Achieving Independence: Successful Transition to Oral Feeding

MSHA ANNUAL CONFERENCE
JACKSON, MS
MARCH 30, 2012

Nina Ayd Johanson, M.A., M.S., CCC-SLP; CEIM
feedourchildren@verizon.net

Learner Outcomes

- Identify contraindications for oral feeding and describe 5 step treatment plan for non-oral feeders.
- Discuss pros and cons of various types of supplemental feeding.
- Formulate treatment plans for children with tracheostomy, and other medical conditions leading to supplement dependency.

Role of Feeding Skill Development

- Biologic skill
- Interpersonal relationship
- Learning about environment
- Social/Cultural Participation
- Biologic Skill
Learning is in direct relation to experience

What kind of experiences are tube-fed children having?

Learning requires active participation
Children learn by comparison and observation

What kind of mealtimes are tube-fed children having?

Feeding Development:

Feeding:

- Anatomic/Structural integrity
- Neurophysiologic maturation

Oral sensation

Learned progression of behaviors influenced by:

Experiential opportunities

Fine and gross motor development

Stevenson & Allaire, 1991
Achieving Independence: Successful Transition to Oral Feeding

Nina Ayd Johanson, MA, MS, CCC-SLP, CEIM
feedourchildren@verizon.net

Feeding Development:

Complexity of feeding compounded by:
- Culture
- Environmental influences
- Interpersonal relationships
- Child’s temperament

Previous factors:
- Experiences
- Gross/fine motor
- Oral sensation

Stevenson & Allaire; 1991

Feeding Development

Anything that interferes or contributes to the factors listed above will limit the acquisition of feeding skills

Morris & Klein; 2000

Critical Period

Lost Experiences

Negative Experiences

Morris & Klein; 2000
Achieving Independence: Successful Transition to Oral Feeding

Food Transitions/Textures

- Suckling
- Swallowing
- Sucking
- Munching
- Biting
- Basic Rotary Chewing
- Mature Rotary Chewing

Food Transitions/Textures

- Liquids
- Strained/Purees  (begin oral exploration)
- Junior/Ground
- Chopped Fine/Fork Mashed
- Coarsely Chopped/Soft Mechanical
- Regular Table Foods; Mixed textures
  - Meltable solids
  - Firm chewables
  - Crispy foods
  - Sticky foods
  - Mixed textures
  - Difficult chewy foods

The A.E.I.O.U. Approach
Achieving Independence: Successful Transition to Oral Feeding

Observation

Understanding

Initiating Treatment

Priorities
- Respiratory Status/Cardiac Function
- Nutrition/Hydration Stability
- Swallowing Function
- Postural Stability
5- Step Treatment Plan

When oral feeding is contraindicated:

1. Address attachment/communication environment
2. Stimulate NNS
3. Maintain/Normalize sensory processing
4. Maintain/Normalize oral-facial sensation
5. Establish feeding/mealtime experience

Step 1: Attachment/Communication

- Observe parent-child relationship
- Parent training/coaching
  o Attentiveness/responsiveness
  o Delight
  o Emotional communication
  o Behavior management
- Infant/child massage

Touch Deprivation

Field, 2001

- Physical violence
- Sleep disturbance
- Suppressed immune response
- Growth deprivation
- Tactile sensitivity
- Allergic conditions
- Dermatitis; asthma
- Cardiovascular disease
Achieving Independence: Successful Transition to Oral Feeding

Touch

- 18 ft of skin
- Skin largest sense organ
- Most sensitive areas: lips and fingertips
- 1st sensory input in womb
- Primary means for learning
- Tactile and pressure receptors
- Stimulates the CNS into a state of relaxation
  - Behavioral and biochemical

Infant and Child Massage

- Comfortable, enjoyable
- Parent-child connection
- Immune and circulatory systems
- Trust and acceptance
- Deep breathing and relaxation
- Normalizes muscle tone; helps prevent contractures
- Body awareness and body acceptance
- Mobility and flexibility
- Muscle fatigue and strain

Step 2: Stimulate NNS

- Improved state regulation
- Calming; organization
- Improved oxygen saturation
- Reduced heart rate
- Improved weight gain/nutrient absorption
- Improved gastric emptying
- Faster transition to oral feeding

Nina Ayd Johanson, MA, MS, CCC-SLP, CEIM
feedourchildren@verizon.net
Step 3: Maintain/Normalize Sensory Processing

- Infant
  - Maintain homeostasis, calming, ability to self-regulate
  - Environment (auditory, visual, tactile)
  - Massage, touch

- Older Child
  - Organize through calming or alerting
  - Normalize responses to sensory stimuli
  - Think “Distal to Proximal”
  - Exposure

How To Help

- Goal is to improve sensory organization, kinesthetic awareness, and functional responses to stimuli by improving acceptance of sensory stimuli through repeated exposure
- No coercion! Object is to “teach” child how to respond/interact; model it; explain it
- Allow child independence-build trust

Step 4: Maintain/Normalize Oral Facial Sensation
Step 5: Establish Feeding/Mealtime Experience

- Family/Social Mealtimes
- Food Exposure (see, touch, smell, taste)
- Tube Feeding in a Mealtime Context
- Adjust Feeding Schedules (normalize)
- Establish PO trials as medically indicated

Transition to Oral Feeding

Prerequisites:
- Medical stability
- Swallowing safety
- Child readiness
- Parent readiness
- Mealtime experience
- Dietary diversity

From Tube to Oral Feeding

1. Treat ongoing medical conditions
   - Minimize/eliminate GI issues, retching, vomiting etc.
2. Establish environmental support
   - Structure, routine, schedule of mealtimes
3. Address sensory processing and aversive conditioning
4. Address oral-motor and feeding skills
5. Normalize hunger/satiety cycles
Enteral Nutrition

- OG/NG: uncomfortable; aversive; can trigger bradycardia
- G Tube: surgery but easily removed; no aversion; daily care; can increase reflux; bolus or continuous feeds; disrupted “mealtime”
- J-Tube: same as above but bypasses stomach so no increase in reflux; continuous feeds only

Types of Tube Feeding

- Tube
- Combination tube/oral
- Continuous Drip
- Bolus
- Syringe/Gravity/Pump
- Day/Night/Schedule
- Enteral Formulas

Blenderized Diet

- Dietary diversity (orally, and in gut)
- Reduced retching
- Reduced reflux
- Improved bowel function
- Improved nutrition
Merry Mealtime Guide

- Setting/Structure
  - Social mealtimes, with models
  - Limited/No distractions (no toys, no tv)
  - In a chair, at a table
  - For meals and snacks only
  - Be consistent
  - Always allow independence-help only with permission; read “cues”

- Schedule/Routine
  - Pleasant beginning/end routine
  - Sensory transitions, if needed
  - Guided by medical/nutrition status
  - Regular Intervals (2 1/2 to 3 hours apart, 5-6x/day)
  - Duration (10-15 min snacks; 15-30 min meals)
  - Use a timer
  - Allow extra time for OM/FM, independence, socializing
  - Expect child to stay at the table
  - No grazing-only water between meals/snacks
  - Use an all-done bowl

- The Food
  - Age/skill appropriate
  - Exposure: taste/texture variety, portions
  - Someone to describe the food
  - Avoid added salt, sugar, artificial flavors/colors, low/no fat, lite
  - Healthy sweeteners: agave syrup, blackstrap molasses, honey (never for under age 1), pure maple syrup
  - Healthy fats: real butter, olive oil, coconut milk, fish oil, nuts, flaxseed (ground or oil)
  - Serve family style
Merry Mealtime Guide

- The Food (continued)
  - Include at least one preferred food
  - Offer at least 3 different foods (max 4-6)
  - No short-order cooking
  - No “walking” cups
  - Keep flavors and textures separate initially
  - Use “bridges”, “masks”, “mash-ups”, and “mixtures”
  - Use appropriate size/shape bowls, plates, utensils

The End!

From survival...to stability...to success...to significance... (S.R. Covey, 1997)

Selected References:

Achieving Independence: Successful Transition to Oral Feeding

Nina Ayd Johanson, MA, MS, CCC-SLP, CEIM
feedourchildren@verizon.net


Achieving Independence: Successful Transition to Oral Feeding

Resources

Infant Massage/Baby Yoga
- Touch Research Institute
  www.miami.edu/touch-research

- Pediatric Massage For the Child with Special Needs by Kathy Fleming Drehobl and Mary Gengler Fuhr, Therapy Skill Builders, 1991
  www.infantmassagesusa.org search for certified practitioners in your area
  www.lovingtouch.com

Tube Feeding and Blenderized Diet
- www.articles.complexchild.com/july2011/00310.html "Feeding Tube Product Roundup"
- www.bellybuttonsandbelts.com g-tube pads/belts
- www.corisafe.com device to conceal and protect medical ports
- www.drinkyourmeals.com the blender diet
- www.ippec.org Institute for Psychology and Psychosomatics of Early Childhood- tube weaning research, training, education
- www.lifeandtimesofstella.com personal blog on tube weaning, Graz tube weaning references
- www.mybuttonbuddies.com g-tube pads
- www.notube.at experts in tube weaning, "Graz" method, netcoaching, training
- www.oley.org comprehensive resource for consumers on parenteral and enteral nutrition
- www.thecrunchyandthesmooth.com/tube-weaning personal blog on tube weaning
- www.tubefedkids.ning.com blog/forum for parents
- www.tubewhoobies.com fancy g-tube pads, hospital "couture" gowns
- www.tummytunnels.com iron on patches that provide access to g-tubes without damage to clothing
- Homemade Blended Formula Handbook by Marsha Dunn Klein, MEd, OTR/L and Suzanne Evans Morris, PhD, CCC-SLP available through www.mealtimenotions.com (also find directions on this site for making a "tube-fed doll"

Nina Ayd Johanson, MA, MS, CCC-SLP, CEIM
feedourchildren@verizon.net
Sensory Processing Disorders

- www.sensory-processing-disorder.com
- www.sensorystreet.com
- www.alertprogram.com
- www.out-of-sync-child.com
- www.sensorycraver.com
- www.spdfoundation.net
- www.stressfreekids.com

How Does Your Engine Run

www.out-of-sync-child.com Carol Stock Kranowitz
www.spdfoundation.net Lucy Jane Miller
www.stressfreekids.com