

## **Consumer Knowledge Of Food Labels Of Low Income Female Workers In Michael Okpara University Of Agriculture Umudike, Abia State.**

**UMEH A.S**

HOME ECONOMICS/HMT DEPARTMENT  
MICHAEL OKPARA UNIVERSITY OF AGRICULTURE, UMUDIKE

### **ABSTRACT**

*The study focused on consumer knowledge of Nutrition food label information and nutritional status of low income workers in Michael Okpara University of Agriculture, Umudike. It was a survey design. The sample consisted of 256 female low income staff drawn from the population. Questionnaire was used for data collection. Data were analyzed using frequency count and mean. The findings indicated that low income workers were aware of food label information. Recommendations were made based on the findings.*

Date of Submission: 20 January 2015



Date of Accepted: 20 March. 2015

### **I. INTRODUCTION**

Consumers in the past consumed mostly fresh farm produce with little or no processing. Eating habits and dietary intakes are changing rapidly in the urban and rural areas as a result of development. The increase in the intake of fats, refined sugars and salt are leading to imbalanced nutrition and over nutrition (Roger and Hawkes, 2006). While under nutrition as a public health problem still persists in the society and at the same time chronic diseases are becoming more common. The high urbanization rate, modern technology and industrialization of the food chain in particular, under the influence of Westernization and globalization are increasing the speed of these changes. Also the increased capacity to store food safely without the need for drying or salting facilitated the extension of the food supply chain from the farm to the urban. The industrialization of the food chain has seen remarkable changes in the way we eat and what we eat (Henry and Heppel, 1998).

Chemical substances are now being added to foods in order to make them into the vast array of processed foods available in the market (Millstone and Lang, 2003). These chemical additives include colouring, preservative, antioxidants, emulsifiers, stabilizers, anti-caking agents and flavour enhancers. These help to make processed foods smaller in size and taste better, as well as improve their shelf life. There are about 540 food additives that are deemed safe for human consumption by regulatory bodies (Henry and Heppel, 1998). There are for instance 13 different sweetening agents besides sugar. The reduction in the variety of species being used as food by man has increased the risks of micronutrient deficiencies. These risks have been compounded by the effects of food processing. For instance, the milling of wheat germ associated with an 80% reduction in the mineral and vitamin content in the flour as compared to the whole grain. To compensate for these increased risks, flour is fortified (Bennion and Scheule, 2000).

Moreover, industrialization of the food chain has also changed the macronutrient composition of the diet, which is now much energy dense. The type of carbohydrate in the diet has changed, with decreases in complex carbohydrates such as starches and increase in refined sugar (Uusitalo, 2002). However, it has been observed that food affects the level of physical, mental and social well-being of individuals (Ajala, 2006). This is why families apply all efforts in providing good nutrition to the members. When this is achieved, the family is said to be food secured. Uko-Aviomoh (2005) agreed with this when she pointed out that food security is achieved when all members of the household have access to food of adequate quality and quantity constantly. The three pillars undermining food security are food availability, accessibility and utilization (World Bank, 2001). This means that the family is able to access food constantly make it available and utilize it correctly.

Thus, a family is food insecure when the demand for food is less than the needed quantity and quality. According to the Report from Edo Agricultural Development Programme (2002), less than 5% of Nigerians have attained food security status, while 65% are semi food secured and over 30% are still food insecure. The low income workers of Michael Okpara University of Agriculture, Umudike cannot be said to belong to the top echelon of Nigerians, the 50% who are food secured. It therefore, becomes pertinent to establish consumer knowledge of food label and how they have been utilizing and applying this information to achieve household food security.

Meanwhile, a consumer is a person who makes use of goods and services to satisfy personal or household needs (Anyakoha and Eluwa, 2008). Consumer activities involve the ability to choose, select, buy and utilize products and service in a rational, intelligent and efficient way. Nutrition food label is the information written on the back of cans and packets of processed foods (Whitney and Rolfes, 2006). According to Codex Alimentarius Commission, (2002) nutrition labeling is a description intended to inform the consumer of the nutritional properties of food, and includes a declaration of the nutrient content of the food as well as supplementary nutrition information. Codex (2002) observed that there are essentially two components of food labeling that can inform a consumer of choice of foods and potentially impact on diet related chronic disease, these are nutrition claims and health claims. Also nutrition claims are those use on labels which make an assertion about a particular nutritional property of a food. While health claims maintain that there is a relationship between a specific and improved health, and that a food can reduce the risk of a particular disease (Hawkes, 2004a).

Nowadays, the consumer faces many problems like choice, selection availability and utilization, as a result of the great varieties of new products in the market which compete for the low income workers scarce resources. Low income worker is a worker who is not a graduate and has few occupational skills (Andrew, 2003). Low income workers are those whose connection to the economy is so tenuous that they cannot provide reliable for a decent life. They live on little or wrong kind of food, spending as much as 80% of their income on food, leaving little or nothing for housing health or education (Mbanefor, 1994).

According to the study by Kajang, Padung, Jatau and Datol (2005), poverty was one of the factors affecting nutrition especially among the low income families. Dimlong and Jatau (2001) argued that harsh economic conditions have prevented some parents from giving their families the needed nutrients. In the event of poverty and poor nutrient intake of families, consumer education becomes an option that can lead to household food security since this will help families to change their food provision methods and promote the consumption of homemade foods. Consumer education will help individuals to recognize that poor nutrition intake will result in chronic dietary problems like obesity, diabetes mellitus, hypertension and coronary heart diseases (Hawkes, 2004). It will also help the low income worker to be a rational consumer by applying the knowledge to what he purchases, utilizes and consumes. The application of the knowledge of nutrition food label information will cushion the effect of the recent increases in prices of processed foods.

## **II. OBJECTIVES OF THE STUDY**

The main objective of the study was to determine knowledge of food labels and the nutritional status of low income workers of Michael Okpara University. Specially, the study determined:

1. the level of awareness of the information of nutrition food labels by the respondent.
2. factors that affect the application and utilization of nutrition food labels by the respondent.

## **RESEARCH QUESTIONS**

1. What is the meaning of nutrition food labels?
2. Do you understand information on food labels?
3. What are the factors that affect the application and utilization of food labels?

## **METHODOLOGY**

The area of the study was Michael Okpara University of Agriculture, Umudike. The study employed a survey research design to elicit information from low-income staff MOUUAU.

**Population of the study:** The population of the study includes all the 508 (256 females and 252 males) (MOUUAU, 2010) low income staff of MOUUAU, Umudike (Registrar Office, Personnel Department).

**Sample for the study:** The sample for the study was the 256 female low income workers in MOUUAU. All female respondents in the population were used for the study.

**Instrument for data collection:** A structured questionnaire validated by three home economist lecturers and pre-tested on the population was used to elicit information. The questionnaire were drafted from the extensive

literature review designed on a 4-point Likert scale of agree, strongly agree (4) agree (3), disagree (2) and strongly disagree (1). Cronbach alpha coefficient which was applied for testing the reliability of the instrument yielded a coefficient value of 0.81.

**Data collection and analysis technique:** Data were analyzed using frequency count and mean items with mean ratings up to 2.50 and above were regarded as agree while below 2.50 was regarded as disagree.

**FINDINGS OF THE STUDY**

**Table 1: Mean ratings on the importance of food labels**

S/N	Knowledge of the meaning of nutrition food label	X	Remark
1	Nutrition food labeling is a description intended to inform a consumer	3.40	Agree
2	It declares the nutrient content of foods	3.63	Agree
3	It increases the consumers understanding of the nutritional value of processed foods.	3.85	Agree
4	It is a standardized easy to read format.	2.50	Agree
5	It gives information on how may servings are in the container	3.00	Agree
6	Nutrition food label information helps in planning nutritious meals.	3.37	Agree
7	Helps to serve variety in meals	3.50	Agree
8	Nutrition information helps to check health information before purchasing.	2.90	Agree
9	It gives nutrition claims	2.83	Agree
10	The knowledge makes you live within the income	2.75	
10	It makes consumer obtain the best value for the money spent	3.61	
11	Lack of awareness of the knowledge leads to potential health problem	3.32	Agree
12	Nutritional labels may create confusion if not properly presented	3.32	Agree

The result in Table 1 revealed that all the items recorded means above the criterion level of acceptance (2.50). This shows that the respondents agreed with the meaning of nutrition food labels.

**Table 2: Mean ratings on whether low income workers read and understand food labels.**

S/N	Whether they read and understand	X	Remark
1	Read nutrition food labels before buying always.	2.50	Agree
2	Read nutrition labels sometimes.	3.00	Agree
3	Do not read food nutrition labels at all.	2.00	Agree
4	Understand the nutrition information with difficulty.	3.78	Agree
5	Depend on others to give nutrient information.	2.50	Agree
6	When you read and understand it helps to compare new foods with familiar ones.	3.09	Agree
7	Have difficulty in understanding the unit of measurement.	3.75	Agree
8	Do not have equipment to measure the quantities stated on the label.	3.65	Agree

Table 2 shows the mean ratings were above 2.50 except item 3 which scored 2.00, indicating that all the workers read food labels. Items 4,7 and 8 scored highest showing that workers have difficulty in understanding the information and the units of measurement and the equipment for measurement.

**Table 3: Mean ratings on factors that affect application and utilization of food label information**

S/N	Factors that affect application and utilization	X	Remark
1	Level of education of the consumer.	3.60	Agree
2	Awareness of the importance of the knowledge of food labels.	3.33	Agree
3	Nutrition information should be in a simple language and in a mother tongue.	3.60	Disagree
4	Low income affects the application/utilization	3.40	Agree
5	Local measuring units should be used for effective application.	3.50	Agree
6	Consumer rights awareness should be created	2.96	Agree
7	Expressed dissatisfaction by consumers should not be ignored by food manufacturers.	3.48	Agree
8	Processed/packaged food should not be expensive to buy	3.33	Agree

Table 3 shows that all the items had means above the criterion level which means that the low income workers accept that the factors affect the application and utilization of nutrition food labels.

### **III. DISCUSSION ON FINDINGS**

According to the responses to the research question 1, the low income workers had a good knowledge of nutrition food labels. They also agreed that the knowledge helps in choosing, planning, purchasing and selecting, preparatory and serving of nutritious meals to the family members. This finding agrees with Hawks (2006) that achieving dietary goals require that people are able to make informed choices about the foods they purchase and eat. Also he says that consumers appreciate nutritious food labels and finds them important when making food choices especially when buying a product for the first time. The finding also agrees with Codex (2002) observation that nutrition labeling is a description intended to inform the consumer of the nutritional properties of food and includes a declaration of the nutrient content of the food as well as supplementary nutrition information.

In response to research question 2: the findings of the study shows that all the low income workers read nutrition food labels sometimes and have difficulty in understanding some of the information on the label. Also the non-availability of the units of measurement in the homes was also a problem. Low income workers agreed that nutrition information is valuable to them, if they understand how to apply all the information on the label in feeding the family. These findings agree with Cowburn and Stockley (2003), who observed that consumers have problems understanding the information conveyed on the labels when presented in certain formats. The findings also agree with the findings of Codex (2002) that a limitation of the application of the nutrition labels as a public health tool is their predominant use amongst certain groups. This suggests that nutrition labeling is limited as a means of reaching more socially disadvantaged groups such as low income workers. It also agrees with Mello, Studdert and Brennn (2006) that food labeling that clearly indicates the content of important dietary components in a processed and packed foods can help consumers to choose better diets and contribute to the prevention of diet related chronic diseases. On the contrary, the low income workers buy these foods without understanding the information just because they want to belong to the social class who eat processed foods thereby wasting their meager resources without giving their members nutritious meals. This is in line with the findings of Dike (1981) who observed that the difference in nutritional status of children from high income and low income families are due to varieties and quantities of food consumed. She further stated that the nutritional status of the low income child is an indication of poor quality and quantity of food they ate since their parents were of low income level. Also FAOSTAT Database (2006) noted that quantity, diversity and preparation of foods are determined by both household income and lifestyle. The findings also agrees with Dimlong and Jatau's (2001) who noted that harsh economic conditions have prevented some parents from giving their children the needed nutrients. They also said that in the event of poor nutritional status of families, nutrition education becomes an option that can lead to household food security. Nutrition education would help individuals to recognize that the poor nutritional practices results in chronic dietary problems. Such education also will help individuals to pay attention to what they purchase, select and how to utilize it to meet their nutritional needs.

Furthermore, the findings on the factors that will enhance the application and utilization of nutrition food labels showed that the factors are important for the understanding, application and utilization of the constraints and will improve the nutrient intake and at the same time nutritional status of the family members. The low salaries affected their purchase of these foods. Finally, the low income workers disagreed that they do not read labels at all rather they cannot afford to buy some of the foods and this agrees with Oguriji and Osakwe (2004) who posited that access to food is either via income that is adequate at prevailing price or via access to resources enabling people to produce their own food, while Anderson states that just producing enough food does not guarantee that the household who need it are able to get it, if they do not have enough money.

### **IV. CONCLUSION**

The study revealed the level of consumer awareness of knowledge of nutrition food labels amongst the low income workers in MOUUAU, Umudike. The finding agrees that these processed and packaged foods are eaten by the low income workers and this has dramatically influenced their nutrient intake and their income. The finding also said that to achieve a good dietary goal, people must be able to make informed choices about the food they purchase and eat. To facilitate this, the home makers (female low income workers) needs nutrition education and consumer education to enhance the application and utilization of the nutrition food label. Salaries should be reviewed upwards to help them purchase equipment, for easy utilization of nutrition labels.

## V. RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made to enhance the understanding, application and utilization of nutrition food labels by low income workers.

1. Low income workers should endeavor to feed the family more on locally rich foods which are cheaper and more nutritious.
2. Consumer education should be taught at all levels of education.
3. Workshops and seminars should be organized for the junior workers by home economics extension workers in the various establishments to create more awareness about nutrition label information.
4. Government should through ministries of Agriculture and Natural Resources make nutrition information and guidelines available for consumers to assess.
5. There is need to establish consumer right court by the three tiers of government to try offenders and to protect the right of the consumer.
6. Law enforcement agencies should ensure that imported food products has all the necessary nutrition information on their labels.

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