Factors Influencing the Consumption of Alternate Poultry Meat in Chennai City, India

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Abstract

The study was carried out to find the factors influencing alternate poultry meat consumption among the consumers of Chennai city, India. The required data were collected by personally interviewing 180 respondents. The results of the multiple linear regression analysis revealed that the coefficient of multiple determinations ($R^2$) was 0.706. The factors like monthly expenditure for food, livestock products and non-food items had a significant negative influence over the quantity of alternate poultry meat consumed. Total expenditure of the household had a significant positive influence over the quantity of alternate poultry meat consumed. These results emphasized that if the respondents spent more for food, livestock products, meat and non-food items, they will reduce the intake of alternate poultry meat. Increase in the consumption of alternate poultry meat will obviously increase the total expenditure and the households with high total family expenditure are more likely to buy alternate poultry meat in Chennai city.

Key words: Alternate Poultry Meat – Consumption - Factors - Regression analysis.

The Indian economic basket consists of different consumers who consume a variety of food items influenced by their social, religious and economic factors. In the past, alternate poultry meat was considered to be a delicacy but with the strong gains in alternate poultry production over the years, alternate poultry meat prices are now lower than other meat prices and consumption among middle-class consumers is expanding rapidly (Kumar and Birthal, 2004). Muthukumar and Dev Roy (2010) stated that alternate poultry meat is preferred over other meat products as it is considered tastier and is available year around throughout the country at relatively lesser prices than other meats. All these factors have led to strong growth in alternate poultry meat consumption in past few years. Having these factors in view the study was designed to analyze the factors influencing alternate poultry meat consumption among the consumers in Chennai city.

Materials and Methods

The expanded Chennai Corporation was divided into three regions viz., North, South and Central. In each region, 60 sample households were selected using simple random sampling and totally 180 households were selected for the present study. The data for the present study were collected through field survey approach by interviewing the sample respondent households with the help of a well-structured pre-tested interview schedule. The data also includes education, family size, religion, monthly income, monthly expenditure for food, livestock products, meat consumption, non food and total expenditure of alternate poultry meat consumers (Priyadharsini, 2008). Among 180 respondents alternate poultry meat consumers were only 128. To analyze the factors influencing alternate poultry meat consumption among the consumers, the following multiple linear regression model was fitted. Similar methodology was adopted by Daisyrani (1995).

$$Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 + \beta_9 x_9 + \beta_{10} x_{10} + \mu$$

Where,

$Y$ = Quantity of alternate poultry meat consumed

$\alpha$ = Constant term

$\beta_i$'s = Regression coefficients

$x_i$ = independent variables

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$X_1$ Education  
$X_2$ Family size  
$X_3$ Hindu  
$X_4$ Muslim  
$X_5$ Monthly income  
$X_6$ Monthly expenditure for food  
$X_7$ Monthly expenditure for livestock products  
$X_8$ Monthly expenditure for meat consumption  
$X_9$ Monthly expenditure for non-food  
$X_{10}$ Total monthly family expenditure  

$\mu$ Random disturbance term; ($\mu_i \sim 0, \sigma_i^2$)

**Results and Discussion**

The factors associated with the consumption of alternate poultry meat were analyzed by fitting a multiple linear regression model. The result of the analysis is given in table. The results revealed that the coefficient of multiple determination ($R^2$) was 0.706 indicating that 70 percent of the variations in the quantity of alternate poultry meat consumed were explained by the independent variables chosen for the study. The variables education, family size, Hindu, Muslim, monthly income had no significant influence on quantity of alternate poultry meat consumed, where as the monthly expenditure for food had a significant negative influence over the quantity of alternate poultry meat consumed. It indicated that 1 percent increase in expenditure of food from its mean level would decrease the quantity consumption of alternate poultry meat by 0.014 grams from their mean level (Table I).

The monthly expenditure for livestock products and meat consumption had a highly significant negative influence over the quantity of alternate poultry meat consumed. Typically, the expenditure for non food item also had a significant negative influence over the quantity of alternate poultry meat consumed. The total expenditure had a significant positive influence over the quantity of alternate poultry meat consumed. It could be emphasized that if the respondents spent more for food, livestock products, meat and non food, they will reduce the intake of alternate poultry meat. Increase in the consumption of alternate poultry meat will obviously increase the total expenditure and the families with high spending habit are likely to

<table>
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<tr>
<th>Particulars</th>
<th>Regression Co-efficients ($\beta_i$)</th>
<th>t statistic</th>
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<tbody>
<tr>
<td>Regression constant</td>
<td>0.087</td>
<td>1.813</td>
</tr>
<tr>
<td>Education</td>
<td>0.312</td>
<td>1.040</td>
</tr>
<tr>
<td>Family size</td>
<td>0.450</td>
<td>0.773</td>
</tr>
<tr>
<td>Hindu</td>
<td>0.795</td>
<td>0.264</td>
</tr>
<tr>
<td>Muslim</td>
<td>0.889</td>
<td>0.142</td>
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<tr>
<td>Monthly income</td>
<td>0.531</td>
<td>0.638</td>
</tr>
<tr>
<td>Monthly expenditure for food</td>
<td>-0.014*</td>
<td>-2.721</td>
</tr>
<tr>
<td>Monthly expenditure for livestock products</td>
<td>-0.001**</td>
<td>-4.158</td>
</tr>
<tr>
<td>Monthly expenditure for meat consumption</td>
<td>-0.007**</td>
<td>-6.020</td>
</tr>
<tr>
<td>Monthly expenditure for non-food</td>
<td>-0.039*</td>
<td>-5.237</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>0.013*</td>
<td>5.772</td>
</tr>
<tr>
<td>F statistic</td>
<td>4.317**</td>
<td></td>
</tr>
<tr>
<td>Co-efficient of multiple determination ($R^2$)</td>
<td>0.706</td>
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<tr>
<td>Adjusted $R^2$</td>
<td>0.542</td>
<td></td>
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<td>Sample size (N)</td>
<td>128</td>
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</table>

** Significant at 1 percent level of probability  
* Significant at 5 percent level of probability
consume more of alternate poultry meat.

Summary

The results of the study on factors influencing the consumption of alternate poultry meat among the consumers in Chennai city revealed that monthly expenditure for food, livestock products, meat consumption and non-food items had a significant negative influence over the quantity of alternate poultry meat consumed. Total expenditure of the household has a significant positive influence over the quantity of alternate poultry meat consumed. These results emphasized that if the respondents spent more for food, livestock products, meat and non-food items, they will reduce the intake of alternate poultry meat. Increase in the consumption of alternate poultry meat will obviously increase the total expenditure and the households with high total family expenditure are more likely to buy alternate poultry meat in Chennai city.

References


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<td>11th November - 1st December 2015</td>
<td>Updates in Veterinary Emergency and Critical Care Medicine in Farm and Pet Animal Practice</td>
<td>21 days</td>
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Interested Veterinarians working as Faculty members / Scientists in the field of Veterinary Clinical Sciences as well as other branches of Veterinary and Animal Sciences employed at SAUs / SVUs / ICAR Institutes may apply through their employer. Advance Copy of application will be accepted subjected to the receipt of through proper channel copy in time. Preference will be given to members of Veterinary Clinical Sciences with active clinical practice. The application format is available at the university website – www.tanuvas.ac.in.

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