



ISSN 2790 – 5985
eISSN 2790 – 5993

Agriculture College – Wasit University

Dijlah J. Agric. Sci. 4(3):83-95, 2025

Dijlah Journal of
Agricultural Sciences

THE CONSUMPTION AWARENESS AND ITS RELATIONSHIP TO SOME ECONOMIC AND SOCIAL FACTORS FOR THE RURAL POPULATION IN WASIT PROVINCE

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Abstract:

Increase the level of awareness of local consumers is necessary with international standards of food quality and safety and methods of preserving and packaging products, which in turn affects consumer behavior. This was reflected in defining some important criteria on which the consumer is based, so the need to enhance the consumer's ability to distinguish between the different types and items offered in the market arose. The main objective of the research is to identify consumer awareness and its relationship to some economic and social factors for the rural population in Wasit province in Iraq. The research included all rural residents in a random sample of (204) respondents from rural communities (10%) randomly surveyed. The study concluded that about 37% of the respondents with limited income viewed the date of production and expiry of the food products, and about 66% of them had fallen into buying spoiled or adulterated goods, and thus about 17% turned away. To buying imported goods, about 41% of the respondents distinguish goods of good quality. It is clear that with an increase in the total monthly income of the respondents, their consumer awareness increases when they purchase food products. The significance of the test was shown statistically between the educational status of the respondents and the variables expressing consumer awareness. The statistical significance of the test was also shown between the number of sources of information of the respondents and the variables expressing their consumer awareness. The results also showed the need for the government to work on implementing all or some of the roles of protecting consumers from falling into the consumption of spoiled or adulterated goods that negatively affect their security and health, especially the roles related to the control of local markets.

Keywords: consumer awareness, rural population, Wasit, food products, commercial fraud.

Received:1/8/2025

Accepted:22/9/2025

Published:30/9/2025

1. Introduction

The different agricultural commodities and services as a result of scientific and technological development made it difficult for the consumer to determine the most appropriate and healthiest of these products [1]. Therefore, food quality and safety has become one of the most important consumer rights, which standardization bodies in many countries work to achieve for people [2]. The adoption of reliable signs of definition, quality, and consumer guidance has become to direct consumers to quality goods and the importance of their acquisition. Therefore, consumer awareness has become a necessity that the producing companies take into account by providing the best possible to their customers in order to satisfy them and gain their trust [3]. The consumer awareness is defined as the knowledge of rural consumers of the optimal combination of various consumer commodities necessary for their living, such as food commodities, clothing, appliances and housing, which leads to no shortage of these commodities [4]. However, this consumption is linked to several factors, including:

The average monthly income of the rural population, the prices of these commodities, the relative prices of alternatives to these commodities, the inherited consumption pattern, social customs and traditions [5], in addition to the environmental and social factors represented in the educational status of the head of the rural household and the cultural status represented in knowing the quality of food commodities [6]. The date of production and their expiration date for consumption, which were considered determinants main consumer awareness of the rural population in Wasit province [7]. The meat products are among the popular foods due to their spread and availability in large quantities, high quality, and affordable prices, with their production costs varying from one region to another [8].

In Iraq, during the last two decades with the economic prosperity in the region, the demand for the consumption of poultry products, especially their meat, increased significantly, which affected the existence of a gap between consumption and local production of this commodity, which led to the trend towards importing to provide this commodity [9]. It has become necessary to increase the level of awareness of local consumers about international standards of food quality and safety and methods of preserving and packaging products, which in turn affects consumer behavior and the level of preference for these food products [10]. This was reflected in defining some important criteria through which the consumer evaluates food products [11]. The most important of which are visual impressions and smell, in addition to some other features such as product color, size and packaging. Consumers prefer meat with a natural color associated with the origin of the meat and resulting from the breeding method, style and type of feeding [12]. There is also a group of important sensory characteristics that are evaluated after heat treatments before consumption, including palatability in terms of smell, taste, freshness and tenderness [13]. Consumers' interest in the level of quality and safety of food products offered in the market is largely determined [14]. Consumers have a special importance to the level of quality of food products offered in the market. It relates to health safety through being free from pathogenic microorganisms, materials and physical contaminations [15].

This interest has increased with the clear increase in the volume of production and the emergence of a competitive market in this field [16]. In addition, to the high ability of consumers to access fresh poultry and its products as a result of the improvement in the economic aspect, well as the high level of standards used by consumers when purchasing

poultry [17]. Despite the clear increase in the consumption of imported and local food products, including poultry meat and its products. In the recent period, it is noted that there are deficiencies in the indicative studies on consumer awareness of consumers' preference for local or imported food products. Behind bridging the demand gaps for this product locally and opening the doors of external competition in the regional and international markets [18].

The spread of the commercial fraud represents one of the negative repercussions of development in light of globalization, as commercial fraud globally represents about 5-10% of the global trade level, while in the Arab countries it reached about 7% of the global commercial fraud level [19]. International reports also indicated that 70% of companies worldwide were exposed to commercial fraud in 2016, with an increase of 10% from what was reported in 2015 [20]. Also, the openness of the Iraqi markets makes the consumer face real problems related to the selection of food commodities and other services [21]. From the foregoing, it needs to conduct this research to identify consumer awareness and its relationship to some economic and social factors of the rural population in Wasit Province. In addition, to the lack of awareness and lack of consumer guidance, differs according to the economic, social and environmental characteristics of consumers. This research contributes to increasing awareness of consumer guidance while achieving consumer protection from commercial fraud using scientific methods and means related to guiding the rural population.

The main objective of the research is to identify consumer awareness and its relationship to some economic and social factors of the rural population in Wasit Province in Iraq, which is achieved through the following sub-objectives including the relationship between some economic and social characteristics of the rural population and their consumer awareness. Study the relationship between some of the economic and social characteristics of the respondents and the degree of their preference for the quality of consumer goods. Also, identify some manifestations of commercial fraud for some commodities in the market from the point of view of the respondents and their proposals to overcome them. As well as, identify the role that the government should play in protecting the rural population from consuming spoiled or adulterated commodities offered in the markets.

2. Research Methodology

2.1. Study area

The research was applied in Kut city, Wasit Province in Iraq, which is located on the banks of the Tigris River, about (180 km) south of Baghdad. Kut city is considered the administrative center of Wasit Province, with an area of about (17153 km²) (Iraqi Ministry of Planning, 2019). Wasit Province is famous for the production of field crops, especially grains such as wheat, barley and sesame, as well as all kinds of dates and vegetable crops, in addition to being distinguished by the spread of various animal production projects.

2.2. Study population and sample

The research population has included all the rural population in the research area. The number of samples was (2038) rural families (Kut Center Agriculture Division, 2022). A random sample of (204) rural families represented by the father (farmer) was chosen at a rate of (10%) randomly selected from the entire research community, according to the material and other capabilities that the researcher possesses. Data for the research was collected for the period from September to December 2022. The primary sources represented in the questionnaire were relied upon as a basic tool for collecting research data from the respondents in their capacity as responsible for and representing their families, in addition to the secondary sources represented in books, references and reports.

2.3. Statistical Analysis

This study falls within the framework of descriptive research, which aims to systematically describe phenomena as they exist by analyzing variables without manipulation. In order to calculate the degrees of reliability of the items of each questionnaire, the reliability of the data related to the studied internal and external factors was analyzed using the Cronbach, s Alpha method. It was found that the scales exceeded the recommended stability level (0.75), which indicates a good level and reliable (0.825). The data and the statistical treatment method used for the data collected through the questionnaire were analyzed using the Statistical Package for Social Sciences (SPSS) program, and the following statistical tests were used: Cronbach's alpha test to calculate the stability scores of the questionnaire items, the arithmetic averages to describe the research variables, the percentages and frequencies to describe the research variables, the Kramer's coefficient to test the correlation between the research variables, and the regression analysis to find out the most important factors affecting the consumer awareness of the respondents.

3. Results and Discussion

3.1. The relationship between some of the economic and social characteristics of the respondents and their consumer awareness:

The consumer awareness of the respondents for the commodity of food products was expressed in each of the variables of looking at the date of production and expiry of this commodity. The incidence of buying spoiled or adulterated commodities, the purchase of imported commodities instead of local commodities in order to avoid falling into the purchase of corrupt or adulterated commodities. The relationship between some of the economic and social characteristics of the respondents was studied, represented in the total monthly income of the, the educational status of the, the number of the information sources, the number of family members, and the consumer awareness of the respondents, as follows:

3.1.1. The relationship between the total monthly income of the respondents and their consumer awareness:

It is clear from the data of Table (1) that about 37% of the low-income respondents look at the production and expiry date of the food product, and about 66% of them have fallen into buying spoiled or adulterated commodities. Thus, about 17% have switched to buying imported goods,

and about 41% of the respondents distinguish goods of good quality, while the percentage of respondents who look at the date of production and expiry increased to about 67% of high-income people. However, it was found that only about 33% had fallen into buying spoiled goods, and about 71% of the respondents with high incomes had turned to buying imported goods, and about 69% of them distinguished of good quality.

Table (1) represents the distribution of respondents according to levels of total monthly income and its relationship to the most important variables of consumer awareness of the respondents

Class	Production and expiry date				buying spoiled or adulterated goods				Buying imported goods				Distinguishing quality goods			
	seen		Not seen		fall		Not fall		Buy		Not buy		select		Not select	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Low income (less than 400,000) dinars	25	37	43	63	23	34	45	66	17	25	51	75	28	41	40	59
Average income (400,000-1000,000) dinars	35	40	53	60	40	45	48	56	29	33	59	67	45	51	43	49
High income (1,000,000 dinars or more)	32	67	16	33	32	67	16	33	34	71	14	29	33	69	15	31
Total	92	45	112	55	95	47	109	53	80	39	124	61	106	52	98	48

Source: calculated from the data of the research sample

By testing the level of statistical significance and measuring the strength and direction of the correlation between the levels of the total monthly income of the respondents and the variables expressing the consumer awareness of their consumption of the commodity of food products using the test the Kramer coefficient, the statistical significance of the test was found between the levels of the total monthly income of the respondents and the expressive variables about their consumer awareness at the level of significance (0.01) (Table 2).

Table (2) the correlation between the total monthly income levels of the respondents and their consumer awareness

Variables expressing consumer awareness	C ²	d.f	Cramer coefficient
Production and expiry date	** 16,09	2	0,30
Buying spoiled or adulterated goods	** 21,84	2	0,36
Buying imported goods	** 67,32	2	0,64
Distinguishing quality goods	** 12,88	2	0,31

Source: calculated from the data of the research sample. * Significant at level (0.05) ** Significant at level (0.01) $C^2(2, 0,05) = 5,991$ $C^2(2, 0,01) = 9,22$

It was found from the measurement of the Kramer coefficient that there is a direct and significant correlation between the levels of the total monthly income of the respondents and the consumer awareness of their consumption of the food commodity. The values of the correlation coefficients were about (0.30, 0.36, 0.64 and 0.31), respectively. It is clear from this that with an increase in the total monthly income of the respondents, their consumer awareness increases when they purchase food products.

3.1.2. The relationship between the educational status of the respondents and their consumer awareness:

Table (3) showed that the increase in the educational status of the respondents, their consumer awareness of the consumption of food products increases, and vice versa. It was found that about 72% of the respondents with a university education level look at the date of production and expiration when they purchase food commodities. Also, about 57% do not fall into buying spoiled or adulterated goods, and about 42% of them have switched to buying imported goods to avoid falling into buying corrupt or adulterated goods, and about 45% of them distinguish goods of good quality, and these percentages decrease with the decrease in the educational status of the respondents. It was about zero%, 25%, 25%, and 13%, for the illiterate respondents, respectively.

Table (3) Distribution of the respondents according to the educational status of the respondents and its relationship to the most important variables of their consumer awareness

Class	Production and expiry date				buying spoiled or adulterated goods				Buying imported goods				Distinguishing quality goods			
	seen		Not seen		fall		Not fall		Buy		Not buy		select		Not select	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
ignorant	-	-	40	100	10	25	30	75	10	25	30	75	5	13	35	87
Reads and writes	9	26	25	74	16	47	18	53	11	32	23	68	9	26	25	74
High School	20	37	34	63	18	33	36	67	20	37	34	63	17	31	37	69
College student	55	72	21	28	43	57	33	43	32	42	44	58	34	45	42	55
Total	84	41	120	59	87	43	117	57	73	36	131	64	65	32	139	68

Source: calculated from the data of the research sample

And by testing the level of statistical significance and measuring the strength and direction of the correlation between the educational status of the respondents and the variables expressing their consumer awareness of consuming the commodity of food products using the (C^2) test and Kramer's coefficient, the significance of the test was shown statistically between the educational status of the respondents and the variables expressing consumer awareness At the level of significance (0.01) (Table 4).

Table (4) the correlation between the educational status of the respondents and their consumer awareness

Variables expressing consumer awareness	C ²	d.f	Cramer coefficient
Production and expiry date	**116,31	3	0,89
Buying spoiled or adulterated goods	**34,35	3	0,46
Buying imported goods	**13,85	3	0,32
Distinguishing quality goods	**44,82	3	0,52

Source: calculated from the data of the research sample. * Significant at level (0.05) ** Significant at level (0.01) C² (2, 0,05) = 5,991 C² (2, 0,01) = 9,22

It was found from the measurement of the Kramer coefficient that there is a direct and significant correlation between the educational status of the respondents and the variables expressing their consumer awareness of the consumption of food products. The values of the correlation coefficients were about (0.89, 0.46, 0.32 and 0.52), respectively, which means that with the increase in the educational status of the rural respondents, their consumer awareness increases when they purchase food products.

3.1.3. The relationship between the number of respondents' information sources and their consumer awareness:

The results have been showed that about 67% of the respondents who get their information from (4 or more sources) look at the production and expiry date of the food product (Table 5). Also, about 69% of them do not fall into the purchase of spoiled or adulterated goods, and about 52% of them turn to buying imported goods to avoid falling into the purchase of spoiled or adulterated goods, and of them about 74% distinguish goods of good quality, while the percentage of respondents who look at the date of production and expiry decreased Validity to about 33% of those who get their information from (less than two sources).

In addition, about 40% of them do not fall into the purchase of spoiled or adulterated goods, and about 37% of them have switched to buying imported goods, and that about 27% of them can distinguish goods of good quality. This indicates that the respondents who obtain their information from multiple and various sources have higher consumer awareness compared to the respondents who obtain their information from a few sources.

Table (5) the distribution of respondents according to the number of their sources of information and its relationship to the most important variables of their consumer awareness

class	Production and expiry date				buying spoiled or adulterated goods				Buying imported goods				Distinguishing quality goods			
	seen		Not seen		fall		Not fall		Buy		Not buy		select		Not select	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Less than two sources	10	33	20	67	12	40	18	60	11	37	19	63	8	27	22	73
2-4	15	58	11	42	16	62	10	38	18	69	8	31	18	69	8	31

sources																
More than sources	99	67	49	33	102	69	46	31	77	52	71	48	109	74	39	26
Total	124	61	80	39	130	64	74	36	106	52	98	48	135	66	69	34

Source: calculated from the data of the research sample

By testing the level of statistical significance and measuring the strength and direction of the correlation between the number of the respondents' information sources and the variables that express their consumer awareness of consuming the commodity of food products using the (Ca2) test and Kramer's coefficient, the statistical significance of the test was found between the number of the respondents' information sources and the variables that express the Consumer awareness for them at the level of significance (0.01)(Table 6).

Table (6) the correlation between the number of respondents' information sources and their consumer awareness

Variables expressing consumer awareness	C ²	d.f	Cramer coefficient
Production and expiry date	** 33,26	2	0,43
Buying spoiled or adulterated goods	** 24,18	2	0,41
Buying imported goods	** 35,52	2	0,28
Distinguishing quality goods	** 28.26	2	0,37

Source: calculated from the data of the research sample. * Significant at level (0.05) ** Significant at level (0.01) C² (2, 0,05) = 5,991 C² (2, 0,01) = 9,22

It is clear from the measurement of the Kramer coefficient that there is a significant direct correlation between the number of the respondents' information sources and their consumer awareness of the consumption of the commodity of food products, as the values of the correlation coefficients were about (0.43, 0.41, 0.28 and 0.37), respectively. It indicates that consumer awareness increases with the increase in the number of sources from which the respondents obtain their information when purchasing food products.

3.1.4. The relationship between the number of family members of the respondent and their consumer awareness

The results have recorded that about 62% of the respondent's small family looks at the date of production and expiry of the food product, and about 76% do not buy spoiled or adulterated goods, and about 68% of them switched to buying imported goods, and about 76% % of them distinguish goods of good quality, while the percentage of respondents who look at the date of production and expiry decreased to about 18% in large families with a number of members (7 or more). Also, about 50% of them buy spoiled or adulterated goods, and about 26%. It has turned to the purchase of imported goods, and about 41% of them can distinguish goods of good quality (Table 7). This indicates that the household of the respondent is small in number have greater awareness of consumption compared to the household of the respondent with a large number.

Table (7) the distribution of the respondents according to the number of family members of the respondent and its relationship to the most important variables of their consumer awareness

Class	Production and expiry date				buying spoiled or adulterated goods				Buying imported goods				Distinguishing quality goods			
	seen		Not seen		fall		Not fall		Buy		Not buy		select		Not select	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
less than 4 persons	62	62	38	38	76	76	24	24	68	68	32	32	76	76	24	24
4-7 persons	31	44	39	56	50	71	20	29	33	47	37	53	50	71	20	29
More than 7 persons	6	18	28	82	17	50	17	50	9	26	25	74	14	41	20	59
Total	99	49	105	51	143	70	61	30	110	54	94	46	140	69	64	31

Source: calculated from the data of the research sample

By testing the level of statistical significance and measuring the strength and direction of the correlation between the number of the respondent's family members and the variables expressing their consumer awareness of their consumption of the commodity of food products using the (K^2) test and Kramer's coefficient, the statistical significance of the test was found between the number of the respondent's family members and the variables expressing the Consumer awareness for them at the level of significance (0.01) (Table 8).

Table (8) the correlation between the number of family members of the respondent and its relationship to the most important variables of their consumer awareness

Variables expressing consumer awareness	C^2	d.f	Cramer coefficient
Production and expiry date	** 29,47	2	0,41
Buying spoiled or adulterated goods	** 15,52	2	0,31
Buying imported goods	** 37,17	2	0,49
Distinguishing quality goods	** 31,58	2	0,45

Source: calculated from the data of the research sample. * Significant at level (0.05) **

Significant at level (0.01) $C^2(2, 0,05) = 5,991$ $C^2(2, 0,01) = 9,22$

It is clear from the measurement of the Kramer coefficient that there is a significant direct correlation between the number of the respondent's family members and their consumer awareness of the consumption of the commodity of food products, where the values of the correlation coefficients were about (0.41, 0.31, 0.49 and 0.45), respectively.

In the light of what has been shown from the comment of Table (7), which indicated an increase in the percentages of the respondents' household categories that are less numerous and related to their consumption awareness. It is clear that there is an inverse relationship between the number of rural family members of the respondents and the variables that express consumption awareness.

3.2. Some commercial fraud for some marketed commodities from the respondents and their proposals to confront it

Table (9) indicates some manifestations of commercial fraud for some marketed commodities, which were mentioned by the respondents and their most important proposals to confront them. They could be arranged in descending order according to their relative importance from their point of view, as follows:

Table (9) the relative importance of some commercial fraud for some marketed commodities and proposals to confront them from the respondents

Manifestations of commercial fraud	frequency	%	Proposals from the respondents	frequency	%
Marketing non-fresh food products.	135	66,1	Establishing awareness programs and guiding producers about the seriousness of commercial fraud and abandoning it through consumer guidance	110	53,9
Use of non-conforming packaging packages, which harms the health of consumers.	98	48,0	improve the efficiency of agricultural marketing services and functions	95	46,5
Frequent manipulation of weights and non-conformity of the weights fixed on the envelopes	88	43,1	Publication of standard specifications and quality requirements for agricultural consumer goods	82	40,1
Price discrepancy for the same commodities	79	38,7	implementation of legislation and laws that penalize violations of commercial fraud and manipulation of weights.	72	35,2
Change and manipulate the production and expiry date of some commodities	53	25,9	Activate the role of consumer guidance to educate consumers on how to purchase high quality and healthy goods.	45	22,0

The percentage of the total number of respondents was calculated (204) respondents

It is clear from the foregoing the need for the concerned authorities to cooperate in confronting the manifestations of commercial fraud that are widespread in the markets due to its danger to the health and life of consumers. In addition, pay attention to the respondents' proposals to put them into practice. So, they can obtain their needs in a healthy and safe manner.

3.3. The role that the government should play to protect the rural population from consuming spoiled or adulterated commodities from the respondents

The role of the government should play in protecting the rural population from consuming spoiled or adulterated goods, which was mentioned by the respondents. It could be arranged in descending order according to its relative importance from their point of view (Table 10).

Table (10) the relative importance of the government's role in protecting the rural population from consuming spoiled or adulterated goods from the respondents

Phrases expressing the role of government	Frequency	%
Increasing inspection campaigns to control markets, especially agricultural products.	126	61,7
Accelerate the actual implementation of the Commercial Fraud Law and Consumer Protection.	106	51,9
Increasing penalties for the production, distribution and sale of spoiled or adulterated goods.	91	44,6
Not to allow the sale of goods of unknown origin in any way in the local markets.	85	41,6
Considering commercial fraud, a crime against honor and punishable by law.	66	32,3
Directing the various media to educate consumers' families.	54	26,4
Tightening control over import outlets through laws and specialized follow-up committees.	38	18,6
Customs quarantine performs its tasks to the fullest extent in controlling imported goods.	25	12,2

The percentage of the total number of respondents was calculated (204) respondents

It is clear from the foregoing that the government must implement all or some roles to protect consumers from falling into the consumption of spoiled or adulterated goods that negatively affect their security and health, especially the roles related to monitoring local markets, implementing the commercial fraud law on violators, and tightening penalties for the production, distribution and sale of corrupt goods.

4. Conclusions

The finding of the research was possible to reach some results including need to work on eradicating illiteracy for individuals from the rural population, which reflects positively on their consumer awareness and the degree of their preference for food and other commodities. Awareness programs for family planning and the number of its members, especially the wife, of the importance of her participation in family planning programs, when the research results showed that families with fewer members are more aware of consumption than large families. Also, pay attention to determining the prices of consumer commodities that are directly related to food products, and tightening control over them to protect the consumer from commercial fraud. Guiding producers and sellers on the need to avoid methods of agricultural, industrial, commercial and service fraud and to set new import controls to ensure the import of safe and healthy commodities. Activate the role of consumer protection associations and increasing their numbers and support so that they can carry out awareness and control tasks to the fullest. Paying attention to the role of the media and directing them to educate and guide consumers in identifying good food products from spoiled and adulterated ones. In addition, working on issuing legislations and laws that punish violations of commercial fraud and tampering with weights, including those related to food products. Working to acquaint the rural population with the correct ways of consumption at different times and giving up bad eating habits, through the appointment of qualified and trained male and female guides in the field of agricultural, consumer and marketing extension. Finally, pay attention to the field of consumer

guidance to educate producers about the correct steps and procedures for the local marketing or export process, as well as guiding and educating sellers to reduce the sale of spoiled and adulterated food products to preserve the health and safety of rural residents.

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