

# THE FAMILY AND NUTRITIONAL CHALLENGES OF FOOD SELECTIVITY IN CHILDREN

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**Abstract:** The purpose of this study was to analyze the family and nutritional challenges in the development of food selectivity in children. Through a bibliographic review study, by articles with children up to 5 years old, using the terms, food selectivity, family characteristics and nutrition, on the platforms of Scielo, LILACS and Google Scholar, giving preference to studies of the the last 6 years, however there was no discard of older works, given the relevance of the topic. **RESULTS:** In the clinical picture of AS (food selectivity), there is a primacy for foods with a mild flavor and light color, such as potatoes, breads and cookies, the preference for certain textures is also common, it is possible to verify the choice for certain temperatures, and the child may not tolerate the smell of foods that are not on the list of preferences. It is noted that in nutritional standards, there is an inadequacy mainly of calcium, iron, copper, vitamin E, vitamin D and zinc, in addition to a discrepancy in relation to weight and height, compared to healthy children. **CONCLUSION:** Food selectivity (FS) is complex due to the relationship between family aspects and social contexts. If there is a suitable counseling, it can lead the child to both organic damage (compromise of the organism's functions), as well as social (affecting affective life), or even psychological damage and the development of phobias.

**Keywords:** Food Selectivity, Nutritional characteristics, Family Aspects.

## INTRODUCTION

In pediatric consultations, one of the things that doctors most often hear is responsible, especially mothers, to complain about the amount of food their children eat, finding it insufficient for their subsistence. Usually setting as the biggest query question. Some North American studies have concluded that approximately 25% of children have an eating

disorder, This percentage tends to increase when food resistance is also configured due to learned behavior.

Among the most observed eating disorders in children is food selectivity, and there is still no comprehensive knowledge and information among physicians and nutritionists on the subject. Among the main characteristics is the triad of symptoms, refusal to eat, lack of interest in food and poor appetite, having among the most different causes.

With interest and practice in the field of infant and young people's nutrition, this essay was developed with the objective of conceptualizing the child's food selectivity, characterizing the selective child and his family, in addition to establishing a relationship between family and nutritional challenges through selectivity. food in children.

## METHODOLOGY

This scientific article aims to present a literature review based on studies and research from academic websites about the influence that family aspects have on the development of food selectivity and its impact on the nutritional status of the child. Using for data collection, the descriptors in Portuguese, "Food Selectivity", "Family Aspects", "Family Aspects", "Essential Characteristics" and "Micronutrients".

Studies found on the platforms of Scielo, LILACS and Google Scholar of the last 6 years were used, however older works were not discarded due to the importance of the theme, however for the choice of guiding articles, it was based on those that best suited the theme from rigorous critical analysis. The basis used for research was Google Scholar.

## DEVELOPMENT

### HISTORY OF FOOD

The history of food follows that of humanity, it is believed that man's food began with roots

and fruits, after observing the behavior of other animals. Then he began to eat shellfish and raw meat. With the discovery of fire, it was possible to add new textures and flavors, thus increasing the variety of preparations.

This discovery was not only important in terms of taste, but also in terms of safety and health, since the simple act of cooking meat, for example, can kill many microorganisms that, when ingested, would become pathogenic, which could lead to food poisoning or in other cases, worst cases, death.

From that moment on, knowledge was also acquired about better planting and harvesting techniques, about storing fruits and vegetables, creativity was developed with regard to culinary activity, gastronomic and dietary techniques and in relation to food culture. With these advances, it was clear that food, in addition to alleviating hunger, is also an ingenious way of providing pleasure.<sup>1</sup>

As the Portuguese writer José María Eça de Queirós said “Tell me what you eat, I’ll tell you what you are. The character of a breed can simply be deduced from its method of roasting meat. A loin of beef prepared in Portugal, France, or England, perhaps makes the intellectual differences of these three peoples better understood than the study of their literature.”<sup>13</sup>

Food is a reflection of the nation, in its way of preparation and customs, it reflects beliefs and customs. It is from a good diet that we can learn a little more about the outstanding characteristics of each country, including with regard to religious beliefs. Thus forming a link between cuisine and culture, in an endless set of combinations that can make the moments at the table the most pleasant and sources of the most varied memories.

## FOOD SELECTIVITY

Na In early childhood, a typical behavior may occur, which is food refusal, with the

main characteristics of behaviors such as trying to negotiate the food to be consumed, in addition to tantrums, delay in eating, snacking throughout the day, between others. However, there are children who until mid-childhood can persist with such behaviors, extending through other stages of life. Such behavior denotes what we call food selectivity (FS), having as its main characteristic precisely this refusal to try new foods, consequently causing food to be very limited.<sup>6</sup>

Unfortunately, data on the prevalence of AS are still scarce, however this characterization is possible from the report of parents and guardians, about its main characteristics. The most frequent age group in which selectivity is observed is with children between 4 and 24 months, characterizing about 19 to 50% of cases. Unfortunately, there is still a difficulty in determining the prevalence for reasons such as the difficulty of reaching a consensus on the correct definition of AS and a huge variability of methodological criteria.<sup>1,3</sup>

Food selectivity has as its main characteristic, the partial or total refusal of some type of food. However, the existence of food and taste preferences among healthy children makes the picture an imprecise attempt. Most of the time, parents tend to describe their children as selective, even if they do not show impairments in terms of eating practices, nutritional status and schedules.<sup>7</sup>

In the clinical picture of AS (food selectivity), there is a primacy for foods with a mild flavor and light tone, such as potatoes, breads and cookies, the preference for certain textures is also common, it is possible to verify the choice for certain temperatures, being able to the child does not tolerate the smell of foods that are not on the list of preferences.<sup>8</sup>

Kwon et al, 2017, observed the prevalence of some specific eating behaviors for a child to be diagnosed with selectivity, among them are neophobic behavior, eating in small amounts,

refusing to eat specific food groups or textures, in addition to having a preference for food, a specific method of preparing a food.<sup>5</sup>

## FAMILY ASPECTS

There is a deep network of environmental and genetic factors for the formation of eating habits. The preference or not for certain foods can be given by genetic tendencies, being able to inherit from the parents a sensitivity with regard to tastes and flavors. However, this influence is built throughout life to the detriment of lived experiences.<sup>10</sup>

The family is the first place where the child receives instructions, affecting physical and psychosocial aspects, therefore, they are inserted in the practices of prevention and health. In food choices, parents are largely responsible, especially with regard to the former, thus determining whether children will have a healthy diet or not.<sup>15</sup>

It is in the family environment that much of the process of socialization and development takes place. Parents have a great influence on the formation of eating habits and, consequently, on the development of selectivity, since it is in the family that the child builds experiences, preferences, developed until preschool age.<sup>7</sup>

It can also be observed that when parents control too much the schedule, quality and quantity to be ingested and are authoritarian, they can stimulate dependence, encouraging the difficulty in trying new foods, which can lead to an emotional lack of control in the child, leading to a control over what to eat.<sup>13,15</sup>

It was observed that with mothers with obsessive behavior in relation to cleanliness, children preferred foods that were easy to eat and that were not at risk of getting dirty (mainly because of mothers who did not let their children use their hands to feed themselves in the food introduction) and were anxious when the meal had sauce, having great

difficulty in accepting sauce preparations.<sup>16</sup>

It can happen that fathers do not get involved with the child's feeding, leaving the responsibility to the mothers, or when they do, they end up being impatient or rude with the child, having inappropriate behaviors, such as letting the child go without food due to rejection of some kind of food. Such behavior can end up affecting the relationship between father and son in the future.<sup>11</sup> . Therefore, it is important that both parents participate in the process of introducing food to the child, always considering attitudes towards the subject.

There are cases in which parents create high expectations regarding, for example, the amount to be ingested, however children cannot overcome such expectations, thus generating an emotional lack of control, which makes the child retain control of the situation, deciding what to eat or not. One of the important facts about selective behavior is that it is usually accompanied by a phobic behavior towards foods that are not part of their preferences, thus generating aggressiveness and inappropriate behavior.<sup>2,10</sup>

Besides, according to the literature, the acceptance of new foods can be influenced by breastfeeding, as breast milk has characteristics such as taste and odor that are directly influenced by the composition of the maternal diet, this is the first contact that the child has with flavors. varied. When the child goes through a short period of breastfeeding, he only knows a smaller amount of flavors. When the case is non-breastfeeding, the case becomes worse, as the child is even less exposed to flavors.<sup>2</sup>

Children who, during the first year of life, have a delay in the introduction of solid foods, are more likely to develop eating disorders, in particular, food selectivity throughout childhood, which, if left untreated, can accompany the child throughout life, being

most clearly identified around age 7.<sup>1</sup>

Such behavior can lead to social harm, as it becomes a common feature in the routine of selective people, the more the list of foods is restricted, the more it causes harm to the individual. As a child, he may have feelings of intimidation when he is in company, in society, and as the child grows and develops, he begins to adopt a constrained behavior and his way of eating gradually becomes more and more reserved. When parents or guardians observe such behaviors in their children, it is important that they seek treatment from appropriate professionals.<sup>10</sup>

### **NUTRITIONAL ASPECTS**

There are essential things for human survival, including food, however it is related to many more aspects, as it includes meanings, values and cultures, in addition to being part of society in its social life. For the child to fully develop, the first years of life are essential, as it is at this time when values, habits and customs, especially food, are formed and will be perpetuated throughout life. Therefore, it becomes necessary to guarantee the nutritional aspects so that yours is guaranteed.<sup>1</sup>

In SA, there is generally a preference for foods with a lighter color and mild flavor, in addition to being specific as to pasty or crunchy texture, they refuse any food that does not meet these specifications. Among the most characteristic foods are bread, milk and potatoes. Another important point is that children do not even tolerate the smell of foods that are not on their restrictive lists.<sup>4</sup>

A deficit is observed in relation to the caloric value consumed, in relation to the daily energy requirement. Regarding macronutrients, a deficiency is also observed, especially in relation to the protein value. However, the main concern is undoubtedly with regard to micronutrients, vitamins and minerals, with more specificity for calcium,

iron, vitamin A, and B12, which are almost always found at levels well below the reference value.<sup>17</sup>

More specifically with regard to micronutrients, there is a concern with the consumption of vitamin E and magnesium, in addition to vitamin C. Between the age group of 6 to 11 months, there is a low intake of vitamins A and B6, riboflavin and thiamine, zinc and copper, always being below the reference values.<sup>9</sup>

Along with this, there is a concern with the nutritional status of selective children. When values are entered on the growth and development curves, such as BMI/age and height/age, what is observed is worrying. Most children who have food selectivity are underweight, at risk of malnutrition and with inadequate height for their age, being below normal and eutrophic. These facts are more evident in up to 5 years of age. In addition to what has already been mentioned, body fat percentage is undoubtedly significantly lower in this age group.<sup>14</sup>

Micronutrient deficiency is directly linked to a higher risk of morbidity and mortality and deleterious effects in childhood, thus compromising not only the individual's health, but also other areas such as potential growth. Zinc, iron, and vitamin A have a strong relationship with the child's development, both physical and mental, with outstanding importance for growth, as already mentioned, due to the metabolic presence in important pathways.<sup>17</sup>

### **CONCLUSION**

With the facts mentioned above and based on the results found in the literature, food selectivity in children is directly linked to family and environmental aspects, since the behavior and attitudes of parents or guardians are largely responsible for the development of selective behavior in children. children,

consequently influencing the nutritional aspect with regard to nutritional status. Such findings prove to be important contributors to clinical practice.

The results obtained can help professionals in the correct decision making regarding the most effective treatment to be applied to their patients, in addition to helping in the correct identification of possible nutritional risk situations with potential for the growth and development of future pathologies.

It is important to discuss with those responsible for new concepts, such as neophobia, which is indirectly linked to food selectivity, so that mothers, in particular, who are generally more concerned with the restoration of the child, do not worry about rejection on the first attempt to introduce a new food. Since the professional will work to gradually reduce this selectivity with the introduction of one food at a time. So that the parent does not create expectations and end up putting pressure on the child, making the process slower.

Finally, it is necessary to encourage further studies in the area, regarding the interference of food selectivity in the nutritional status of individuals, in addition to establishing more concise methods for diagnosis and definitions that become standards. In summary, it is interesting that the cause of the development of such behavior is better analyzed, since the subject proves to be important for a more accurate understanding, relating to a more assertive prognosis in relation to the most diverse variants of cases.

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