

# 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.<sup>1</sup>
- Up to 90% of children with ASD have feeding difficulties<sup>2</sup>
- 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.<sup>3-4</sup>
- 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.<sup>5-6</sup>
- 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

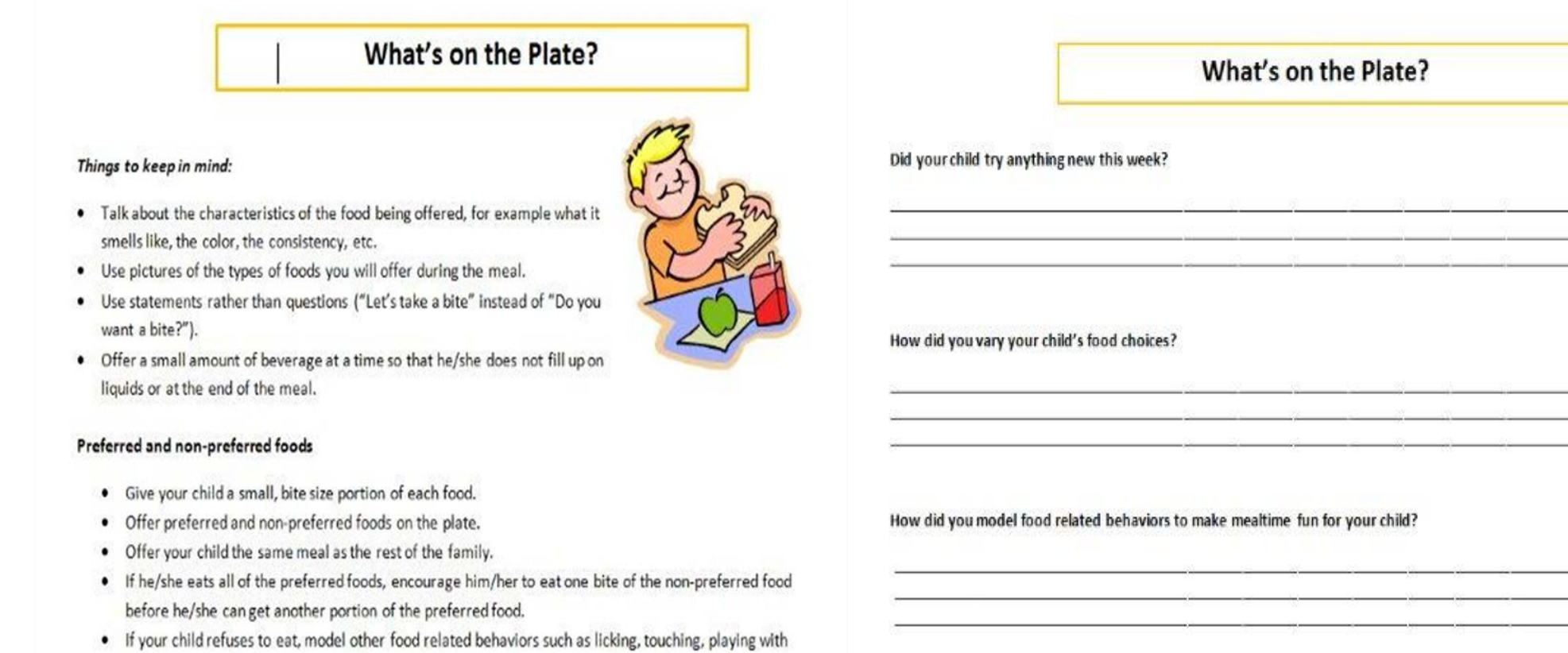
**Phase 2:** Group-based snack time training program with caregiver education

- Play-based, child-centered snack time training intervention provided in a group for 8 weeks, bi-weekly.
- 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 Environment for Mealtime
- What's on the Plate
- Using Visual Schedules
- Components of Food
- Making Mealtime Fun
- Managing Mealtime Behaviors
- Prompting during Mealtime



### Instrumentation:

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

## Phase 1: Caregiver Education Results

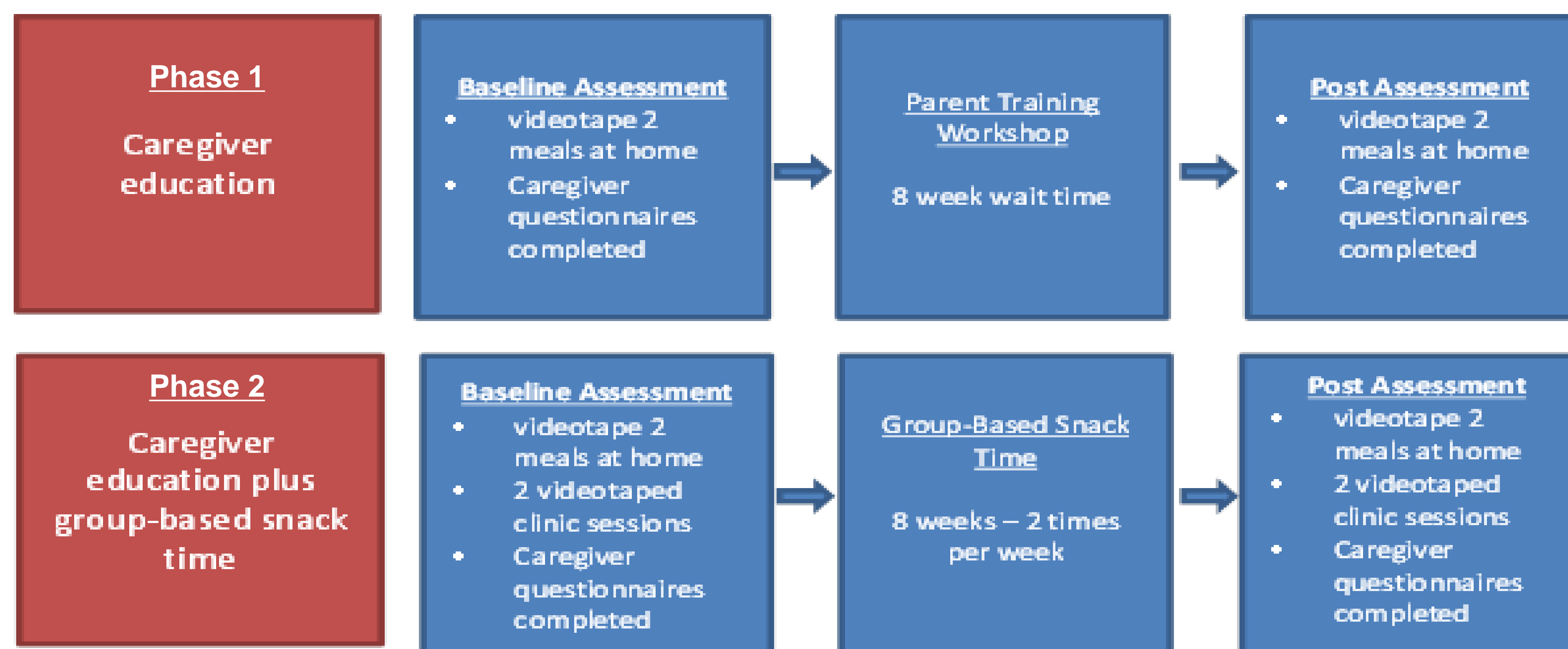
- Phase 1 caregiver education workshop completed
- 11 parents attended the session
- Session lasted 1.5 hours
- Parents actively participated in question and answer portion
- Pre-intervention questionnaires and videos were collected for data analysis

## Phase 2: Caregiver Education & Snack Time

- 12 children and parents participated in group-based 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.



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