

D-SO02: Dysphagia – postural compensatory strategies

Scope and objectives of clinical task

This CTI will enable the Allied Health Assistant (AHA) to:

- explain the purpose of dysphagia postural compensatory strategies
- safely and effectively educate/instruct, facilitate and supervise clients using dysphagia postural compensatory strategies including chin tuck, head turn, head tilt, effortful swallow and supraglottic swallow
- monitor and address common performance problems.

VERSION CONTROL

Version: 1.0

Endorsed: (Professional) Queensland Health Speech Pathology Advisory Committee Date approved: 21/03/2019

Approved: (Operational) Chief Allied Health Officer, Allied Health Professions' Office of Qld Date approved: 10/06/2019

Document custodian: Chief Allied Health Officer, Allied Health Professions' Office of Qld Review date: 10/06/2022

Acknowledgements: Queensland Health Speech Pathology Advisory Committee AHA steering committee

The CTI reflects best practice and agreed process for conduct of the task at the time of approval and should not be altered. Feedback, including proposed amendments to this published document, should be directed to AHPOQ at: allied_health_advisory@health.qld.gov.au.

This CTI should be used under a delegation framework implemented at the work unit level. The framework is available at: <https://www.health.qld.gov.au/ahwac>

Please check <https://www.health.qld.gov.au/ahwac/html/clintaskinstructions.asp> for the latest version of this CTI.

© State of Queensland (Queensland Health) 2019



This work is licensed under a Creative Commons Attribution Non-Commercial No Derivatives 3.0 Australia licence. This work is licensed under a Creative Commons Attribution Non-Commercial No Derivatives 3.0 Australia licence. In essence, you are free to copy and communicate the work in its current form for non-commercial purposes, as long as you attribute Queensland Health and authoring unit listed above, and abide by the licence terms. You may not alter or adapt the work in any way. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/3.0/au/deed.en>.

For further information contact Allied Health Professions' Office of Queensland, PO Box 2368, Fortitude Valley BC QLD 4006, email allied_health_advisory@health.qld.gov.au, phone (07) 3328 9298. For permissions beyond the scope of this licence contact: Intellectual Property Officer, Queensland Health, GPO Box 48, Brisbane Qld 4001, email ip_officer@health.qld.gov.au, phone (07) 3328 9862.

Disclaimer

Queensland Health has made every effort to ensure that the information in this resource, at the time of distribution, is correct. The information in this resource will be kept under review and future publications will incorporate any necessary amendments.

The information in this resource does not constitute clinical advice and should not be relied upon as such in a clinical situation. The information is provided solely on the basis that readers will be responsible for making their own assessment of the matters presented herein and readers are advised to verify all relevant representations, statements and information. Specialist advice in relation to the application of the information presented in this publication must be sought as necessary to ensure the application is clinically appropriate.

In no event, shall Queensland Health be liable (including negligence) for any claim, action, proceeding, demand, liability, costs, damages, expenses or loss (including without limitation, direct, indirect, punitive, special or consequential) whatsoever brought against it or made upon it or incurred by Queensland Health arising out of or in connection with a person's use of information in this publication



Requisite training, knowledge, skills and experience

Training

- Completion of CTI D-WTS01 When to stop
- Mandatory training requirements relevant to Queensland Health / HHS clinical roles are assumed knowledge for this CTI.
- Completion of the following Queensland Health allied health assistant training modules (or corresponding units of competency in HLT43015 Certificate IV in Allied Health Assistance) or equivalent work-based learning:
 - Speech Pathology Learner Guide: provide support in dysphagia managementAccess the module/s at: <https://www.health.qld.gov.au/ahwac/html/ahassist-modules>
- Completion of CTI D-SO01 Mealtime review, if the local service model includes supporting the client to use compensatory strategies for dysphagia management whilst eating a meal.

Clinical knowledge

The following content knowledge is required by an AHA delivering this task:

- basic elements of swallowing and common conditions that effect swallowing with a specific focus on those relevant to the client population in the local service e.g. stroke, chronic obstructive pulmonary disease, frail aged population
- the impact of swallowing problems whilst eating and drinking and common adaptive strategies including posture, food and fluid modification and use of adaptive equipment
- the appearance and differences between various texture modified diets and thickened fluids
- signs of aspiration including coughing, gurgly/wet voice, choking, or changes to breathing whilst eating or drinking
- the purpose of dysphagia postural compensatory strategies including chin tuck, head turn and supraglottic swallow, correct performance and common performance errors and strategies used to correct performance.

The knowledge requirements will be met by the following activities:

- completing the training program/s (listed above)
- reviewing the 'Learning resource'
- receiving instruction from an allied health professional in the training phase.

Skills or experience

The following skills or experience are not identified in the task procedure but support the safe and effective performance of the task and are required by an AHA delivering this task:

- competence in safely re-positioning a client from lying to sitting, including techniques for maintaining upright sitting in a bed or chair.

Safety and quality

Client

- The AHA will apply CTI D-WTS01 When to stop at all times.
- In addition, the following potential risks and precautions have been identified for this clinical task and should be monitored carefully by the AHA during the task:
 - As clients are at risk of aspiration, close supervision is required during the task. Coughing and spluttering may be a sign of eating too fast or not coordinating breathing, resulting in potential aspiration. If the client coughs or splutters during the task, cease the task and ask the client how they feel, listen for a gurgled or wet sounding voice and check the oral cavity for residue. If present, cease the task and inform the healthcare team and delegating health professional that potential aspiration has been observed. If the voice is clear and the oral cavity is free of residue, recommence the task and continue to monitor for signs of aspiration. If the client experiences another episode of coughing or spluttering, cease the task, remove the food and/or fluid and liaise with the delegating health professional or the healthcare team regarding the potential sign of aspiration.
 - As dysphagia compensatory strategies are practiced during eating, food can fully or partially block (obstruct) the airway, causing choking. Signs include: holding or touching the throat; coughing, wheezing or gagging, which may be weak or ineffective; difficulty breathing; making a whistling or 'crowing' sound when trying to breathe; or an inability to make sound or cry. If ignored, this may lead to lips, faces, earlobes or fingernails turning blue and loss of consciousness. Airway obstructions are considered a medical emergency and local procedures should be commenced immediately e.g. code blue activated, call an ambulance.
 - Clients in hospital may have their oral intake status changed at short notice e.g. fasting for a procedure, change in swallowing ability or new signs of aspiration noted. Check the client's oral intake status prior to commencing the task. If a change in status is noted, such as the client is nil by mouth (NBM) or the fluids or meal does not match the texture or consistency of the delegation instruction, cease the task and liaise with the delegating health professional.
 - If the client reports they have already eaten, feel full or nauseous whilst performing the task, cease the task. Confirm with the client the time and quantity of their last oral intake (food and fluid) and liaise with the delegating health professional.
 - Strategies should be performed in sitting. Clients may be unable to be positioned in sitting due to medical requirements post-procedure, dizziness, drowsiness, nausea, confusion, fatigue, distress, discomfort or pain. If the client is unable to sit up do not commence the task and liaise with the delegating health professional. If during the task the client's posture becomes asymmetrical (slumped to one side), or slips down the bed or chair, cease the task. Reposition the client using patient manual handling skills and recommence the task. If the client is unable to maintain the correct posture, cease the task and inform the delegating health professional.
 - Lying down after a meal increases the risk of reflux and aspiration. As the client has practised dysphagia compensatory strategies whilst eating the client should remain in sitting for a minimum of 20 minutes after the task. Inform the client and/or health care team of the time that the client may lie down.

Equipment, aids and appliances

- Ensure all equipment is clean and in good working order as per local infection control protocols. Refer to the manufacturer's guidelines for maintenance requirements e.g. check grips on cutlery have not loosened or perished, that rubber suction on plates are stable and that plate guards and sippy cup lids are fitted properly.
- If the client has hearing aids, glasses or dentures, these should be fitted prior to commencing the task. If the client has difficulty fitting devices, provide assistance. If uncertain about fitting requirements, seek guidance from a healthcare professional.
- As the client may require assistance for fitting dentures or removing food residue from the oral cavity, it is advisable to either wear gloves or have them readily available.

Environment

- Nil

Performance of Clinical Task

1. Delegation instructions

- Receive the delegated task from the health professional.
- The delegating allied health professional should clearly identify parameters for delivering the clinical task to the specific client, including any variance from the usual task procedure and expected outcomes. This may include:
 - client's current diet and fluids e.g. regular, mildly thick fluids or soft and bite sized diet
 - set-up requirements including assistance and equipment e.g. manual guidance, use of a plate guard, built up cutlery or a dysphagia cut out cup
 - specific client considerations and management strategies e.g. need for secondary or clearing swallows, visual neglect, use of an interpreter, hearing aid, dentures or communication device, presence of nasogastric/oxygen tubes or restrictions
 - postural compensatory strategy/ies to be performed whilst eating and drinking e.g. chin tuck, head turn and supraglottic swallow.

2. Preparation

- Client handout and any required feeding equipment

3. Introduce task and seek consent

- The AHA introduces him/herself to the client.
- The AHA checks three forms of client identification: full name, date of birth, **plus one** of the following: hospital UR number, Medicare number, or address.
- The AHA describes the task to the client. For example:
 - 'I have been asked to demonstrate and practice some swallowing strategies with you that may help your eating and drinking. This will involve changing the position of your head while you are eating and/or drinking to make your swallowing safer'.
- The AHA seeks informed consent according to the Queensland Health Guide to Informed Decision-making in Health Care, 2nd edition (2017).

4. Positioning

- The client's position during the task should be:
 - sitting upright in bed or in a supportive chair. The client's head and trunk should be symmetrical. If in bed ensure that the client's bottom is positioned near to where the base of the backrest is and the client has a knee break before setting the back rest to upright e.g. pillow under knees so they are comfortably flexed. If the client is sitting in a chair ensure the client's bottom is at the back of the chair and the client's feet are flat on the floor or supported on a footrest.
- The AHA's position during the task should be:
 - seated or standing beside the client in a position to demonstrate the exercises and observe the clients' performance. If the client is in a bed, the height should be adjusted to suit the AHA.

5. Task procedure

- Explain and demonstrate (where applicable) the task to the client.
- Check the client has understood the task and provide an opportunity to ask questions. This may include asking the client to demonstrate the exercise.
- The task comprises the following steps:
 1. Confirm the correct diet and fluid consistencies have been provided for the practice session. If incorrect, remove the food/fluid from the bedside and liaise with the delegating health professional. This may include implementing local incident reporting procedures e.g. PRIME or Riskman report.
 2. Observe that the client is in the correct starting posture for the task. See 'Positioning' and 'Safety and quality' sections.
 3. Explain how to perform the planned swallow strategy. See the 'Learning resource' for specific details.
 4. Demonstrate how to perform the strategy.
 5. Ask the client to perform the strategy by swallowing the saliva in their mouth. Provide feedback on performance. See 'Safety and quality' section and 'Learning resource'.
 6. Ask the client to perform the strategy again with a mouthful of food/drink monitoring for safety and quality.
 7. At completion of the practice session ask the client to open their mouth. Observe the oral cavity for residue. If residue is present, prompt the client to sip fluids to clear it. If residue remains in the oral cavity, ask the client to remove the residue with their tongue or finger. If residue persists the client will require oral cares performed e.g. if trained and assessed as competent perform oral cares or seek support from nursing staff.
 8. Inform the client and health care team regarding when the client may lay down. See the 'Safety and quality' section.
- During the task:
 - provide feedback and correct errors in the performance of the task. This may include:
 - the client's head should be kept in the required posture whilst swallowing each bolus (mouthful). They may return to a neutral head/neck position between mouthfuls for comfort and to assist with placing the bolus in the mouth. If the client does not adopt or maintain the correct posture during swallowing provide verbal prompting/correction and/or manual guidance. See Table 1 in the 'Learning resource'. If problems persist, cease the task and liaise with the delegating health professional.

- ensure the client remains sitting upright and maintains the required head posture throughout the task by encouraging him/her to 'sit up straight'. See 'Safety and quality'.
- count repetitions/noting the time elapsed for the client and indicating when to rest.
- if the client reports pain during or after performance, pause the task and monitor the client's pain. See the 'Safety and quality' section. If pain eases, ask the client if they are able to continue. If not, cease the task. If able, continue with the task.
- Generally a practice session should take 20 minutes. If the client is slow to chew and swallow their food or becomes short of breath during the task, encourage them to take their time and catch their breath. If the client has a reduced level of alertness or shows signs of aspiration, cease the task. See 'Safety and quality' section.
- monitor for adverse reactions and implement appropriate mitigation strategies as outlined in the 'Safety and quality' section above including CTI D-WTS01 When to stop.
- At the conclusion of the task:
 - encourage feedback from the client on the task
 - provide summary feedback to client, emphasising positive aspects of performance and areas to work on e.g. holding the head posture
 - ensure the client is comfortable and safe.

6. Document

- Document the outcomes of the task in the clinical record, consistent with relevant documentation standards and local procedures. Include observation of client performance, expected outcomes that were and were not achieved, and difficulties encountered or symptoms reported by the client during the task.
- For this task the following specific information should be presented:
 - the name of the postural compensatory strategy practised including the number of repetitions, sets and duration of hold completed for each, any difficulties experienced and/or monitoring requirements
 - required re-positioning, assistance or any equipment used whilst eating/drinking
 - observed signs of aspiration, oral pooling or choking and action taken
 - ability to clear the oral cavity and any strategies required.

7. Report to the delegating health professional

- Provide comprehensive feedback to the health professional who delegated the task, including:
 - observations of client performance, expected outcomes that were and were not achieved and difficulties encountered or symptoms reported by the client during the task. The AHA may also provide observations to the health professional that supports changes to the program such as the need to progress or review a postural compensatory strategy.

References and supporting documents

- Queensland Health (2015). Clinical Task Instruction D-WTS01 When to stop.
<https://www.health.qld.gov.au/ahwac/html/clintaskinstructions.asp>
- Queensland Health (2017). Guide to Informed Decision-making in Health Care (2nd edition).
https://www.health.qld.gov.au/_data/assets/pdf_file/0019/143074/ic-guide.pdf

Assessment: Performance Criteria Checklist

D-SO02: Dysphagia – postural compensatory strategies

Name:

Position:

Work Unit:

Performance Criteria	Knowledge acquired	Supervised task practice	Competency assessment
	Date and initials of supervising AHP	Date and initials of supervising AHP	Date and initials of supervising AHP
Demonstrates knowledge of fundamental concepts required to undertake the task.			
Obtains all required information from the delegating health professional, and seeks clarification if required, prior to accepting and proceeding with the delegated task.			
Completes preparation for the task including collecting the client exercise handout and equipment, setting up the practice environment and checking the clients functional and medical status.			
Introduces self to the client and checks client identification.			
Describes the purpose of the delegated task and seeks informed consent.			
Positions self and client appropriately to complete the task and ensure safety.			
Delivers the task effectively and safely as per delegated instructions and CTI procedure. a) Clearly explains the task, checking the client's understanding. b) Demonstrates the postural compensatory dysphagia strategy. c) Asks the client to demonstrate the strategy by swallowing saliva. d) Determines the client's capacity to participate in the prescribed strategy before commencing. e) Reinforces the strategy with the client by referring to the client handout/s. f) During the task, maintains a safe clinical environment and manages risks appropriately g) Provides feedback to the client on performance during and at completion of the task.			
Documents the outcomes of the task in the clinical record, consistent with relevant documentation standards and local procedures.			
Provides accurate and comprehensive feedback to the delegating health professional.			

Comments on the local service model:

The allied health assistant has been trained and assessed as competent in the following postural compensatory dysphagia strategies:

- Chin tuck
- Head turn
- Head tilt
- Effortful swallow
- Supraglottic swallow

Other:

- _____
- _____

Comments:

Record of assessment competence:

Assessor name:	Assessor position:	Competence achieved: / /
----------------	--------------------	--------------------------

Scheduled review:

Review date: / /

Dysphagia – postural compensatory strategies: Learning resource

Postural compensatory dysphagia strategies use modified postures to improve swallowing. The strategies do not change the underlying strength or timing of the swallow. These techniques redirect the movement of the food and fluids in the mouth or throat to reduce the risk of aspiration.

Required reading

- American Speech-Language-Hearing Association (2018). Adult dysphagia: Treatment. Available at: <https://www.asha.org/PRPSpecificTopic.aspx?folderid=8589942550§ion=Treatment>
- Vose A, Nonnenmacher J, Singer ML, Gonzalez-Fernandez M (2014). Dysphagia management in acute and sub-acute stroke. Current Physical Medical and Rehabilitation Reports 2(4):197-206. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4608439/>
- Queensland Health (2016). Allied health nutrition & dietetics skill set electives pre-requisite units for Certificate IV in Allied Health Assistance: Combined learner guide. Dysphagia and texture modification, pages 157-162. Available at: https://www.health.qld.gov.au/_data/assets/pdf_file/0027/650619/LG-nutrition-dietetics-pt1.pdf
- Manufacturers guidelines for maintenance and fitting requirements for feeding equipment relevant for the local service model e.g. plate guard, sippy cup, cut out cup or built up cutlery.
- Orientation and familiarisation with local resources for:
 - Dysphagia postural compensatory strategies including client handouts, posters and models
 - Local workplace procedures for airway obstruction and aspiration

Example client handouts/resources

- National Foundation of Swallowing Disorders. Available at: <https://swallowingdisorderfoundation.com/oral-swallowing-exercises/>
- Speech pathology statewide exercise resources. (QH employees only). Available at: <https://qheps.health.qld.gov.au/alliedhealth/html/professions/speech-pathology-collaboratives>

Required viewing

Chin tuck

- TCD Dysphagia (2016). How to carry out the chin tuck posture. Available at: <https://www.youtube.com/watch?v=kWkhwzQKy88>

Head turn

- TCD Dysphagia (2016). How to carry out the head turn posture. Available at: <https://www.youtube.com/watch?v=K071UnqO2IA>

Head tilt

- TCD Dysphagia (2016). How to carry out the head tilt posture. Available at: <https://www.youtube.com/watch?v=T60HannQGeQ>

Effortful swallow

- Medbridge (2019). Effortful swallow. Available at: <https://www.medbridgeeducation.com/patient-education-library/condition/2667-Effortful-Swallow>
- Therapedia (2017). Effortful swallow. Available at: <https://www.youtube.com/watch?v=wKmJdCe7aKs>

Supraglottic swallow

- Therapedia (2017). Super-supraglottic swallow. Available at: <https://www.youtube.com/watch?v=C2HlepSWG84>
- The Speech Therapy Group (2015). Supraglottic swallow. Available at: <https://www.youtube.com/watch?v=gJpl4e2qAUg>

Optional viewing

- Eugene speech therapy (2017). Swallowing exercises and postures (dysphagia treatment). Available at: <https://www.youtube.com/watch?v=ERQarqgyfOA>
- Speech Therapy Practice (2017). Speech therapy swallowing exercise – effortful swallow. Available at: <https://www.youtube.com/watch?v=mevAcMkWm2o>

The principles of dysphagia postural compensatory strategies and the differences between them, common performance errors and common strategies to correct performance errors are presented in Table 1.

Table 1 Principles of dysphagia postural compensatory strategies

Postural compensatory swallow strategy	Common performance errors	Common strategies to correct performance errors
<p>Chin tuck</p> <p>Aims to reduce the risk of food/fluids passing into the airway by increasing control of the food/fluid in the mouth, bringing the base of the tongue closer to the back of the throat and narrowing the opening of the airway.</p> <p>How to do it:</p> <p>Clients are instructed to 'bring their chin down to their chest' and maintain this posture during swallowing.</p> <p>You do this by:</p> <ol style="list-style-type: none"> Instructing the client to take a mouthful of food/drink Tuck their chin towards their chest Swallow with their chin tucked 	<ul style="list-style-type: none"> The client performs a deep chin tuck. The chin is observed to almost be touching the chest. The client would be looking towards their thighs or stomach. 	<ul style="list-style-type: none"> Verbally prompt the client "that's a bit too much, pretend you are sitting at a table and looking at your plate" or "the top of your knees". Re-demonstrate the movement
	<ul style="list-style-type: none"> The client looks down with their eyes but doesn't move their head and neck 	<ul style="list-style-type: none"> Verbally prompt the client to move their head e.g. "pretend you are sitting at a table and looking at your plate or "the top of your knees".
	<ul style="list-style-type: none"> The client tries to place food/fluid in their mouth with their head in the chin down posture i.e. does not return to the neutral position. 	<ul style="list-style-type: none"> Verbally prompt the client to take a sip first, then tuck their chin and swallow whilst their chin is tucked in. Then return to upright 'head up'.
	<ul style="list-style-type: none"> The client resumes a 'head up' posture whilst swallowing <p>Note: this includes secondary or clearing swallows and should be part of the delegation instruction if required.</p>	<ul style="list-style-type: none"> Verbally prompt the client to have their chin tuck whilst swallowing the mouthful. "Chin down, chin down, swallow, OK now you can come back up".
<p>Head turn/tilt</p> <p>The direction of the turn/tilt is usually towards the damaged and/or weaker side (as advised by the speech pathologist) to direct the food/fluids down the stronger side of the throat. Aim is to push the food/drink toward the stronger side of the throat and help food/fluid to go down the right way.</p> <p>How to do it:</p> <p>Clients may be instructed to 'turn/tilt your head to the side (as if you are looking over your shoulder). Either right or left</p> <ol style="list-style-type: none"> Instruct the client to take a sip/bite of food 	<ul style="list-style-type: none"> The client turns/tilts their head only partially. The clients chin should be close to their shoulder. 	<ul style="list-style-type: none"> Verbally prompt the client to look 'all the way over their shoulder' or 'tilt to the side' before swallowing
	<ul style="list-style-type: none"> The client resumes a 'head neutral' posture whilst swallowing. <p>Note: this includes secondary or clearing swallows and should be part of the delegation instruction if required.</p>	<ul style="list-style-type: none"> Verbally prompt the client to have their head turned/tilted whilst swallowing the mouthful e.g. "look over/tilt towards your left shoulder, look/tilt left, look/tilt left, swallow, now look at me" <p>Note: the turn/tilt will be right or left and part of the delegation instruction.</p>

Postural compensatory swallow strategy	Common performance errors	Common strategies to correct performance errors
<ol style="list-style-type: none"> 2. Turn/tilt the head towards the _____ shoulder whilst keeping the rest of their body facing forward 3. Instruct the client to swallow in this position 		
<p>Effortful swallow</p> <p>Aim is to maximally recruit the tongue and pharyngeal muscles during swallowing.</p> <p>How to do it:</p> <p>The client is instructed to squeeze their muscles hard whilst swallowing.</p>	<ul style="list-style-type: none"> • A lack of 'effort' will have the neck muscles appear relaxed. The neck muscles should appear to protrude/strain during performance. 	<ul style="list-style-type: none"> • Verbally prompt the client to try and swallow using all of their muscles e.g. "Imagine you are swallowing something really big e.g. golf ball/elephant"
<p>Supraglottic swallow</p> <p>Aim is to close the airway during swallow, and assists the food/drink to go down the right way.</p> <p>How to do it:</p> <p>The client is instructed to hold their breath while swallowing and then cough after swallowing to close the airway and expel any food/fluid which may be close to the wind pipe after swallowing.</p> <ol style="list-style-type: none"> 1. Instruct the client to take a breath in 2. Hold the breath 3. Take a mouthful of food/drink 4. Keep holding their breath and swallow 5. Then cough 	<ul style="list-style-type: none"> • The client doesn't hold their breath prior to the swallow task 	<ul style="list-style-type: none"> • Verbally prompt the client to "hold, swallow, then cough".
	<ul style="list-style-type: none"> • The client doesn't hold cough after the swallow task 	<ul style="list-style-type: none"> • Verbally prompt the client to cough after they have finished swallowing the mouthful.
	<ul style="list-style-type: none"> • Poor co-ordination 	<ul style="list-style-type: none"> • This task requires co-ordination and should always be demonstrated and practised prior to introducing a bolus. This includes verbal prompting of each step as the client practises without the bolus. Do not introduce a bolus until the client can demonstrate correct performance. If the client after 5 attempts is unable to perform correctly liaise with the delegating health professional
	<ul style="list-style-type: none"> • It is not uncommon that clients report feeling breathless or fatigued during performance 	<ul style="list-style-type: none"> • Encourage regular rest breaks between sets. Adjust the number of repetitions to support client performance.