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Research article

CRITERIA THAT DETERMINE CONSUMER CHOICE OF FOOD PRODUCTS WITHIN HEALTH RISK ANALYSIS

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Provision of food quality and safety is among national priorities. The strategy aimed at improving quality of food products in the Russian Federation for the period up to 2030 highlights a relevant issue as regards Russians consuming low-quality food products. The aim of this study is to identify criteria that determine consumer choice of food products and its influence on health risks.

The empirical data used in the study are represented by the results of national social surveys (Russian Public Opinion Research Center, NAFI Research Center, Public Opinion Fund, 2020–2023) and materials obtained by focus interviews with Russian megacity residents (n = 26, spring 2024).

Price is the top criterion that determines consumer choices in Russia. We identified three behavioral strategies based on subjective perception of food quality and price: 1) quality is priority regardless of a price (the strategy is typical for middle-aged consumers with higher incomes); 2) a balance between quality and price (including orientation at discounts and special promotion campaigns at points-of-sale); 3) refusal from subjectively more qualitative food products in favor of less qualitative but cheaper ones (the strategy is typical for consumers from senior age groups). Consumer orientation at product price leads to changes in diets in case population incomes are dropping or market prices are growing; in particular, it means a decline in fruit, meat and fish consumption. Significance a consumer places on food taste as a selection criterion results in choosing food products with low 'objective' consumer value but a higher 'subjective' one, for example, chips, sweetened carbonated beverages, and products with high saturated fat contents. Risky consumer choice is also determined by low interest in healthy diets and absence of any faith in possibility to get objective information.

A conclusion is made that it is necessary to make food products, which are subjectively perceived by consumers as more qualitative, more affordable in money terms; to intensify educational activities and to create suitable conditions for making consumers refuse from buying products with low nutrition value.

Keywords: food products, food quality, food safety, consumer behavior, subjective criteria of quality and safety, risk behavior.

The WHO (World Health Organization) Global Strategy for Food Safety considers food safety a priority issue of public healthcare and socioeconomic development¹. The Strategy for Food Quality Improvement up to 2030 approved by the RF Government Order in June 2016 defines provision of food quality as a 'key component in health protection, achieving longer life expectancy and raising quality of life of the country population'². Great attention is

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¹ EB150/25, WHO Global Strategy for Food Safety: Report by the Director-General. WHO, December 10, 2021. Available at: https://apps.who.int/gb/ebwha/pdf_files/EB150/B150_25-en.pdf (August 14, 2024).

² Strategiya povysheniya kachestva pishchevoi produktsii v Rossiiskoi Federatsii do 2030 goda, utv. rasporyazheniem Pravitel'stva RF ot 29 iyunya 2016 g. № 1364-r [The Strategy for Food Quality Improvement in the Russian Federation up to 2030, approved by the RF Government Order on June 29, 2016 No. 1364-r]. *The Russian Federation Government*. Available at: <http://static.government.ru/media/files/9JUDtBOPqmoAatAhtT2wJ8UPT5Wq8qIo.pdf> (August 14, 2024) (in Russian).

paid to food safety and quality due to products with *inadequate* consumer properties (falsified food products or foods that do not conform to sanitary-epidemiological requirements) and foods with poor consumer properties (products with low nutrient and biological value, with high contents of trans fats) being distributed on the market. In Russia, turnover of low quality and falsified goods is supervised by Rospotrebnadzor, Rosselkhoznadzor and some other relevant public authorities. A consumer is not usually able to recognize a falsified product and, as a rule, does not choose it consciously³. But consumers buy food products with objectively low consumer properties, which, however, are safe according to a formal approach, following their own choice. It is usually based on ‘consumer quality’ [1] or ‘subjective quality as perceived by consumers’ [2], ‘subjective consumer utility’ [3].

Subjectively perceived quality of foods is determined by two groups of factors, 1) internal (they describe how a consumer perceives internal properties of a product (appearance, smell, composition, number of calories, etc.)) and 2) external (they describe how a consumer perceives modifiable properties of a product, namely, its price, brand, manufacturer, etc.). Within the Search / Experience / Credence model, three types of quality are viewed as components in the structure of perceived quality. They are ‘search quality’ (it can be determined prior to purchase, for example, a product appearance or composition declared by a manufacturer), ‘experience quality’ (it can be determined only upon consumption, for example, a product taste), and ‘credence quality’ (consumers cannot determine it on their own and have credence in others, as it is the case with utility of organic products declared by

mass media) [4]. Criteria used by consumers to determine food quality have been studied in great detail; as a result, more than 50 such criteria, or cues, have been identified including price, smell, taste, vitamins and minerals, easiness to prepare, country of origin, being a product for diabetics / children / pregnant women etc. All cues have different significance for various groups of consumers [5]. For example, a study accomplished by NAFI Research Center in October 2022 revealed that a) a product utility was more important for people aged 55 years and older; b) a product taste was more significant for men, middle-aged people and people without higher education; c) a product price was rather a key cue for Russians close to retirement age and already retired as well as low-income consumers⁴.

Consumer demands are dynamic and tend to change when influenced by a socioeconomic situation, sociocultural contexts, advertising, fashion, etc. New social norms and values that become fixed in a society also transform consumer demands to food products [6]. Thus, a trend for environmental-friendly consumption has spread globally over the last decade [7] and this has resulted in including ‘environmental friendliness’ into priority consumer criteria. According to the data provided by the Russian Public Opinion Research Center (VCIOM), in 2021, 55 % of respondents in Russia considered whether a product was ‘environmental-friendly’ when making a choice and 64 % of respondents would rather buy a more expensive product if it was ‘environmental-friendly’⁵.

Consumer choice is only partially rational [8] and very often impulsive and rather shortsighted when a consumer is oriented only at getting momentary benefits and not long-term

³ Ignatova O. Glava Rospotrebnadzora rasskazala o sposobakh vyyavleniya fal'sifikata [The Head of Rospotrebnadzor has told us how to detect falsified products]. *Rossiiskaya gazeta: Internet portal*. Available at: <https://rg.ru/2018/10/10/glava-rospotrebnadzora-rasskazala-o-sposobah-vyivavleniia-falsifikata.html> (August 14, 2024) (in Russian).

⁴ Aimaltdinov T.A., Bychkova E.A. Trendy potrebleniya rossiyanami produktov pitaniya. Rezul'taty kompleksnogo issledovaniya [Trends in food consumption by Russians. The results of complex survey]. *NAFI Research Center*, 2023. Available at: https://nafi.ru/projects/potrebitelskoe_povedenie/trendy-potrebleniya-rossiyanami-produktov-pitaniya/ (August 17, 2024) (in Russian).

⁵ Ekologichnoe potreblenie [Environmental-friendly consumption]. *VCIOM (Russian Public Opinion Research Center): official web-site*. Available at: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/ehkologichnoe-potreblenie> (August 15, 2024) (in Russian).

effects [9]. When buying food products, consumers, as a rule, act ‘out of habit’ or use their own intuitive judgment [10]. Declared values may fail to determine actual consumer behavior (for example, accepting health as a key life value may be combined with ‘unhealthy diets’ or choosing food products with low nutritional value).

The aim of this study was to identify subjective consumer criteria that describe safety and quality of foods distributed on the Russian market and to determine their relationship with health risk behavior.

Materials and methods. The study is based on a secondary analysis of national social surveys (Domestic and Imported Foods by the Public Opinion Fund, August 2020, $n = 1000$; Russians’ Health and Diet by the Russian Public Opinion Research Center, May 2021, $n = 1600$; Trends in Food Consumption by Russians by NAFI Research Center, October 2022, $n = 1600$; Foods: Domestic or Imported? by the Russian Public Opinion Research Center, April 2023, $n = 1600$) as well as materials obtained by focus interviews with Russian megacity residents (a criterion sample, $n = 26$), which were conducted by experts from the Federal Scientific Center for Medical and Preventive Health Risk Management Technologies in March – April 2024.

Results and discussion. Consumer criteria of food safety and quality are not identical with consumer choice criteria but they overlap to a certain extent. According to the results obtained by formalized surveys, price is the top criterion that determines consumer choices in Russia. According to the data provided by the NAFI Research Center, in 2022, 82 % of Russians primarily relied on a product price as the most significant criterion when buying foods (87 % among consumers aged 35–44 years and 86 %

among those aged 55 years and older). Significance of price as a selection criterion was also confirmed by 88 % of the respondents agreeing with the statement: ‘I pay great attention to discounts, campaigns, or special offers when buying foods’⁶. According to VCIOM data, price was one of top three criteria employed to choose food products by 52 % of the respondents in 2020 and by 59 % in 2021. It is noteworthy that in 2021, the share of consumers who were primarily guided by product prices was higher among people aged 18–24 years and consumers with a very poor / poor financial position than on average in the sample and reached 67 and 68 % respectively⁷. Growing significance of a product price in consumer groups with lower incomes was also evidenced for foreign samples [11, 12].

Analysis of the interviews revealed that consumers, regardless of their age or sex, tended to believe that more expensive products had the highest quality when discussing the ‘price’ category: ‘Price means quality’ (female, 19 years old, Novosibirsk), ‘More expensive buckwheat has better quality and is cleaner. When you wash cheaper one, you get only husk’ (female, 77 year old, Nizhnii Novgorod), ‘The more expensive a product is the better quality it has. I’m sure of it’ (female, 83 years old, Perm), ‘.. depends on a price, of course. If a product is more expensive, it is going to have higher quality. Cheap products do not have high quality.’ (male, 22 years old, Perm)⁸. However, it is price that makes qualitative food products less affordable for many consumers: ‘Quality very often means high prices [...] So, we have to buy cheaper products and they are not so high-quality’ (female, 21 years old, Novosibirsk).

In general, when consumers who gave an interview talked about food prices in connec-

⁶ Aimaletdinov T.A., Bychkova E.A. Trendy potrebleniya rossiyanami produktov pitaniya. Rezultaty kompleksnogo issledovaniya [Trends in food consumption by Russians. The results of complex survey]. NAFI Research Center, 2023. Available at: https://nafi.ru/projects/potrebitelskoe_povedenie/trendy-potrebleniya-rossiyanami-produktov-pitaniya/ (August 17, 2024) (in Russian).

⁷ Zdorov’e i pitanie rossiyan: monitoring [Russians’ Health and Diet: monitoring]. VCIOM (Russian Public Opinion Research Center): official web-site. Available at: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/zdorove-i-pitanie-rossijan-monitoring> (August 15, 2024) (in Russian).

⁸ Here and later on the text contains informants’ original statements.

tion to quality, they could be divided into three groups: those who chose products, which, in their opinion, were of higher quality, regardless of their price (*'We certainly do not buy very expensive products but we try not to be economical when it comes down to quality' (female, 46 years old, Perm)*), 2) those who looked for a balance between quality and price (*'I try to buy discounted fish and meat [...] always inspect a product appearance so that it would be satisfying. Meat is expensive and fish is as well, so we buy such products in... large retail networks. ...as a rule, when they are sold with discounts' (female, 51 years old, Novosibirsk)*), 3) those who refused from buying products, which, in their opinion, were of higher quality, and chose less qualitative but cheaper products (*'If pension is enough, we buy qualitative products, and when it is not ... we look for something cheaper' (female, 78 years old, Nizhnii Novgorod)*, *'If a product is sold at a cut-price, yes, our pensioners buy it and low-income families do it. I do it as well even if I know that this product is not healthy. But I, just as people like me, who get very small salary, cannot afford to buy ... such food products that are qualitative and healthy' (female, 49 years old, Perm)*). Therefore, limited purchasing power in Russia is the primary factor that influences consumer choices making them buy products with lower subjective quality.

When consumers are guided by prices, it results in changes in their diets in a situation when incomes are declining or market prices are growing. A study by the Public Opinion Fund revealed that growing prices for food products made 27 % of Russians to buy less qualitative products and 22 % of Russians to refuse from buying certain expensive products. One quarter of consumers economize on meat and poultry; 18 %, on cheese, sausages, fish and other seafood; 14 %, on fruit⁹. Foreign

studies established that healthy food on average tended to cost more than unhealthy one [13] and prices for the former tended to grow faster during a socioeconomic crisis [14].

In consumers' minds, quality of a product is closely connected with its freshness: *A high-quality product is a fresh one. For me, quality is first of all freshness.' (female, 64 years old, Nizhnii Novgorod)*. Freshness is usually estimated through an expiration date and appearance. Some respondents considered these quality characteristics to be quite comprehensive without any clarifying questions by an interviewer: *"First of all, you have a look at how fresh a product is and when it was manufactured. As for more ... I guess there is nothing else to look at' (male, 63 years old, Nizhnii Novgorod)*, *'[I judge freshness] by appearance.... Only appearance' (female, 71 years old, Perm)*. This may indicate that consumers either have rather low demands or are poorly aware of methods used to estimate food quality. If we pay attention to contexts of interviews, we can see that the financial position of this respondents' group does not allow them to buy expensive products.

Consumers have several ways to estimate food quality connecting it with determining how fresh it is: 1) by seeing the declared expiration date on a package in case it is provided there (according to the NAFI Research Center data, among all consumers who pay attention to a product package to a certain extent (89 % of the sample), 92 % of the respondents do it to see a date when a product was manufactured and its expiration date¹⁰); 2) estimating a product by using the sense organs judging its color, smell, and consistency; 3) asking sellers: *'[When determining whether a product is fresh, rely on] only on sellers' words who tell us that everything is fresh' (male, 67 years old, Nizhnii Novgorod)*. It is interesting that such two criteria as 'quality' and 'freshness' were

⁹ Продукты и товары: стат'и экономии [Products and goods: items to economize on]. FOM (Public Opinion Fund): official web-site. Available at: <https://fom.ru/Ekonomika/14189> (August 14, 2024) (in Russian).

¹⁰ Aimaletdinov T.A., Bychkova E.A. Trendy potrebleniya rossiyanami produktov pitaniya. Rezul'taty kompleksnogo issledovaniya [Trends in food consumption by Russians. The results of complex survey]. NAFI Research Center, 2023. Available at: https://nafi.ru/projects/potrebitel'skoe_povedenie/trendy-potrebleniya-rossiyanami-produktov-pitaniya/ (August 17, 2024) (in Russian).

offered to respondents separately in the quantitative survey by the Russian Public Opinion Research Center (2021). As a result, 53 % of the respondents told that they primarily paid attention to quality; 37 %, to freshness¹¹.

It is noteworthy that quality, freshness included, is estimated in a different way for various product groups. For example, some specific estimates are used for a) fish and meat: specific appearance (*'Well, some yellow film on fish, fat on its surface,...so to speak. You can always tell a fresh fish from spoilt' (male, 67 years, Nizhnii Novgorod), 'I try to notice whether a fish has a good color and its scale is shining; if yes, it means it is more or less edible' (female, 71 years old, Perm)*), consistency (*'... if it is not a frozen product, I estimate consistency' (female, 50 years old, Perm)*); b) fruit and vegetables: freshness (*'Probably, how ripe they are, if there are no rotten spots ... they do not look spoilt' (female, 46 years old, Perm)*), size (*'Well, appearance mostly, color and shape. Some people also judge by size nowadays because sometimes products are of an enormous size and you can't help doubting their quality' (female, 50 years old, Perm)*), tactile perception (*'Whether an apple is soft or not', (female, 21 years old, Novosibirsk)*). It is the most difficult for consumers to estimate in a shop whether fruit and vegetables are 'qualitative' due to, among other things, absence of any label with product description: *'They do not provide the composition and I cannot read anywhere what this fruit or vegetable contains. I can only have a look at it and see whether I want to buy it or not or whether I like it or not, something like that' (female, 51 years old, Novosibirsk)*.

Consumers with different level of income tend to have different attitudes towards products with a close expiration date. According to the NAFI Research Center survey, when answering the question 'If you see products that are sold at cut-off prices but with their expira-

tion date being in the next few days, are you going to buy them or not?', 25 % of the respondents answered that they would consider buying such products above all. The share of those who would not buy such products was 8 % higher among wealthy respondents than on average in the sample (36 against 28 % respectively). Moreover, a product with a close expiration date attracted primary attention of low-income consumers (due to its more attractive price) but wealthy consumers saw it as a reason not to buy it even if this product was still safe for consuming. Therefore, choosing a product of lower quality estimated basing on its freshness was again connected with its greater affordability.

In consumers' opinion, food quality is closely connected with a place of origin, be it a country, a region, or even a specific manufacturer. For example, according to the Public Opinion Fund survey, in 2016, 14 % of Russian respondents believed the quality of Russian food products to be lower than that of imported ones¹². The NAFI 2022 survey revealed that the share of consumers who thought imported goods to be more qualitative almost did not change and amounted to 15 %. The younger a respondent was the more often he or she stated that Russian products were less qualitative than imported ones: 24 % among people aged 18–24 years and 27 % – among those aged 25–34 years and only 8 % among people aged 60 years and older. This preference for domestic foods as more qualitative, which was typical for elder age groups, could also be traced in the interviews: *'It's better to buy our Russian fruits' (male, 67 years old, Nizhnii Novgorod), 'We never buy imported foods. We always choose our home manufacturers' (female, 77 years old, Nizhnii Novgorod)*.

Consumers believe more qualitative products to be a) those grown in their vegetable gardens (*'Our own vegetables, which we have*

¹¹ Zdorov'e i pitanie rossijan: monitoring [Russians' Health and Diet: monitoring]. VCIOM (Russian Public Opinion Research Center): official web-site. Available at: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/zdorove-i-pitanie-rossijan-monitoring> (August 15, 2024) (in Russian).

¹² Otechestvennye vs. importnye produkty pitaniya [Domestic vs. Imported foods]. FOM (Public Opinion Fund): official web-site. Available at: <https://fom.ru/Ekonomika/12587> (August 14, 2024) (in Russian).

grown in our garden, are high-quality of course' (female, 64 years old, Nizhnii Novgorod)), b) farmer products without any industrial processing ('We buy milk from private farmers, fresh cow milk' (male, 63 years old, Nizhnii Novgorod)), c) products manufactured in a region where an informant lives ('We know what manufactures are located not far from us in Perm region. Well I hope they stick to all necessary production processes at their milk processing plant' (female, 46 years old, Perm)). 'Being natural' is the key argument here, which is commonly interpreted as absence of any artificial components in a product, refusal from using antibiotics or hormones in production, and a natural environment: '... some E-numbers, additives, I guess, I'd be cautious with them, just as with palm oil. I'm not going to buy foods with them' (female, 51 years, Novosibirsk), 'Meat should be grown without any antibiotics, without any... Well, everything should be natural about it' (female, 49 years, Perm). However, consumers not always choose local products because they believe such products are more 'natural' and sometimes their reasons can seem irrational: 'Interviewer: And why do they seem the most qualitative to you? Informant: I don't know. I guess ... home is home' (female, 63 years old, Nizhnii Novgorod). Preference to local producers and consumption of farmer products can be called a trend that has been developing across the globe starting from the mid 2010ties [15]; it became only 'stronger' during the pandemic [16].

A product 'naturalness' can be seen not only as a sign of its quality but of its safety as well. For some consumers, safe products are those that do not contain genetically modified organisms or cultures or artificial chemical additives: 'safe food products are those without any chemical coloring agents, primarily,

GMOs and so on and so forth' (female, 49 years old, Perm), 'For me, safe foods are those with low levels of chemicals or sugar as well as those with low GMO contents' (female, 19 years, Novosibirsk). In general, Russian consumers tend to be highly suspicious of genetically modified organisms. According to VCIOM data, in 2020, 66 % of Russians agreed with the statement 'Genetically modified food products (GMO-containing foods) are extremely hazardous for human health. However, the population is not allowed to have this information'; 17 % had difficulty in expressing their unambiguous attitude towards the statement; and only 20 % of respondents believed genetically modified food products to be safe for people¹³. In 2022, 44 % of Russians agreed with the statement that 'GMO-containing products induce cancer'¹⁴. The smaller settlement respondents lived in the sooner they would agree with this statement ($p < 0.001$, $F_i = 0.194$).

Food safety is a basic criterion of consumer choice. It is closely connected with product quality and is interpreted as a) commonly as food being edible ('Unsafe [foods] means they are not edible' (female, 71 years old, Perm)) and b) in a more narrow sense, as absence of relatively prompt adverse health outcomes (food poisoning or allergic reactions) ('[safe food product] means I don't get, for example, stomach ache after I've had it' (female, 83 years old, Perm); '[Unsafe foods] means you can eat them and get stomach ache in the best case, in the worst case, you get poisoned with ...bacteria' (female, 42 years old, Novosibirsk)). Product freshness, identified based on its expiration date or visually, is the basic operational safety criterion. Still, a) safe foods can be 'unhealthy' ('Suppose, a hamburger is unhealthy food. Well, I still think it to be safe, yeah? That is, it is fresh, made of meat

¹³ Teorii zagovora – i chto lyudi o nikh dumayut? [Conspiracy theories – and what do people think about them?]. VCIOM (Russian Public Opinion Research Center): official web-site. Available at: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/teorii-zagovora-i-chto-lyudi-o-nikh-dumayut> (September 16, 2024) (in Russian).

¹⁴ Pochemu neobkhodimo prosveshchenie, ili snova o rasprostranennykh zabluzhdeniyakh [Why do we need education or again about commonly spread delusions]. VCIOM (Russian Public Opinion Research Center): official web-site. Available at: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/pochemu-neobkhodimo-prosveshchenie-ili-snova-o-rasprostranennykh-zabluzhdeniyakh> (September 14, 2024) (in Russian).

and vegetables. And I think it is safe basically but still unhealthy' (female, 24 years old, Perm)), b) safe food products can be low-quality ('well, for example, vegetables have been on the shelf for too long, carrots are flabby but they are still safe. You can buy them and cook something' (female, 71 years old, Perm)).

A 2019 survey by the Russian Public Opinion Research Center revealed that only 17 % of Russians were guided by food safety when buying agricultural products such as vegetables or greenery. On the other hand, 'being fresh' turned out to be a significant criterion for 48 % of the respondents (the most common choice among all options)¹⁵, which in general supports the thesis that customers are primarily guided by food safety even if there is no verbal confirmation of the fact.

A product taste is another important criterion that determines consumer choice [17]. According to a survey that was accomplished among Europeans by Euromonitor International, in 2022, 51 % of European consumers were guided by taste when choosing foods¹⁶. A survey that was conducted in Portugal in October 2022 revealed that 58 % of the respondents thought a product taste to be of critical importance¹⁷. Quantitative surveys aimed at determining how significant a product taste is for Russians have yielded somewhat ambiguous results. Thus, according to a survey by the Russian Public Opinion Research Center, in 2021, only 17 % of the respondents named a product taste among three basic cues in choosing food products. An all-Russia survey conducted in 2021 by the Research Scientific Center for Social and Political Monitoring of the Institute for Social Sciences, on the contrary, established that 51 % of consumers thought a product taste to be a priority criterion [18]. Data collected by the

NAFI Research Center show that in 2022 64 % of the respondents aged 35–44 years were guided by a product taste when choosing food products.

Significance of a product taste as a consumer choice cue results in preferring foods with low 'objective' consumer properties but high subjective value such as chips, sweetened carbonated drinks, products with high saturated fat contents, etc.: 'Coca-Cola, energy drinks, yes, I have sinned. They are very tasty.' (male, 23 years old, Novosibirsk). Still, in the foregoing survey by the Russian Public Opinion Research Center, 43 % of the respondents told they 'would rather agree' with the statement that 'tasty food is never healthy'. It is important that consumers understand low nutritional value of foods they consume since they label such products as 'unhealthy' or 'useless' ('Unhealthy foods have a lot of salt or fats, like chips, also Coca-Cola, crackers, croutons and many fast foods, all this is unhealthy' (female, 71 years old, Perm)) and their consumption as non-conforming to a healthy diet (for example, by using such words as 'sin' or 'we have sinned': 'Sometimes, you just want sausage or herring. Sometimes, we sin and have some chocolates as well' (female, 78 years, Nizhnii Novgorod)). Still, an attractive taste of a product turns out to be the predominant criterion in making a decision to buy ('I like all these unhealthy stuff very much, so delicious, even if they have E-numbers ... It's very difficult to refuse from eating them' (female, 27 years, Novosibirsk)).

A product taste is an important cue when choosing fast food as a basic diet. Thus, according to the Russian Public Opinion Research Center data, in 2022, 25 % of young consumers in Russia aged between 18 and 24 years visited a fast food café at least once a week. More than a half of them (65 %) did it

¹⁵ Pitanie: pravil'noe i bezopasnoe [Diet: healthy and safe]. VCIOM (Russian Public Opinion Research Center): official web-site. Available at: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/pitanie-pravilnoe-i-bezopasnoe> (August 14, 2024) (in Russian).

¹⁶ Food and Nutrition. Euromonitor International. Available at: <https://www.euromonitor.com/insights/food-and-nutrition> (August 15, 2024).

¹⁷ Food choice criteria in Portugal in 2022, by level of importance. Statista. Available at: <https://www.statista.com/statistics/1394568/portugal-food-choice-criteria-by-importance/> (August 14, 2024).

to save time and 23 % stated they did it because ‘the food was delicious’¹⁸. The second place as per popularity belonged to the answer ‘children ask / children like’ in the age group 35–44 years as regards going to fast food cafes. This again confirms that fast food has an attractive taste not so much for adults as for children.

When consumers are guided by product tastes (without considering their nutritional value, vitamin and mineral contents), this leads to prevalence of consumer behavior that creates health risks. Persistent consumption of sweetened carbonated drinks and fast food (in particular chicken and potato fried in deep fat, hamburgers, etc.) authentically increases obesity risk [19], among children and adolescents as well [20]. Excessive consumption of sugar in foods is associated with caries both in adults [21] and children [22].

Customers’ opinions about product tastes are to a great extent based on their own previous experience (*‘I mostly buy the same brand of macaroni that I like, that I’ve had eaten and know that they are tasty’ (female, 24 years old, Perm)*). Overall, experience is an important component of the mechanism for consumer choice stabilization (‘making a habit’). Thus, most Russians (90 %) try to buy products of those brands and manufactured by those companies they ‘know well’. ‘Conservative’ decisions are more popular among middle-age people, women and consumers with higher middle incomes than on average in the sample¹⁹. Well-established habits of informants’ consumer behavior [23] are usually manifested by using such words as ‘habit’ or ‘life experience’ (*‘Well, we have been buying this butter for a long time, like, got used to it. So we keep buying it’ (female, 64 years old, Nizhnii Novgorod)*). On the one hand, habitual consumption makes choice easier; on the other hand, it is viewed as a way to mitigate risks:

‘Actually, you buy the same stuff,...you know this product is alright, you eat the same foods and they seem to not affect your body or health so much. So to say, no poisonings, nothing bad. Therefore, I try to buy the same products, so to say, not to face any risk of poisoning’ (male, 64 years old, Nizhnii Novgorod).

Several reasons, apart from attractive tastes and lower prices, determine risky consumer choices:

– Low interest in the subject and no motivation to learn any useful data on product features (*‘[studying product contents in detail] No, I’ve never done that, I’m not so good at it, you have to learn how to do it properly <...> I know that many people are able to count calories and something like that but that’s not my cup of tea...’ (female, 64 years old, Nizhnii Novgorod)*);

– Consumers do not believe they can get objective information about products; they think they have no choice as available ranges of products are limited (*‘We go shopping and buy what we see on the shelf. In most cases, we just buy a cat in a bag and we do not know what we eat’ (female, 49 year old, Perm)*);

– Health risks associated with consuming foods that possibly contain some adverse chemicals are estimated as low (*‘Well, cucumbers and tomatoes that are sold in winter... people say they contain a lot of poisons. But nobody has died of it, right? Everybody eats them’ (female, 64 years old, Nizhnii Novgorod)*);

– Lack of time and peculiar lifestyles (*‘You often just don’t have enough time to, say, cook anything; it just takes a lot of time. And a lot of homework, all this makes me have just a snack on foot, and these snacks can be rather unhealthy, I don’t know, maybe, too stuffed with nutrients or whatever’ (female, 21 years old, Novosibirsk)*).

¹⁸ Fastfud: ot epokhi Makonal'dsa – vo vremena «Vkusno i tochka» [Fast food: from the McDonald’s era to Vkusno I Tochka times]. VCIOM (Russian Public Opinion Research Center): official web-site. Available at: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/fastfud-ot-ehpokhi-makdonaldsa-vo-vremena-vkusno-i-tochka> (August 17, 2024) (in Russian).

¹⁹ Aimaletdinov T.A., Bychkova E.A. Trendy potrebleniya rossiyanami produktov pitaniya. Rezul'taty kompleksnogo issledovaniya [Trends in food consumption by Russians. The results of complex survey]. NAFI Research Center, 2023. Available at: https://nafi.ru/projects/potrebitelskoe_povedenie/trendy-potrebleniya-rossiyanami-produktov-pitaniya/ (August 17, 2024) (in Russian).

Conclusion. Our findings allow us to make the following conclusions. First, such cues as food quality and food safety overlap in consumers' minds in many respects. In particular, 'freshness' of a product or its expiration date being remote indicate that a product is high-quality and safe. 'Naturalness' of a product is estimated by presence / absence of chemical additives or genetically modified organisms and cultures in it and this makes such a product both safe and high-quality for consumers. Given that, it seems unadvisable to offer consumers such an estimation criterion as 'food quality' without its additional operationalization within formalized empirical research.

Second, criteria that describe food quality and those determining consumer choices do not coincide completely. Price is the key priority for Russians when they choose what food products to buy. Consumers giving preference to a cheaper product often means that they do not keep strict demands to quality. An attractive taste is a significant motive to choose a product with low nutritional value but consumers do not think it to be a sign of good quality.

Third, consumers' credence to a manufacturer or supplier is a mediator allowing to estimate a product as high-quality one. Thus, local food manufacturers are seen as 'close', 'domestic' and, accordingly, they deserve more credence as compared with manufacturers from other regions or countries.

Fourth, routine practices of buying foods have been made a habit and are determined by a habit to choose the same product. It can be based on various motives including absence of any interest in keeping a 'healthy diet', wish to mitigate health risks by keeping this habit, lifestyle peculiarities, etc. A considerable part of consumer practices being old habits moves the issue of assessing food quality and safety out from the space of everyday reflexion.

Reduction in prevalence of risky consumer behaviors requires the following:

1) making 'natural' products more affordable, offering wider ranges of farmer products affordable for consumers with middle and low incomes;

2) intensifying educational activities aimed at forming stable public opinions about safety of genetically modified products and about healthy food that can also be tasty;

3) creating suitable conditions for refusal from consuming food products with low nutritional value by young students including wider ranges of dishes offered to them by food providers in vocational educational establishments and higher education institutions.

Limitation of the study. Primary empirical data the study relied on are qualitative. The sample corresponds to the requirement of being representative fixed for qualitative research.

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