

# GUSS-ICU

Recommended for all patients who were **intubated for more than 24 hours.**

The screening is to be conducted no earlier than 1 hour after extubation. If necessary, perform oral hygiene.

Preliminary Investigation / Indirect Swallowing Test			Direct Swallowing Test (4 subtests)		
	Yes	No		Pass	Fail
RASS from 0 to +2	1	0	<div style="font-size: 3em; font-weight: bold;">}</div> <p><b>6 points:</b> Proceed to "Direct Swallowing Test" <b>&lt; 6 points:</b> Stop the screening (SLP and/or FEES)</p>	1	0
Stridor present	0	1		1	0
Coughing and/or throat clearing efficiently	1	0		1	0
Swallowing saliva possible	1	0		1	0
Drooling (saliva)	0	1		1	0
Change of voice after swallowing saliva	0	1		1	0
<b>SUM:</b>			4. Liquids & Solids: Give a piece of bread (1.5 x 1.5cm) and a sip of water after half of the chewing time *	1	0
				<b>SUM:</b>	
				<b>TOTAL SUM:</b>	

\* Observe the patient after each swallow.

Discontinue the subtest and the screening if the patient shows any of the following signs:

**Difficulty swallowing (prolonged oral phase: > 10sec with liquids and semisolids, >23 sec. with bread), coughing, drooling or change of voice.**

If there are no visible problems, proceed to the next subtest. (IDDSI= International Dysphagia Standardization Initiative)

FEES (Fiberoptic Endoscopic Evaluation of Swallowing), IDDSI (International Dysphagia Standardization Initiative), RASS (Richmond Agitation Sedation Scale)

Troll C, Trapl-Grundschober M, Teuschl Y, Cerrito A, Compte MG, Siegemund M. A bedside swallowing screen for the identification of post-extubation dysphagia on the intensive care unit - validation of the Gugging Swallowing Screen (GUSS)-ICU. BMC Anesthesiol. 2023;23:122. doi: 10.1186/s12871-023-02072-6.

# GUSS-ICU-EVALUATION

Results	Severity Code	Diet Recommendations (based on IDDSI-Framework)
0-6 points	Preliminary investigation or semisolids failed (Severe Dysphagia with high risk of aspiration)	* NPO (non per os) --> Refer to Speech and Language Pathologist (SLP) / Speech&Language Therapist (SLT) or ENT/Phoniatician/Dysphagia Specialist. Repeat the test after 4 hours at the earliest.
7 points	Semisolids passed, fluids failed (moderate dysphagia with aspiration risk)	<ul style="list-style-type: none"> <li>* Pureed or liquidised textures (IDDSI 3-4)</li> <li>* All liquids must be thickened (IDDSI 2-3)</li> <li>* Pills should be crushed and mixed with puree (IDDSI: 3-4)</li> <li>* No liquid medication!</li> <li>* Optional: Further functional swallowing assessments (FEES, VFSS)<sup>1</sup></li> <li>* Optional: Refer to Speech&amp;Language Pathologist (SLP) / Speech&amp;Language Therapist (SLT)</li> <li>* Supplementation via PEG, nasogastric tube or parenteral + supplementary food</li> </ul>
8 points	Semisolids passed, fluids passed, solids failed (mild dysphagia with low risk of aspiration)	<ul style="list-style-type: none"> <li>* Dysphagia diet (minced &amp; moist or soft &amp; bite-sized) (IDDSI: 5 or 6)</li> <li>* Liquids IDDSI 0</li> <li>* Optional: Further functional swallowing assessments (FEES, VFSS)<sup>1</sup></li> <li>* Optional: Refer to Speech&amp;Language Pathologist(SLP) / Speech&amp;Language Therapist (SLT)</li> <li>* Supplementation via PEG, nasogastric tube or parenteral + supplementary food</li> </ul>
9 points	Semisolids passed, fluids passed, solids passed, mixed textures failed (mild dysphagia with low risk of aspiration)	<ul style="list-style-type: none"> <li>* Dysphagia diet (soft &amp; bite-sized or Easy to chew) (IDDSI: 6 or 7 EC)</li> <li>* avoid mixed or hard to chew textures</li> <li>* Liquids (IDDSI 0)</li> <li>* Optional: Further functional swallowing assessments (FEES, VFSS)<sup>1</sup></li> <li>* Optional: Refer to Speech&amp;Language Pathologist(SLP) / Speech&amp;Language Therapist (SLT)</li> <li>* Supplementation via PEG, nasogastric tube or parenteral + supplementary food</li> </ul>
10 points	All textures passed (Minimal/no Dysphagia; Minimal/no risk of aspiration)	<ul style="list-style-type: none"> <li>* Normal diet (IDDSI: 7, 7 EC)</li> <li>* Regular liquids (IDDSI: 0)</li> <li>* First normal meal under supervision of a SLP/SLT or dysphagia-trained nurse to evaluate the swallowing ability of mixed consistencies</li> </ul>

<sup>1</sup> Use functional Investigations like: Fiberoptic Endoscopic Evaluation of Swallowing (FEES), Videofluoroscopic Swallowing Study (VFSS). (IDDSI= International Dysphagia Standardization Initiative)