

## Speech Therapy Swallowing Objective Measurements

<p><b>Mann Assessment of Swallowing Ability (MASA)</b>          Moderate dysphagia 139-167          Moderate aspiration &lt; 148          Mild dysphagia 168-177          Mild aspiration 149-169</p>	<p><b>FOIS: Functional Oral Intake Scale</b>  <b>Level 1:</b> Nothing by mouth  <b>Level 2:</b> Tube dependent with minimal attempts of food or liquid  <b>Level 3:</b> Tube dependent with consistent oral intake of food or liquid  <b>Level 4:</b> Total oral diet of a single consistency</p>	<p><b>FOS: Functional Oral Intake Scale</b>  <b>Level 5:</b> Total oral diet with multiple consistencies, but requiring special preparation or compensations  <b>Level 6:</b> Total oral diet with multiple consistencies without special preparations, but with specific food limitations  <b>Level 7:</b> Total oral diet with no restrictions</p>	
<p><b>Rosenbek's Penetration-Aspiration Scale:</b>  <b>1.</b> Material does not enter the airway  <b>2.</b> Material enters the airway, remains above the vocal folds, and is ejected from the airway  <b>3.</b> Material enters the airway, remains above the vocal folds, and is not ejected from the airway  <b>4.</b> Material enters the airway, contacts the vocal folds, and is ejected from the airway</p>	<p><b>Rosenbek's Penetration-Aspiration Scale:</b>  <b>5.</b> Material enters the airway, contacts the vocal folds, and is not ejected from airway  <b>6.</b> Material enters the airway, passes below the vocal folds, and is ejected into the larynx or out of the airway  <b>7.</b> Material enters the airway, passes below the vocal folds, and is not ejected from the trachea despite effort  <b>8.</b> Material enters the airway, passes below the vocal folds, and no effort made to eject</p>	<ul style="list-style-type: none"> <li>• Number of swallows per bolus</li> <li>• Rate of Mastication</li> <li>• Rate of Intake</li> <li>• Coughing before, during, or after the swallow?</li> <li>• Pocketing is measured by residue in the vallecular and pyriform sinus</li> <li>• Swallow response: reflexive/volitional</li> <li>• Oral transit time: 1-1.25 sec.</li> <li>• Pharyngeal transit time: 1 sec.</li> </ul>	
<b>SSP/SSA</b>	<b>Cause</b>	<b>Therapy Techniques</b>	<b>Exercises</b>
Premature spillage may result in aspiration before the swallow	Poor back of tongue control	<ul style="list-style-type: none"> <li>• Chin tuck</li> <li>• Smaller bolus size</li> <li>• Consistency changes</li> <li>• Different utensil</li> </ul> <p><i>(avoid straws, cut-out cup, Provalve cup)</i></p>	<p>Oral-motor exercises for back of tongue</p> <ul style="list-style-type: none"> <li>• Hard /k/ /g/ sounds (i.e. "kick" "go")</li> <li>• Pressure on tongue blade with back of tongue</li> </ul>
Delayed swallow trigger	If delay is longer than 2 seconds tx is warranted	<ul style="list-style-type: none"> <li>• Thermal/tactile stim</li> <li>• Sour bolus</li> <li>• Chin-down posture</li> <li>• Consistency changes</li> <li>• Smaller bolus size</li> </ul>	<ul style="list-style-type: none"> <li>• Cold/hot/sour/spicy bolus trials <i>(Document how long the delay is)</i></li> </ul>
Aspiration during swallow	Poor vocal fold adduction	<ul style="list-style-type: none"> <li>• Consistency changes</li> <li>• Smaller bolus size</li> <li>• Head turn to left/right</li> <li>• Chin tuck</li> </ul>	<ul style="list-style-type: none"> <li>• Breath hold</li> <li>• Laryngeal adduction exercises</li> <li>• Supraglottic swallow</li> </ul>
Aspiration after the swallow	Mistiming of laryngeal elevation/timing of closure  Reduced laryngeal elevation  Reduced BOT pressure	<ul style="list-style-type: none"> <li>• Controlling bolus size</li> <li>• Chin tuck</li> <li>• Different utensil</li> <li>• Consistency changes</li> <li>• Liquid wash</li> <li>• Dry swallow</li> </ul>	<ul style="list-style-type: none"> <li>• Super-supraglottic swallow</li> <li>• Mendelsohn maneuver</li> <li>• Falsetto/laryngeal elevation ex's</li> <li>• Imitate gargle</li> <li>• Imitate yawn</li> </ul>