Snack Time Training Program for Children with Autism Spectrum Disorder and

Their Caregivers

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Background

- Children with autism spectrum disorder (ASD) experience eating difficulties more than children with intellectual disability and neurotypical children.¹
- Up to 90% of children with ASD have feeding difficulties²
- Children with ASD are often reported to have unusual eating habits such as
- Rigid mealtime behaviors
- Limited food repertoire
- Food sensitivities and refusal related to food texture, color, smell and temperature.³⁻⁴
- Eating enjoyment, positive mealtime environment and enthusiastic modeling in both adults and peers have been shown to increase food acceptance and social interaction in children.⁵⁻⁶
- Educating caregivers has been shown to be effective in reducing problematic mealtime behaviors and food selectivity.

Specific Aims

Aim 1: To determine if snack time intervention plus caregiver training shows greater increase in eating behaviors at home than caregiver training alone.

Aim 1a: To determine if snack time intervention has an impact on improving eating behaviors in a group setting.

Aim 2: To determine if snack time intervention plus caregiver training shows greater increase in social communication behaviors at home than caregiver training alone.

Aim 2a: To determine if snack time intervention has an impact on social behaviors in a group setting.

Aim 3: To determine if the caregiver training program results in a change in caregivers' mealtime behaviors at home.

Aim 3a: To determine if the caregiver training program results in a change in the caregivers' knowledge regarding mealtime strategies.

Method

CCHMC: Cohort design

Participants:

 9 boys and 2 girls with ASD (aged 3 to 6) who are picky eaters and their primary caregiver, recruited from CCHMC

Procedure:

Phase 1: Caregiver education workshop

- 1-2 hour snack time training workshop with caregivers
- Content included topics such as setting up the environment, managing mealtime behaviors, introducing new foods and 5 additional topics
- 8 weeks wait time for parents to implement training strategies at home

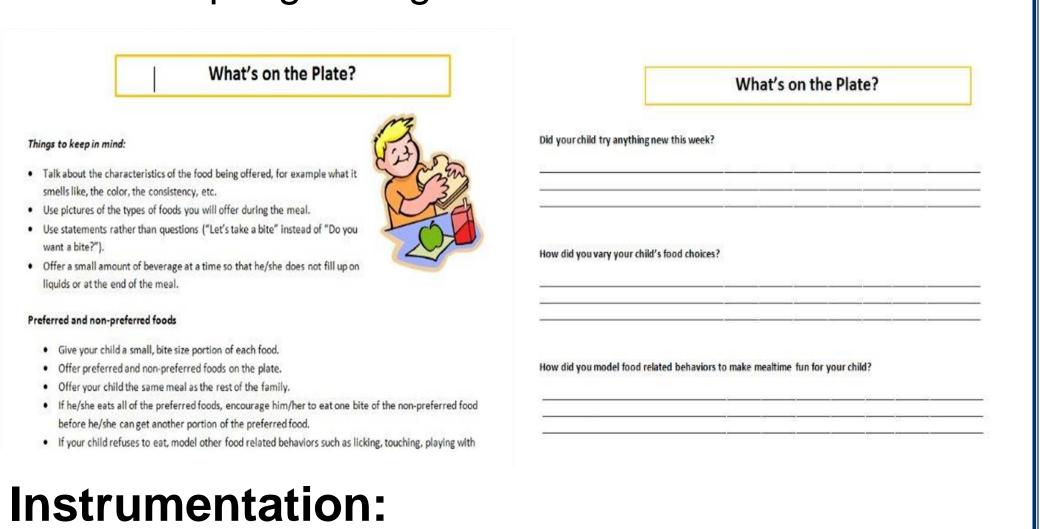
Phase 2: Group-based snack time training program with caregiver education

- Play-based, child-centered snack time training intervention provided in a group for 8 weeks, biweekly.
- Sessions includes sensory play before and after each snack time
- A combination of familiar and novel foods will be offered at each session
- Food selection will be determined by results from Food Frequency Questionnaire (FFQ), food allergies and parental preferences
- Parent observes child through 2-way mirror with hands on training provided by therapist

Method

Caregiver Education Topics:

- Creating a Mealtime Routine
- Setting up the Environent for Mealtime
- What's on the Plate
- Using Visual Schedules
- Components of Food
- Making Mealtime Fun
- Managing Mealtime Behaviors
- Prompting during Mealtime



- Demographic
- Food Familiarity Questionnaires (pre/post)
- Food Frequency Questionnaire (FFQ) (pre/post)
- Caregiver Mealtime Questionnaire (pre/post)
- Brief Assessment of Mealtime Behavior in Children (BAMBIC) (pre/post)
- Short Sensory Profile (SSP)
- Mealtime pre and post-videos from home and clinic snack time training

Phase 1: Caregiver Education Results

- Phase 1 caregiver education workshop completed
 - 11 parents attended the session
 - Session lasted 1.5 hours
 - Parents actively participated in question and answer portion
 - Pre-intervention questionaries and videos were collected for data analysis

Phase 2: Caregiver Education & Snack Time

- 12 children and parents participated in groupbased snack time training program with caregiver education over 8 weeks
- Currently analyzing pre and post data for intervention effectiveness, including group with pre-education
- Currently analyzing qualitative data from focus groups on the family experience of picky eaters with ASD

Next Steps

• LEND trainees, in collaboration with a community research partner, will participate in data interpretation and manuscript preparation.

Phase 1 Baseline Assessment Post Assessment Parent Training videotape 2 videotape 2 Workshop Caregiver meals at home meals at home education Caregiver Caregiver 8 week wait time question naires questionnaires completed completed Phase 2 Post Assessment Baseline Assessment videotape 2 Group-Based Snack videotape 2 Caregiver meals at home meals at home <u>Time</u> education plus 2 videotaped 2 videotaped group-based snack clinic sessions 8 weeks – 2 times clinic sessions Caregiver per week Caregiver time questionnaires questionnaires completed completed



Acknowledgements

These projects were funded by The Maternal and Child Health Bureau Grant T73MC00032. We would also like to thank the parents, children, and staff at CCHMC for their participation in this study.

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