Important Nutritional, Oral Motor, Feeding, and Language Ideas to Ensure Optimal Development of Your Child with Down Syndrome

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Medical Assessment/Intervention

- Cardiology
- Gastroenterology
- Audiology
- Opthalmology/Vision Specialist
- Nutrition
- Physical/Occupational Therapy
- Speech Therapy/Lactation Consultant
- Developmental Therapy

Oral Motor/Feeding/Language Characteristics of Children with Down Syndrome

- Difficulty with motor planning
- Decreased oral sensory awareness due to low tone
- Overstuffing of food
- Tongue protrusion
- Issues with middle ear fluid/hearing loss
- Motivated by music
- Excellent gestural imitation
- Telegraphic speech patterns

Ideal Nutrition for Infants/Babies with Down Syndrome

- Breastfeeding/Breast milk
- Organic foods/Clean diet
- Avoidance of gluten
- Avoidance of dairy products
- Vitamins/Supplements
- Appropriate feeding tools/aids

Bottle-Feeding/Breastfeeding Techniques and Aids

- Sara Rosenfeld-Johnson's bottle-feeding technique
- Specialized bottles: Haberman Feeder, Dr. Browns, Innobaby, Calma, etc.
- Paced bottle-feeding
- Firm bottle nipples
- Nipple shields
- Supplemental nursing system

Bottle-feeding/Nursing Aids

Oral Motor Activities/Exercises

- Breastfeeding
- Straw drinking
- Open cup drinking
- Tongue elevation and lateralization exercises
- Graded chewing
- Lip strength/closure activities
- Oral sensory awareness activities
- Horn hierarchy

Specific Oral Motor Exercises for Tongue

- Tongue pointing exercises
- Lateralization of food bolus
- Tongue retraction
- Tongue tip definition/elevation
- Tongue-ties

Specific Oral Motor Exercises for Lips/ Jaw

- Lip rounding
- Prolonged lip closure
- Lip isolation
- Graded chewing
- Bite and pull
- Oral tug of war
- Oral sensory awareness
- Oral proprioceptive input

Jaw Grading/Tongue Lateralization

Lip Rounding

Exercises with Food

- Combining crunchy with smooth
- Food shape (strips)
- Varying viscosity of liquids
- Isolating lips to pick up food items
- Lateralization of food items
- Graded biting

Foods Used in Therapy

Oral Facial Tone Variability

Speech/Language Strategies

- Audiological Assessment
- Use of a Total Communication Approach
- Expansion and differentiation of vocabulary
- Modeling and expansion of sentence structures
- Emphasis on articles in speech, e.g. the, a, etc.
- Incorporation of siblings in therapy
- Literacy Training
- Non-therapy activities: Tae kwon do, dance, swimming,etc.

Importance of Use of Sign Language with Children with Down Syndrome

- Issues with motor planning
- Good at imitating gestures
- Allows communication until verbal speech is present
- Visual learners/hearing difficulties

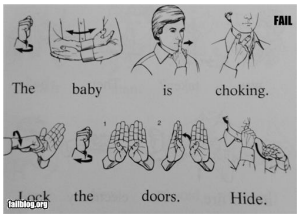
American Sign Language

- Known as ASL
- Is the true language of the deaf
- Has it's own syntax and grammar
- Best to use if child is truly deaf
- Third most used language in the United States

Signing Exact English

- Known as SEE
- Using ASL signs, with English grammar and syntax
- It's expanded with prefixes, tenses, articles, prepositions and endings
- Manual representation of English vocabulary and grammar
- Takes longer to communicate
- Used to teach deaf children English

Example of SEE



Types of Signs

- Iconic Signs
- Nouns versus Verbs
- Have meaningful origins, e.g. boy, potato, onion, etc.
- Sign approximations

Sign Language Strategies

- Viewing of Signing Times videos
- Incorporation of siblings in therapy
- ASL.pro video dictionary
- Pairing sign with verbal words

Resources to Learn Sign Language

- www.signingtime.com
- www.babysigns.com
- www.asl.pro
- www.loveandlearning.com
- www.signingsavvy.com

Community Resources

- Gigi's Playhouse
- National Association of Down Syndrome
- Ups for Downs
- North Shore Down Syndrome Awareness Group
- Lutheran General's Down Syndrome Clinic

Questions???