

# ANALYSIS OF FEEDING BEHAVIOR IN CHILDREN WITH AUTISM SPECTRUM DISORDER ASSISTED IN THE MUNICIPALITY OF ANÁPOLIS, GOIÁS

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## ABSTRACT

Autism Spectrum Disorder (ASD) is characterized by deficits in neuropsychomotor development, affecting cognition, communication, and social interaction, as well as manifesting restricted interests and repetitive behaviors, in addition to patterns of food selectivity and compulsive eating. The present study aims to evaluate the prevalence and profile of selectivity and compulsive eating disorders in autistic children, correlating them with anthropometric parameters and child growth curves. This is a cross-sectional, quantitative, descriptive, and observational study based on the analysis of a questionnaire applied to children assisted at the Association of Exceptional Parents and Friends (APAE) in the municipality of Anápolis. The research revealed that a significant number of children have food rituals. Moreover, selectivity was observed, particularly regarding food texture, and a preference for eating without permission at inappropriate times. Anthropometric data analysis indicated that 15.4% of the children had very short stature, and 21.7% were classified as overweight. Regarding Body Mass Index (BMI), among children aged 0 to 5 years, 33.3% were obese, and among those aged 5 to 20 years, 17.6% were overweight. The results highlight the significant relationship between ASD and feeding disorders, emphasizing the need for interventions to improve the nutritional health of these children, which is fundamental for their growth and healthy development. The analysis of feeding behavior in children with ASD is, therefore, a crucial field of study.

**Keywords:** Compulsion; Selectivity; Autism Spectrum Disorder

## INTRODUCTION

Autism Spectrum Disorder (ASD) is defined by impairment in neuropsychomotor development and is characterized by qualitative deficits in cognition, communication, and social interaction, with a restricted range of interests, repetitive behaviors, and often stereotyped mannerisms (ANDRADE; BRITO, 2022).

Among the stereotypes presented by autistic children, a high prevalence of alterations in feeding behavior is observed, such as selectivity and compulsion (TURNER et al., 2020). During childhood, 25% of neuroatypical children develop significant changes in feeding behavior, whereas in neurotypical children, such disorders occur in 80% of cases (LÁZARO; SIQUARA; PONDÉ, 2019).

Alterations in eating habits manifest in various ways, such as consuming the same foods daily, sensory preferences with hypo- or hypersensitivity to taste, texture,

smell, color, and appearance of foods, as well as the possibility of prolonged fasting, induced vomiting, or excessive intake (MAGAGNIN et al., 2021). Furthermore, changes in routine, unfamiliar environments, parental feeding models, chewing motor skills, mealtime abilities, structuring of the feeding environment, behavioral aspects during meals, and emotional issues also influence appetite (FELIPE et al., 2021).

In this perspective, there is a relationship between autism and feeding disorders, such as selectivity and compulsive eating (LEADER et al., 2020). These factors related to inadequate eating contribute to a high risk of nutritional deficiencies, directly affecting the growth and healthy development of the child, influencing bone growth, stature, head circumference, weight, body mass index, and other organ functions (CAETANO; GURGEL, 2018). Given these facts, the present study aims to evaluate the prevalence and profile of selectivity and compulsive eating disorders in autistic children, correlating them with anthropometric parameters and child growth curves.

## **Methodology**

This is a cross-sectional, quantitative, descriptive, and observational study. Field research and data collection were conducted at the Association of Exceptional Parents and Friends (APAE) in the municipality of Anápolis. The analyzed population was a convenience sample composed of patients who agreed to participate in the research. Inclusion criteria encompassed patients within the childhood age range with a confirmed diagnosis of autism and assisted by APAE in Anápolis.

Data were collected during visits to APAE, with the patient and guardian present during the application of the “Feeding Behavior Assessment Scale in ASD Patients,” which was answered by the parents. The data obtained were correlated with development curves appropriate for each child’s age group. In addition, prevalence calculations were performed for responses to the questionnaire. Subsequently, statistical analysis of the data was conducted using the *Statistical Package for Social Science* (SPSS). This project was submitted and approved by the Ethics and Research Committee of UniEVANGÉLICA, according to Resolution 466/12 of the National Health Council/Ministry of Health.

## RESULTS

Evaluating the target population's behavior during meals, a significant association was observed between children with ASD and the performance of rituals during mealtime. The use of the same utensils was present in 42.3% of the evaluated children, while 34.6% always ate in the same place. Furthermore, 50% displayed motor restlessness while sitting at the table, and 53.8% reported spilling food on themselves and around them.

Responses to questions about avoiding different types of foods (vegetables, meats, and fruits) showed polarization, with a higher prevalence of "never" compared to "always." There was a tendency to select foods based on texture, with 34.6% always preferring crunchy foods and 19.2% always choosing soft foods. Regarding the presence of sauces, responses were symmetrical, with 30.8% always selective for wet meals and 30.8% for dry meals. Additionally, 23.1% of responses indicated that these children always take food outside regular mealtimes, and 19.2% always take food from others without permission.

Regarding anthropometric data, height, weight, and BMI parameters were evaluated and correlated with development curves according to each child's age group. It was found that 15.4% of children with ASD had very short stature, corresponding to a Z-score  $< -3$ . Additionally, 11.5% were classified as having short stature, with a Z-score between  $-2$  and  $-3$ . Most of the population was categorized as having adequate stature, with a Z-score  $> -2$ .

Concerning weight-for-age anthropometric classification, although most children with ASD fell within the Z-score  $-2$  to  $+2$  range, considered adequate weight, 34.8% were at the extremes of the anthropometric classification. The second most prevalent category was elevated weight (21.7%), corresponding to a Z-score  $> +2$ . Additionally, 4.3% of children with ASD were underweight (Z-score between  $-2$  and  $-3$ ), and 8.7% were classified as very underweight (Z-score  $< -3$ ).

Regarding BMI classification, among children aged 0 to 5 years, 33.35% were eutrophic, 11.1% at risk of overweight, 22.2% overweight, and 33.3% obese. Among

children aged 5 to 20 years, 76.5% were eutrophic, 17.6% overweight, and 5.9% obese.

## **CONCLUSION**

In summary, the children participating in the study exhibited a tendency to perform rituals during meals, with motor restlessness and difficulty maintaining clean eating habits. Food selectivity was also significant, with clear preferences for specific textures, particularly crunchy foods. Additionally, a portion of the analyzed population exhibited compulsive behavior by taking food outside regular mealtimes and without permission.

Anthropometric data raise concerns regarding growth and nutritional status. Although most children fell within physiological anthropometric parameters, approximately 25% were classified as having short or very short stature. Elevated weight was observed in 21.7%, with 33.3% of children aged 0 to 5 years classified as obese, and 5.9% of the target population aged 5 to 20 years classified as obese.

Limitations of this study were related to low adherence by parents and caregivers, resulting in a considerable number of refusals. Consequently, it was not possible to fully evaluate all children with ASD assisted by APAE. Nevertheless, the results highlight the need for reflection and intervention regarding children's feeding and behavioral difficulties, emphasizing the importance of a multidisciplinary approach to support both children and families.

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