appropriate price so as to avoid impacting market potential.

### **Willingness to pay**

After validating the model, willingness to pay (WTP) was estimated by summing the individual products of the coefficients of the independent variables and their respective values. Subsequently, the result of this sum was divided by the Price variable coefficient:

$$WTP = \frac{(-4.14 + 0.041(Age) + 1.21(Education) + 0.75(Income))}{-0.02} \quad (7)$$

The average willingness to pay was \$145.61 per kilogram (kg) of organically produced guajolote meat, which is 32.37% higher than the price of guajolote found in Mexican markets.

Despite the results presented, it is notable that these may present a bias due to the questionnaire, the order of questions or errors made by interviewees (Valdivia *et al.*, 2009; Cervantes *et al.*, 2020).

### Marginal effects of Willingness to Pay

The marginal effect of price is -0.51%, meaning that as the price of the product increases, consumers' willingness to pay decreases. This result is consistent with economic theory, as a higher price tends to reduce demand (Table 5).

Among the sociodemographic variables, the marginal effect of age is 1.03%, suggesting that as consumers age, their willingness to pay increases slightly. Although the effect is positive, its impact is moderate.

The variable with greatest impact is Education, with a marginal effect of 30.19%. This indicates that a higher level of education is associated with a significantly higher willingness to pay for the product, highlighting education as the factor with most influence on WTP.

Likewise, income also plays a key role, with a marginal effect of 18.60%. This suggests that consumers with higher incomes are considerably more willing to pay, although impact is less than that of education.

## DISCUSSION

The guajolote's importance in Mexico transcends its role in preserving traditional cuisine and the nutritional benefits it provides to consumers. This product also plays a key role as a source of employment and income for small scale producers, especially in rural communities, where according to Ángel *et al.* (2023), guajolote farming represents a significant economic activity, usually undertaken by women.

**Table 5.** Marginal effects of variables.

Variable	Marginal effect
Price	-0.00510
Age	0.01030
Education	0.30186
Income	0.18597

Source: self-elaborated using data obtained from statistical software, 2022.

While previous studies on this species have focused on origin and historical and cultural relevance, as well as its phenotypical, nutritional characteristics and production systems (Cigarroa *et al.*, 2013; García and Guzmán, 2016; Portillo *et al.*, 2022 and Rodríguez *et al.*, 2025), this research expands the perspective by analyzing consumer preferences and their willingness to pay (WTP) for guajolote meat.

These results indicate an affinity with the consumption trends of contemporary consumers, who are characterized by their search for natural, functional, and culturally significant products that contribute to their well-being. As Benites *et al.* (2025) point out this consumer profile increasingly values foods that, in addition to being healthy, possess attractive sensory qualities. In this regard, respondents highlighted the flavor, texture, and nutritional content of guajolote meat as key attributes contributing to preference.

These results are consistent with Mufeeth (2018), who when studying preferences for native chicken in Ampara, Sri Lanka, identified flavor and nutritional properties as the most valued attributes— aspects that proved equally decisive in the present study.

In line with the above, Montoya *et al.* (2015) and Romero *et al.* (2024) reveal a growing interest in the quality and health benefits of the foods people choose, also consistent with the findings of Jaramillo *et al.* (2018), who emphasize that low-fat foods are particularly appreciated and increase willingness to pay, as consumers seek options that contribute to their well-being.

Likewise, Ariadi *et al.* (2021) point out that the perception of a product such as guajolote meat as organic increases the perceived quality and therefore willingness to pay for it.

Despite the consumer preferences described above, the explanatory variables were primarily linked to the consumer's socioeconomic characteristics. For example, age emerged as a relevant variable in the willingness to pay (WTP) for guajolote meat. This finding aligns with previous research, such as that by Jaramillo (2016), which demonstrates that older consumers tend to value products with a variety of attributes, such as sustainability or health benefits, and are willing to pay a premium for them.

Income also showed a positive relationship with WTP, consistent with the findings of Jaramillo *et al.* (2015), Trujillo *et al.* (2019), Nawi *et al.* (2023), and Jaramillo *et al.* (2025), who indicate that as consumers achieve a higher monthly income, they are more likely to be willing to pay a premium for products with differentiated attributes, such as those produced organically.

Similarly, Jauregui *et al.* (2023) identify educational level as a relevant factor. This agreement reinforces the idea that certain consumer behavior patterns remain constant across different contexts and product types.

Taken together, these results provide useful evidence for the design of public

policies or market strategies that promote the consumption of guajolote meat as a healthy, culturally relevant and economically sustainable alternative for communities involved in production.

## CONCLUSIONS

Findings from this research allow us to conclude that guajolote meat produced using traditional and organic methods is perceived favorably by consumers, who value a number of attributes, in a context of growing demand for healthy and culturally relevant foods.

In line with the stated objective, it was confirmed that the willingness to pay for guajolote meat is mainly influenced by socioeconomic variables, such as age, education level and income, which are determining factors in valuation and the payment decision.

Although the sensory and nutritional attributes of the product are highly valued by consumers and influence their preference, these do not exert a significant direct influence on willingness to pay, suggesting that other factors, such as sociodemographic profile, play a more decisive role in terms of intention to pay.

Overall, the findings of this research confirm that guajolote meat has real commercial potential in the Texcoco region, in the eastern part of The State of Mexico. This opens a window of opportunity for small producers to promote this food as a viable and profitable alternative. Capitalizing on this market niche would not only allow them to expand sales and profit margins, but also contribute to strengthening the value of traditional production practices.

## REFERENCES

- Alamilla NE, Arauco S. 2009. Microeconometría: Modelos de respuesta binaria. *Hitos de Ciencias Económico Administrativas*, 15(42). 83-88. <https://revistahitos.ujat.mx/hitos/es/article/view/4266>.
- Antonelli G, Viganó E. 2018. Global challenges in traditional food production and consumption. *In: Case studies in the traditional food sector*. A volume in the Consumer Science and Strategic Marketing series. Cavicchi A y Santini C. Cambridge (eds), Reino Unido. Woodhead Publishing, <https://doi.org/10.1016/B978-0-08-101007-5.00003-8>. pp: 25-46.
- Ariadi BY, Relawati R, Szymoniuk B, Khan WA. 2021. The factors influencing purchase and willingness to pay for organic vegetables. *Sarhad Journal of Agriculture*. 37(1). 207-218. <https://dx.doi.org/10.17582/journal.sja/2022.37.s1.207.218>.
- Bao M, Pierce GJ, Strachan NJC, Martínez C, Fernández R, Theodissiou I. 2017 Consumers' attitudes and willingness to pay for Anisakis-free fish in Spain. *Fisheries Research*. 202. 149-160. <https://doi.org/10.1016/j.fishres.2017.06.018>
- Barrera A, Espejel A, Pérez MG. 2021. Atributos de diferenciación y valoración en vainilla mexicana, región de origen. *In: XIII Congreso de Economía Agroalimentaria*. Universidad Politécnica de Cartagena, España, 2021. <https://doi.org/10.31428/10317/10545>.
- Becerra GN. 2022. El método valoración contingente como herramienta para medir servicios ecosistémicos. *Ciencia Latina Revista Científica Multidisciplinar*. 5(6): 14304-14325. [https://doi.org/10.37811/cl\\_rcm.v5i6.1401](https://doi.org/10.37811/cl_rcm.v5i6.1401).
- Benites EL, Franco EM, Sumba NA, Cueva JM. 2025. Preferencias de consumo y hábitos saluda-

- bles: un estudio sobre consumidores de bienestar activo. *Revista De Ciencias Sociales y Económicas*. 9(2). 126–141. <https://doi.org/10.18779/csye.v9i2.1096>.
- Buckland ST, MacMillan DC, Duff EI, Hanley N. 1999. Estimación de la disposición media a pagar a partir de estudios de valoración contingente de elección dicotómica. *The Statistician*. 48(1). 109-124. <https://doi.org/10.1111/1467-9884.00175>.
- Canales AM. 2020. Caracterización de distintas poblaciones de pavo común. Tesis de doctorado. Universidad de Córdoba. España. <https://helvia.uco.es/xmlui/handle/10396/19413>.
- Cervantes JO, Melo E, Hernández J, Valdivia R, Sandoval F, González A. 2020. Disposición a pagar por mezcal añejo en San Felipe, Guanajuato, México. *Acta Universitaria*. 30. 1-11. <https://doi.org/10.15174/au.2020.2887>.
- Cigarroa F, Herrera JG, Ruiz B, Cuca JM, Rojas RI, Lemus C. 2013. Caracterización fenotípica del guajolote autóctono (*Meleagris gallopavo*) y sistema de producción en la región centro norte de Chiapas, México. *Agrociencia*, 47(6). 579-591. <https://agrociencia-colpos.org/index.php/agrociencia/article/view/1041>.
- Consejo Mexicano de la Carne. 2021. Pavo o Guajolote ¿Cuál es la diferencia? Consejo Mexicano de la Carne, <https://comecarne.org/pavo-o-guajolote-cual-es-la-diferencia-2/#:~:text=Por%20lo%20que%20podemos%20llamar,identificados%20como%20recursos%20gen%C3%A9ticos%20diferentes>.
- COPLADEM (Comisión de Planeación para el Desarrollo del Estado de México). 2019. Programa Regional XV Texcoco 2017-2023. Gobierno del Estado de México. [https://copladem.edomex.gob.mx/plan\\_estatal\\_desarrollo\\_2017\\_2023](https://copladem.edomex.gob.mx/plan_estatal_desarrollo_2017_2023).
- FAO (Food and Agriculture Organization of the United Nations). 2021. FAOSTAT, <https://www.fao.org/faostat/es/#data/TCL/visualize>.
- García A, Guzmán E. 2016. El guajolote nativo, elemento cotidiano del traspatio en Playa Ventura, Copala, Guerrero, México. *Agricultura, Sociedad y Desarrollo*. 13(1). 1-18. <https://www.revista-asyd.org/index.php/asyd/article/view/275>.
- Hanemann WM. 1984. Welfare evaluations in contingent valuation experiments with discrete responses. *American Journal of Agricultural Economics*. 66(1). 332-341. <https://doi.org/10.2307/1240800>.
- Hernández J, Galicia OJ, Melo E, Valdivia R, Valenzuela LM. 2022. El huevo de traspatio: ventana de oportunidad de ingresos en comunidades del Municipio de Texcoco, Estado de México. *Revista Mexicana de Ciencias Pecuarias*. 13(1). 287-296. <https://doi.org/10.22319/rmcp.v13i1.5784>.
- Hernández MS, Valdivia R, Melo E, Hernández J, Valenzuela LM, Martínez MÁ. 2023. Disposición a pagar por carne de cerdo sin antibióticos en el Estado de México. *Agricultura, Sociedad y Desarrollo*. 20(1). 41–51. <https://doi.org/10.22231/asyd.v20i1.1509>.
- Herrera JG, Rogers NA, Núñez JM, Portillo R. 2024. Contribución del Guajolote (*Meleagris gallopavo*) a la cocina mexicana en un sistema de producción en pequeña escala. *Agro-Divulgación*. 4(6). 57-64. <https://doi.org/10.54767/ad.v4i6.396>.
- Ibarra MC, Michalus JC. 2010. Análisis del rendimiento académico mediante un modelo LOGIT. *Ingeniería Industrial*. 9(2). 47–56. <https://revistas.ubiobio.cl/index.php/RI/article/view/56>.
- INEGI (Instituto Nacional de Estadística y Geografía). 2020. Censo de Población y Vivienda 2020. INEGI. [https://www.inegi.org.mx/programas/ccpv/2020/default.html#Resultados\\_generales](https://www.inegi.org.mx/programas/ccpv/2020/default.html#Resultados_generales).
- Jaramillo JL. 2016. Preferencias del consumidor y disposición a pagar por el consumo de tortilla de maíz orgánico. *Estudios Sociales*. 25(47). 143-161. <https://www.ciad.mx/estudiossociales/index.php/es/article/view/312>.
- Jaramillo JL, Carranza I, Zepeda LA, Rojas LA. 2025. Preferencias y disponibilidad a pagar por frutas orgánicas y producidas localmente en Puebla: un enfoque de valoración contingente. *Acta Universitaria*. 35. 1-18. <https://doi.org/10.15174/au.2025.4432>.
- Jaramillo JL, Vargas S, Guerrero JD. 2015. Preferencias de consumidores y disponibilidad a pagar por atributos de calidad en carne de conejo orgánico. *Revista Mexicana de Ciencias Pecuarias*. 6(2). 221-232. <https://doi.org/10.22319/rmcp.v6i2.4065>.
- Jaramillo JL, Vargas S, Rojas LA. 2018. Valoración contingente y disponibilidad a pagar por atributos intangibles en carne de bovino. *Revista Mexicana de Ciencias Pecuarias*. 9(1). 14-31. <https://doi.org/10.22319/rmcp.v9i1.4376>.
- Jauregui CZ, Espejel A, Barrera AI, Hernández A, Hernández L. 2025. Disposición de los consumi-

- dores mexicanos a pagar por vinos. *In: Ensayos Revista De Economía*. 44(2). 183–208. <https://doi.org/10.29105/ensayos44.2-3>.
- Labandeira X, León CJ, Vázquez MX. 2007. *Economía Ambiental*. Pearson Educación: Madrid; pp: 148-152.
- López P, Fachelli S. 2015. Metodología de la investigación social cuantitativa. Universitat Autònoma de Barcelona: Barcelona; [https://ddd.uab.cat/pub/caplli/2016/163564/metinvsocua\\_a2016\\_cap1-2.pdf](https://ddd.uab.cat/pub/caplli/2016/163564/metinvsocua_a2016_cap1-2.pdf). 22 p.
- Mitchell RC, Carson RT. 1989. Using Surveys to Value Public Goods: The Contingent Valuation Method. *Natural Resources Journal*. 29(3). 900-902. <https://www.jstor.org/stable/24883508>.
- Montoya A, Caicedo S, Montoya IA. 2015. Análisis de las oportunidades de aumento de consumo de carne de pavo (*Meleagris gallopavo*) en Colombia. *Suma de Negocios*. 6(14). 183-193. <https://doi.org/10.1016/j.sumneg.2015.10.006>.
- Moreno E. 2011. Métodos de elección discreta en la estimación de la demanda de transporte. Instituto Mexicano del Transporte: México; <https://www.imt.mx/archivos/Publicaciones/PublicacionTecnica/pt335.pdf>. 20 p.
- Mufeeth M. 2018. Consumer Preference of Value Added Indigenous Chicken Product: Contingent Valuation Approach. *International Journal of Innovative Science and Research Technology*. 3(2). 103-111. [https://www.researchgate.net/publication/323280701\\_Consumer\\_Preference\\_of\\_Value\\_Added\\_Indigenous\\_Chicken\\_Product\\_Contingent\\_Valuation\\_Approach](https://www.researchgate.net/publication/323280701_Consumer_Preference_of_Value_Added_Indigenous_Chicken_Product_Contingent_Valuation_Approach).
- Mustapa MAC, Baba Y, Kallas Z, Garcia MB, Escobar C, López L. 2025. Consumers' attitudes toward and willingness to pay for organic aquaculture products: Evidence from Spain. *Aquaculture*. 599. 1-12. <https://doi.org/10.1016/j.aquaculture.2025.742126>.
- Nawi NM, Basri HN, Kamarulzaman NH, Shamsudin MN. 2023. Consumers' preferences and willingness-to-pay for traceability systems in purchasing meat and meat products. *Food Research*. 7(1). 1-10. [https://doi.org/10.26656/fr.2017.7\(1\).646](https://doi.org/10.26656/fr.2017.7(1).646).
- Nazzaro C, Uliano A, Lerro M, Stanco M. 2025. From Claims to Choices: How Health Information Shapes Consumer Decisions in the Functional Food Market. *Foods*. 14(4). 1-14. <https://doi.org/10.3390/foods14040699>.
- Osorio JD, Correa FJ. 2009. Un análisis de la aplicación empírica del método de valoración contingente. *Semestre Económico*. 12(25). 11-30. <https://www.redalyc.org/pdf/1650/165013651001.pdf>.
- Medina A, Valadez R, Pérez G, Rodríguez B. 2020. *Huexólotl. Pasado y presente en México*, 1ª ed.; Universidad Nacional Autónoma de México. Instituto de Investigaciones Antropológicas. México; [https://editorialia.unam.mx/omp/index.php/publicaciones/catalog/book/huexolotl\\_pasado\\_presente](https://editorialia.unam.mx/omp/index.php/publicaciones/catalog/book/huexolotl_pasado_presente). pp: 1-18.
- Portillo R, Herrera JG, Bautista J, Chay AJ, Cigarroa FA. 2022. Guajolote – A poultry genetic resource native to Mexico. *World's Poultry Science Journal*. 78(2). 467–482. <https://doi.org/10.1080/00439339.2022.2028217>.
- Riera P. 1994. *Manual de Valoración Contingente*. Instituto de Estudios Fiscales: España. <http://132.247.70.26/profesores/blopez/valoracion-manual.pdf>.
- Romero D, Rincón EM, Arredondo MA, Vázquez SM, Barrios D. 2024. Factores determinantes de la intención de compra de productos cárnicos procesados saludables. *Revista CEA*. 11(25). 1-20. <https://doi.org/10.22430/24223182.3095>.
- Rodríguez JA. 2024. Discrepancias entre disposiciones a pagar y aceptar en valoración contingente: observaciones desde la economía conductual. *Revista Iberoamericana de Economía Ecológica*. 37(1). 21-31 <https://raco.cat/index.php/Revibec/article/view/435594>.
- Rodríguez L, Vargas A, Zúñiga EA, Hernández FJ, Rodríguez A, Ronquillo E, Sifuentes DM, Zarate D. 2025. Contenido de proteína y características físicas del huevo de guajolote criollo. *XAHNI Boletín Científico De La Escuela Preparatoria No. 6*. 3(5). 30–34. <https://doi.org/10.29057/xahni.v3i5.14840>.
- SADER (Secretaría de Agricultura y Desarrollo Rural). 2019. *Productos orgánicos naturalmente importantes*. Gobierno de México. <https://www.gob.mx/agricultura/articulos/productos-organicos-naturalmente-importantes>.
- Sartori JJP. 2006. Diseño de un experimento de preferencias declaradas para la elección de modo de transporte urbano de pasajeros. *Revista de Economía y Estadística*. 44(2). 81–123. <https://doi.org/10.22231/revista.44.2.81-123>.

- [doi.org/10.55444/2451.7321.v44.n2.383](https://doi.org/10.55444/2451.7321.v44.n2.383).
- Stobierski T. 2020 Willingness to pay: what it is & how to calculate. Harvard Business School Online. <https://online.hbs.edu/blog/post/willingness-to-pay>.
- Trujillo J, Hernández J, Martínez MA. 2019. Disposición a pagar por productos orgánicos en Texcoco, Estado de México. *Revista Mexicana de Ciencias Agrícolas*. 10(7). 1685-1691. <https://doi.org/10.29312/remexca.v10i7.926>.
- Tudela JW, Leos JA. 2017. Herramientas metodológicas para aplicaciones del método de valoración contingente. Universidad Autónoma Chapingo: México; <https://ciestaam.edu.mx/publicaciones2018/metodologias/herramientas-metodologicas-aplicaciones-metodo-valoracion-contingente.pdf>. 72 p.
- Valdivia R, Cuevas CM, Sandoval M, Romo JL. 2009. Estimación econométrica de la disponibilidad a pagar de los consumidores de servicios recreativos turísticos. *Terra Latinoamericana*. 27(3). 227-335. [http://www.scielo.org.mx/scielo.php?script=sci\\_arttext&pid=S0187-57792009000300007&lng=es&tlng=es](http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0187-57792009000300007&lng=es&tlng=es).
- Valero J, Márquez C, Espejel A. 2024. Significados de compra y disposición a pagar por tortillas de maíz en Nuevo León. *Revista Mexicana de Ciencias Agrícolas*. 15(2). 1-16. <https://doi.org/10.29312/remexca.v15i2.3241>.