

DEFINING FOOD SELECTIVITY ACCORDING TO CAREGIVERS OF CHILDREN WITH AUTISM SPECTRUM DISORDER



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Background Information

Children with autism spectrum disorder (ASD) have difficulties related to feeding, and 46-89% of children exhibit behaviors associated with limited food acceptance.¹

Limited diets of children with ASD are associated with insufficient nutrient intake and can lead to increased malnutrition and medical concerns.²

Studies evaluate effectiveness of strategies aimed to facilitate food acceptance and intake. However, literature inconsistently uses the term "food selectivity."^{3,4}

Due to the inconsistencies, comparing strategies is difficult, because varied operational indicators are used to refer to "food selectivity" such as food refusal, food acceptance, or expulsion of food from the mouth.

Lack of standard definitions used to discuss food selectivity increases the probability for miscommunication between researchers, clinicians, and caregivers of children with ASD.

Purpose of Study:

Define "food selectivity" within the context of mealtime, according to the perspective of caregivers of children with autism spectrum disorder.

Methods

This research was part of a larger mixed-methods study that explored the characteristics of feeding disorders in young children with ASD and the impact on family mealtime.

Design

Qualitative study using a narrative approach and thematic analysis

Participants

5 Parents (caregivers) from 4 families

Inclusion Criteria — 1) Parent with child between 2-7 years diagnosed by a local physician or psychologist with autism spectrum disorder
2) Parent identifies child as a "selective" or "picky eater"

Exclusion Criteria — Parent's child has comorbidities related to developmental disorders other than ASD, visual impairments, traumatic brain injury, or recent seizure activity

Caregiver Pseudonym	Caregiver Gender	Caregiver's Occupation	Annual Household Income	Child's Age (Years)	Child's Gender	Number of Child's Siblings
Melanie	Female	K-5 Educator	\$100,000+	6	Female	0
Lily	Female	Communications Educator	\$80,000-\$99,999	4	Female	1
Tina	Female	Dietitian	<\$20,000	5	Male	2
*Ben	Male	Worker at Adult Family Home	\$40,000-\$59,000	Child A 4	Female	1
*Rachel	Female	Owner of Adult Family Home	\$40,000-\$59,000	Child B 6	Male	1

*Ben and Rachel are parents of two children diagnosed with autism and together responded to interview questions.

Procedures

Parents participated in 2-3 semi-structured interviews related to feeding and mealtime.

Interviews of participants were audio recorded, transcribed verbatim, and used for data collection.

Nvivo,⁵ a computer software program, was used to analyze interviews.

Results

Five Themes Emerged From Analysis:

Limited Number of Foods in Diet: Small number of foods in child's repertoire

"She's never been a really good eater in terms of either quantity or types of food that she'll eat. She is-I would consider at this point extremely picky."—Melanie

"So that's you know that might be more of, 'oh gosh,' if we cut something out what the heck will he eat."—Lily

Food Jaggig: A persistent focus on one specific food, often unpredictable

"[He] went on very rigid jags for a long period of time, where for probably a year and a half it was peanut butter and jelly and waffles, nothing else, absolutely nothing else."—Rachel

Sensory Aversion: Characteristics of foods related to senses such as textures, smells, and tastes which promote a negative response from child

"And he goes 'ahh, that's stinky.' I'm like 'oh come on, come on! It's a banana for heaven's sake. It doesn't really have a very big smell, but alright, maybe it does to you.'—Tina

"He's always been really, um, conscious of different textures and what he was willing to touch... [occupational therapist] noticed he had a lot of food aversions and basically just like you know, his mouth."—Lily

Nutrition: Quality of food intake

"I want him to get more protein. He, he gets enough, but it's not very varied... When he hasn't eaten, um, something that's a protein other than milk he will eat dog food."—Tina

Mealtime Rigidity: Behaviors surrounding the context of feeding that create rigid routines, insistence on sameness, general inflexibility, and rigid mealtime expectations determined by the child's needs

"He'll drink soda if it's from a particular fast food chain in their particular glass."—Ben

"You know, how rigid he can be and how he has to have certain foods."—Rachel

"She kinda knows the routine, she knows what's expected of her. If it's not a food she'll prefer she'll pick it up and kiss it or ya know, touch touch touch, and then off she goes."—Melanie

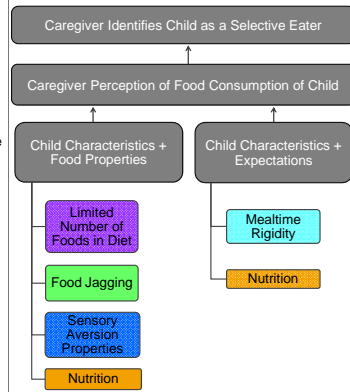
Theoretical Model



Based on the themes identified from the results, the following theoretical model was developed as a concept for understanding food selectivity.

This model shows how the common themes can be categorized according to interactions between the child, food properties, and caregiver expectations.

From these interactions, caregivers may consider whether they believe their child is a selective eater.



Defining "Food Selectivity"

According to our analysis of caregivers of children with autism spectrum disorder, within the context of family mealtime, food selectivity is defined as:

Poor consumption of food due to a complex interaction between food properties, caregiver expectations, and child characteristics

Conclusion

Five major themes related to "food selectivity" emerged from this study: Limited number of foods in diet, food jaggig, sensory aversion properties, nutrition, and mealtime rigidity.

This study offers a theoretical model and definition of food selectivity beneficial for treatment of children with autism.

Future studies should consider the various aspects associated with food selectivity and clearly specify what components are being studied rather than provide a generalization.

Clinical Implications

Clinicians will be able to use the themes from this study as a template to engage caregivers of children with ASD in dialogue related to specific family needs regarding food selectivity.

Our findings exemplify the complexity of food selectivity and shows the need to consider various aspects food selectivity when creating goals and measurable outcomes.

This study focused primarily on families of children with autism and characteristics specific to ASD. However, our proposed definition of food selectivity may be applied to other populations.

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