One in 68 children is diagnosed with Autism Spectrum Disorders (ASD) each year with 46-88% of those children exhibiting feeding challenges such as selective eating and food refusal. Previous research with typically developing children has shown that a parent’s food habits, attitudes about food, and knowledge about nutrition can influence their child’s food preferences and overall diet by making some foods available rather than others to promote the child’s growth and health, and by acting as models of eating behavior. Limited information is known about parents’ perceptions of health and nutrition shaping the diet of a child with ASD and feeding challenges.

**Research Design & Methods**

**Design**
- Convergent mixed method.
- Interview data was used to identify parent perceptions of nutrition. Quantitative data included food repertoire, calorie intake, and Body Mass Index (BMI).
- Qualitative and quantitative results were merged and interpreted in order to find what extent the two types of data relate to each other.

**Participants**

<table>
<thead>
<tr>
<th>Family</th>
<th>Mother’s Education</th>
<th>Father’s Education</th>
<th>Annual Household Income</th>
<th>Child’s Age (Years)</th>
<th>Gender</th>
<th>Number of Siblings</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Family</td>
<td>Bachelor’s Degree</td>
<td>Bachelor’s Degree</td>
<td>$60,000 to $79,999</td>
<td>4</td>
<td>Male</td>
<td>0</td>
</tr>
<tr>
<td>Smith Family</td>
<td>Bachelor’s Degree</td>
<td>Bachelor’s Degree</td>
<td>$20,000 to $29,999</td>
<td>5</td>
<td>Male</td>
<td>2 (younger)</td>
</tr>
<tr>
<td>Williams Family</td>
<td>Bachelor’s Degree</td>
<td>Bachelor’s Degree</td>
<td>$60,000 to $79,999</td>
<td>6</td>
<td>Female</td>
<td>1</td>
</tr>
<tr>
<td>Thompson Family</td>
<td>Bachelor’s Degree</td>
<td>Bachelor’s Degree</td>
<td>Less than $20,000</td>
<td>7</td>
<td>Male</td>
<td>0</td>
</tr>
</tbody>
</table>

**Qualitative**
- A thematic analysis was undertaken within and across caregiver interviews of health and nutrition perceptions.
- Families participated in 2-3 semi-structured interviews.
- Interviews were recorded and transcribed verbatim.

**Child Dietary and Growth Measurements**

<table>
<thead>
<tr>
<th>Failure Goal</th>
<th>Percentage of Daily Diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral motor skills</td>
<td>18.3%</td>
</tr>
<tr>
<td>Money</td>
<td>12.1%</td>
</tr>
<tr>
<td>Access to food, supplements, and DAN doctors based on location</td>
<td>16.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Food Groups</th>
<th>Percentage of Daily Diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain (40%)</td>
<td>33.6%</td>
</tr>
<tr>
<td>Vegetable (20%)</td>
<td>31.4%</td>
</tr>
<tr>
<td>Fruit (13.3%)</td>
<td>29.2%</td>
</tr>
<tr>
<td>Dairy (13.3%)</td>
<td>27.9%</td>
</tr>
</tbody>
</table>

**Results**

**Themes of Parent Perceptions of Nutrition**

- **It Is How I Was Raised**
  - Parents discussed the impact of their childhood and upbringing, and would like to re-create their own childhood experiences around food and mealtimes for their child.
  - “I always drank a lot of milk when I was a kid.”
  - “I think some of that is coming from a farm family.”
  - “I want to know where my food comes from.”

- **Back to the Basics**
  - Parents mentioned trying to incorporate natural foods into their child’s diet by avoiding processed foods and products that contain unfamiliar ingredients. Being able to provide whole, natural foods is often constrained by budget for these families.
  - “I want to get closer to the food source as we can.”
  - “This is all organic and we don’t really buy all organic for ourselves.”

- **Let It Go, At Least They Will Eat.**
  - Due to various barriers and factors, the ideal diet for the parents of these children is incredibly difficult to achieve and can be an exhausting process. Therefore, parents often push aside their ideals and focus on the reality that at least their child is eating something even if it is not what they would like them to eat.
  - “It is about perfect eating. It is about doing the best you can.”
  - “Because of having to get him to eat something, I have to break my own rules or values about food to make it happen.”

- **Being Creative**
  - The parents often tried different ways to incorporate healthy foods and added nutrition into their child’s diet besides directly presenting a non-preferred or unhealthy food.
  - “I used to put them [broccoli] in pancakes to make her eat vegetables.”
  - “I used butternut squash and put it in everything.”

**Conclusions**

- **Four themes emerged from this study:** It is How I Was Raised; Back to the Basics; Let It Go, At Least They Will Eat; and Being Creative.
- **Overall hypothesis is not supported through the qualitative and quantitative data.**
- **Child characteristics include:** Selective eating, displaying difficult behaviors during mealtimes, sensory processing, attention, oral motor skills, fine motor skills, and motor planning.
- **Child and family characteristics can be barriers between what parents want their children to be eating based on their ideas about nutrition and what the child actually eats.**
- **A Child characteristics see in this study are consistent with the challenges children with ASD often face.**
- **Family characteristics that were barriers to implementing the preferred diet were the financial budget and access to healthy foods.**

**Implications for Practice**

- An Occupational Therapist should be aware of parental perceptions of nutrition and their values around food when considering feeding and mealtime interventions.
- An intervention should incorporate family centered therapy in order to generalize feeding strategies and interventions into daily routines.

**References**


**Acknowledgments**

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