

# NUT FOOD CONSUMPTION AS A SIGNIFICANT PREDICTOR OF FEMALE COASTAL COMMUNITIES WITH CLIMATE CHANGE EXPERIENCE IN SABAK BERNAM, SELANGOR

**Zainal Badari, S.A.\* , Zainalaludin, Z., Saidi, N., Jaafar, N.A.A, Osman, S., Zainudin, N.,  
and Jamaluddin, A.**

Department of Resource Management and Consumer Studies, Faculty of Human Ecology,  
Universiti Putra Malaysia

\*shazri@upm.edu.my

This paper aims to measure the food consumption score (FCS) among respondents with experience of climate change (CCE). A purposive sampling approach was used to collect data from  $n=274$  respondents in Sabak Bernam, a coastal district in Malaysia. A Binary Logistic Regression (BLR) Model was used to test the Following Hypotheses: Ho1, no significant FCS predicts respondents with CCE; Ho2, no significant FCS predicts male respondents with CCE; and Ho3, no significant FCS predicts female respondents with CCE. The DV=1 refers to the respondent with CCE. In  $n=230$  respondents reported that they have CCE. There are 8 categories of FCS and only 6-category are selected as IVs which are milk, vegetables, fruits, oil, nuts, and rice/cereal. This is because of multicollinearity within the IVs where meat has a strong relationship with the vegetables and oil, and oil has a strong relationship with sugar. The additional IVs are the gender (male & female) of the respondents and the gender of the household heads. Only general and female BLR Models are significant ( $p<0.05$ ). For the general BLR Model, 26.6 percent variance in DV can be explained by the IVs; and the significant ( $p<0.05$ ) predictors are nuts FCS (odds=0.928), male gender (odds=7.162) and male-headed household (odds=3.621). For the female BLR model, an 18.3 percent variance in the DV can be explained by the IVs; and the significant predictors are nuts FCS (odds=0.920) and male-headed household (odds= 5.079). Focusing on FCS, only nuts FCS is significant in both general and female BLR models. An increase of one score in nuts FCS will reduce the 7.2 per cent and 8.0 per cent likelihood that the respondents have CCE in general and female BLR Models respectively. Thus, males were 7.16 times more likely to report CCE than females in the general model. This could reflect differences in exposure (e.g., males working outdoors) or reporting biases. Female respondents in male-headed households were significantly more likely to report CCE, indicating potential inequalities in resource access or decision-making power that shape climate experiences. In conclusion, this study highlights nuanced links between diet (especially nuts), gender, and climate perception, urging integrated policies for food security and gender equity in coastal areas.

**Wald Chi-Square (General Model)**

|                                          | B            | S.E.        | Wald          | df       | Sig.        | Exp(B)       |
|------------------------------------------|--------------|-------------|---------------|----------|-------------|--------------|
| Cereals, grains, roots, and tubers       | -.029        | .081        | .128          | 1        | .721        | .971         |
| <b>Legumes/pulses, nuts, and seeds</b>   | <b>-.074</b> | <b>.031</b> | <b>5.609</b>  | <b>1</b> | <b>.018</b> | <b>.928</b>  |
| Milk and other dairy products            | -.002        | .018        | .015          | 1        | .903        | .998         |
| Vegetables and leaves                    | .001         | .120        | .000          | 1        | .996        | 1.001        |
| Fruits                                   | -.034        | .092        | .139          | 1        | .709        | .966         |
| Oils                                     | .182         | .189        | .930          | 1        | .335        | 1.200        |
| <b>Gender (Male=1)</b>                   | <b>1.969</b> | <b>.578</b> | <b>11.620</b> | <b>1</b> | <b>.001</b> | <b>7.162</b> |
| <b>Head of Household (Male headed=1)</b> | <b>1.287</b> | <b>.476</b> | <b>7.318</b>  | <b>1</b> | <b>.007</b> | <b>3.621</b> |
| Poverty Status (Non-poor=1)              | -.395        | .432        | .838          | 1        | .360        | .673         |
| Constant                                 | .903         | 1.159       | .607          | 1        | .436        | 2.467        |