

Sara Rosenfeld-Johnson’s Approach to Oral-Motor Feeding and Speech Therapy

What is oral-motor therapy and what is unique about SRJ oral-motor therapy? Oral-motor therapy addresses the physical movements of speech and feeding. Sara Rosenfeld-Johnson’s approach to oral-motor therapy (TalkTools Therapy™) evolved from a need to address the ways specific speech sounds are produced and the role of feeding techniques in overall oral-motor development.

TalkTools Therapy™ incorporates the proprioceptive and kinesthetic feedback necessary to address the sensory aspects of speech production and feeding skills; we call this the “feel of speech.” Auditory and visual models of feedback and cueing often do not provide adequate input for those who demonstrate difficulty knowing how to produce specific sounds and combine sounds in connected speech. The therapies and tools used in TalkTools Therapy™ provide tactile cueing, or the *feel of speech*, to promote more appropriate movement patterns for standard speech production and clarity as well as appropriate feeding.

Accepted definitions of oral-motor therapy include Hammer’s (2007) definition, “having to do with movements and placements of the oral structures such as the tongue, lips, palate, and teeth,” and Marshalla’s (2004) definition, “the process of facilitating improved oral (jaw, lips, tongue) movements.” The American Speech-Language-Hearing Association’s (ASHA) National Center for Evidence-Based Practice in Communication Disorders (2007) presented the results of an ad hoc committee on the efficacy of oral-motor exercises. The committee defined oral-motor exercises as “activities that involve sensory stimulation to or actions of the lips, jaw, tongue, soft palate, larynx and respiratory muscles which are intended to influence the physiologic underpinnings of the oropharyngeal mechanism and thus improve its functions” (as cited in Mosheim & Banotai, 2007). Combined, these definitions provide a basic physiological context for speech sound production and other skills involving the oral structures.

TalkTools Therapy™ is appropriate for anyone displaying reduced mobility, agility, precision, and endurance of the oral structures and musculature that adversely affect speech production, feeding, and oral management as compared to typically-

developing peers. It is also appropriate for clients with dysarthria, affecting oral-motor movement for speech and feeding.

In addition to the feel of speech, only speech-like movements are targeted in TalkTools® oral-motor therapy. Movements that do not imitate speech should not be used, as they are ineffective in the remediation of speech sound errors. This philosophy is in agreement with those opposed to the use of oral-motor therapy for the improvement of speech articulation:

- “there is no relevance to the end product of speaking by using an exercise of tongue wagging, because there are no speech sounds that require tongue wagging” (Lof, G. L., 2003);
- “The goal of speech therapy is NOT to produce a tongue wag, to have strong articulators, to puff out the cheeks, etc. Rather, the goal is to produce intelligible speech” (Lof, G. L., 2006);
- “no speech sound requires the tongue tip to be elevated toward the nose; no sound is produced by puffing out the cheeks; no sound is produced in the same way as blowing is produced. Oral movements that are irrelevant to speech movements will not be effective as speech therapy techniques” (Lof, G. L., 2006).

The goals of oral-motor, feeding, and speech therapy are to increase the awareness of the oral mechanism and normalize oral tactile sensitivity (Fisher, 1991, Schmidt, 1988 in Bahr, 2001; Morris & Klein, 2000), improve the precision of volitional movements of oral structures for speech production (Dewey, 1993; Newmeyer, Grether, S., Grasha, C., White, J., Akers, R., Aylward, C., Ishikawa, K., & deGrauw, 2007; Robin, D. A., 1992), increase differentiation of oral movements (Gooze, Murdoch, Ozanne, Cheng, Hill, Gibbon, 2007; Green, Moore, Reilly, Higashikawa, & Steeve, 2000; Morris & Klein, 2000; Rosenfeld-Johnson, 2001), improve feeding skills and nutritional intake, and improve speech sound production to maximize intelligibility. In TalkTools Therapy™, three main concepts and movements of the jaw, lips, and tongue are incorporated into each activity:

- a. **Dissociation:** The separation of movement, based on stability and adequate strength, in one or more muscle groups;
- b. **Grading:** The controlled segmentation of movement through space based upon dissociation;

- c. **Fixing:** An abnormal posture used to compensate for reduced stability which inhibits mobility.

These three concepts are consistent with the goals above in that they encompass the oral movements necessary for adequate speech and feeding skills. Each exercise and therapy activity promoted by TalkTools Therapy™ integrates the concepts of dissociation, grading, and fixing to better understand, assess, and treat oral-motor speech and feeding disorders.

TalkTools Therapy™ incorporates concepts of normal, age-appropriate motor development to determine appropriate therapy for each child. For example, studies indicate that jaw control is established by about 15 months, before control is established for the upper and lower lips (Green, Moore, Reilly, Higashikawa, & Steeve, 2000; Green, Moore, & Reilly, 2002). This indicates that the jaw is the basis for motor speech development. Therefore, the jaw is an important component of the speech and feeding skills assessed and treated in each session according to each child's needs. Stability (in the jaw and body) for speech and feeding is addressed before more complex motor skills such as lip and tongue dissociation or later-developing speech sounds. This ensures every child has the motor skills necessary to accomplish age-appropriate speech and feeding goals.

TalkTools Therapy™ is used in conjunction with other speech therapies and does not replace the need for direct work on speech production. A common misconception of oral-motor therapy is it is used in isolation; however, TalkTools Therapy™ was developed to be used in conjunction with other speech, language, and feeding interventions. Oral-motor therapies improve the foundational skills necessary to achieve appropriate oral-motor skills, speech sound acquisition, feeding skills, and oral management. To be effective, they should be used in combination with speech, language, and feeding interventions for effective remediation of speech sound errors and speech clarity or the treatment of feeding disorders.

Once the foundational movements for speech are observed by the clinician and achieved by the client, those movements are immediately transitioned into function for feeding and speech (Bahr, 2001, pp.3-4; Green, et al., 1997; Moore & Ruark, 1996;

Ruark & Moore, 1997). When movement is transitioned into function, oral-motor therapy is no longer necessary for that movement.

SRJ Therapies™ and Innovative Therapists International™, Inc. are working hard to provide easy access to education, therapeutic intervention, therapy materials, and research and development within the framework of Evidence-Based Practice. We have joined the effort to engage in evidence-based practices and research efforts to validate the use of TalkTools Therapy™. Our unique methods of oral-motor therapy have proven effective for clients with oral-motor deficits in therapeutic settings and we are excited to begin clinical trials to validate those results. We are working with researchers to provide practitioners and families with evidence-based therapeutic methods to address the oral-motor aspects of speech, sensory and feeding deficits. Several research projects are underway addressing various aspects of TalkTools Therapy™ techniques, tools and methodologies. Our research findings will be made available to others so they may be subjected to peer review. We are also collaborating with other professionals to expand our knowledge of oral-motor applications for sensory, feeding and speech development.

Our goal at Innovative Therapists International, Inc. is to provide today's therapists with new and innovative techniques that can, when combined with existing client skills, help each child achieve maximum success with adequate oral-motor skills for speech and feeding.

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