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FACTORS INFLUENCING FOOD NEOPHOBIA. A BRIEF REVIEW

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Abstract

Nowadays, the number of new food products has increased considerably. Nevertheless, not all new food products are accepted and understood by consumers, the innovations in the food sector are often not well received by the market, partly due to a phenomenon known as food neophobia. Food neophobia, a general aversion to try new or unfamiliar foods, has a major impact on preferences, selection and food product acceptability. The neophobic consumers tend to display negative attitudes and less pleasure in relation to new food products. Food neophobia is based on three main reasons for rejection of a food, such as: dislike of its sensory characteristics, fear of negative consequences of eating it, and disgust arising from the idea of the food's nature or origin. Phobia towards the introduction of unfamiliar foods in the diet can occur for several different factors, such as: socio-demographic characteristics, education level and lifestyle, degree of urbanization, income level, arousal, personal experiences, advertising, fashion, advices of other persons, and habits.

This review paper was designed to provide up-to-date relevant information on factors influencing food neophobia, like social factors, type of new food, education, and arousal. The scientific information presented here could help food scientists in new food development, and food companies to develop the best marketing strategies that lead to a general decrease in neophobic consumers' behaviour. The application of appropriate marketing strategies may allow the product to reach a competitive advantage and be successful.

Keywords: food neophobia, new food, social factors, education, arousal.

1. Introduction

Nowadays, the consumers are becoming more demanding and conscious of their food selection [1, p. 82; 2, p. 281], especially with regard to novel foods [2, p. 281]. Food neophobia, general reluctance/aversion to try new or unfamiliar foods [1, p. 72; 3, p. 380; 4 , p. 75; 5, p. 51; 6, p. 72; 7, p. 393; 8, p. 259; 9, p. 926; 10, p. 522], is a personality trait [1, p. 72; 4, p. 76; 6, p. 71; 9, p. 92911, p. 1], a continuum along which people can be located in terms of their stable propensity to approach or avoid new foods [4, p. 768; 6, p. 71]. The neophobia has a major impact on preferences, selections and food product acceptability [6, p. 76]. The neophobic consumers tend to display negative attitudes and less pleasure in relation to new food products [1, p. 72; 6, p. 76]. Aversion to new foods has been the subject of several studies aiming to identify which variables affect more or less phobic behaviour related to food consumption [12, p. 3]. The foods that are accepted are usually those that (are expected to) taste good and those that are seen to be beneficial [4, p. 77]. Food neophobia is based on three main motives for rejection of a food, such as: dislike of its sensory characteristics, danger - a fear of negative consequences of eating it, and disgust (strong emotional reaction) arising from the idea of the food's nature or origin [1, p. 72; 4 p. 75; 6, p. 71]. Different factors seem to play a relevant role in food products neophobia [9, p. 926]. Phobia

towards the introduction of unfamiliar foods in the diet can occur for several different factors [6, p. 73], such as: socio-demographic characteristics, education level [1, p. 72; 6, p. 72; 9, p. 926], lifestyle [5, p. 51; 6p. 77; 9, p. 926], degree of urbanization [3, p. 381; 9, p. 929], income level [6, p. 72], arousal [4, p. 80], personal experiences [9, p. 926], habits [5, p. 51; 6, p. 72], advertising, fashion, and advices of other persons [3, p. 381]. The general objective of this paper is consulting a database required to provide up-to-date relevant information on factors influencing food neophobia. It is examined some factors, such as: social factors, type of new food, education, and arousal (Figure 1). Knowledge about the food neophobia' influencing factors is an important key permitting the food companies to develop the best marketing strategies that lead to a general decrease in neophobic behaviours. Finally, the application of appropriate marketing strategies may allow the product to reach a competitive advantage and be successful.

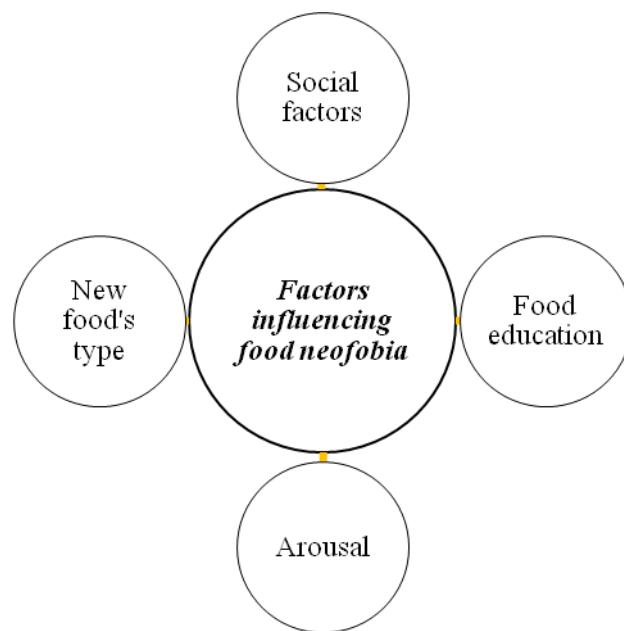


Figure 1: Factors influencing food neophobia

2. The degree of the problem currently investigating

2.1. Social factors

Social factors (age, urban / rural areas, and gender) have significant effects on acceptance of and liking for novel foods [4, p. 78]. Food neophobia occurs in all age groups [13, p. 1], and it appears to increase with age [14, p. 119]. Differences in the level of food neophobia have been detected according to age [1, p. 72; 6, p. 72; 15, p. 122; 16, p. 1]. The persons can be expected to be less neophobic when they are young and more neophobic as they get older, numerous studies indicating neophobia in older people [6, p. 77; 17, p. 3]. The young people have more willingness to taste new foods than middle aged and elderly groups [8, p. 259]. Older people are generally more conservative in their eating habits [6, p. 77]. The place of residence plays an important role in neophobia level [1, p. 73]. The people living in urban places are both more willing to taste new foods and more likely to encounter new kinds of foods than the people living in rural places [8, p. 259]. Some studies claim that people living in rural areas have a higher food neophobia level [1, p. 73; 8, p. 259], while others say that people living in rural areas would have lower food neophobia compared to urban people [9, p. 929]. Numerous differences in the level of neophobia have also

been detected according to gender [1, p. 72; 6, p. 72], but it is stated that effect of its on food neophobia is not clear [8, p. 260]. Some authors show that males are more food neophobic about tasting new foods [3, p. 381; 8, p. 260], whilst others have found that females are more neophobic [8, p. 260].

2.2. Type of new food

The types of new foods are: functional foods (the foods that claimed to promote health [18, p. 249; 19, p. 145]), genetically modified foods (foods that are produced using gene technology [18, p. 249; 20, p. 109]), nutritionally modified foods (foods that have more nutritional benefits than conventional foods [18, p. 249]), organic foods (the foods are produced or farmed in traditional conditions, they are achieved without agrochemicals [18, p. 249; 21, p. 573]), and ethnic foods that are specifically familiar to one culture but unfamiliar to others [18, p. 249]. The people are more likely to reject new foods (functional foods, genetically modified foods) [3, p. 381; 4, p. 79]. The organic foods consumer considers that eating of organic food as an important constituent of the way of life [3, p. 382]. The bases of new foods' declining might be different from those related to unwillingness to eat ethnic foods [4, p. 79]. Moreover, it is also the case that willingness to try new ethnic foods seems to show a different relationship with age than does willingness to try the other kinds of new food products [4, p. 79]. While many studies show that people become more willing to try new ethnic foods as they get older, people seem to become more hesitant to eat the other kinds of new foods as they get older [4, p. 79]. People have the chance to explore food products in different cultures thanks to their jobs [8, p. 260], the experience with different foods decrease neophobia [9, p. 929]. As the time spent in abroad increase, the anxiety of tasting new foods decreases, while people who have never been in abroad are more anxious about tasting new food [8, p. 260]. Knowledge and personal experience influence the interest in trying new foods, people exposed to diverse cultures might be less food neophobic [9, p. 926]. An increase in the exposure to new food has been proved to reduce general food neophobia levels [8, p. 3].

2.3. Education

Differences in the neophobia's level have also been detected according to level of education [6, p. 72]. A high educational status contributes to food neophilia [9, p. 929]. As the education level increase, the anxiety of tasting new foods decreases [3, p. 381; 6, p. 77; 8, p. 260; 13, p. 1; 14, p. 119; 17, p. 3]. Nowadays, food education is mainly based on the social-cognitive theory which incorporates the interaction of personal, environmental and behavioural factors [10, p. 522; 22, p. 1002]. According to this theory, the models and the repeated exposure are the principles that are highly influential in establishing changing food behaviour [10, p. 522; 23, p. 452; 24, p. S18]. The repeated exposure to a specific food increases the liking and consumption of that food through a mechanism that is believed to be a learned safety behaviour [10, p. 522]. Learning mechanism may be the principal process in the acquisition of food likes and dislikes [23, p. 447]. According to this theory, repeated consumption of an unfamiliar food without negative consequences leads to increased acceptance of that food [10, p. 522]. Food educational interventions can play a significant role in food choice [10, p. 522]. In food educational, on food products from others

countries, the festivals [10, p. 522], TV channel, Internet, and Food Network specials [25, p. 56] are considered as a teaching tools in order to increase scientific information about these new foods [10, p. 522; 25, p. 56]. Nutritional education can be used to reduce the impact of poor food habits on health, and avoid food neophobia, mainly responsible for refusing consumption of new foods [10, p. 522].

2.4. Arousal

People tend to reject new foods [26, p. 552; 27, p. 708]. New foods are particular kind of novel stimuli [26, p. 551; 28, p. 505], that may initiate a fear / avoidance response within the individual [29, p. 183]. People might not be willing to try an extremely novel stimulus, but would be willing to try one which is a little less novel [26, p. 552]. The literature indicates that strong arousal (fear, hunger) produces a decrement in novelty preference [4, p. 80; 26, p. 551]. In humans, experimentally induced increases and decreases in arousal produced corresponding decreases and increases in preferences for complexity [26, p. 551]. Making predictions from optimal level of arousal theories some researchers found a negative relationship between willingness to taste new foods and manipulated arousal [4, p. 80]. In addition, some of them found that manipulated arousal interacted with individual differences in sensation seeking, often considered to be a measure of optimum level of arousal [4 p. 80]. They manipulated both fear and hunger and assessed willingness to try new foods [4, p. 80]. In the condition in which arousal was presumably highest (high fear–high hunger) people showed the greatest repulsion to try the new food products [4, p. 80]. The willingness to try new foods is greatest in situations that are otherwise relatively familiar are compatible with the arousal, if one simply assumes that arousal in a familiar situation is likely to be low [4, p. 80].

3. Methods and materials applied

Method applied was an exploratory research. The general objective of this paper is consulting a database required to provide up-to-date relevant information on some factors influencing food neophobia, like social factors, type of new food, education, and arousal. The understanding of these factors it can be implemented into our future research design. The used instrument was the existing data analysis via exploitation the results obtained by other researchers from different sources, such as: ISI or BDI online journals, chapters in books.

4. Conclusions

Different factors (social factors, education level and lifestyle, degree of urbanization, income level, arousal, personal experiences, and habits) seem to play a relevant role in food neophobia. This paper covers a wide literature in psychology, economy, food nutrition, and food science to take stock of current knowledge about some of these factors, like social factors, type of new food, education, and arousal. Information presented here could help professionals and food scientists in the process of creating new foods, and food companies to develop the best marketing strategy that

lead to a general decrease in neophobic consumers' behaviour. Acceptance of a new food is not easy, the consumers are anxious while tasting and eating new food products. Creating positive experiences with new foods, exposure the consumers to new (feared) foods, presentation of new foods in familiar contexts, nutritional counselling, education, changing preconception about new food, tasting of the unfamiliar foods, observation of neophobic or neophilic attitudes of other people may play a crucial role in preventing food neophobia negative effects.

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Rezumat

În zilele noastre, numărul produselor alimentare noi a crescut considerabil. Cu toate acestea, nu toate produsele alimentare noi sunt acceptate și înțelese de către consumatori, inovațiile din sectorul alimentar nu sunt bine primite, de multe ori de către piață, în parte din cauza unui fenomen cunoscut sub numele de neofobie alimentară. Neofobia alimentară, o aversiune generală de a încerca produse alimentare noi sau necunoscute, are un impact major în preferințele, selecția și acceptabilitatea produselor alimentare. Consumatorii neofobici tend să manifeste atitudini negative și o plăcere redusă în relația cu produsele alimentare noi. Neofobia față de produsele alimentare noi are la bază trei motive principale în respingerea unui produs, și anume: dezgustul față de caracteristicile senzoriale ale acestuia, teama de consecințele negative ale consumării acestuia și dezgustul față de natura sau originea produsului. Fobia față de introducerea alimentelor necunoscute în dietă se datorează mai multor factori, precum: caracteristicile socio-demografice ale persoanei, nivelul de educație și stilul de viață, gradul de urbanizare, nivelul veniturilor, stimularea (dinamizarea) dată de produsul nou, experiențele personale, publicitatea, moda, sfaturile altor persoane și obiceiurile.

Acest articol review oferă informații actualizate, relevante cu privire la unii factorii ce influențează neofobia alimentară, cum ar fi: factorii sociali, tipul de produs nou, educația și stimularea (dinamizarea). Informațiile științifice prezentate aici ar putea fi de folos dezvoltatorilor de produse alimentare noi și companiilor din industria alimentară în dezvoltarea celor mai bune strategii de marketing, care să conducă la o reducere a comportamentului neofobic. Aplicarea unor strategii de marketing adecvate poate să conducă la obținerea avantajului competitiv și la succesul produsului.

Cuvinte-cheie: neofobie alimentară, produs alimentar nou, factori sociali, educație, stimulare.

Аннотация

В настоящее время значительно возросло количество новых продуктов питания. Тем не менее, не все новые пищевые продукты приняты потребителями и понятны им, инновации в пищевой промышленности не очень хорошо восприняты рынком, часто по причине, так называемого, явления, как пищевая неофобия. Пищевая неофобия, как нежелание пробовать новые или незнакомые продукты, оказывает значительное влияние на предпочтения потребителей, выбор продуктов питания и их приемлемость. Потребители, склонные к неофобии, показывают свое негативное отношение к продуктам и незначительное удовольствие при контактировании с ними. Неофобия на новые продовольственные продукты основана на трех главных причинах непринятия продукта, а именно: отвращение к его сенсорным характеристикам, страх негативных последствий от его потребления и отвержение его природы или происхождения продукта. Фобия по включению незнакомых продуктов в диету обусловлена целым рядом факторов таких как: социально-демографические характеристики личности, уровень воспитания и стиль жизни, степень урбанизации, уровень доходов, стимулирование новым продуктом, личный опыт, реклама, мода, советы других людей и обычаи.

Данная обзорная статья содержит актуальные данные, по ряду факторов вызывающих пищевую неофобию, такие как социальные факторы, виды нового продукта, воспитание и стимулирование (динамизация). Приведенная научная информация может быть полезна разработчикам новых продуктов питания и предприятиям пищевой промышленности при создании наиболее эффективных маркетинговых стратегий, способствующие снижению неофобий. Применение соответствующих маркетинговых стратегий может привести к достижению конкурентных преимуществ и успеху продукта.

Ключевые слова: пищевая неофобия, новый продовольственный продукт, социальные факторы, воспитание, стимулирование.

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