THE ORAL-MOTOR DEBATE IN REHABILITATION

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ORAL-MOTOR DEBATE IN REHABILITATION

- To date, there is no official definition of the term "Oral-Motor Treatment" with the Speech-Language Pathology (SLP) profession.

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- Research, articles and presentations narrowly defines oral-motor treatment and equates with non-speech oral exercise and treatment.(NSOME/NSOMT).
- However nonspeech oral exercise and other forms of nonspeech or nonfeeding treat (e.g. oral massage and facilitation) are only part of oral-motor treatments.

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- Lack of a standard definition has caused significant confusion and misunderstanding within the field of speech-language pathology.

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- Oral-Motor Treatment was originally discussed in the context of feeding and motor speech.
- Marshalla (2004) says oral-motor therapy is the process of facilitating improved oral (tongue, jaw, lip) movements.

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- Hammer defines the term "oral-motor" as having to do with movement and placements of the oral structures as the tongue, lips palate and teeth.
- He describes his intervention as techniques which draw the child' attention and effort to the oral musculature and articulators which simultaneously engaging the child in speech practices.

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- These definitions are very different that oral-motor treatment = nonspeech oral motor exercises.

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- What effects the context of oral-motor treatment:
- Cutural Components
- Attitudes and Values
- Environmental Factors – home vs public
- Social Activities during mealtime.

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- Saying that a child with ASD will eat a sensory offensive food, if they're hungry is like handing me a bowl of earth worms and saying "If you're really hungry, you will eat these."

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- Client Factors Affecting Oral Motor Function:
- Presence of medical conditions affecting function
- Presence of seizures
- Medications
- Cognitive level
- Postural instability

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- Variety and control of movement for lips, cheeks, jaw, and tongue:
  - During Speech
  - During Drinking
  - During Eating
  - During Chewing

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- Hypersensitivity to touch on body, face, or within the mouth
- Are there specific oral motor interventions now?
- Sensory seeking behavior (outside of meal time)

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- What is reinforcing to the person?
- How does person eat at mealtimes
- How positioned
- Gagging, coughing, delayed oral transit

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- Tongue thrust, tonic bite
- Refuses foods/fluids
- Consistency of techniques used
- Food texture, consistency, temperature
- Time alloted for intake

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- **Most frequent problem in oral motor treatment is oral hypersensitivity**

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frontalis: the forehead

corrugator: the brow

nasalis: the nose

obicularis oculi: around the eye

levator labii: raises the upper lip

masseter: closes the jaw

Obicularis oris: purses the lips

risoris: draws the lips in a smile

buccinator: pulls the lips wide and tight

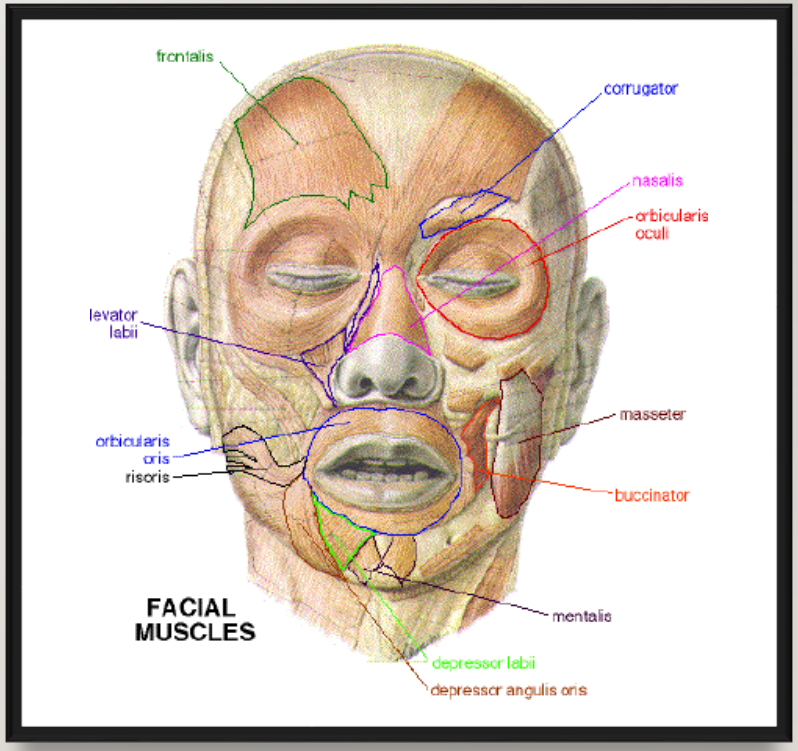
depressor labii: lowers the lower lips

depressor anguli oris: lowers the bottom
corner of the lips

levator anguli oris (not shown): raises the
upper corner of the lips

pterigoid (not shown): pulls jaw back or shut

mentalis: pulls chin down



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- Children with delays often have difficulty feeding resulting from oral motor problems.
- Research indicates that that oral motor problems are under recognized in children with problems other than cerebral palsy, including children with Autism.

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- During the first three years of life, oral-motor skills develop rapidly in both structural growth and neurological control.
- Developmentally a feeding problem exists when a child is “stuck” in their feeding pattern and cannot progress (Eicher 2002) (Kerwin 2003)

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- Many oral-motor treatments do not focus on feeding or oral speech disorders, They instead focus on children with Down Syndrome, Autism, Cerbral Palsy etc, children children who have developmental speech sound disorders.

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- Although the presence of a feeding difficulties is not used to determine if a child fits the diagnostic profile for Autism Spectrum Disorder (ASD) problems with eating are typically a part of the repertoire of symptoms for a child with ASD.

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- ASD children typically have strong food preferences as well as fluctuations in the volume and the variety of food consumed,
- In addition, the presence of unusual eating behaviors suach as food cravings and pica (eating inedible items)

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- Researchers such as Kerwin et. al) found that children with ASD demonstrated significantly higher instances of food selectivity by type and lower instances of food refusal and oral motor problems than other children with disabilities.
- Some ASD children refuse to eat entire food groups
- The impact on feeding can be pervasive

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- At meal time, sensory experiences occur with ASD students which may not for other children with disabilities. The lights, the movements, the sounds, smells, the tactile-kinesthetic input to the sensory system may result in behavioral responses such as fighting, screaming, becoming aggressive, running away or shuting down altogether.
- Sensory and oral –motor skills are sometimes worked on together to improve feeding skills.

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- The specific feeding rituals that children with ASD might include:
  - Food preparation raw or cooked
  - All food on the plate must be the same color
  - Foods must be presented in a certain order
  - Food may not touch each other on the plate
  - Only drink things that are presented in a certain order

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Some examples of oral-motor activities include:

Bubbles	Straws
Party Horns	Blow Ticklers
Straws	Chewing
Sipping	Blowing

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- Are nonspeech activities, which organize from a sensory processing perspective and engaging from a motor perspective used only to improve muscle tone and strength?
- Regarding oral massage and facilitation, can a feeding or motor speech therapist using a hands-on method such as PROMPT – Prompts for Restructuring Oral Muscular Phonetic Targets

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- Would a standard definition of oral-motor treatment help with current confusion and misunderstanding regarding the term?

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- Oral Motor Exercises & Oral Exercises -- do these to get your children's oral muscles in shape for speech and better function.
- Oral-Motor Exercises
- 1. Tongue Push-Ups
- Objective: to strengthen tongue Procedure: child holds up an M&M, cheerio, etc. on upper ridge just behind teeth (not on teeth) and pushes up with tongue.
- 2. Tongue Pops
- Objective: To strengthen tongue Procedure: Suck tongue up on the top of the mouth, pull it back and release it, making a popping sound.

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- 3. Back and Forth
- Objective: To increase oral-motor coordination Procedure: Protrude tongue and move it from side-to-side, outside of the mouth making sure that the tongue does not touch the lips.
- 4. Find the Stick
- Objective: To increase tongue movement and coordination.
- Procedure: Move a dull stick, tongue depressor or spoon around the inside and outside of the mouth and have the child put their tongue on it or to where you have touched their mouth with the stick, depressor or spoon.
- 5. Pointy Tongue

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- Objective: To increase tongue movement and coordination. Procedure: Protrude tongue and point it at the tip.
- 6. Quick Strength
- Objective: To increase tongue strength. Procedure: Using gauze, pull tongue out gently while child tries to pull tongue back in.
- 7. Throat Scratches
- Objective: To strengthen the back of the tongue. Procedure: Move tongue back in the mouth and move it in a downward, circular motion, scratching the back of the throat.
- 8. Tapping

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- Oral-motor therapy is often used as a component of feeding therapy. In this case an experienced therapist will be able to determine why a child is having difficulty in a particular area and will create an oral-motor-feeding plan individualized for the child.
- There is no current research to support the use of oral-motor therapy to treat speech disorders children with ASD.

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- Oral-motor therapy can be very helpful or it can be a waste of time. It depends on how and for what it is being used.
- If a therapist is recommending oral-motor therapy for your child it is important to understand why and to be involved as much as possible. If not you are at risk of wasting time and money.

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- **Conclusions** Insufficient evidence to support or refute the use of OMEs to produce effects on speech was found in the research literature. Discussion is largely confined to a consideration of the need for more well-designed studies using well-described participant groups and alternative bases for evidence-based practice.

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- Questions?