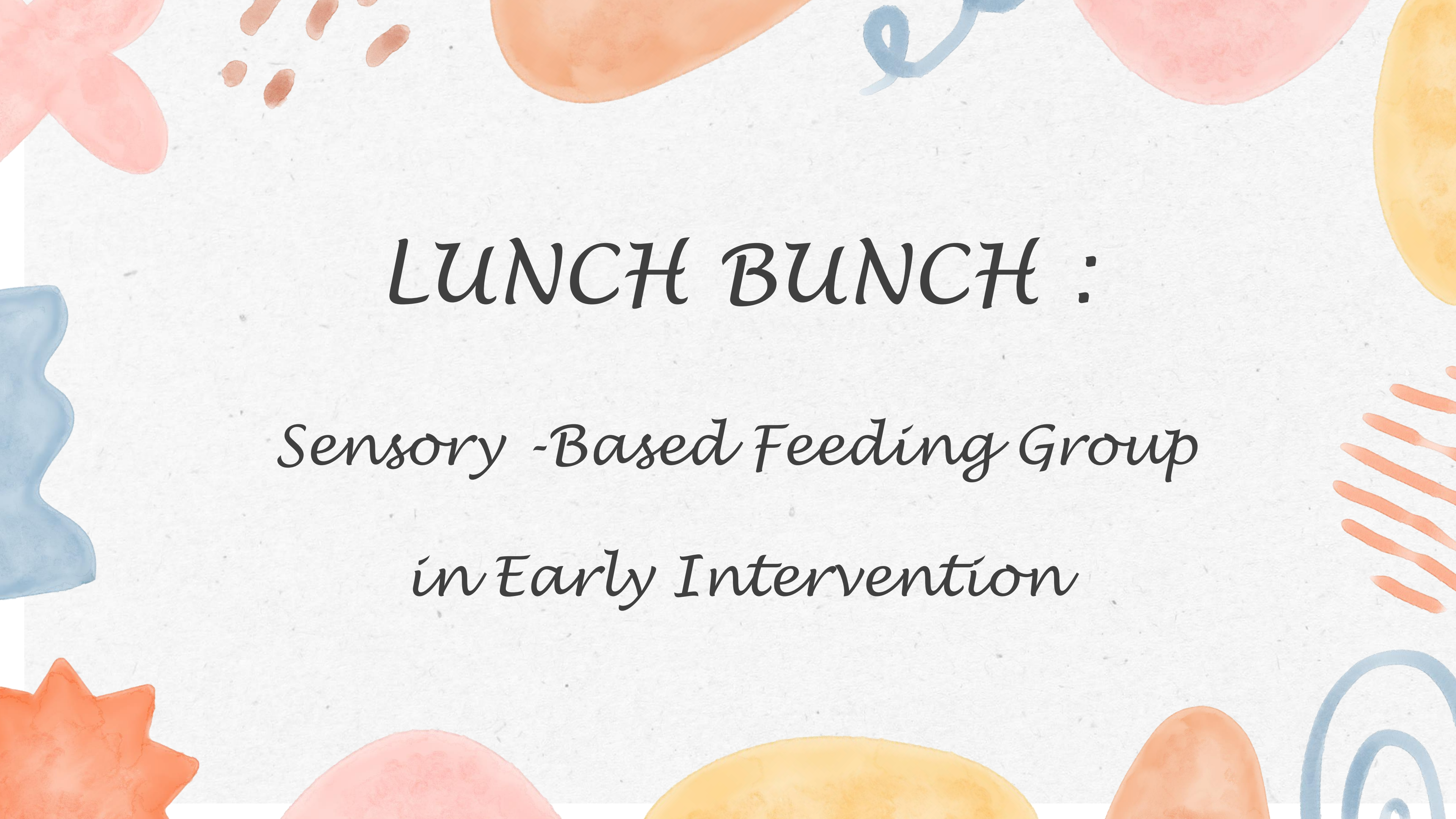




LUNCH BUNCH :

Sensory -Based Feeding Group

in Early Intervention

INTRODUCTIONS



WINNY SOENARYO, OTD, OTR/L, BCP



AMY PRASAD, OTD, OTR/L

OBJECTIVES

1. IDENTIFY THE NEED FOR A SENSORY-BASED FEEDING GROUP IN AN EARLY INTERVENTION PROGRAM.
2. DISCUSS THE OUTCOMES OF A SENSORY-BASED FEEDING PROGRAM ON THE CHILDREN'S PARTICIPATION AND MEALTIME EXPERIENCE.
3. DISTINGUISH WHAT ENTAILS A CLIENT-CENTERED AND CULTURALLY SENSITIVE SENSORY-BASED EARLY INTERVENTION FEEDING PROGRAM.
4. DEVELOP PRACTICE STANDARDS THAT SUPPORT POPULATIONS IN NEED OF SENSORY-BASED FEEDING INTERVENTION.



LEAPS AND BOUNDS

- CENTER- BASED EARLY INTERVENTION
- ELIGIBILITY CRITERIA: COGNITIVE DELAY &
2 OTHER DELAYS
- 3X/ WEEK



COURTESY OF AMY
PRASAD

LEAPS AND BOUNDS

- SENSORY, LANGUAGE ENRICHED
- EDUCATIONAL AND THERAPEUTIC
- OT, PT, SLP, SOCIAL LANGUAGE GROUPS
- CIRCLE, SNACK, SHARE TIME



COURTESY OF AMY
PRASAD



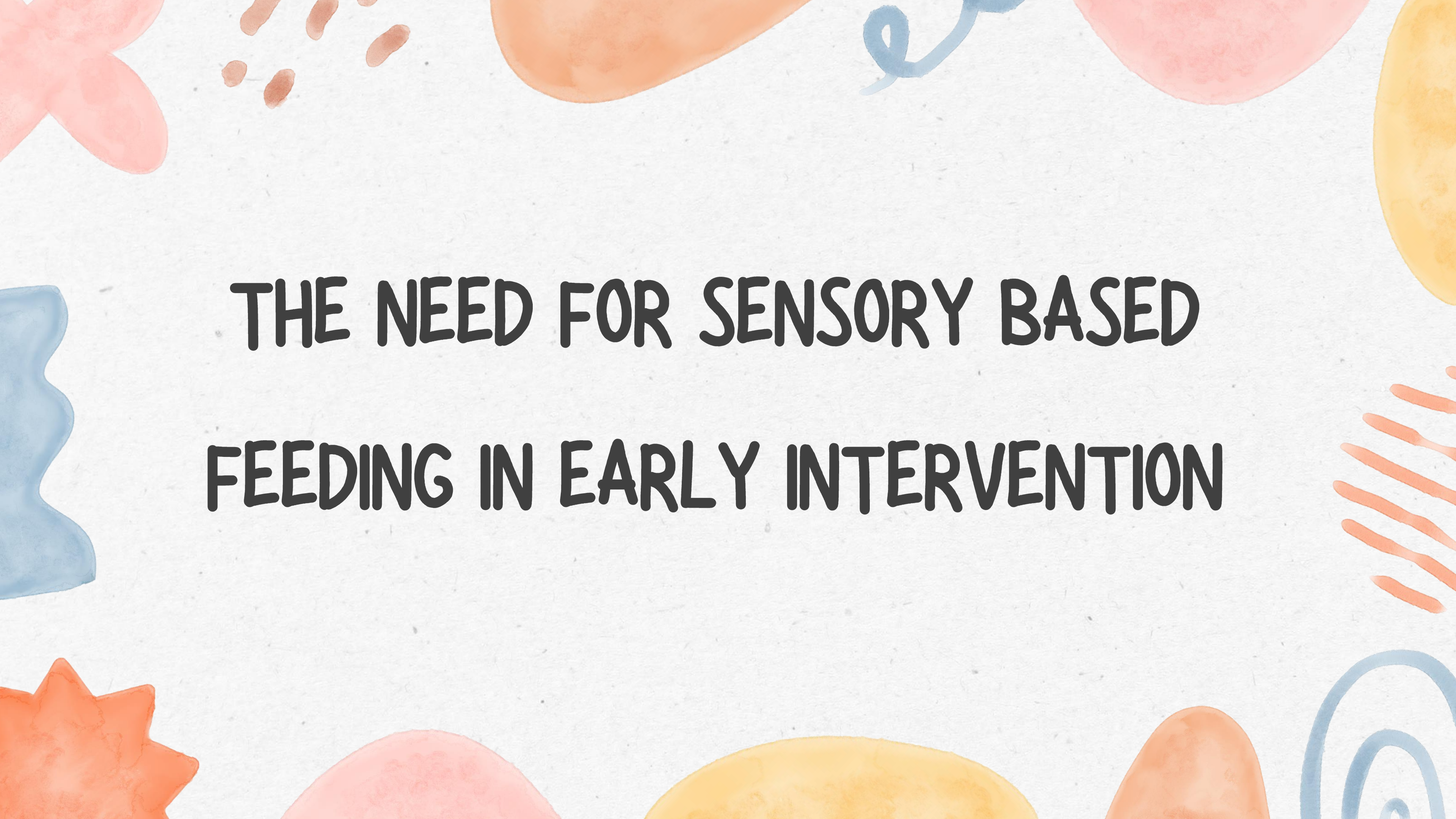
COURTESY OF AMY
PRASAD

LUNCH BUNCH ELIGIBILITY:

- CHILDREN WITH GREATER FEEDING AND SENSORY RELATED NEEDS
- 1 ADDITIONAL HOUR OF FOCUSED THERAPY PER WEEK



COURTESY OF AMY
PRASAD



THE NEED FOR SENSORY BASED FEEDING IN EARLY INTERVENTION



LUNCH BUNCH



2023 (Spring)

Lunch Bunch Pilot
Program ; focusing on
the children's sensory
processing



2023 (Summer - 2024 Spring)

Lunch Bunch; continue to
focus on the sensory
processing and self-regulation
(participation in mealtime)



2024 (Summer - Fall)

Expanded program to
include Feeding
Interventions



PROGRAM DEVELOPMENT

Literature
Review

Sensory
Enrichment
Pilot Program

Needs
Assessment

Expanded to
LUNCH BUNCH

SENSORY PROCESSING

- Sensory processing difficulties impact 5-16% of all children, with certain subgroups of children showing 80-100% likelihood of a sensory processing difficulty. These subgroups include autism spectrum disorder, fragile X, fetal alcohol disorder, down syndrome and more. Many of these children experience challenges with mealtime, in addition to other meaningful occupations (Kong & Moreno, 2018)
- Feeding difficulties related to selective intake are consistently correlated with impaired sensory processing and perception and tend to be positively associated with rigidity and challenging behavior. (Cermak, Curtin, & Bandini, 2010)

ASD & FEEDING

- Children with ASD are more likely to be in the underweight or obese extremes of weight, have a greater degree of inadequate intake, high food selectivity as indicated by their consumption frequency, and more disruptive mealtime behavior than neurotypical children (Molina-Lopez, et al., 2021)
- Children with ASD had a limited dietary range of foods and strong food preferences for sweet and salty tastes (e.g., ice cream, cookies, chicken nuggets, hot dogs, pizza, potato chips, and French fries) (Schreck & Williams, 2006)

ASD, FEEDING DIFFICULTIES & AGE ONSET

- Children with autism spectrum disorder (ASD) are five times more likely to develop feeding difficulties associated with food selectivity than children without ASD, and the ASD group has a higher risk of dietary inadequacies (Sharp et al., 2021)
- Children on the autism spectrum demonstrated feeding symptoms from infancy and had a progressively less varied diet from 15 months of age. Between 15 and 54 months of age, the children with ASDs were consistently reported to be difficult to feed and very choosy. (Emond et al., 2010)

ASD & FOOD SELECTIVITY

- The following eating problems found common among children with ASD: Food selectivity, poor appetite or food refusal, binge eating or overeating, chewing and swallowing problems, insistence on certain food presentation, PICA, fast eating, (Sharp et al., 2013)
- In the literature on children with ASD, feeding difficulties related to selective intake have been called food selectivity, selective eating, food fussiness, picky eating, food neophobia, food refusal, food aversion, and atypical eating, among others. (Page et al., 2022)
- Food selectivity began by the age of 18 months and lasted for over 2 years (Zulkifi et al. , 2022)

INTERVENTION FRAMEWORK

- There are medical, biological, environmental, parental, and behavioral factors at play that influence food selectivity in individuals with ASD (sharps et al., 2014)
- Sensory oversensitivity to food texture, smell, or taste significantly influence food selectivity in children with ASD. (Mari-Bauset et al, 2014; Cermak, Curtin, & Bandini, 2010)
- Food selectivity associated with ASD increases the challenges faced by caregivers of children with this disorder due to lack of knowledge, training and
- Group occupational therapy allows for modeling of behavior and leads to increased engagement and sustainable outcomes (Wikum and Mesibov, 2020)

SENSORY ENRICHMENT PROGRAM

Program Focuses on:

1. Sensory Processing
2. Motor Development
3. Praxis
4. Self-regulation during mealtime



COURTESY OF AMY
PRASAD

ONGOING NEEDS ASSESSMENT

Community: No group feeding program for younger age

Parents: Needing a feeding group program for children ages 2-3

Teachers: Increase in the number of children with feeding problems in the early intervention (EI) program.

Therapists: The challenge of addressing individualized feeding interventions during the EI group program.

LUNCH BUNCH

Nurturing and engaging program:

Program Focuses on:

1. Sensory Processing
2. Motor Development
3. Feeding Skills
4. Parent Education



The flyer for Momentum Lunch Bunch features a blue background with white clouds. At the top, the word "momentum" is in white lowercase letters. Below it, "LUNCH" is written in large, colorful, blocky letters (L: blue, U: red, N: blue, C: purple, H: orange). In the center, there is an illustration of four diverse children sitting around a table, eating and talking. Below the children, the word "BUNCH" is written in large, colorful, blocky letters (B: purple, U: yellow, N: blue, C: red, H: blue). At the bottom, there is a green bar.

The Lunch Bunch is an enriching and specialized intervention designed to cater to the developmental needs of children. At Lunch Bunch, we are dedicated to providing a nurturing and engaging space where every child can thrive.

Program Focus

Lunch Bunch offers an extra hour of targeted intervention focusing on Sensory Processing, Motor Development, Feeding Skills, and Play.

Sensory Processing: Children will engage in sensory-based activities where they will enhance their skills in the areas of self-regulation, motor development, social language, and play.

Motor Development: Children will engage in activities that promote gross and fine motor skills.

Feeding Skills: Children will engage in different opportunities to develop essential feeding skills. This includes sensory play with varying types of food, tool use/ manipulation, and fostering independence in self-feeding.

The Lunch Bunch runs Monday thru Thursday.

• 2-3 years	11:15 AM to 12:15 PM
• 3-5 years	12:45 PM to 1:45 PM
• 5-7 years	3:00 PM to 4:00 PM
• 7-10 years	4:15 PM to 5:15 PM

ENROLL NOW

Scan the Referral QR Code. Accepting Private Pay and Regional Center Clients



LUNCH BUNCH

Culturally Responsive and Client- Centered Approach:

- 1.Engaging with Food from home
- 2.Responsive Feeinng
- 3.Parents' involvement during mealtime.

LUNCH BUNCH SCHEDULE

11:10–11:40 SENSORIMOTOR ACTIVITIES

11:40–11:55 TACTILE FOOD PLAY

11:55–12:00 HAND WASHING

12:00–12:15 GROUP MEALTIME



COURTESY OF AMY

PRASAD



COURTESY OF WINNY

SOENARYO

LIMITATIONS

- Generalization - rigidity causes challenges with accepting foods in different settings (e.g. in the clinic vs. at home)
- Parent education - more time is needed to provide parents with opportunities for learning and participation in the program



OUTCOMES OF THE SENSORY-BASED FEEDING PROGRAM

OUTCOME MEASURES

**SENSORY
PROCESSING**

**SELF-
REGULATION**

**MEALTIME
ENGAGEMENT**

**PARENTS'
UNDERSTANDING
OF CHILDRENS'
NEED**

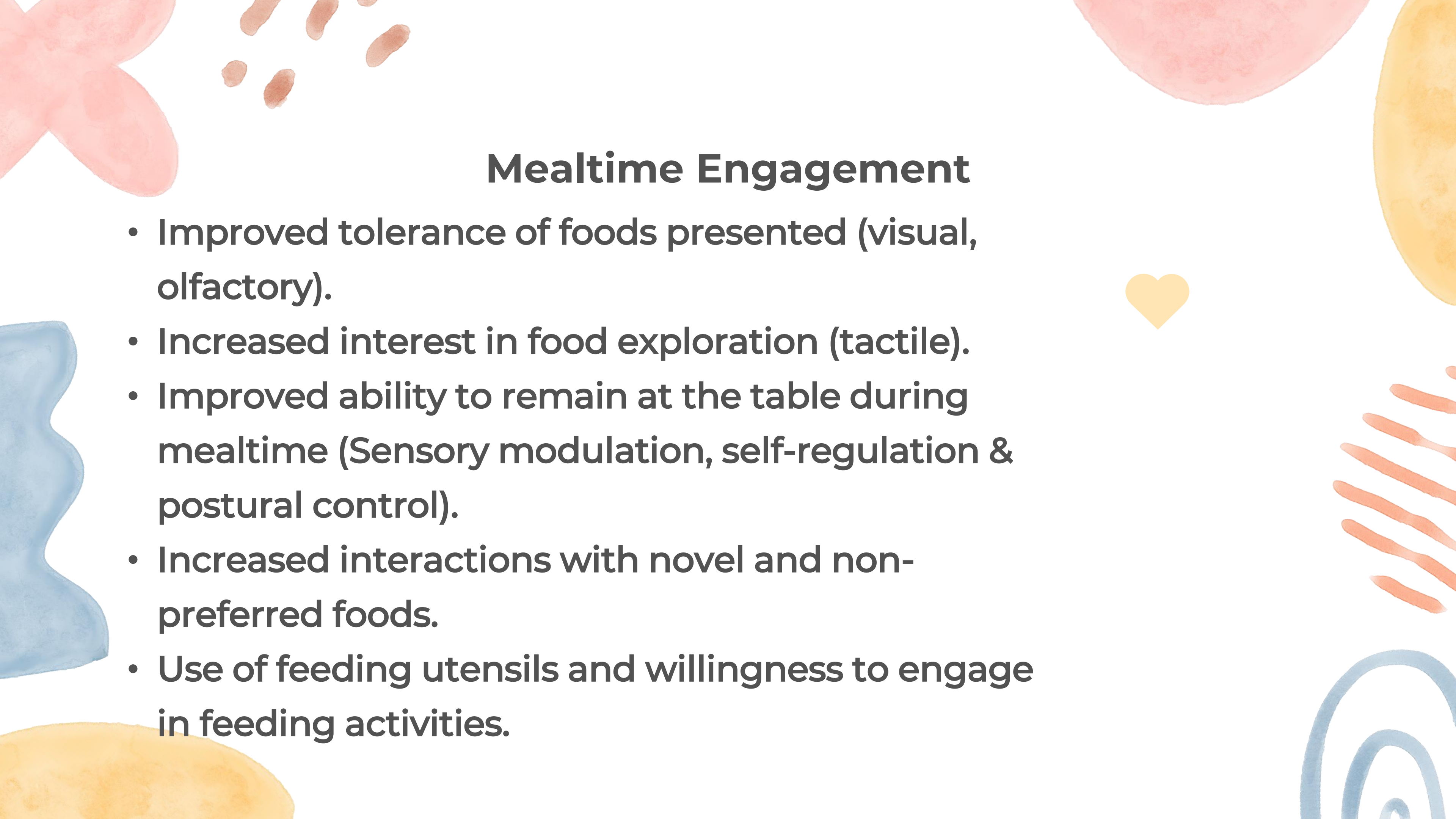
Sensory Processing

- Improved tactile modulation
- Improved tactile discrimination
- Improved vestibular processing
- Improved postural control



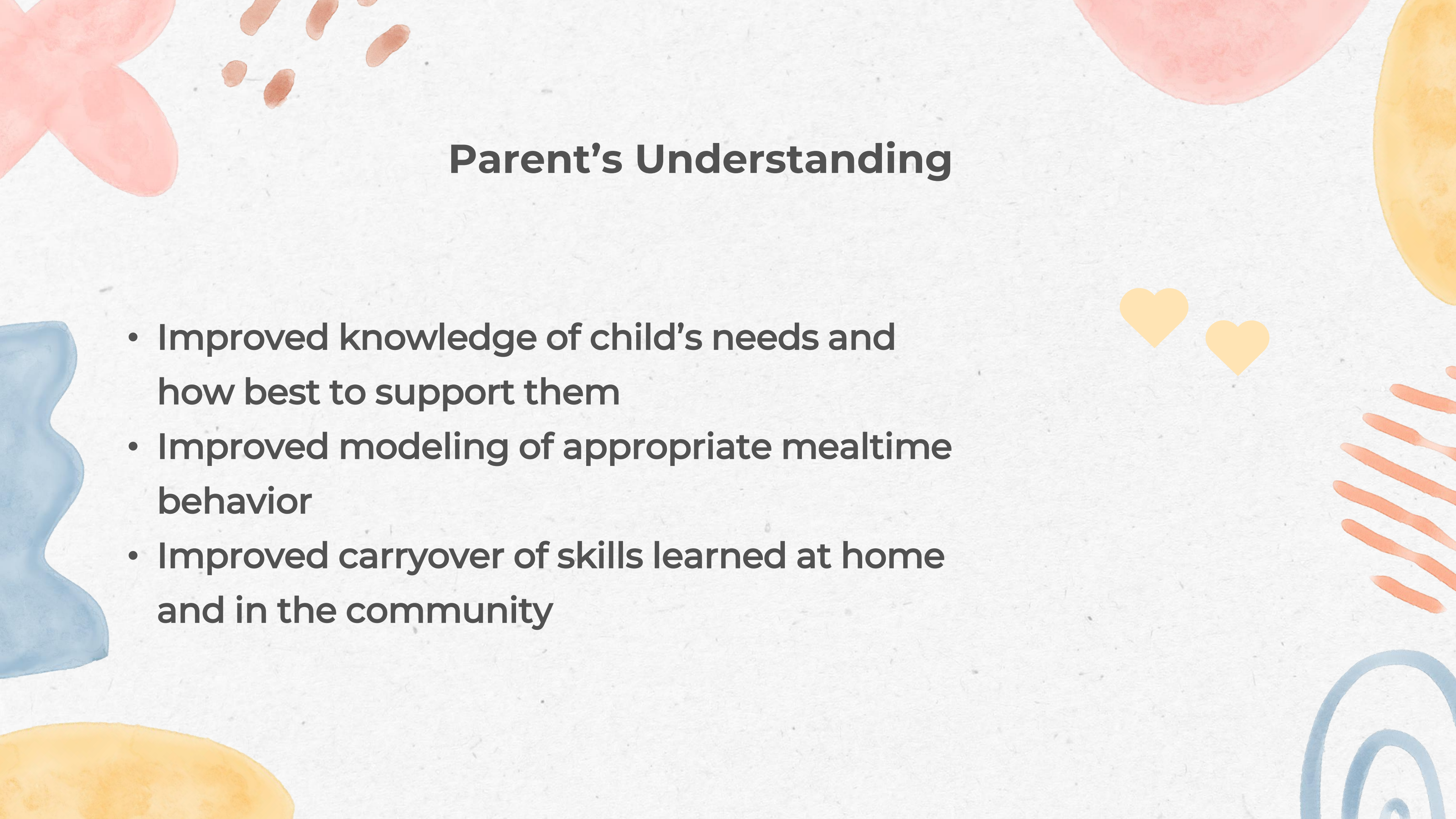
Self-Regulation

- Improved tolerance of cueing from adults
- Improved ability to interact with peers or the environment
- Improved engagement in mealtime activities
- Improved food exploration



Mealtime Engagement

- Improved tolerance of foods presented (visual, olfactory).
- Increased interest in food exploration (tactile).
- Improved ability to remain at the table during mealtime (Sensory modulation, self-regulation & postural control).
- Increased interactions with novel and non-preferred foods.
- Use of feeding utensils and willingness to engage in feeding activities.



Parent's Understanding

- Improved knowledge of child's needs and how best to support them
 - Improved modeling of appropriate mealtime behavior
 - Improved carryover of skills learned at home and in the community
- 
- 

PARENTS/ TEACHERS SURVEY

**Self-
Regulation**

**My child's ability
to regulate**

**Engagement/
Participation**

**My child's ability
to engage/
participate in
task**

**Mealtime
Engagement**

**My child's
participation in
snack or
mealtime**

**Understanding
the needs of
the child**

**I am able to
understand the
need of the child
and able to
support them in
class/ home**

PARENTS/ TEACHERS SURVEY

Parent Survey

LUNCH BUNCH SURVEY

When did your child start Lunch Bunch?

How many days per week did they participate in Lunch Bunch?

On a scale of 1 to 5 with “1” being “strongly disagree” and “5” being “strongly agree” please rate the following statements.

	1	2	3	4	5
SELF-REGULATION					
My child’s ability to regulate his/her emotions has improved since starting Lunch Bunch.					
ENGAGEMENT / PARTICIPATION					
My child’s overall engagement has improved since starting Lunch Bunch.					
MEALTIME					
My child’s participation in mealtimes has improved since starting Lunch Bunch.					
OTHER					
The therapists/staff were knowledgeable and shared how my child did/collaborated with me after each session.					
My child’s participation in Lunch Bunch has helped me to understand my child’s needs and how I can best support them.					
I am satisfied with the treatment my child got during Lunch Bunch.					
I would recommend Lunch Bunch to other families.					

Any additional comments or feedback?

Thank you!

PARENT'S FEEDBACK

“Great Program, it really helped P. with some of her self-feeding skills. It was also nice to get extra OT time 1-1.”

“Thank you for helping my son.”

“I would like my child to enroll in a program like this again if offered for parents enrolled in private services. The social aspect is important for my child as these are no other peers for he to regularly model.”

TEACHER'S FEEDBACK

“I personally did see a big improvement in P. since she started! I think this program is awesome and I love collaborating with the Lunch Bunch team to best support the child.”

“Factors outside of the clinic affected the child’s emotional regulation but overall they have greatly improved.”

“M. benefited a lot from Lunch Bunch. Especially in feeding areas and sensory/texture things; prior he was very sensitive to a lot of textures both in touch and in eating- but he greatly improved.”



PRACTICE STANDARD CONSIDERATIONS



Standards for Practice

- Environmental Modification
 - Age-appropriate sitting arrangement
 - Opportunities for modifications to food presentations
 - e.g. honey bear cup to assist in straw drinking, sensorimotor equipment
 - Keeping in mind the Person Environment Occupation Model
- Sensory Exposure
 - Exposure to various foods
 - Tactile, taste, in preparation for consumption
- Parent Training
 - Invite parents into the program
 - Include time at the end to meet with parents and discuss progress



CASE STUDIES

REFERENCES

- Branscomb KR, Goble CB. (2008) Infants And Toddlers in Group Care: Feeding Practices That Foster Emotional Health. *YC young children*. 2008;63(6):28-33.
- Chamberlin JL, Henry MM, Roberts JD, Sapsford AL, Courtney SE. (1991) An infant and toddler feeding group program. *The American journal of occupational therapy*. 1991;45(10):907-911. doi:10.5014/ajot.45.10.907
- Chung, L. M. Y., Fang, Y., Or, P. P. L., Sun, F., Poon, E. T. C., & Chan, C. K. M. (2024). "Still work?" Design and effect of interventions used to modify feeding problems in children with autism: A systematic review of studies employing group designs. *Child: Care, Health and Development*, 50(4), e13307. <https://doi.org/10.1111/cch.13307>
- Emond A, Emmett P, Steer C, Golding J. Feeding symptoms, dietary patterns, and growth in young children with autism spectrum disorders. *Pediatrics* (Evanston). 2010;126(2):e337-e342. doi:10.1542/peds.2009-2391
- Kim AR, Kwon JY, Yi SH, Kim EH. (2021) Sensory Based Feeding Intervention for Toddlers With Food Refusal: A Randomized Controlled Trial. *Annals of rehabilitation medicine*. 2021;45(5):393-400. doi:10.5535/arm.21076
- Kong M., & Moreno, MA. (2018). Sensory Processing in Children. *JAMA Pediatr* 2018;172(12):1208. DOI:doi:10.1001/jamapediatrics.2018.3774
- Marí-Bauset, S., Llopis-González, A., Zazpe-García, I., Marí-Sanchis, A., & Morales-Suarez-Varela, M. (2014). Nutritional status of children with autism Spectrum disorders (ASDs): A case-Control study. *Journal of Autism and Developmental Disorders*, 45(1), 203–212. <https://doi.org/10.1007/s10803-014-2205-8>
- Marí-Bauset, S., Zazpe, I., Mari-Sanchis, A., Llopis-González, A., & Morales-Suarez-Varela, M. (2014). Food selectivity in autism spectrum disorders: A systematic review. *Journal of Child Neurology*, 29(11), 1554–1561. <https://doi.org/10.1177/0883073813498821>
- Page SD, Souders MC, Kral TVE, Chao AM, Pinto-Martin J. Correlates of Feeding Difficulties Among Children with Autism Spectrum Disorder: A Systematic Review. *Journal of autism and developmental disorders*. 2022;52(1):255-274. doi:10.1007/s10803-021-04947-4
- Schreck, K. A., & Williams, K. (2006). Food preferences and factors influencing food selectivity for children with autism spectrum disorders. *Research in Developmental Disabilities*, 27(4), 353–363. <https://doi.org/10.1016/j.ridd.2005.03.005>
- Sharp, W. G., Berry, R. C., McElhanon, B. O., & Jaquess, D. L. (2014). Dietary diversity in children with autism. In *Comprehensive Guide to Autism* (pp. 2077–2097). New York: Springer.
- Sharp, W. G., Berry, R. C., McCracken, C., Nuhu, N. N., Marvel, E., Saulnier, C. A., ... Jaquess, D. L. (2013). Feeding problems and nutrient intake in children with autism spectrum disorders: A meta-analysis and comprehensive review of the literature. *Journal of Autism and Developmental Disorders*, 43(9), 2159–2173. <https://doi.org/10.1007/s10803-013-1771-5>
- Vanover ST. (2017) The Beginnings of School Readiness : Foundations of the Infant and Toddler Classroom. *The Rowman & Littlefield Publishing Group, Inc.*; 2017.
- Zulkifli MN, Kadar M, Fenech M, Hamzaid NH. Interrelation of food selectivity, oral sensory sensitivity, and nutrient intake in children with autism spectrum disorder: A scoping review. *Research in autism spectrum disorders*. 2022;93:101928-. doi:10.1016/j.rasd.2022.101928

The background is a light gray textured paper with various watercolor-style illustrations. There are orange and pink circular shapes, a blue squiggle, a blue wavy shape on the left, an orange star-like shape at the bottom left, and a blue spiral at the bottom right.

THANK YOU VERY MUCH!

Amy Prasad: AmyWhite@alumni.usc.edu

Winny Soenaryo: Winny.Soenaryo@chan.usc.edu