

MOTHERS' PERCEPTIONS OF HEALTHY DIET FOR CHILDREN IN UKRAINE

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Type of manuscript: research paper.

Abstract: *Multiple chronic diseases could be prevented by introducing and implementing healthy diet policies oriented for preschool children in the time of setting life-long habits. The role of mothers is highlighted to be crucial for a preschooler's diet. It was important to conduct research to explore and investigate mothers' perceptions of healthy diet for children in small towns in Ukraine. The study applies the qualitative methodology of semi-structured interviews using the strategy of a snowball and maximum variation sampling approaches interviewing mothers of preschool children in Lubny (Poltava Region, Ukraine) including local- and national-level health experts. As the research instrument, a topic guide was developed. It is based on the categories of analysis. The study displays that there is a variety of perceptions around healthy diet among interviewed mothers and health experts. It was also confirmed by previous studies that the mothers' perceptions of a healthy diet for children are highly linked to socio-demographic characteristics which was found in the article. Common for all interviewed mothers was the perception about fresh fruits and vegetables consumption as the additional component of the child's diet, but not the basis. None of the mothers was fully aware of World Health Organisation recommendations for a healthy diet. Based on the results, we conclude that mothers of preschool children in Lubny may be grouped into three main types by their perceptions about healthy diet: 1) the conservative type (mothers who prefer traditional meals for children and have a high level of trust to medical doctors and institutions in Lubny); 2) the loyal type (mothers have the same perceptions about healthy diet as conservative yet with a high loyalty to junk food in children's diet); 3) the critical type (mothers who reported different from conservative type perceptions about healthy diet and tend to have low level of trust to the medical doctors and institutions in Lubny). The study represents findings relevant for Lubny and Poltava Region in Ukraine. Further research is needed to provide more data for a better understanding of perceptions about a healthy diet for children in Ukraine.*

Keywords: nutrition perceptions; children's nutrition; mothers' feeding styles; diet policy in Ukraine; qualitative study.

JEL Classification: D83, I10, I12, I18.

Received: 28 July 2023

Accepted: 30 August 2023

Published: 30 September 2023

Funding: There is no funding for this research.

Publisher: AR&P

Cite as: Heiko, L., & Yurochko, T. (2023). Mother's perceptions of healthy diet for children in Ukraine. *Health Economics and Management Review*, 3, 22-33. <https://doi.org/10.61093/hem.2023.3-02>



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Introduction. According to the World Health Organisation, unhealthy diet and malnutrition are the direct or indirect causes of 60% of the 10.9 million deaths among children under the age of five each year. Additionally, non-communicable diseases have been on the increase worldwide, not the least due to factors related to unhealthy lifestyles and poor diet. These diseases are a notable burden on healthcare systems and overall life quality. Specifically, designed health promotion policies and interventions proved to be beneficial in improving the health of particular groups of the population.

The early stages of life, including preschool age, are recognized as the period of establishing life-long habits incorporating health behavior. Understanding mother's perceptions of a healthy diet is important since parents provide food and play a leading role in children's lives at this age.

The data about mothers' perceptions of healthy diet in Ukraine in small towns are limited. The study aims to provide a better understanding of this social phenomenon. For that reason, the research used the qualitative methodology that allows to maximize knowledge about respondents' perceptions. Specifically, a tool of semi-structured interviews provides the opportunity to explore certain themes related to the study object.

Generally, diet perception may be determined by a socio-demographic characteristic, including the area of residence, such as urban or rural territories. Substantially, small towns may be out of the scope of study samples. Therefore, this research aims to cover this gap and provide evidence for future health policies and interventions oriented toward preschool children. Additional interviews with local and national level health experts were gainful for extended interpretation and investigation of collected data from a professional perspective.

The article's purpose is to provide a better understanding of mothers' perceptions of healthy diet for preschool children in small towns in Ukraine for future design and implementation of health policies and interventions.

Literature review. Studies show that there are issues around the phenomenon of healthy diet perception that hinder the implementation of WHO recommendations. Diet perceptions are formed at an early age and commonly constructed by parents and the social environment where a child is developed (Almoosawi et al., 2016; Vaughn et al., 2016).

Parents act as role models in the context of preschool children's nutrition (Hart et al., 2015; Natale et al., 2014). A number of studies found a correlation between sociodemographic characteristics of mothers and malnutrition of children (Montgomery et al., 2006; Vollmer, 2019; Klazine van der Horst & Sleddens, 2017; Ek et al., 2016; Scaglioni et al., 2008; Larson et al., 2011; Do et al., 2015; Jansen et al., 2014). The connection between the quality of the diet of mothers and the quality of the diet of their preschool children was found in the example of adequate consumption of vegetables and fruits (Nicklas et al., 2001; Draxten et al., 2014).

The family environment and income of parents also determine the styles of feeding children and the idea of healthy nutrition for children (Power et al., 2015; Hurley et al., 2011). Qualitative research on preschool children's diet has shown that providing low-income families with healthy meals is seen as a challenge for implementation (Herman et al., 2012). Family nutrition perceptions, internal habits, and traditions also determine the BMI of children and may be associated with overweight and obesity (Campbell et al., 2007; Kalinowski et al., 2012).

Low-income mothers are also more likely to overfeed their children, and allow them frequent snacks (Blaine et al., 2017; Rudy et al., 2018; Davison et al., 2015) because of the perception that children may need extra calories to grow up properly (Blaine et al., 2015). It has been found that mothers tend to feed their children in the absence of hunger (Remy et al., 2015) or force and pressure their children to continue eating when they are full (Galindo et al., 2018). It has also been found that mothers may have misconceptions about the adequate portion size for serving massive portions for preschool children (Blake et al., 2015; Fisher et al., 2007; Fisher et al., 2019; Steenhuis & Vermeer, 2009), which has a risk of consuming excessive calories and the risk of overweight and malnutrition. In a study of the effect of portion size, it was found that in the case of serving double portions, children consumed 33% more food (Fisher et al., 2007).

Studies of feeding styles show that mothers tend to have more control and monitoring of children's food than their husbands (Do et al., 2015). Evidence proves the correlation between the ideas and styles of breastfeeding and the development of children's eating behavior in the future (Campbell et al., 2007; Costanzo & Woody, 1985; Do et al., 2015; Draxten et al., 2014; Ek et al., 2016; Galindo et al., 2018; Klazine van der Horst & Sleddens, 2017; Montgomery et al., 2006; Remy et al., 2015; Vollmer, 2019) and body mass index of the child in future (Hurley et al., 2011).

In order to identify problematic areas and typical perceptions of mothers about healthy diet, it is important to realize that reflections on feeding styles are difficult for parents (Kalinowski et al., 2012). Eating styles and practices can be determined by the situational context (Costanzo & Woody, 1985). Parents' perceptions of their children's nutrition can be controversial and distorted. For example, in terms of weight, parents may assume that their child has normal weight when in fact the child is overweight (Almoosawi et al., 2016). Evidence also suggests that parents of preschool children may be more likely to be concerned about undereating and malnutrition rather than overeating (Hart et al., 2015).

Otherwise, a study of parents' knowledge of healthy eating revealed that mothers have a basic understanding of healthy eating. They described healthy eating as variety, balance, and restriction of refined foods high in sugar and salt (Hart et al., 2015). Mothers may be aware of the value of healthy eating and the risks of being overweight, but many have noted the social pressure that a child should be "chubby" (Lindsay et al., 2011). Additionally, parents may somehow ignore the emotional or psychological needs of the child (Vaughn et al., 2016) which may affect the diet of a child. According to the theory of self-regulation, the more parents force children to eat, the more difficult it is for them to understand and recognize their own feelings of hunger and satiety (Ryan & Deci, 2000).

A study of the feeding practices of low-income Latin American and African-American mothers found that mothers often insisted on their children eating, despite the fact that children said they were full and could not continue. Also, in a study of feeding styles of preschool children, gender differences regarding feeding boys and girls (Galindo et al., 2018).

For children with higher BMI, parents tended to set more dietary restrictions and force children to eat less (Jansen et al., 2014). At the same time, the mothers' presence at the child's meal is associated with a healthier weight for preschoolers (McCurdy et al., 2014). Despite control and restrictions, mothers described their children as intelligent and resourceful in persuading other adults to give them unhealthy products, such as sweets and junk food. Specifically, if mothers forbade children to eat junk food, they could turn to other family members in the absence of mothers. It was found that there is almost no information that would guide parents' decisions about when and under what circumstances it is appropriate or recommended to provide a snack (Davison, et al., 2015). Parents usually evaluate a snack for a child as "something small" (Blake et al., 2015).

As noted above, mothers' perceptions are determined by sociodemographic characteristics. In a study of the reasons why low-income parents allow their children snacks between main meals, it was found that parents of children aged 2–5 offered their children many snacks to help them grow up properly. For primary school children, the quantity of snacks was already much smaller (Blaine et al., 2015). It has also been found that overweight or obese children tend to eat more often than normal-weight children (Kachurak et al., 2018). Additionally, the availability of junk food at home is associated with the presence of snacks in children's diets (Blaine et al., 2015).

Methodology and research methods. This study aimed to examine the perceptions of a relatively small group of people, namely mothers of preschool children in the town of Lubny, Poltava Region, Ukraine. Evidence regarding mothers' perceptions of a healthy diet is limited in Ukraine. For this study, it was important to clarify the perceptions of mothers regarding their understanding of healthy diet for their own children. A qualitative methodology is found to be the most appropriate for the implementation of identified research objectives and aims. The hypothesis of the investigation was that mothers' perceptions of healthy diet for preschool children are linked to socio-demographic characteristics.

The study was conducted during the 2018/19 years framed by the thesis project at the School of Public Health at the National University of Kyiv-Mohyla Academy, Ukraine. Firstly, the methodology and results of the most relevant studies on mothers' perceptions of a healthy diet were analyzed, identifying key challenges and research gaps. Secondly, the research conceptualization of the term "healthy diet" was specified by the WHO definition presented in official public guidelines.

In January and February, semi-structured interviews were conducted with mothers in the town of Lubny (12 interviews). Respondents were selected via the strategy of a snowball sample with a combination of the maximum variation sample approach. The main purpose of sampling women was the criteria of having children aged from 2 to 6 years. Interviews with mothers were conducted until reaching the point of saturation. Interviews with local and national level experts on healthy diet were collected in March 2019 (4 interviews). The results were analysed in April 2019, and findings were finalised in May 2019. Topic guides for interviews are presented in the source "Research appendix: Topic-guides for semi-structured interviews with mothers and experts (2023)" from the references list.

Interviews with mothers. At this stage of research, the fundamental factor was to create an atmosphere of trust, anonymity, and comfort for mothers. All respondents received informative consent for recording the

conversation. Therefore, the interviews were conducted at a convenient time for the respondents. They were also given the opportunity to choose a place. It was usually at a cafe or the respondents' own home. In some sessions, respondents' children were present during some interviews, but the distraction of mothers was insignificant and organic.

In our opinion, this fact can also be used as additional material for observation. For example, in one of the interviews, the child's mother did not allow her son to eat sweets, despite his insistence. But another woman, during an interview in a cafe, bought her daughter sweets several times during the interview. The average duration of interviews with mother respondents was about one hour. The analysis of the results with mothers of preschool children was carried out in the following thematic categories based on the WHO definition: 1) calorie counting and balance of nutrients; 2) consumption of clean water; 3) consumption of 400 g of fruits and vegetables daily; 4) consumption of meat products daily; 5) consumption of fish 3 times a week; 6) consumption of hot liquid food daily; 7) perceptions about family environment; 8) satisfaction with the family doctor and the level of trust to medical institutions; 9) satisfaction with the quality of diet in preschool institution; 10) diet, family traditions and health.

The age of the interviewed mothers ranged from 25 to 41 years (Table 1). Among 13 respondents, 4 women were on maternity leave (3 years in Ukraine) or temporarily unemployed. The remaining 9 women were employed in the following specialties: scientific collaborator, bookkeeper, primary school teacher, saleswoman, and hairdresser. Four women were entrepreneurs who had their own business. Regarding maternal education, 9 out of 13 respondents had higher education. 4 respondents had secondary or vocational education. 7 of 13 women had children aged 3-6 years. The gender distribution of children among the respondents was approximately equal. 5 out of 13 respondents had a second child in the family.

Name	Age	Level of education	Marital status	Number of children
Interviewee 1	32	Higher	Married	1
Interviewee 2	36	Higher	Single	1
Interviewee 3	26	Higher	Married	1
Interviewee 4	29	Higher	Married	1
Interviewee 5	30	Middle	Married	2
Interviewee 6	29	Middle	Married	1
Interviewee 7	25	Higher	Single	1
Interviewee 8	25	Middle	Married	1
Interviewee 9	41	Higher	Married	2
Interviewee 10	30	Higher	Married	2
Interviewee 11	39	Higher	Married	2
Interviewee 12	31	Middle	Divorced	2

Table 1. Sociodemographic characteristics of mothers

Sources: Systematised by the authors based on data from interviews (2017).

Expert interviews. For a better understanding of the context of mothers' perceptions of a healthy diet, a series of semi-structured interviews with healthcare experts and nutritionists were conducted. The study involved 2 experts from Lubny and 2 experts from Kyiv. Three expert interviews were conducted offline in person, and one interview was conducted via video call. The framework topic guide on the study of mothers' perceptions has been adjusted and supplemented for experts. Questions about their own children were eliminated, and questions about the experts' vision and policy were added. Expert interviews were conducted after interviewing mothers of children. This part of the study was needed to systematize the data obtained from interviews with mothers to interpret the results in the context of the current healthy diet policy in Ukraine.

The conversation took place at a time convenient for experts, primarily at their workplace. One of the experts was interviewed via video call at the agreed time. The conversation started with greetings, descriptions of the topics, and results of the study with mothers, followed by discussions on international recommendations for healthy diet in relation to national and international recommendations and guidelines. The average duration of expert interviews was about 50 minutes.

Methodological limitations and ethical principles of the study. Semi-structured interviews with mothers and experts were the most appropriate in the context of the research aim. The resulting empirical material has the potential for multiple interpretations. Therefore, a common methodological limitation is the subjectivity of the researcher's interpretation of the data, which is common to qualitative methodology. In addition, it is important to understand that mothers' perceptions can be skewed and changed depending on the context and situation. Therefore, a series of expert interviews was conducted for a more accurate interpretation of the data.

Additionally, mothers tend to give socially expected answers regarding the nutrition of their children. The topic of children's nutrition may be complex for mothers as it concerns issues of family income, values, traditions, education, and employment of parents.

Results

Calorie counting and balance of protein-carbohydrates-fat. Respondents reported that they do not count calories because it is difficult and impractical. Experts note that calories do not need to be counted if the child's weight is normal. However, it is important to focus on the amount of sugar, salt, and fat, and pay attention to the quality of food. Only one respondent stated that sometimes she looks at the composition of the product. She reported that she pays attention to the caloric content of her own diet and always monitors herself and, in some cases, her child: *"It is frightening that she [her daughter] eats a lot"* (Interviewee 8). *"There are some recommendations that are difficult to use, they are outdated. For example, how to count calories"* (Expert 1).

However, the preschool senior nurse is concerned that some children do not eat the served amount of food: *"Only 10 out of 100 only eat normally"* (Expert 4). She added, *"I write the menu. The approximate caloric intake is a bit more than 2,000"* (Expert 4). Experts also note that there is a traditional concept of child feeding in society. However, it is not the quantity but the quality of food that is more important in terms of a healthy diet. From experts' perceptions, children should listen to their own hunger and satiety instead of internal pressure from family members.

"But the grandmother or mother grabs his head — the child does not eat anything" (Expert 2).

Mothers and experts about sugar, salt, and fats. Mothers identify that sugar can be harmful, and they try to limit it in children's diet.

"Children like sweets so much. But there are only problems with this sugar" (Interviewee 10).

Some mothers state that they abandoned sugar and replaced it with "more healthy honey", but the WHO recommends limiting the honey as well as sugar.

"Children don't eat sweets. Sugar is replaced by honey" (Interviewee 9).

At the same time, mothers admit that they do not pay attention to the composition of dairy products in stores and don't check the amount of sugar in various foods.

"2 teaspoons a day and a chocolate bar, and I don't know how much sugar is in the bar. There is a lot of it, I guess" (Interviewee 11).

Talking about sugar consumption, mothers can only say approximately how many spoons of sugar they add to their children's tea and estimate the amount of sweets a child consumes per week.

"My daughter consumes four and a half spoons of sugar a day with tea" (Interviewee 6).

However, added sugar in dairy products, beverages, flour products, and other industrial products is ignored by mothers.

"A child eats more salt than sugar" (Interviewee 12).

According to the nutritionist, *"Sugar should not be offered to children at school. Especially products with more than 10% sugar in their content"* (Expert 1).

Mothers and experts about fruits and vegetables. Mothers and experts report about the low level of consumption and overall priority of the consumption of vegetables in comparison with fruits. The respondents admit that meat and hot liquid dishes are key elements of a healthy diet.

“First is normal cooked food, then we eat cookies, an apple, a cake. A kid interrupts appetite with apples” (Interviewee 10).

Fruits and vegetables are perceived as an addition to a diet, and their consumption is determined by the season.

“Vegetables and fruits are consumed depending on the season. We have our own in the garden” (Interviewee 10).

Mothers also say that children do not eat vegetables and refuse them. It can be hard to offer vegetables, but they try.

“I tell him, try cucumbers and tomatoes. Well, at least try to lick, you’ll like it!” (Interviewee 4).

In preschool facilities, solid vegetables and fruits are presented less often than in other forms.

“Fruits every day must be in juices, compotes” (Expert 4).

Preschools also have financial limits on children’s diets.

“I can’t give a whole apple because a child will overeat 27 UAH” (Expert 4).

According to Expert 1, even fresh juices and smoothies contain a lot of sugar. Therefore, it is better to offer solid fruits and vegetables for children. Experts also said, *“Nutritionists do not consider fruit as a healthy food. Vegetables are more useful” (Expert 2).*

Regarding the consumption of organic fruits and vegetables, which concerns mothers from Lubny, experts note, *“Organic or non-organic is a manipulation! There is no reason. Caveats outweigh the benefits. There is no reason to reduce the consumption of fruits and vegetables because of it” (Expert 2).*

It was noted that the seasonality of fruit and vegetables is also not significant, as the main advantage of their consumption is the high content of fibers that can be hardly replaced by other products.

“It is nonsense that vegetables and fruits should be eaten only in season, only grown in Ukraine. Parents themselves do not eat and do not give children enough vegetables and fruits” (Expert 1).

“We often eat vegetables and fruits. Greens and salads are necessary” (Interviewee 9).

“He eats bananas only, but does not eat the rest of fruits and vegetables” (Interviewee 12).

“Vegetables are not very in favor of children - neither cooked nor raw” (Interviewee 8).

“Apples with wax... I want higher quality products” (Interviewee 10).

Mothers and experts about meat and fish consumption. Most of the respondents are convinced that a healthy diet is impossible without regular consumption of meat. All mothers reported that they feed their children with meat on a daily basis, but fish is a less popular product, despite the awareness of its high nutritional value and health benefits. Respondents explained that this situation is caused primarily by the financial constraints of families to buy ocean fish.

“I would like to cook fish more often. It is a high-value and price product” (Interviewee 2).

Leading Ukrainian health and nutrition experts were more lenient with the idea of limiting meat and children’s vegetarianism.

“I would recommend adding meat and fish 1-2 times a week several times a week” (Expert 2).

“A person can live without meat, even a child can live. If he or she eats fish, eggs, dairy products. Meat is not such an absolute product” (Expert 1).

“Fish is more useful than meat, especially from the sea. There is vitamin D, omega-3” (Expert 1).

Mothers of children reported low levels of the consumption of fish and seafood also because of the fear of bones inside the fish as a risk for their children. It can also be interpreted as certain family habits and traditions.

“We rarely eat fish, mostly river fish” (Interviewee 8).

“We very rarely consume fish due to the financial situation” (Interviewee 11).

“I am afraid to give fish because of the bones in it” (Interviewee 4).

“Meat children consume almost every day, and fish twice a week, when they get bored with meat” (Interviewee 10).

Mothers and experts about hot liquid foods consumption. In the opinion of mothers and some experts, hot liquid foods (soup and borscht) do not necessarily have to be included in the daily diet of children.

“Now there is a new opinion that this [liquid food] is not necessary. Therefore, not often, at will” (Interviewee 7).

“It depends on how you are taught, it is not necessary, but I was taught and the child also eats [liquid food]” (Interviewee 2).

Experts explain that these dishes contain vegetables, so they should not be excluded from the diet. This statement is also supported by interviewed mothers.

"If we talk about first dishes, they are traditional dishes. Dietary fiber is stored from vegetables. You can eat borscht if the child does not eat vegetables raw" (Expert 1).

"Soups are the most important thing, everything from the garden, from the village" (Interviewee 5).

Some mothers and experts say that soup and borscht are the main dishes in the diet and cannot be replaced by other dishes.

"How can children in preschool in Denmark not eat soup?! And they just spread some pasta on toast" (Expert 3).

This vision is also shared by some mothers in Lubny. However, some mothers perceive the consumption of hot liquid food as a habit or a social tradition rather than a requirement for a healthy diet.

"Soup is an obligatory meal. You will not be satisfied by one tea" (Interviewee 4).

"I give soup and borscht every day. We are used to it" (Interviewee 10).

Mothers and experts about the family environment. Some respondents stated that due to full-time employment and inconsistencies in the family schedule, joint meals with children are nearly excluded from their lifestyle. Mothers also say that healthy eating is not a family value.

"We do not follow a healthy diet in the family. In the past when I had stomach problems, I followed a diet" (Interviewee 8).

Experts note that parents, especially mothers, play a significant role in shaping children's eating behavior. Therefore, the lack of parental involvement and joint meals in the family does not contribute to a healthy diet in the family and adequate diet in the future.

"Young mothers know how to cook less. Ketchup, sausages, sauces are very simple and monotonous things. People get used to buying the same thing" (Expert 2).

"Vegetables should be offered to children up to 10 times. They should be bought and cooked together to make children interested and agree to eat them. Yes, it takes time and energy" (Expert 1).

Regarding the experts' interpretation of the issue of coercion to eat, the chief physician of the Public Health Centre believes that it is not necessary to make children feed even with healthy food.

"Bring your child to the vegetables at the market and ask to choose. So, then, the child knows what it looks like. And when a child is hungry, give vegetables and say the rest of the food is not ready yet" (Expert 2).

Mothers' perceptions of coercion use in child nutrition are different. Some women said that from time to time, it is necessary to force the child to eat. However, other respondents were in favour of greater freedom for children.

"Healthy eating is intuitive eating" (Interviewee 7).

"I know that children should not be forced to eat" (Interviewee 2).

"I do not force her. When she wants, then she eats" (Interviewee 12).

"There are situations when we did not have breakfast, then did not have lunch, and then we had to force" (Interviewee 10).

"I know that he wants to eat, but he does not like food, so I force him to do it" (Interviewee 11).

Mothers and experts about family doctors. At the moment of data collection in 2019 in Lubny, family doctors did not sign an agreement for the medical services for children under 14 years. Pediatricians provide consultations mainly when the mother and child come for treatment, but preventive check-ups are not common outside preschool facilities.

"We have a big problem with education. Paediatricians are not taught things that have never been in a normal world. All this continues. This is a systemic problem" (Expert 1).

Some mothers preferred to use healthcare specialists from the private sector or specialists they have connections with.

"We have our proven other specialist" (Interviewee 1).

Other respondents have a high level of trust about the qualifications of paediatricians, other mothers do not trust local doctors and follow their recommendations.

"We consumed vitamin D for up to three years, as the doctor said" (Interviewee 5).

"I like our pediatrician. She is very experienced" (Interviewee 4).

Mothers reported that they discuss questions regarding healthy diet with their peers. Respondents may use evidence-based recommendations instead of contacting a doctor.

"There are some people who are not very educated, but are sure that they are experts. They spread information like it is a true fact" (Expert 1).

Mothers and experts about diet in preschool facilities. Some mothers trusted preschool facilities as a

reputable institution that provides children with healthy nutrition. The majority of respondents are satisfied with the food in preschool institutions, as well as with the served options and prices.

“He eats well in kindergarten. They cook well, and I am satisfied with the price” (Interviewee 11).

“They drink oxygen cocktails in kindergarten, they have a good effect on immunity” (Interviewee 4).

Experts note the importance of involving parents in the diet formulation and monitoring in preschool facilities.

“Mothers should be responsible for nutrition and preschool facilities too. There is a responsibility on the staff and manager, but should be changed by parents. Where they do not just inform, but involve parents. Parents will adjust and pay extra money. If they decide they are willing to pay for quality” (Expert 2).

Mothers and experts about junk food. Experts also noted the negative impact of unhealthy food marketing targeted at children. From the nutritionist’s perspective, there is a need to limit advertisements for such products for children.

“The most difficult thing is to remove advertising oriented for children” (Expert 1).

“People are no longer looking for food, but food is looking for consumers” (Expert 2).

Mothers said that foods high in fat, sugar, and salt can have negative health effects and their consumption should be controlled.

“The body grows, if you eat harmful, sweet, fried, fatty food then it will be pancreatic, stomach pain” (Interviewee 10).

“I am against sausages, my husband eats, but the children do not” (Interviewee 5).

Experts highlighted the importance of marketing regulation and the exclusion of some components for consumers. The reason is customers should not spend time studying labels in order to provide a healthy diet for children because it may be challenging for mothers and experts in small towns in Ukraine.

“If we talk about nutrition content so that you do not need to study the labeling. Are there trans fats? They simply will not be there” (Expert 1).

“I don’t pay attention to the labels and E-mark”. I haven’t figured them out yet” (Expert 4).

At the same time, experts and mothers can be loyal to the so-called unhealthy foods in children’s diets.

“I am not saying you can’t have one candy, you can” (Expert 1).

“And sausages, and juice, and candy ... we do not forbid” (Interviewee 6).

“I also steamed Mivina [fast-food noodles]. It is better to get used to eat it earlier” (Interviewee 12).

“My parents did not follow a healthy diet, and now I am well” (Interviewee 8).

Conclusions. Based on the results, we conclude that respondents had a variety of perceptions about healthy diet. Mothers of preschool children in Lubny are not a homogeneous group, however, some similarities were found. None of the interviewed women took into account the amount of calories consumed by the child, and the balance of nutrients.

Some mothers had a number of significantly similar perceptions of a healthy diet for preschool children and their families. At this point, authors observe certain tendencies that could be summarised by types of mothers based on their perceptions. According to the results of the interview, the respondents were divided into three relative types (Table 2) by the method of preferred inclusion.

Categories	The conservative type	The loyal type	The critical type
Calorie counting and balance of protein-carbohydrates-fat	No	No	No
Calculation of sugar and salt	No	No	No
Preference of drinking clean water	No	No	Yes
Consumption of 400 g of fruits and vegetables daily	No	No	No
Consumption of meat daily	Yes	Yes	Yes
Consumption of fish regularly	No	No	No
The presence of hot liquid food daily (soup, borscht)	Yes	Yes	No

The presence of family dinners	No	No	No
High level of trust in the family doctor	Yes	Yes	No
Satisfaction with the foods in the preschool facility	Yes	Yes	No
The pressure to eat	Yes	No	No
Loyalty to junk food	No	Yes	No
Search for information on the Internet	No	No	Yes
The subjective level of health of the child	No	No	No

Table 2. Mother's perceptions types based on analysis of categories

Sources: Systematised by the authors based on data from interviews (2017).

The conservative type. Mothers of the conservative perception type have higher or secondary-level education. Regarding the general characteristics, the defining features are traditionalism and conservatism in children's diet. Mothers demonstrated a commitment to the concept of home-made food as the best option for preschoolers. They trust institutions, follow doctor's recommendations, and are satisfied with the preschool meals for children. This type has become the most common among mothers of preschool children in Lubny. It includes 5 of the 12 surveyed women (Interviewees 3, 4, 5, 10, 11).

The loyal type. This type includes women who also have features of the conservative perception type. However, at the same time, they have a high level of loyalty to junk food in the preschool children's diet and have quite relaxed attitudes to diet and health. All loyal type informants received secondary or vocational education. Because of the high loyalty of mothers, this type is derived from the conservative type. It is the least common among mothers and contains only 3 out of 12 respondents (Interviewees 6, 8, 12).

The critical type. This type includes women with critical perceptions about healthy diet. They prefer to seek information about nutrition on their own. Mothers of this type have a critical approach to traditional food patterns. All respondents of the critical perception type received higher education. The defining feature is the interest in a healthy diet and an innovative approach to feeding children. The critical type has its own ideas about healthy eating, which may be opposite to conservative. This group includes 4 of 12 respondents (Interviewees 1, 2, 7, 9).

Limitations. The qualitative methodology that was used in the study involves such limitations as distortion of information and fragmental knowledge. As was mentioned in the method section, reflection on a healthy diet is complex and not static. Information that was given by mothers and experts may be influenced by certain situations or moods. Also, respondents sometimes tend to express socially-expected answers, mothers may tend to behave in a socially accepted way to avoid judgment. The typology that we propose in the article is only an attempt to simplify and generalize a much more complex variety of perceptions about healthy diet for preschool children.

Conclusion. Mothers' perceptions of a healthy diet for preschool children are linked to socio-demographic characteristics categorized into three types based on their perceptions: the conservative type (mothers who prefer traditional meals for children with a high level of trust in medical doctors and institutions); the loyal type (mothers with traditional views yet with a high loyalty to junk food in children's diet); the critical type (mothers who prefer to find information by their own and have low level of trust to the local medical doctors). Further research is needed to make more grounded conclusions about the understanding of healthy diet for children in small towns in Ukraine from a qualitative and quantitative methodology perspective.

Author contributions: conceptualization, L.H., and T.Y.; methodology, L.H., and T.Y.; formal analysis, L.H.; investigation, L.H., and T.Y.; resources, L.H.; data curation, L.H., and T.Y.; writing-original draft preparation, L.H.; writing-review and editing, T.Y.; visualisation, L.H.; supervision, T.Y.; project administration, L.H.

Conflicts of interest: Authors declare no conflict of interest.

Data availability statement: Not applicable.

Informed consent statement: Informed consent was obtained from all subjects involved in the study.

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