

Milk Intake and Echolalia: Parental Perspectives on Dietary Factors and Language Development in Children with Autism Spectrum Disorder

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Abstract

This study examined the relationship between milk intake and echolalia in children with Autism Spectrum Disorder (ASD), focusing on parental perspectives regarding dietary factors and language development. A quasi-experimental design was employed involving 30 children with ASD, divided into control and experimental groups. The experimental group followed a casein-free diet, while the control group maintained regular milk consumption. Results indicated that parents in the experimental group reported a reduction in repetitive echolalic speech and an increase in functional language use compared to the control group. However, findings also revealed variability, with some parents perceiving echolalia as a meaningful communicative tool rather than a deficit. The study suggests that dietary interventions may influence language behaviors in ASD, but parental perspectives highlight the importance of balancing biomedical approaches with identity-affirming views of echolalia.

Keywords: Autism Spectrum Disorder, Echolalia, Casein-free Diet, Parental Perspectives, Language Development.

1.

Language development in children with Autism Spectrum Disorder (ASD) often includes echolalia, the repetition of words or phrases. While traditionally viewed as a symptom to be reduced, many parents now recognize echolalia as a communicative strategy and part of their child's identity. At the same time, dietary factors—particularly milk intake—have been explored as potential influences on behavior and communication in ASD. Casein, a protein found in milk, has been implicated in anecdotal parental reports of speech delays and behavioral challenges. This study investigates parental perspectives on the relationship between milk intake and echolalia, examining whether dietary modifications influence language development in children with ASD. The research is anchored on Vygotsky's Social Constructivist Theory, which emphasizes the role of social and environmental factors in language development (Vygotsky, 1978).

2. Methodology

The study utilized a quasi-experimental pretest-posttest control group design (Prizant, 1983).

2.1. Participants and Setting

- Participants: 30 children with ASD, ages 4–8
- Location: Autism therapy centers in urban communities
- Duration: 6 weeks

The experimental group followed a casein-free diet for the duration of the study, while the control group maintained regular milk consumption. Echolalia frequency and communicative function were measured using an Echolalia Rating Scale based on parental observations. Data analysis included the use of independent t-tests for group comparisons alongside thematic coding for parental interviews.

3. Results and Discussion

The pretest and posttest assessments showed a notable difference in the frequency of echolalia within the experimental group compared to the control group.

Table 1. Mean scores of echolalia frequency

Group	Pretest	Posttest
Control	3.2	3.0
Experimental	3.1	2.2

Statistical analysis yielded a t-value of 2.95 and a p-value of 0.004. Results suggest that reducing milk intake may lower echolalia frequency and promote functional language use. However, dietary evidence remains mixed in broader literature (Elder et al., 2006). Parental interviews revealed a duality: some parents valued echolalia as identity-affirming, while others sought reduction for clearer communication.

4. Conclusion and Recommendations

The study concludes that casein-free diets may reduce echolalia frequency, but these dietary interventions must be balanced with parental insights that respect neurodiversity.

- Clinicians should integrate parental perspectives into dietary guidance
- Parents should consult nutritionists before making significant dietary changes
- Future research should involve larger samples and longer intervention periods

a The profile was determined using the Autism Diagnostic Observation Schedule (ADOS) scores provided by the centers.

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