

CONSUMER ATTITUDES TOWARDS THE INTRODUCTION OF READY-TO-EAT MEALS IN THE LATVIAN MARKET

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Abstract

Nowadays the demand for fast and easy-to-make meals is ever increasing. This type of food is an essential dietary component of a large section of people in developed countries. Given the economic importance of ready-to-eat meals there is a need for a better understanding of the factors that determine their consumption. The aim of this research was to determine consumer attitudes towards the introduction of ready-to-eat meal (MRE) sets in the Latvian market. A survey was performed to determine the Latvian citizens' attitudes towards the introduction of this type of quick-to-make, ready-to-eat products into the market of Latvia. The survey included a total of 800 respondents who answered 14 questions which were related to the interest in MRE sets that can be prepared (warmed up etc.) in less than 10 minutes and taste like home-cooked food, and the types of MRE sets these consumers would like to purchase. The demand forecast for MRE sets in the Latvian market is rather high as 67% of the respondents expressed a desire to purchase these products; the development and implementation of MRE sets is topical. The results show that the highest rated MRE set the respondents, a total of 77.1%, expressed a desire to purchase, was chicken fillet with vegetables. No significant differences in terms of liking were observed between chicken fillet with vegetables and chicken fillet with rice, the second highest rated MRE set by 73.9% of the respondents ($p > 0.05$).

Key words: ready-to-eat meal, consumers, market.

Introduction

Over the last few years, the development of innovative food products has been receiving an increasing attention. It is mainly because the demand for safe and easy-to-use food with extended shelf life has been increasing in both consumer and merchant groups (Valceschini, 2006). Nowadays, a significant trend has been observed in Europe: an increasing number of consumers choose for easy-to-cook foods (Olsen et al., 2012). Easy-to-cook foods are a good option for any meal in any group of Latvian consumers, allowing to reduce the daily consumption of junk food, which is becoming increasingly popular. Consumers spend less and less time to prepare meals, and because of long working hours and spending a lot of time on the way, they try to increase their already limited free time. There is an ever increasing demand for services and products that are quick and easy to use. Over the past 10 years, the market for ready-to-eat meals (hereafter referred to as MRE, i.e., meals, ready-to-eat) has increased in Europe and experienced a steady growth (Olsen et al., 2010; Oliver and Salvadori, 2012). MRE include such important features as easy use and short cooking time (Valceschini, 2006; Carini et al., 2013).

The most widely used preparation type for MRE sets is heat treatment. This type of product treatment ensures a long-term storage at room temperatures, maintaining the quality and microbiological safety (Sansone et al., 2012; Ito et al., 2014). This technology provides a number of advantages; it allows you to effectively manage the heat from the steam or water to the product through the packaging, preventing recontamination of the product. It also excludes

off-flavour formation and oxidation of the product, preventing moisture and nutrient losses during evaporation and loss of volatile compounds during cooking, as well as preventing development of aerobic microorganisms in the product (Bindu et al., 2007).

With an increase in demand for high quality food, one of the quality assurances includes the possibility of a new, improved and safe packaging use. Advanced packaging technologies offer new and alternative ways to protect the products from the loss of colour, flavour and nutrients, as well as the formation of off-flavours (Chen et al., 2013). One of the most important functions of packaging is a convenient trade and communication with consumers. The communication function serves as a link between consumers and food producers (Marshall et al., 2006). The packaging contains key information about the weight of the product, the origin of the ingredients and their nutritional value (Puligundla et al., 2012).

Food choices are largely dependent on socio-economic and demographic factors, health status and lifestyle factors of the consumers (Geeroms et al., 2008). Based on these factors, consumer attitudes towards the introduction of new food products into the market are not identical. Women show significantly greater distrust of new food products and technologies on the market compared to men (Rollin et al., 2011). Studies related to consumer awareness and shopping motives are extremely important to the food industry, especially in new product development during the initial stages. Understanding how consumers perceive food can cause problems for researchers, because consumers often find it difficult to express or explain the underlying motives for the purchase of the product

(Vidal et al., 2013). One of the principal factors that influence the consumers like or dislike of products is sensory properties of the product. The taste has to be perfect because of its significant impact on food choices (Lyly et al., 2007). Today, there is a high demand for foods processed in packing, because they have long shelf life and are easy to use; these products are popular as daily food (Ito et al., 2014).

It is necessary to evaluate the potential interest of consumers and the attitudes towards this type of product before beginning a new product development. Therefore, the aim of this research was to determine consumer attitudes towards the introduction of MRE sets in the market of Latvia.

Materials and Methods

Food purchase and cooking habits of Latvian adults, as well as the interest in MRE sets that can be prepared in less than 10 minutes and taste like home-cooked food, were analysed in this study.

Eight hundred respondents participated in the 14 question survey, of which 28% were men and 72% were women (Fig 1, description insertion ‘Results and Discussion’). The average age of respondents was 31.4 years. Initially, the questions were structured to determine how often respondents cook at home, how long it takes and what products are usually used for meal preparation, as well as the key factors when purchasing food. Since there is a variety of processed (cooked, canned) foods available in the market, the use of which enables to shorten the cooking time, consumer attitudes towards traditionally thermal treated products was determined. One of the most significant questions in the survey was the consumer attitude towards the introduction of MRE sets into the market of Latvia. If the attitude was positive,

consumers were asked to choose MRE sets they would like to purchase from 20 different (Table1.) MRE set options.

The obtained data were processed using SPSS software package 16.0; differences among results were considered significant if p-value < 0.05. One way analysis of variance (ANOVA) and Tukey’s test were used to interpret the results.

Results and Discussion

The highest activity in completing the survey was observed in age group 26 to 35 years, but the least active respondents were 18 years old or younger. The youngest respondent who participated in the survey was 17 years old, while the oldest was 77 years old (Fig.1).

The level of education was taken into account when analysing the results of the survey. The majority of the respondents (72.8%) had higher education, 16.7% had secondary education, 9.2% had vocational education and only 1.3% of respondents had basic education. Assessing consumer attitudes towards the need of MRE sets in the market of Latvia, the activity of respondents in the labour market was determined. The results showed that 90.8% of the respondents were employed, while 9.2% were unemployed. In order to fully evaluate each of the obtained results the socio-economic and demographic situation of the respondents involved in the survey was an important factor.

Given the fast pace of today, respondents were asked how often they prepared lunch or dinner meals at home (Fig. 2). The results showed that the majority of respondents (69.9%), most of who work, prepare lunch or dinner meals every day. 16.3% of the respondents do not cook at home and prefer to eat out.

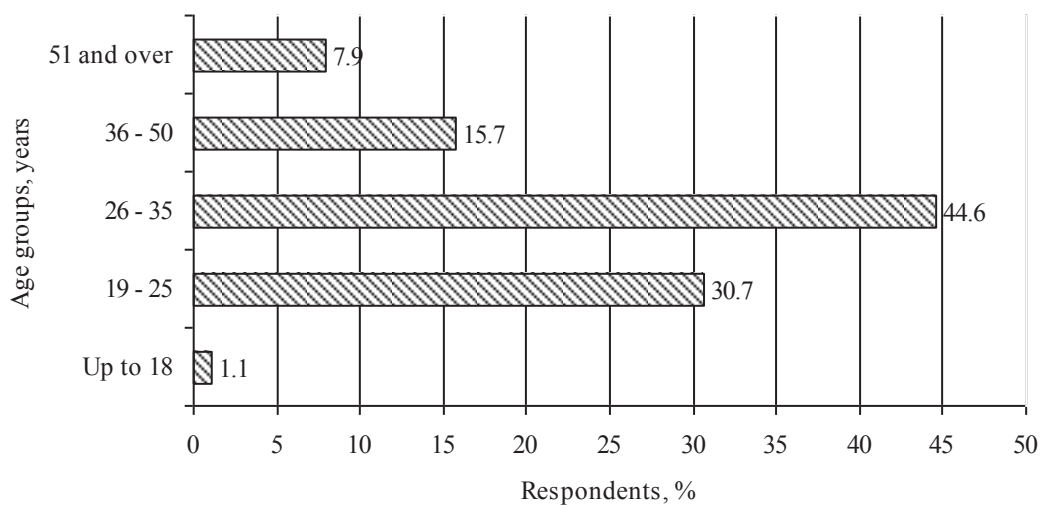


Figure 1. Distribution of respondents by age, %.

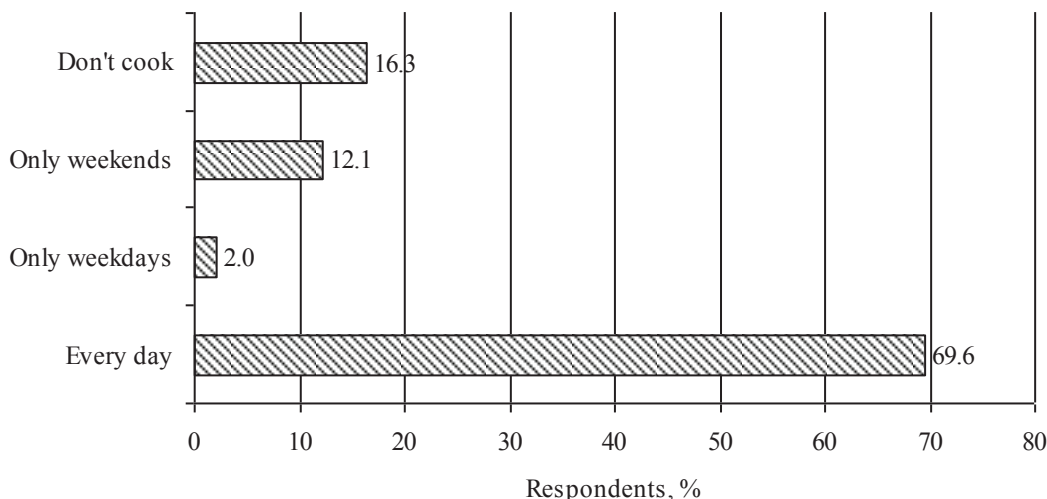


Figure 2. Preparation frequency of lunch or dinner meals at home.

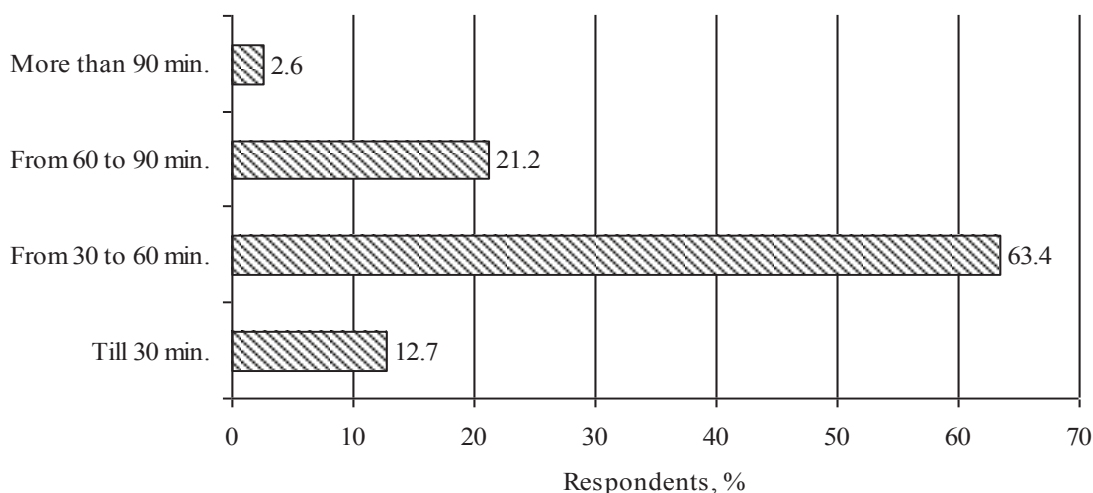


Figure 3. Time spent for preparing one meal a day.

The authors found that 63.4% of the respondents devote 30 to 60 minutes a day for the preparation of one meal (Fig. 3), while 21.2% of respondents spend 60 to 90 minutes a day. Since most of the respondents prepare meals every day, they lose on average 3.5 to 7 hours of their free time on weekly basis. Using MRE sets as lunch or dinner meals would save time for other types of important activities or pursuits.

To be able to understand the main factors of food choice by consumers, and the product characteristics that influence food choices, respondents were asked to assess five key factors: price, quality, producer, packaging and the composition of food.

Food choice and consumption is a part of human behaviour (Mahon et al., 2006). Results show that the quality of the product is the factor consumers evaluate the highest when making a purchase. M. Lyly et al. (2007) noted that the consumer overall preference of

foods is greatly affected by the organoleptic properties which is clearly demonstrated in this study as 55.9% of the respondents rated quality as a very important when making a food choice (Fig. 4).

In recent years, more attention has been paid to the ingredients of food products and this study also reflects the fact that Latvian consumers pay more attention to the composition of food. 43.1% of the respondents claimed that the composition of food is an important factor when making a food choice. 45.8% of the respondents said that the price of the product is an important factor when choosing food for daily consumption. However, only 32.7% of the respondents evaluate the producer before making the purchase; significantly more attention is paid to the quality and the price of the product. When asked about the importance of product packaging, 32.4% of participants felt that this factor is of a little importance, although packaging is one of the

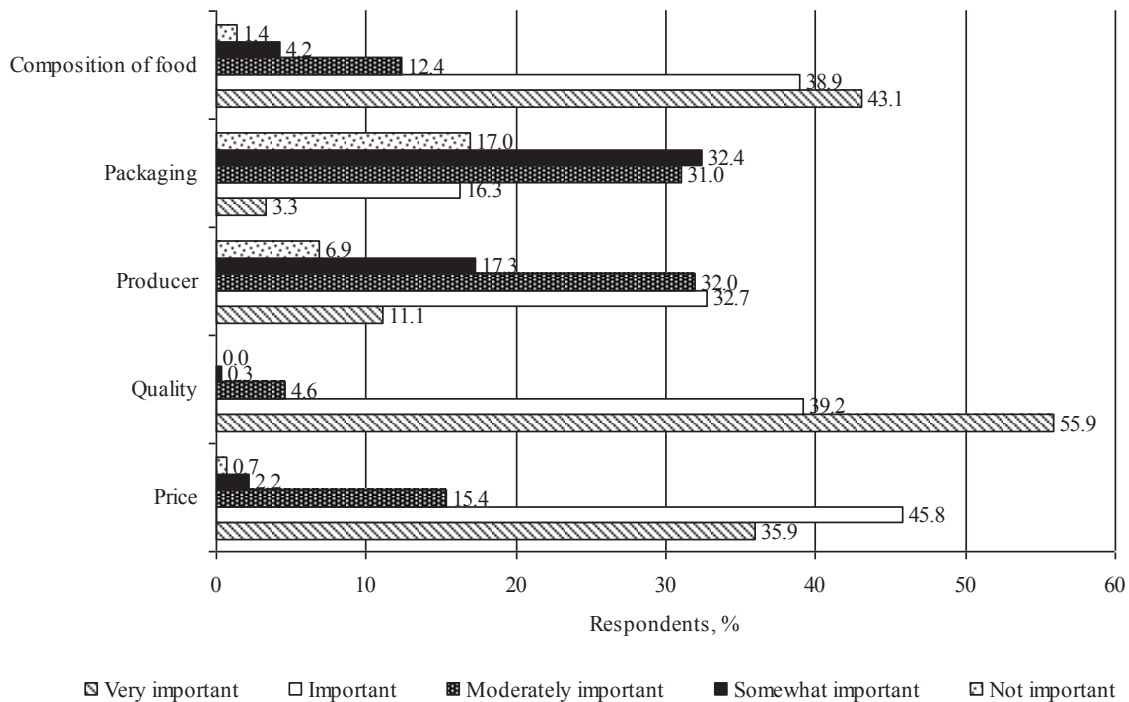


Figure 4. Factors that influence consumer food choices, %.

most important processes in the final stages of food production because it ensures the quality of products during storage and transportation.

Food packaging is designed to contain and protect food, as well as to provide all the necessary information about the product. The primary function of food packaging is to ensure that the food is safe for consumption while brought from the producer to the consumer; properly selected food packaging can significantly extend the shelf life of food products. The secondary function of food packaging is marketing (Han, 2014).

One of the important tasks of the survey was to determine the consumer interest in the introduction of Latvian produced MRE sets into the market of Latvia. These MRE sets could be prepared in less than 10 minutes and would taste like home-cooked food. Consumer view and attitude are the key factors in the development of new products, because the negative attitude may hinder the integration of the product in the market (Haugaard et al., 2014). Survey results show that 67.2% of the respondents would be interested in the introduction of MRE sets into the market of Latvia, while only 32.8% of the respondents claimed that such products are not necessary in the market of Latvia and they have no interest in purchasing MRE sets. These results show that the number of the respondents which are interested in MRE sets is significantly higher than the number of disinterested respondents ($p < 0.05$). Thus, the development and implementation of MRE in the market is relevant.

With the introduction of new food products to the market, it is necessary to ascertain the requests of consumers. Food choice is a complex phenomenon with multiple interaction factors that determine which foods are consumed at a particular place and time. Food selection and consumption is a natural and integral part of human behaviour (Mahon et al., 2006).

MRE sets vary in composition of ingredients and in the way of preparation, therefore to find out the product pairs which could be chosen for daily consumption, consumers were asked to choose the MRE sets from 20 different MRE set options that they would be keen to purchase or would not purchase as lunch or dinner meals (Table 1). This question was asked only to the respondents who were interested in the introduction of MRE sets into the market of Latvia, a total of 67.2% of the surveyed consumers. The MRE set which, as approved by most, consisted of ‘vegetables with chicken fillet’; 77.1% of the respondents stated that they would like very much to purchase this MRE set for lunch or dinner meals. In terms of preference, there were no significant differences ($p > 0.05$) between the MRE sets ‘vegetables with chicken fillet’ and ‘rice with chicken fillet’. The ‘rice with chicken fillet’ set was approved by 73.9% of respondents. The last set in top three was ‘potatoes with chicken fillet’ that 67.4% of respondents would like to purchase and use as the key element for everyday meals. It can be concluded that consumers prefer MRE sets containing chicken instead of pork or beef. On the other hand, the MRE sets, which the consumer would not like to

Table 1

The opinion of the respondents on MRE sets

Groups of meals, ready-to-eat	Types of meal ready-to-eat sets	Respondents, %
		Would Buy
Meals, ready-to-eat with chicken fillet	Vegetables with chicken fillet	77.1
	Potatoes with chicken fillet	67.4
	Rice with chicken fillet	73.9
	Pasta with chicken fillet	56.4
	Buckwheat with chicken fillet	56.0
Meals, ready-to-eat with beef	Vegetables with beef	63.3
	Potatoes with beef	51.8
	Rice with beef	48.2
	Buckwheat with beef	45.4
	Pasta with beef	40.8
Meals, ready-to-eat with pork	Vegetables with pork	65.6
	Potatoes with pork	62.8
	Rice with pork	58.3
	Buckwheat with pork	56.9
	Pasta with pork	54.6
Meals, ready-to-eat with sauce	Vegetables with sauce	45.4
	Potatoes with sauce	31.7
	Rice with sauce	27.5
	Pasta with sauce	26.6
	Buckwheat with sauce	24.3

see as lunch or dinner meals, were buckwheat with sauce (75.5%), pasta with sauce (73.4%) and rice with sauce (72.5%) with no significant differences between the rating of disliking ($p > 0.05$). Respondents would not purchase these MRE sets for daily consumption.

The survey data show that consumers would choose the MRE sets containing chicken, beef and pork more often than the MRE sets with sauce.

For a MRE set (they would like to purchase) 62.2% of the respondents replied that the optimal

weight should be 500 g. (Fig.5). About one third of the respondents (29%) informed that the optimal weight should be 250 g, and 8.8% of the respondents claimed they would like to purchase a MRE set that weighs 1000 g. The weight of MRE sets highly depends on family situation (marital status) and the number of people in families.

In addition, a question about an appropriate price for a MRE set with meat was asked (Fig.5). Respondents were offered to choose from four

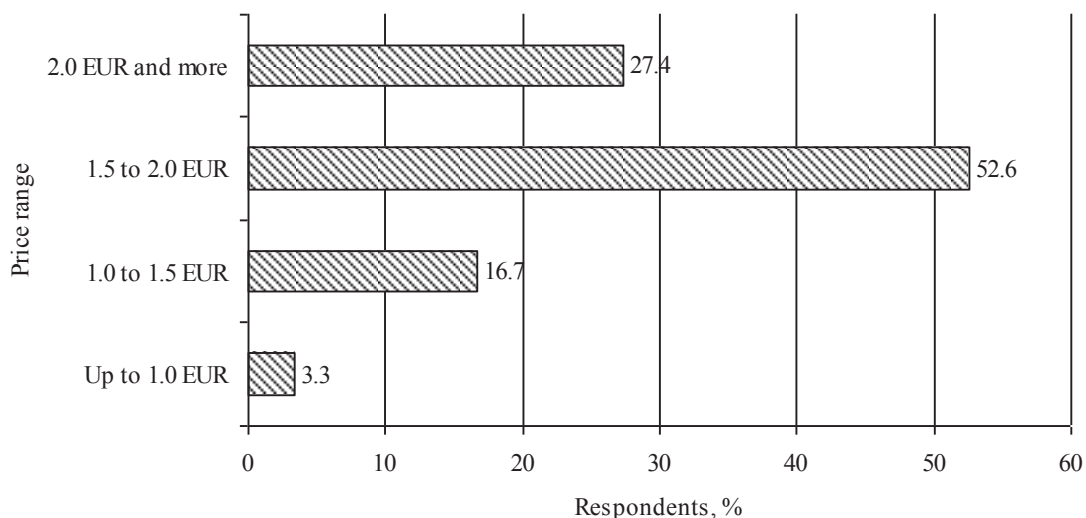


Figure 5. What should be the optimal price for one MRE set with meat that you would be willing to pay?

different MRE set prices. Majority of respondents (52.6%) chose 1.5 to 2.0 EUR as an optimal price. In turn, 27.4% of respondents reported that they would be willing to pay more than 2.0 EUR for a set of MRE. The results of such a response are due to the economic factors which can significantly influence the food choice.

Conclusions

1. The results about the demand forecast for MRE sets in the market of Latvia lead to the conclusion that the development and implementation of MRE is relevant, as 67.2% of the respondents expressed a desire to purchase such products.

2. The target audience for MRE sets is young adults and people in their 30s (age group 19-35 years) with active daily rhythm who work or study and choose to spend more of their free time in other types of activities than preparing meals.

3. When making a food choice, a lot of attention is paid to such factors as product quality, composition of food ingredients and price, while the packaging and producer are less important. The demand for new products in the market of Latvia depends on the food purchase habits of consumers and the factors characterising the product quality.

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