

THE ATTITUDE OF CONSUMERS TO EXPIRY DATES OF FOOD PRODUCTS IN THE KINGDOM OF SAUDI ARABIA

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ABSTRACT

Current study aims to investigate the attitude of consumers to expiry dates of food products in the Kingdom of Saudi Arabia. The data was collected through a face-to-face interview by using a convenient sampling method and 117 respondents were selected from Hyper Panda, Farm Markets, Tamimi Markets, and Panda. The majority of the respondents (51.30%) showed a positive attitude towards reading the expiration date of food products. Whereas 35.90 and 12.80% of the consumers showed a neutral and negative attitude towards reading expiry dates of food products respectively. Only age showed a significant relationship with the consumers' attitudes towards reading expiry date of the food product. The study recommends that awareness programs through the collaboration of the food department should be implemented to make consumers aware of the advantages of reading expiry dates of the food products.

Keywords: Attitude, Food, Consumers, Saudi Arabia

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1. INTRODUCTION

The types of food products and sufficient information of the products ensures purchasing decisions among consumers, the available information included expiry date, shelf life, storage and preparation guidelines (Hyytia and Kola 2006; Ababio et al. 2012; Zhang et al. 2023). Attitude is defined as an internal state that affects an individual's choice of behavior or non-behavior regarding a specific subject, person, or thing (Basha and Mason 2015; Muddassir and Al-Zahrani 2022). Among the studies that dealt with consumer trends towards reading food label information, including the expiration date, a study was conducted in "Riyadh, Jeddah, Dammam, Tabuk, Medina, Hail, and Abha," in which it was found that 21% review the production date, and 28% review the expiration date. Nurliyana et al. (2011) and Zaidi and Muhammad (2012) found a relationship between knowledge, attitudes, and practices in the field of using food labels and identifying the factors that affect the use of labels during purchasing decision making. Among students of a university in Kuala Selangor, Malaysia, a study indicated that the most important factor in the purchasing decision was the expiry date (98.5%). Simmaky et al. (2015) also found that 92% of Jaffna consumers in Sri Lanka were aware of the information provided on food labels, and 89.5% of participants considered expiry and manufacturing dates to be the most important information.

The significance of nutritional value during purchase has been highlighted (Volkova and Mhurchu 2015; Egnell et al. 2019). However, it appears that price and appearance hold equal importance, indicating a low current utility of nutrition labels in food purchasing among consumers (Gomes et al. 2017; Jones et al. 2019). Although brand name and country of origin are also noted as influential factors in purchasing decisions (Berry et al. 2015), surprisingly, respondents did not consider the food manufacturer or its location as relevant factors. Consumer awareness serves as the initial step towards adoption (Rogers et al. 2014). Several studies on food labeling have assessed consumer perceptions regarding specific characteristics such as nutritional composition, design/layout, indication of premium or local products, among others (Gregori et al. 2014; Feldmann and Hamm 2015; Pettigrew et al. 2016; Huang and Lu 2016). This study aims to study the attitude of consumers to expiry dates of food products in the Kingdom of Saudi Arabia in the city of Riyadh in the Kingdom of Saudi Arabia. Current study could be helpful to design awareness programs to raise consumers' knowledge about food labelling and safety.

2. MATERIALS AND METHODS

The research questionnaire was divided into two different sections. The first section contained questions related to the socio-economic characteristics of the respondents. It included age, nationality, education and marital status. The second section consisted of questions about the consumers' attitudes towards reading expiry dates of food products. Questions in the second section were measured using three-point Likert scale (1=Negative; 2=Neutral and

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3=Positive). The questionnaire was distributed to the respondents in Arabic language and informed about the purpose of the study. Out of the 150 consumers, 117 (78%) returned the completed questionnaires.

2.1. Reliability and Validity

A pilot study was also conducted in order to test the reliability of the questionnaire. Data were collected from 30 respondents and Cronbach Alpha was run to determine the reliability of the Likert Scale. The value of the Alpha was estimated to be 0.82.

2.2. Data Analysis

Both descriptive and inferential statistics were used for summarizing and analyzing the collected data. The personal demographics of the respondents were summarized using percentages, mean and SD. The Spearman correlation was run between dependent and independent variables Statistical Package for Social Sciences (SPSS 27v) was used for running data analysis.

3. RESULTS

Table 1 shows that the majority of the respondents were Saudi, married and less than 34 years old. Furthermore, the majority of the respondents had completed their university education. Table 2 shows consumers' attitudes towards reading expiry dates of food products. The food product "Croissant sandwich" holds the highest mean score of 2.44. On the other hand, the food product "Nuts" holds the lowest mean score of 1.98.

Fig. 1 shows that the majority of the respondents (51.3%) have positive attitude towards reading food expiry date, only 35.9 and 12.8% of the respondents have neutral and negative attitude towards reading food expiry date respectively.

Table 1: Demographic characteristics of the respondents

Variable	Percentage
Nationality	
Saudi	78.6
Non-Saudi	21.4
Marital status	
Married	56.4
Single	43.6
Age	
Less than 34 years	53.9
34 to 52 years	31.6
More than 52 years	14.5
Education	
School education	26.5
University	73.5

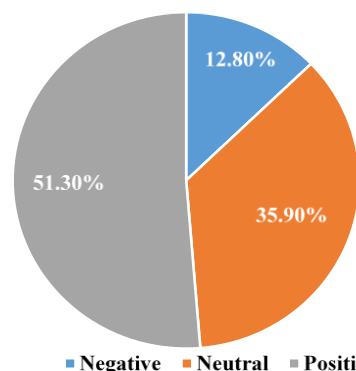


Fig. 1: Consumers' attitudes towards reading expiry dates of food products.

Table 2: Consumers' attitudes towards reading expiry dates of food products

Variables	Never	Sometimes	Always	Mean	SD
Croissant sandwich	19.7	17.1	63.2	2.44	0.80
Dates	21.4	45.3	33.3	2.11	0.75
Potato chips	29.1	35.9	35.0	2.06	0.80
Kit Kat	32.5	32.5	35.0	2.01	0.85
Tuna cans	15.4	29.1	55.6	2.40	0.74
Bean	17.9	31.6	50.4	2.33	0.76
Mashroom	21.4	33.3	45.3	2.24	0.78
Pineapple cans	23.9	29.1	47.0	2.20	0.86
Flour	29.9	27.4	42.7	2.13	0.85
Macaroni	29.9	34.2	35.9	2.06	0.81
Indomie	33.3	32.5	34.2	2.01	0.83
Nuts	33.3	35.0	31.6	1.98	0.81
Minced meat	17.9	23.1	59.0	2.41	0.78
Nugget	23.1	23.1	53.8	2.31	0.83
Sausage	22.2	25.6	52.1	2.30	0.81
Ice cream	36.8	26.5	36.8	2.00	0.86
Milk	2.6	8.5	88.9	2.86	0.41
Yogurt	4.3	9.4	86.3	2.82	0.48
Labneh	6.0	18.8	75.2	2.70	0.60
Mortadella	14.5	28.2	57.3	2.43	0.74

Table 3 identifies correlation between socio-economic characteristics and the consumers' attitudes toward reading the expiration dates of food products, the simple Pearson correlation coefficient was used to calculate the relationship. Among all variables, only age showed a positive (weak) and significant relationship with consumers' attitudes towards reading expiry date of food products. It means, increase in age improved their attitude towards reading expiry dates of the food products.

Table 3: The correlation between socio-economic characteristics and the consumers' attitudes toward reading the expiry date of food products

Independent variables	Pearson's correlation coefficient
Age	0.03*
Education	0.15
Marital status	0.12
Nationality	0.12

*Significant at $P < 0.05$; **Significant at $P < 0.01$.

acknowledging the importance of labeling, only 12% consistently read labels on food items. Consumers primarily peruse labels to confirm manufacturing and expiry dates. Our findings contradicted those of Moreira et al. (2019) who revealed that consumers usually did not read food labels due to lack of time and excessive information. Irish consumers are also not used to read labelling (Food Safety Authority of Ireland 2009). Some consumers revealed no discomfort in terms of the different logos. This may be a finding of the fact that every tested label formats were obviously understood, as confirmed in other studies (Feunekes et al. 2008; Grunert and Wills 2009).

Furthermore, the age of the respondent showed a positive (weak) and significant relationship with consumers' attitudes towards reading expiry dates of food products. The consumers' attitude towards the reading expiry date depends on their attention to read the label of the product. Older consumers usually watch more TV and are interested to use innovative device, this practice among consumers may improve their knowledge and importance of reading expiry date. The ICT tools including mobile, and internet can be a useful source of information (Aldosari et al. 2019).

Our findings are contradicted with Riley et al. (2016) who revealed that age was not an important modifier of attitudes towards food labels for adults in South Australia. Older people were less likely to trust labels. The increase in the age of consumers may reduce interest in reading expiry dates due to their trust or long-term purchasing experiences. They may not find any issues regarding expiry date during their purchasing experience that possibly make them lazy in reading expiry date. Positive attitudes among consumers in the study area may be due to their good socioeconomic situation and their concern about food freshness and quality (Muddassir and Al-Zahrani 2022). According to the researchers' observations, aged consumers were more conscious about food freshness, and they linked food freshness with food expiry date. Current findings may decrease health issues among consumers by improving awareness about food products regarding labelling (Borgmeier and Westenhofer 2009; Mejean et al. 2013; Cecchini and Warin 2016). Awareness of food product labelling aids adoption of food safety measures among consumers (Moreira et al. 2019; Alshaikh et al. 2023).

5. CONCLUSION

This aims to identify the consumers' attitudes towards the expiry dates of food products. The majority of the respondents showed a positive attitude towards reading the expiry date of food products. Furthermore, age showed a significant relationship with the consumers' attitudes towards reading expiry date of the food products. The current study recommended that the concerned authorities should develop guidance programs on the importance of reading the expiry date of products. Note that the current study was limited to the Riyadh region. The findings of the study may not be generalizable to consumers of other regions. It is therefore suggested that a similar study should be conducted in other regions of Saudi Arabia.

Author's Contribution

Salah Moqren AlShaikh; data collection, Salah Moqren AlShaikh; survey development, Jamal Mohammed Alotaibi; final review, Jamal Mohammed Alotaibi; data analysis, Ahmed Hasan Herab; data curation and Ahmed Hasan Herab; results and discussion.

Conflict of Interest

Authors declare no conflict of interest.

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