CONSUMER’S ATTITUDES TOWARDS THE DEMAND FOR IRRADIATED FOOD IN CAIRO GOVERNORATE

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ABSTRACT

Currently, the international community focus on the problem of food security and nutrition to achieve the goals in the United Nations 2030 Sustainable Development Plan, in particular the second objective of sustainable development, which concern eradication of hunger, saving food security and be improved nutrition, as well promotion of sustainable agriculture (The official website of the United Nations). The field study aims to provide an indication of the expected volume of demand for irradiated food in the Egyptian market and estimate degree of approval, due to measuring of consumer’s attitudes. The process of food irradiation gives a competitive advantage in the markets, through achievement of important role in preserving food and agricultural products, an addition protect them from spoilage. The field Study was based on consumer demand for irradiated food in Cairo Governorate, as the largest governorate in terms of population intensity, representing about 10.06% of the total population of the Republic (Central Agency for Public Mobilization and Statistics, 2017). A survey was conducted on consumers who frequented the hypermarket between two areas, one located in a high income area (1st Settlement) and the other located in a low income area (Shoubra). The results of the survey showed that the percentage of those who approved the purchase of irradiated food amounted to about 67%, while the percentage of those who undecided and rejected was estimated at about 12% 21% respectively. The highest percentage of weighted average value was approved for the axis of the nutritional value of food and quality, which amounted to about 81.33%, while the approval rate for the axis of environmental specifications has reached 74.66% only. The results indicate that the factors affecting on consumers behavior for the purchase of irradiated food are not mainly due to the price specifications of the commodity but to the nutritional value and quality, health and marketing specifications. In addition, the results showed that relationship wasn’t statistically significant between the variables of the age group, gender, social status and all the axes of the irradiated food specification, but relationship was found statistically significant between the variable of the region (high income and low income) and the total specifications. The study suggests which explains the importance of directing marketing strategies appropriate to the consumer groups with a relatively low level of education and low incomes, because increasing the awareness of the benefits of radiation Processed of food, will increase the total economic benefit for them, it’s most important of maintain quality and safety of food for long shelf life. The results also showed the relative importance of information, that effect on demand for irradiated food in the Egyptian market, it’s considered high relatively where was estimated at 87%. Furthermore, the results explained an important role of the major media as television, which has most Watched by consumers by 69%, followed it the Internet by 29%. The dry foods may be provided when the commercial application and marketing of irradiated products in the Egyptian market would be started, This is due
to agree with most consumer's attitude, which selected by 62% of the study sample. Based on the above, the important role becomes clear of field studies and marketing research in the Egyptian market, to identify the actual wants of consumer, which represented to obtain safe, healthy and high quality of food, how optimization using of food irradiation technology could be met consumer's demand on Specification of food products required in the Egyptian commercial markets. The study recommends of put a marketing strategy for irradiated food, which mainly dependent on providing specifications of these foods, such as nutritional value, quality, health and marketing specifications, which are important economic axes, it had highly compatible with the preference and consumer’s behavior towards purchasing. This is one of the most important factors affecting on demand according to economic theory. This ensures the marketing process’s effectiveness for these foods before supplied to the market. In addition to achieve the expected economic returns at the national level by saved food security or at the individual level by satisfying the consumer's wants to obtain safe food with high quality and comparatively long shelf life.

**Key words:** Food irradiation, Consumer trends, Food specification, Questionnaire, Demand, Non-parametric Testing, Statistical Inference, Tests of statistical hypotheses, Marketing study, Food preservation