

# A Sensorimotor Approach to Feeding Problems in a Toddler with FAS and FTT

## Rhoda P. Erhardt, MS, OTR/L, FAOTA

### Abstract

Children with Fetal Alcohol Effect or Syndrome represent an increasingly large part of our special needs population. These children have complex physiological issues including motor deficits and increased sensory sensitivity that may contribute to feeding problems and failure to thrive. Professionals that partner with parents to meet these challenges need a knowledge of the effects of prenatal drug exposure and a theoretical frame of reference to guide intervention. This case study poster demonstrates the integration of sensorimotor treatment strategies into an occupational therapy home based feeding program for an 18-month-old toddler whose primary source of nutritional intake had been Pediasure™. The initial videotaped evaluation investigated specific functional problems, short term and long term family goals, and current feeding behaviors. Recommendations were made for specific treatment strategies addressing the child's sensory regulation issues and his developmental delays. The process of task analysis and problem solving by the foster mother and therapist then led to ongoing facilitation of appropriate positioning, utensils, foods, and movement patterns which resulted in decreased oral sensitivity, self-feeding developmental gains, and increased intake of a variety of solid foods. Videotapes of each home visit were provided to the parent who found them helpful for reference between visits. Captures from those videos illustrates the toddler's initial behaviors, intervention techniques that proved effective, and subsequent improved eating skills.

### Functional Problems and Observations

- Primary nutrition is bottle feeding



- \* Resists spoons and cups
- Face and mouth (inside and out) hypersensitive to touch by others



- Good head and trunk control for sitting balance
- Some fine motor delays ranging from 1-7 months
- Mouths and plays with food and feeding utensils
- Accepts small amounts of foods with salty and spicy flavors (pizza sauce), extreme temperatures (frozen peas), and crunchy consistencies (pretzels)
- Accepts very little solid food
- Allows toothbrushing on teeth only, not gums

## Summary

Although fine motor skills are mildly delayed, feeding problems appear to be more sensory-based than motorbased. Difficulty processing sensory information results in overloading to excessive sound, visual, and especially tactile stimulation. Strong food flavors and consistencies give clear messages to the nervous system: what this food is and where it is in the mouth. Coping strategies include efforts to insure sameness (e.g. chair always in same place) and resistance to external control by others (dependent and assistive feeding).

## Treatment Plan

- One hour occupational therapy sessions in the home, once a week, for 3 months, with a one-year followup
- Informational materials for caregivers: articles, books, and videos, explaining normal feeding development, sensory regulation issues, problematic behaviors, and "sensory diet" strategies

## Mouth and Hand Toys/Exploration

- To help normalize tactile sensations in mouth and develop lip, tongue, and jaw control
- To improve manipulation skills and hand/mouth movement patterns

### Pre-feeding Stimulation

- Slow firm rubbing inside mouth on upper and lower gums, both sides



- Rapid tapping on cheeks (alerting)



### Mealtime Skills

- Dependent spoon-feeding: spoon presented below and in front of mouth for child to actively reach with lips and pull food off spoon



### Mealtime Skills (continued)

- Assistive spoon-feeding: caregiver guides by holding handle of long-handled spoon, not child's hand
- Transition from bottle to cup through a feeding system of cups and lids
  - \* 1st stage: nursing cup (nipple)
  - \* 2nd stage: spout cup (soft)
  - \* 3rd stage: straw cup
  - \* 4th stage: training cup (slotted)



### Short-Term Goals

- To reduce tactile defensiveness: **Met**
- To begin transition from bottle to cup: **Met**
- To move from dependent to independent feeding: **Met**
- To increase variety of foods: **Met**

### Results After 3 Months

- Cup-drinking: Drinks from first stages of cup/lid feeding system: nursing cup (nipple) and spout cup (soft)
- Increased variety of foods: Crackers, grapes, raisins banana pudding, roast beef, canned fruit, toast, cereal
- Independent spoon-feeding: Dips spoon into food and brings to mouth upside down with good lip closure



### Long-Term Goals

- To become independent in all self-feeding: **Met**
- To enjoy a wide variety of foods: **Met**
- To eat enough quantity of food for good nutrition (to not need Pediasure): **Not met**

### Results at Age 2 1/2 Years

Examples of additional foods eaten (small quantities):

- Canned and fresh fruit (pears, peaches, apples)
- Ham sandwiches with mayonnaise and butter
- Hamburgers with cheese, tomatoes, lettuce, ketchup
- Hot dogs with mustard
- Spaghetti with sauce
- Corn
- French fries
- Ice cream
- Granola bars



## Results at Age 2 1/2 Years (continued)

Finger feeding



Biting and chewing



Independent spoon-feeding



Independent fork use



Drinking with regular glass  
(both hands and one hand)



Straw-drinking

