Investigating the Factors Affecting Fast Food Consumption Level: Case Study, Mashhad, Iran

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Abstract

Due to increase of consumption of fast foods in Iran, the factors affecting the consumption level of sausages, salami and hamburgers have been investigated in this study. For this purpose, we investigated the probability of each household being in groups of non-consumption, low consumption, medium consumption and high consumption using an ordered logit model and data of 396 households of Mashhad, in 2020. The results of the ordered logit model indicated that variables such as price, income, consumption of other meats and education level of consumers do not have a statistically significant effect on the level of consumption of prepared meat products. While variables such as awareness of the existence and effects of nitrite, information about cheating in the product and awareness about the materials used in the ready-made foods have a negative and significant effect on the probability of consuming these kinds of foods. Accessibility of households to the fast foods and households' trust in the producers also have a positive effect on the likelihood of consuming the ready-to-eat meat products under question. Regarding the importance of controlling fast food consumption in society, we concluded that improving awareness of consumers about the properties of fast foods and their consequences effects on health could be considered as an important tool to control fast food consumption

Keywords: Fast food products, Ordered Logit model, Marketing

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Introduction

Today, with development of societies, the life style has changed and this issue has led to the weakening of indigenous traditions and customs and cultures, including nutrition and food customs and behaviors, and in the meantime, people tend to use fast-food products (Bowman and Vinyard, 2004). Fast foods are those that are quick and easy to prepare and include a variety of sandwiches, burgers, cheeseburgers, fried chicken and shrimp, hot dogs, French fries, chicken nuggets, pizzas, sausages and hot dogs. Of course, many nutritionists consider fast food to be harmful to health due to its high calorie and trans fatty acids, and the presence of sodium and potassium nitrate compounds of them (Kamkar *et al, 2003*; Nazari and Sarrafzadega, 2009). Initially, Becker's (1984) theory can be used to analyze the behavior of fast food consumers. According to this theory, the household is considered as an economic unit with two roles of consumer-producer, in the role of the consumer they try to increase their utility, and in the role of the producer, they produce some goods which meet their needs optimally. Becker considers a pattern of household behavior in which the opportunity cost to prepare food at home includes the price of food, energy, the value of time to prepare food, and all activities after eating, such as washing dishes and disposing of garbage. Based on these factors, the family decides whether to pay the opportunity cost or prepare fast food. The decision in this regard depends on various economic, social and demographic factors of households. Prices, incomes, opportunity costs, time constraints and some demographic characteristics such as age, gender, place of residence, race, level of education and household size are the most important factors (Sadeghi *et al.,* 2010, Pereira *et al.,* 2005, Gould and villareal 2006, and Bai, 2010). Of course, some households consider eating fast food as a kind of entertainment that is directly related to their income level (Long, 1997). Households also spend more time on fast food when their jobs and occupations require them to spend more time outside the home, especially as women's employment rates increase (McCracken and Brandt, 1987). In addition, the number of people in a household can affect these costs, so that the larger the household, the more economical it is to prepare foods at home, which makes single-person or double-family households less likely to have opportunity compared to large households, so

these households spend more on fast foods (Long, 1997; Gould and Villareal 2006). In addition, households with younger members are more likely to consume fast foods than households with higher average ages (Sampaio *et al.,* 2004).

Experimental studies have confirmed the effect of consumers' level of awareness about fast foods and their ingredients in creating a positive or negative attitude towards the purchase and consumption of these foods. Most studies have shown that fast food consumers have inaccurate or inadequate information about these foods. However, the group that felt sufficient information had a negative attitude toward the consumption of processed foods and their consumption was lower than the group that had insufficient information (Kim *et al.,* 2007; Aoki *et al.,* 2010).

Sausages, burgers and salami are among the most popular meat products that are consumed by millions of consumers around the world (Sadeghi *et al.,* 2010). In Iran, the consumption of these products due to their cost-effectiveness compared to buying white or red meat, ease of cooking and the desirable taste of traditional food has a growing trend. The average per capita consumption of these products in Iran is estimated at one and a half kilograms per year (Prochaska and Schrimper 1973). In one study, it was found that the priority of Iranian households in choosing sausages, burgers and salami, is compliance with health standards and good taste. The results showed that the importance of healthy products for consumers is high, the importance of good taste and fast preparation is relatively high, and the importance of reasonable price is low and relatively low. Also, the main consumers of these products are between 19 and 31 years old, and the most purchases in this group are made by mothers, and the children are the most interested in sausages, burgers and salami in the family, and they have the greatest impact on their purchases (Hassan Gholipour, 2007).

Some studies also showed that the highest age group of fast food consumers were young, single and students, which indicates that young people do not have the necessary experience and knowledge about healthy eating and they have less care about their health and as a result, fast food consumption among them is high. However, as people get older, their experience, awareness and understanding of danger increase and they pay more attention to their health. Of course, in addition to age, advertising and education level have also been effective in consuming fast foods (Fazelpour *et al.,*

2010; Fatehi Panah *et al.,* 2015; Stewart *et al.,* 2006).

In another study, the effect of various factors such as age group, education level, ethnicity, marital status, the level of mother's education, mother's job, participation in a nutrition education class, students' knowledge and attitude on fast food consumption was investigated. Among these factors, students' knowledge, attitude and ethnicity were identified as effective factors in adopting fast food consumption behavior. Also, the existence of an inverse relationship between awareness and behavior was confirmed, so that people with moderate or low awareness were more inclined to consume fast foods (Didarloo, 2018). In this regard, another study identified people's attitudes and beliefs as the strongest predictors of behavioral intention for fast food consumption; so, people with moderate to high attitude scores compared to others, were more inclined to consume these foods (Tehrani, 2019).

Considering the factors affecting the consumption of fast food products is important because by identifying these factors, we can plan and take action to increase or decrease their consumption trend in society according to the concept of social marketing, and also reduce the harm of consumption of these products. On the one hand, consumers can be informed about the consequences of consuming these products, and on the other hand, producers can be encouraged to comply with the main production standards. In this regard, the main purpose of this study is to investigate the factors affecting the consumption of fast foods (sausages, salami, hamburgers) in order to identify the extent and severity of these factors in changing the consumption of these products.

Methodology

This study examines the factors affecting the level of consumption of fast food products by consumers in Mashhad, Iran. For this purpose, we studied consumers of these products in Mashhad across 13 municipal regions. The sampling was a stratified random sampling method. The required data were collected by filling a questionnaire in 2020. In order to determine the number of samples, a pre-study was conducted and the first 50 households were randomly selected and questioned and the information obtained from this sample was used to determine the sample size of the whole sample. The total sample size was 396 households, and the required models were estimated using STATA 16 software.

The dependent variable in this study is the level of consumption of fast food products as a qualitative variable in 4 categories including no consumption, low consumption or monthly consumption less than 0.5 kg, average consumption or monthly consumption between 0.5 to 1 kg and high consumption or monthly consumption more than 1 kg per month. It should be noted that the classification of the dependent variable is done according to the average sample consumption and its standard deviation. Due to the qualitative nature of the dependent variable, ordered logit or ordered probit regression models should be used to investigate the effect of independent variables effect on the probability of dependent variable. The ordered logit model is based on a continuous latent variable (Long, 1997) and its model is defined as equation (1):

$$y_i^* = \beta' x_i + \varepsilon_i \, , \quad -\infty < y_i^* < +\infty \quad (1)$$

In equation (1), y_i^* is the continuous variable of consumption of the products, β' is the vector of parameters that should be estimated, and x_i is the vector of non-random explanatory variables that measures the $i$is households characteristics. ε_i is also an error term that has a logistic distribution. y_i^* is an invisible variable and therefore we cannot estimate equation (1) by conventional regression methods. But if we assume that it is a discrete and observable variable y_i that represents different levels of household $i$thconsumption, the relationship between the invisible y_i^*variable and the observable y_i variable is obtained from the ordered logit model as follows:

$$\begin{aligned}
y_i = 1 \quad &if \quad -\infty < y_i^* < \mu_1, \quad i = 1, \dots, n, \\
y_i = 2 \quad &if \quad \mu_1 < y_i^* < \mu_2, \quad i = 1, \dots, n, \\
y_i = j \quad &if \quad \mu_3 < y_i^* < +\infty, \quad i = 1, \dots, n,
\end{aligned} \quad (2)$$

n is the size of the sample.

μ's are thresholds that define the observed responses and should be estimated (14). The probability that $y_i = J$ is calculated by the equation (3).

$$pr(y_i = J) = pr(y_i \geq \mu_{J-1}) = pr(\varepsilon_i \geq \mu_{n-1} - \beta' x_i) = F(\beta' x_i - \mu_{J-1}) \quad (3)$$

In terms of cumulative probability, the ordered logit model estimates the probability that the household i occupies the level j or lower levels of $(j-1, \dots, 1)$. Unlike the multinomial logit model,

the response groups in the ordered logit model, represent sequential levels among themselves. The ordered logit model is specified as relation (4).

$$\log\left[\frac{\gamma_i(x_i)}{1 - \gamma_j(x_i)}\right] = \mu_j - [\beta_1 x_{1i} + \beta_2 x_{2i} + \cdots + \beta_k x_{ki}] \quad (4)$$

Here γ_j is the cumulative probability calculated as follows:

$$\gamma_j(x_i) = \gamma(\mu_j - \acute{\beta}x_i) = P((y_i \leq j|x_i) \quad (5)$$

β is a vector of the parameters and the x_i is a vector of the explanatory variables. μ_j also depends only on the probability of the prediction class and does not depend on explanatory variables.

The parallel regression test is used to test the null hypothesis on equality of all parameters across groups. The marginal effect of a unit change in the x_k predictor on the probability of class j is calculated as follows (Long, 1997):

$$\frac{\partial P(y_i = j|x_i)}{\partial x_k} = \left[\frac{\partial\gamma(\mu_j - \acute{\beta}x_i)}{\partial x_k} - \frac{\partial\gamma(\mu_{j-1} - \acute{\beta}x_i)}{\partial x_k}\right]$$
$$= [\lambda(\mu_{j-1} - \acute{\beta}x_i) - \lambda(\mu_j - \acute{\beta}x_i)]\beta_k$$

where:

$$\mu_j = +\infty, \mu_o = -\infty, \lambda_j(x_i) = \frac{\partial\gamma_i(x_i)}{\partial x_k}$$

Given that the marginal effect depends on the values of all explanatory variables, the decision to use the values of the variables in the estimation is important. Usually the marginal effect is calculated on the mean values of variables. Given that the sum of the probabilities is always equal to one, the sum of the marginal effects for each variable will be zero.

Results and Discussion

Based on the theoretical foundations, the important variables affecting the level of fast food consumption products that were used in this study are: The gender variable that reflects the gender of the head of the household, Education (head of household), income (household), awareness of the existence and properties of nitrate, knowledge of the composition of ready-made meat products, information about fraud and its methods, consumer satisfaction index of these products, consumer confidence index of production and the employment status of the head of the household, each of them is classified into three groups. Table 1 lists the independent variables used in the research and their classes along with their expected sign.

Table 1- Description of the variables

Variable	Description	The expected sign
Gender	(Female=0 , male=1)	–/+
Education	Under diploma=1 , diploma to bachelor=1, master's degree to Ph.D. =3	–/+
Income(in million Rials)	(1:< 50 ; 2: 50-100 ; 3: >100)	+/–
Awareness of nitrate harm	(Low=1 , medium=2 , high=3)	–
Awareness of product compositions	(Low=1 , medium=2 , high=3)	–
Awareness of fraud	(Low=1 , medium=2 , high=3)	–
Consumption of other meats	Consumption per month(kg)	+/–
Consumer satisfaction index	(Low=1 , medium=2 , high=3)	+
Trust index	(Low=1 , medium=2 , high=3)	+
Job	(Governmental=1 , private=2 , other=3)	+/–

into 4 groups, shows that more than 30% of respondents have a high level of consumption of these products (Table 2).

A descriptive study of the questionnaire data on the level of consumption of fast food products (sausages, salami, hamburgers) which aredivided

Table 2- Consumption of fast food products		
Consumption of fast food products	**Frequency**	**Percent**
No consumption	62	15.6
Low consumption (<0.5kg)	115	29
Medium consumption (0.5-1kg)	98	24.7
High consumption (>1kg)	121	30.7
Total	396	100

Also, the level of consumption of these products by households according to the research variables listed in Table 3, shows that; first, the largest group of fast food consumers were younger than 30 years old, which was indicated in previous studies. Second, people with lower incomes consumed more, which can be attributed to the effect of substitution; Third, the consumption of these products in other occupational groups, which includes students and freelancers, is higher than other groups, which seems to be due to lack of time; Fourth, people with lower education consume more food, which seems to be due to lack of awareness, and Fifth, men consume more fast foods than women; Which can be related to the lack of time and cooking skills.

Table 3- fast food consumption percent according to selected variables of the study						
Variable	**Category**	**Consumption(percent)**				**Total(percent)**
		High	**Medium**	**Low**	**None**	
Age	<30	73(33.6)	49(22.6)	61(28.1)	34(15.7)	217(100)
	30-50	42(26)	46(28.4)	48(29.6)	26(16)	162(100)
	>50	6(35.2)	3(17.6)	6(35.2)	2(12)	17(100)
Income	<50 million Rials	70(31.5)	49(22)	66(29.5)	39(17)	٢٢٤(١٠٠)
	50-10 million Rials	47(30)	47(30)	42(27)	20(13)	156(100)
	>100 million Rials	4(25)	2(12)	7(44)	3(19)	16(100)
Job	Governmental	40(25.3)	36(22.8)	60(38)	22(13.9)	158(100)
	Private	38(31.4)	29(24)	28(23.1)	26(21.5)	121(100)
	Other	43(36.7)	33(28.2)	27(23)	14(11.9)	117(100)
Education	Under diploma	15(34.1)	11(25)	11(25)	7(15.9)	44(100)
	Diploma to Bachelor	98(30.2)	81(24.8)	98(30)	49(15)	326(100)
	Master's and Ph.D.	8(31)	6(23)	6(23)	6(23)	26(100)
Gender	Male	94(31.6)	75(25.1)	86(28.9)	43(14.4)	298(100)
	Female	27(27.5)	23(23.5)	29(29.6)	19(19.4)	98(100)

Table 4 presents the estimation results of the ordered logit model. Regarding the nominal nature of the job variable, the method of dummy variables has been used, so that the government job is considered the basic group and other groups (private = 2 and others = 3) are ranked based on it.

As shown in Table 4, the variables of trust, easy access and the type of job have a positive effect on the level of consumption of fast food products. In other words, an increase in these independent variables increases the likelihood that the household will be at higher levels of product consumption. The more consumers' confidence in producers and production methods, the higher their level of consumption of these products, and these results are according to the expectations. Therefore, trying to gain the trust of consumers by moving towards improving the quality of products and production at the level of global standards can be helpful in this regard. Increasing access to food products also has a positive effect on consumption. Therefore, one of the tools to increase or decrease the level of consumption of these products is to increase or decrease the level of consumer access to them. Restricting the supply of fast food products to authorized retailers or protein supply centers can limit consumers' access to these products and thus affect consumption.

In the case of jobs, the results also show that other occupations, including workers, the unemployed, students, and so on, have a higher consumption of fast foods than the basic group (government jobs).

Table 4- Results of ordered logit model estimation

Variable	Coefficient	Std. error	Z statistic	Prob.
Gender	۰.۱۵۵	۰.۲۲۸	0.68	0.496
Education	۰.۰۱۸	۰.۲۴۴	0.08	0.938
Income	0.195	0.186	1.05	0.293
Awareness of nitrate harm	-0.291**	0.142	-2.04	0.041
Awareness of product compositions	-0.010*	0.006	-1.62	0.10
Awareness of fraud	-0.274**	0.129	-2.13	0.034
Consumption of other meats	0.016	0.075	0.22	0.826
Accessibility	0.265**	0.103	2.55	0.01
Price	-0.006	0.971	-0.06	0.949
Trust index	0.023***	0.007	3.28	0.001
Job:				
Private=2	0.061	0.232	0.27	0.790
Other jobs=3	0.474**	0.251	1.89	0.05
Age	-0.065	0.175	-0.38	0.707
Cut1	0.35	0.161		
Cut2	1.9	0.85		
Cut3	3.07	1.26		
Pseudo R-Square				
Cox-Snell/ML			0.11	
Nagel-Kerke			0.12	
McFadden(adjusted)			0.04	

*** represents significant level at 1%.
** represents significant level at 5% .
* represents significant level at 10%.

Higher living standards for public and private employees and their preference for home-cooked meals can be one of the reasons for this result. Also, based on the results of Table 4, the variables of awareness of the existence and effects of nitrate, information about the existence of fraud and its methods, as well as knowledge of the composition of prepared meat products, affect the probability of consumption of these products in the opposite direction. In other words, increasing the levels of these independent variables reduces the likelihood of consuming fast food products in the household. Consumption of other types of meat, prices of fast food products, education of the head of the household and household income did not have a significant effect on the probability of consuming fast food products.

Based on the R^2_{Pseudo} statistics calculated in Table (4), it can be said that the estimated ordered logit model has a good level of fit. In addition, as mentioned earlier, parallel regressions evaluate the parameter equality hypothesis for all groups. The results of the mentioned test are presented in Table 5, which indicates that the hypothesis of equality of parameters for all groups in the estimated model is logical. Considering the significance level of the χ^2 statistic of the parallel regression test, it can be assumed that the value of the status parameters is the same for all response groups, and therefore in this respect the estimation of the logit model is correct.

The results of the Pearson and Deviance tests with the null hypothesis of a good fit of the data by the present model are also reported in Table 6, so the computational chi-square statistic indicates the accuracy of the null hypothesis.

Table 5- Results of parallel regression test

Model	2Log Likelihood	Chi- square statistic	Prob.
Null hypothesis(present model)	۱۰۲۵/۸۳۱	۳۰/۴۷۳	0.25
Alternative hypothesis	۹۹۵/۳۵۷		

Table 6- Fits of goodness indicators

Statistic	StatisticChi- Square	Prob.
Pearson	1195.012	0.3
Deviance	1025.831	1.000

Due to the significant level of computational chi-square of this test, the data in this model are properly fitted, so according to the test results, the estimated model is sufficiently reliable and the results of this model are assured.

Since the signs of the estimated coefficients can only be used in relation to the probability of low or high consumption of households, so in order to make more use of the results of the estimated model, the marginal effects for each consumption group should be calculated. In this regard, the marginal effects for each of the consumer groups have been calculated and the results are presented in Table 7. Based on the results of this table, it can be said that the probability of households being less aware of the presence of nitrate and its effect on health is increased in the groups of non-consumption and low consumption, and on the other hand, the probability of being inmedium consumption and high consumption groups are reduced.

Table 7- Calculation of marginal effects for different groups of fast food products

Variable	Marginal effect model(1) Consumption: none	Marginal effect model(2) Consumption: <0.5kg	Marginal effect model(3) Consumption: 0.5-1 kg	Marginal effect model(4) Consumption: >1 kg
Gender	-0.0191	-0.0192	0.0070	0.0313
Education	-0.0022	-0.0024	0.0007	0.0039
Income	-0.0233	-0.0248	0.0080	0.0401
Awareness of nitrate	0.0349	0.0370	-0.0119	0.0600
Awareness of product compositions	0.0012	0.0012	-0.0004	-0.0020
Awareness of fraud	0.0328	0.0348	-0.0112	-0.0564
Consumption of other meats	-0.0019	-0.0021	0.0006	0.0034
Accessibility	-0.0317	-0.0337	0.0109	0.0545
Price	0.0007	0.0008	-0.0003	-0.0012
Trust index	-0.0028	-0.0029	0.0009	0.0048
Job	-0.0073	-0.0079	0.0025	0.0127
	-0.0530	-0.0619	0.0138	0.1011
Age	0.0078	0.0083	-0.0026	-0.0135

These results also show that households whose jobs are free (other) are less likely to be in the non-consumption and low-consumption groups than in government jobs, and on the other hand, they are more likely to be in the middle-consumption and high-consumption groups.Freelancers are often forced to eat ready-made meals due to their job position and the lack of a clear daily schedule.

In addition, it can be said that with the increase of households' awareness of the existence of fraud and its methods, the probability of these households being in the low consumption or non-consumption group has increased and on the other hand, the probability of being in the high and very high consumption groupis reduced.The same interpretation can be said about the variable of recognizing the compounds of these products.The more households know about the ingredients of ready-to-eat meat products, the more likely they are to be in the low-consumption group.

Other results indicate that the higher the household access to fast food products, the lower the probability of their being in the non-consumption and low consumption groups and the higher the probability of their being in the medium and high consumption groups.In addition, households that have more confidence in ready-to-eat meat products are less likely to be in the non-consumption and low-consumption groups, and on the other hand, this leads to an increase in the probability of households being in the middle consumption and high consumption groups.

Contrary to the expectations, the consumption of other types of meat and also the price of red or white meat has not had a significant effect on the consumption of ready-made meat products, and therefore to change the consumption of these products, changing the price of their substitutes like other types of meat is not appropriate. In addition, household income has not had an effect on the consumption of fast food products, which seems to be the reason that ready-made meat products are available in different grades, different qualities and at different prices in the market, and most households with different incomes can buy and consume a variety of these products, and therefore income does not affect the consumption of these products.

Summaries and Suggestions

Ready-made meat products such as sausages, salami and hamburgers are among the most widely consumed products in the food industry in Iran. High consumption of these products is harmful to health and a number of fundamental improvements should be made in their production and consumption.Therefore, identifying important and effective factors on the level of consumption of fast food products is an important issue in this study, using the logit model, an attempt was made to model the factors affecting the probability of consumption of these products.

The results of fitting the ordered logit model indicate that contrary to the expectations, some important variables such as price, household income and meat prices did not have a significant effect on the level of consumption of ready-made meat products. It seems that the supply of ready-made meat products at various prices and with different qualities (good and bad, depending on the types of compounds added to these products and the percentage and the type of meat) is the main reason for these results, and so the consumer with any level of income can buy and consume a variety of these products.

However, the variables of consumer confidence in the manufacturer and the level of access to these products have a positive effect on the probability of consumption of fast food products. So that the more consumer confidence in the units of production and supply of ready-made meat products, or the more access to these products in the community, the more likely they are to be consumed.In addition, compared to the group of employees, freelancers (others) like workers are more likely to consume ready-to-eat food products.

It is noteworthy that the variables of awareness of the existence and effects of nitrite, knowledge of fraudulent methods in production and recognition of ingredients of ready-made meat products have a negative and significant effect on the level of consumption of these products. Therefore, if the goal of policymakers in the field of health and nutrition in society is to use social marketing tools to control and even reduce the consumption of fast food products, they can act with these tools to reduce consumption. Moreover, they can inform the existence and the properties of nitrite and its harmful effects on the body, as well as the possibility and methods of fraud in production and trying to identify the composition of ready-to-eat meat products for consumers through mass media and by these tools they can control the level of consumption of these foods in society and reduce the potential harm to people in terms of nutrition.

On the other hand, with accurate and targeted information, producers can be led to produce healthier products with high nutritional value. It is also suggested that with more supervision of health officials and relevant institutions, producers are forced to enter complete information about ready-made food products in terms of type and amount of ingredients of these products to control the level of consumption.

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بررسی عوامل موثر بر سطح مصرف فرآورده‌های گوشتی آماده در شهر مشهد

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چکیده

با توجه به افزایش مصرف فرآورده‌های غذایی آماده در کشور، در این مطالعه عوامل موثر بـر سـطح مصـرف فراورده‌هـای غـذایی آمـاده از جملـه سوسیس، کالباس و همبرگر مورد بررسی قرار گرفته است. به منظور بررسی عوامل موثر بر سطح مصرف فرآورده‌های غذایی آماده و هـم چنـین نحـوه تاثیر هر عامل بر احتمال قرار گرفتن هر خانوار در چهار گروه عدم مصرف، مصرف کم، مصرف متوسط و مصرف زیاد، الگوی لاجیت ترتیبی و اطلاعات ۳۹٦ خانوار شهر مشهد در سال ۱۳۹۹ به کار گرفته شد. نتایج مدل لاجیت ترتیبی حاکی از آن است که متغیرهای قیمت، درآمد، مصرف سایر گوشت‌ها و تحصیلات مصرف کننده از لحاظ آماری اثر معناداری روی سطح مصرف فرآورده‌های گوشتی آماده مورد بررسی ندارند و متغیرهـایی چـون آگـاهی از وجود و اثرات نیتریت، اطلاع از تقلب و شیوه‌های آن و شناخت ترکیبات فراورده‌های غذایی آماده دارای اثر منفی و معنـادار روی احتمـال مصـرف ایـن فراورده‌ها است. میزان دسترسی خانوارها به فراورده‌های غذایی آمـاده مـورد بررسـی و اعتمـاد خانوارهـا بـه تولیدکننـدگان نیـز روی احتمـال مصـرف فراورده‌های گوشتی آماده تحت بررسی، اثر مثبت برجای می‌گذارد. از این رو اگر هدف سیاست‌گذاران حوزه تغذیه و بهداشت در جامعـه کنتـرل و تغییـر مصرف فراورده‌های گوشتی آماده است، می‌توان از ابزارهایی از جمله تغییر در میزان دسترسی خانوارها بـه ایـن فراورده‌هـا بهـره گرفت. همچنـین بـا اطلاع‌رسانی از وجود و خواص نیتریت و اثرات آن و نیز با تلاش برای شناساندن ترکیبات فراورده‌های گوشـتی آمـاده بـرای مصـرف‌کنندگان، می‌تـوان مصرف این مواد غذایی را در جامعه کنترل کرد و از این مسیر آسیب‌های احتمالی را در حوزه تغذیه کمتر ساخت.

واژه‌های کلیدی: الگوی لاجیت ترتیبی، بازاریابی اجتماعی، فراورده‌های غذایی آماده، مصرف

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