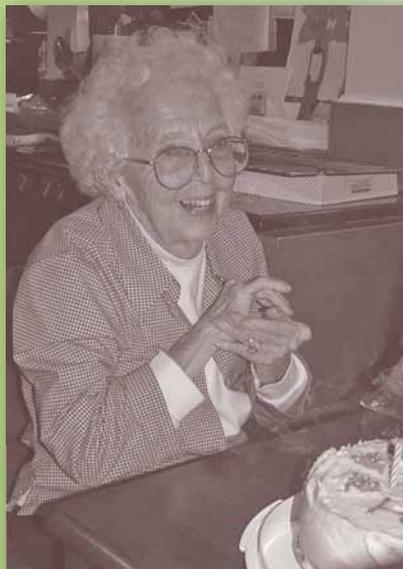
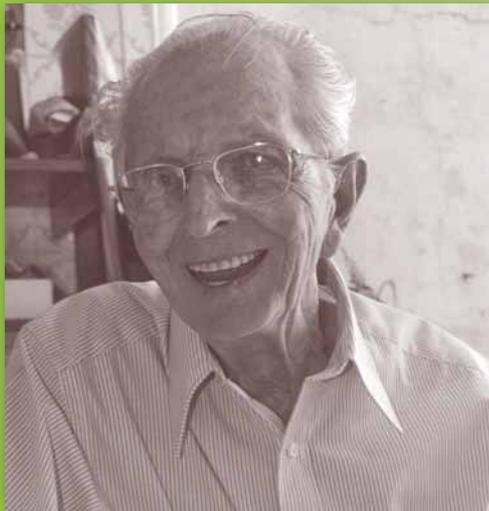
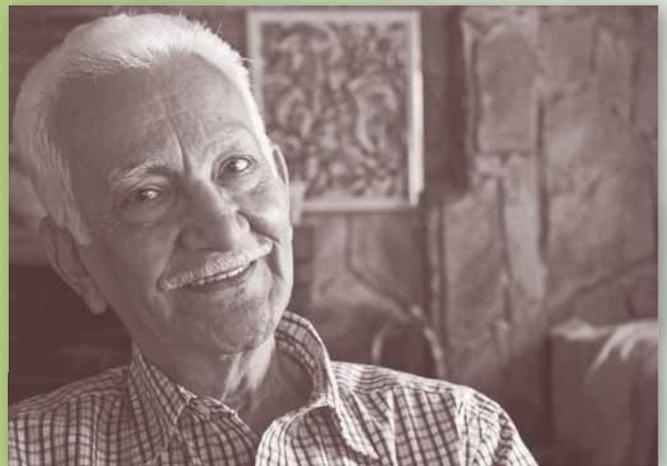


Dining

with Dementia



Latrobe University – Past Degree Project 2009

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Preface

‘Dining with Dementia’ is a user-friendly manual which is focussed on empowering carers and residents alike during mealtimes. The manual is targeted at nursing home staff and aims to provide strategies for general effective feeding and specific strategies for difficult mealtime behaviours in residents with dementia.

The manual contains generic ‘handout’ sheets which are available for copying. These provide information to help maintain and encourage an optimal mealtime.

The information within ‘Dining with Dementia’ was derived from a range of current sources including internet-based and written literature, local Alzheimer’s and Dementia associations, Speech Pathologists who work with the geriatric population, and information and knowledge gained through student clinical placements.

We trust that ‘Dining with Dementia’ proves to be a useful resource to enhance the mealtime experience for residents with dementia.

Furthermore, we believe that ‘Dining with Dementia’ will empower caregivers with the additional knowledge to further improve the quality of care given to the elderly residents in our community.



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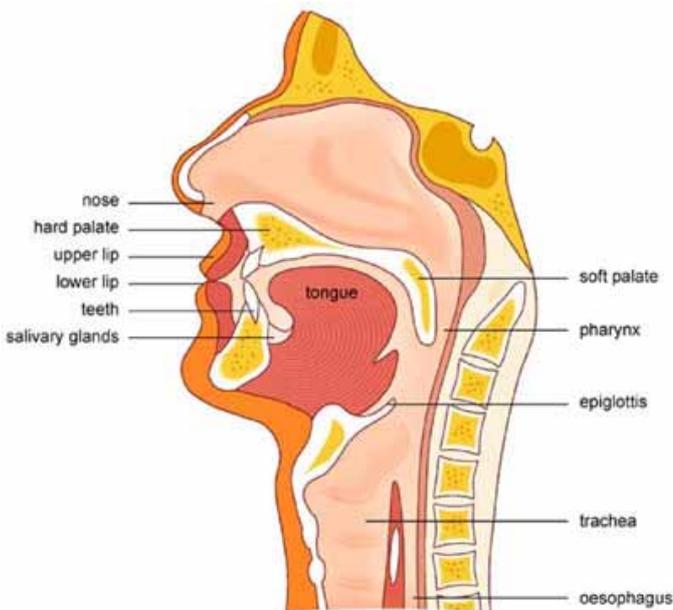


THE NORMAL ADULT SWALLOW

The swallowing process ensures that oral nutrition is able to be received adequately and safely.

Swallowing involves many nerves and muscles that are under both voluntary and involuntary control. There are many steps that must occur sequentially in order to produce a normal and safe swallow.^{1, 2}

The structures involved in the swallowing process:



Picture obtained from: http://www.nestlenutrition.co.uk/HEALTHCARE/GB/HEALTH_CONCERNS/DYSPHAGIA/Pages/dymechanismofdysphagia.aspx

The normal swallow can be broken down into four phases. These phases are:

1. Anticipatory phase
2. Oral Phase
3. Pharyngeal Phase
4. Oesophageal Phase

Anticipatory Phase:

This phase prepares the resident for the act of eating and drinking. It occurs immediately prior to consuming food/fluid and is under both voluntary and involuntary control.

Voluntary control (consciously controlled behaviour):

- The mouth and jaw are open.
- Tongue is flat on the floor of the mouth.
- Attention is focused on the act of eating and drinking.

Involuntary control (unconscious behaviours/body processes):

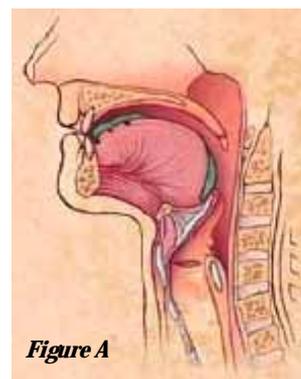
- Reactions to the sight and smell of food/fluid lead to increased saliva production.

Oral Phase:

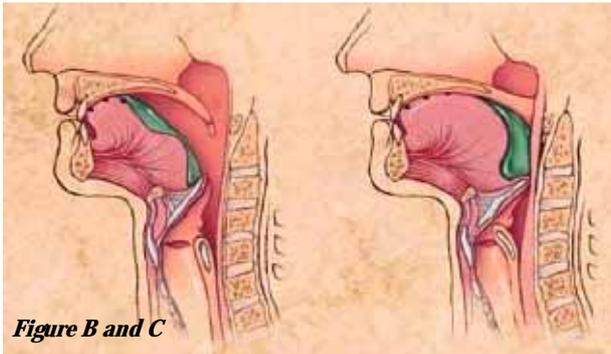
This phase involves preparing the food/fluid in the mouth and then transporting it to the back of the mouth into the throat.

During this phase:

- The lips close to form a seal.



- Food is chewed and mixed with saliva to form a cohesive ball (**bolus**). Refer to *Figure A*:
- The bolus is lifted by the front of the tongue and pushed to the back of the mouth and into the throat. Refer to *Figure B and C*:



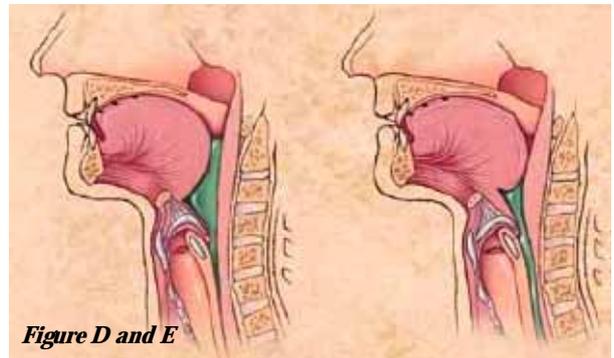
This phase requires taste, temperature, touch and sensory recognition to form an appropriate sized bolus.^{1, 2, 3}

Pharyngeal Phase:

This phase is an involuntary reflex that is triggered when the bolus passes from the back of the mouth and into the throat.

During this phase:

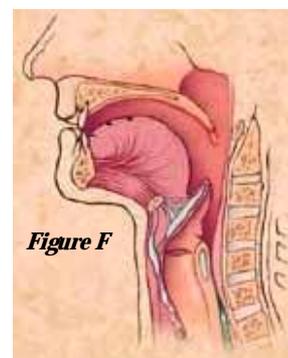
- The **soft palate** elevates to form a barrier between the mouth and nasal cavity. This prevents food/fluid from entering the nasal cavity.
- The voice box (**larynx**) elevates towards the epiglottis to protect the airway from food/fluid entering the wind pipe (**trachea**). Refer to *Figure D and E*.



- Within the voice box, the vocal folds close to enhance airway protection.
- Muscles in the throat contract from top to bottom to push the bolus down towards the opening of the food pipe (**oesophagus**).^{1, 2, 3}

Oesophageal Phase:

This phase begins when food/fluid passes through the opening of the oesophagus. The oesophagus contracts to push the food/fluid towards the stomach.^{1, 2, 3}



Figures A, B, C, D, E and F printed from: Logemann, J. A., Stewart, C. A., Hurd, J., Aschman, D. J., Matthews, N. L. (2008). Understanding Dysphagia. Today's caregiver magazine (p. 27-29)

NORMAL AGE-RELATED CHANGES TO SWALLOWING

As normal ageing occurs, changes to the swallowing process may take place. These changes may or may not cause negative symptoms to the healthy elderly adult. If these changes cause problems to the swallowing process (**dysphagia**) and they are coupled with other medical conditions, such as dementia, there may be a major impact on a person's overall health.^{3, 4}

Typical age related changes of the swallowing process include: ^{3, 4}

The Anticipatory Phase:	<ul style="list-style-type: none">• Reduction in smell and taste of food/fluid<ul style="list-style-type: none">- Which may lead to decreased appetite
The Oral Phase:	<ul style="list-style-type: none">• Reduced ability to smell and taste foods• Reduction of saliva production• Chewing difficulties:<ul style="list-style-type: none">- Difficulty manoeuvring the tongue- Difficulty forming a cohesive bolus- Fatigue when chewing foods and forming a bolus- Dentures may increase chewing difficulty, especially if they're loose fitting• Food residue after swallowing may lead to poor oral hygiene, oral discomfort and mouth odour
The Pharyngeal Phase:	<ul style="list-style-type: none">• Delay in the involuntary reflex to initiate the pharyngeal phase• Decreased sensation in the throat may reduce the ability to sufficiently clear all food/fluid, resulting in residue/coating of food/fluid in the throat• Food/fluid residue increases the prevalence of it entering the wind pipe

DEMENTIA AND DYSPHAGIA

Dementia is a term used to describe many conditions that result in a general decline of cognitive and physical functioning.¹¹

The common symptoms resulting from dementia include:

- Decline in cognitive functioning such as memory loss, decreased awareness, orientation, concentration and initiation.
- Decline in social interaction skills.
- Abnormal emotional reactions.¹¹

Residents with dementia are likely to experience age-related changes to their swallow.

Cognitive impairment in dementia can also reduce the ability to carry out all the appropriate tasks required when eating and drinking.

Physiological changes related to dementia that may impact on feeding and swallowing include:

- Reduced tongue movement from side to side.
 - Required when chewing solid food.
- Delayed pharyngeal phase.
 - Decreased airway protection.
- Weakness of the food pipe.
 - This can impair bolus movement and airway protection.
- Reduced movement of the voice box (**larynx**).
 - This may lead to decreased airway protection.
- Decreased movement of the base of the tongue.
 - Food may fall into the throat prior to initiating the swallow reflex.
- Decreased sensation of smell, taste and touch.
 - May result in a decreased appetite.
 - Negative reaction to food/fluid textures and consistencies.^{2, 7}

As a result of dementia, there are a number of behavioural changes that may occur, which can impact on the mealtime experience.

Please refer to the troubleshooting section.



SIGNS AND SYMPTOMS OF DYSPHAGIA

Dysphagia (swallowing problems) can be caused by a neurological (brain/nerves) and/or physical (muscles/oral structures) problem.

Dysphagia is characterised by an impaired ability to move food/fluid (and saliva) from the mouth, down the throat and into the stomach.

Symptoms of dysphagia can occur within any phase of the swallow. Symptoms are varied and specific to the individual.^{1, 12, 13}

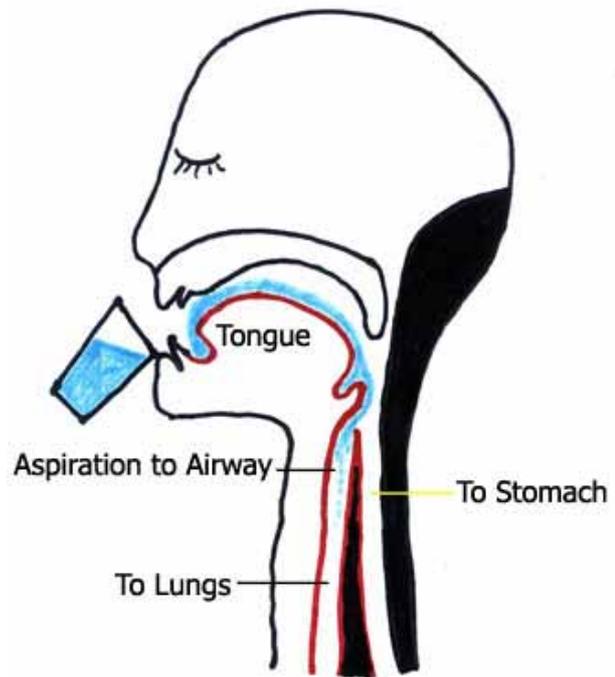
Possible symptoms may include (not limited to):

- Weakness in the lips, tongue and jaw. As a consequence there may be:
 - Excessive drooling.
 - Spillage of food/fluid out of the mouth.
 - Difficulty chewing.
 - Food residue in the mouth after the swallow (as the tongue may be unable to clear it).
- Coughing during/after meals due to decreased sensations and decreased airway protection.
- Choking and/or regurgitation of food/fluid.
- Delay in starting the swallow reflex.
 - This may lead to food/fluid entering the airway.
- Holding food in the mouth.
- Food avoidance and fear about swallowing.^{1, 12, 13}

Many of the possible symptoms mentioned above can lead to aspiration; the event where food/fluid has entered the airway.

Aspiration

Aspiration is the accidental movement of food/fluid through the air passages and into the lungs. It has many negative and serious health effects if left untreated.¹²



Signs of aspiration can include:

- Coughing during or after ingesting food/fluid.
- Throat clearing during and after meals.
- Choking.
- Gurgly, 'wet' sound in the throat while breathing or speaking after swallowing.
- Altered breathing during and after meals (rapid, gurgly or shortness of breath).¹

Possible consequences of unmanaged dysphagia include:

- Elevated temperature.
- Aspiration pneumonia/repeated chest infections.
- Unexplained weight loss.
- Malnutrition that may lead to secondary issues such as infection, impaired wound healing, immune deficiency etc.
- Dehydration.^{1, 12}

The complications that can result from aspiration pneumonia/ unmanaged dysphagia may lead to death.

ROLE OF THE SPEECH PATHOLOGIST

When a resident has been referred to a speech pathologist, their swallow will be assessed to ascertain the ability to swallow safely. The speech pathologist may also recommend a management plan and provide swallowing information.¹

The swallowing evaluation includes the assessment of:

- The safety and efficiency of all the stages of swallowing.
- Mealtime behaviours.
- The efficiency of the muscles and structures in the mouth.
- Neurological abnormalities affecting the swallowing process.

During the swallowing evaluation a range of different food and fluid consistencies may be trialled with the resident. This helps to gain further understanding of what textures and consistencies are tolerated safely.¹

Management plans may include:

- Diet modification
 - Thickening fluids and/or modifying food choices.
- Safe eating/feeding techniques.
- Meal time plans
 - Eg. Use of specific utensils, assisted feeding, pre cut-up meals etc....

- Discussion with the resident, nursing staff and family regarding findings and management plans.¹

When to refer to a Speech Pathologist

If you notice any of the following, consult your ward coordinator and discuss referral to a speech pathologist.

- Coughing during or after food/fluid.
- Throat clearing during or after food/fluid.
- Choking.
- Gurgly, 'wet' sound in the throat while breathing/speaking after swallowing.
- Multiple swallows used to clear food from mouth.
- Altered breathing during and after meals (rapid, gurgly or shortness of breath).
- Elevated body temperature.
- Chest infections/pneumonia.
- Unexplained weight loss.

Recognising the signs of aspiration is the first step to preventing complications that may occur.^{1, 12, 13}

How to refer to a Speech Pathologist

- Check to see if your facility already has an association with a Speech Pathologist and the procedure for referring to them
- If no procedure exists, you can find a local specialist Speech Pathologist in your area using the Speech Pathology Australia website:

<http://www.speechpathologyaustralia.org.au>

- You can also call Speech Pathology Australia on: 9642 4899

FLUID AND DIET MODIFICATION

Following a swallowing assessment, food/fluid modifications may be recommended by a speech pathologist to reduce the impact of dysphagia and achieve a safe and efficient swallow.

The flow rate of fluid determines how efficiently it can be controlled within the mouth and throat. Thickened fluids (with a slower flow rate) are able to be controlled more easily within the mouth and throat than thin fluids. Thickened fluids allow time for the resident to apply conscious and unconscious control over the swallowing process. This increases the chance of a protected airway.²¹

A modified diet, such as a puree consistency, requires less effort throughout the swallowing process when compared to a normal diet consistency. This helps to increase food intake whilst decreasing aspiration risk.

A resident's diet may need to be modified if they have difficulty with:

- Chewing
- Forming a cohesive bolus of food/fluid
- Moving the bolus toward the back of the mouth
- Swallowing foods with harder consistencies²²

MODIFIED FLUIDS

There are 3 levels of modified fluids:

- Mildly thick
- Moderately thick
- Extremely thick

Mildly thick fluids:

Mildly thick fluids have a fast flow rate.

Mildly thick fluids are slightly thicker than regular fluids. These fluids should be easy to drink from the cup, but are slightly harder to drink via a straw.



Figure G

Moderately thick fluids:

Moderately thick fluids have a slow flow rate.

Moderately thick fluids are cohesive and pour very slowly. These fluids are consistent with the thickness of honey. While it is possible to drink these fluids from a cup, spooning the fluid into the mouth may be easiest.¹⁸



Figure H

Extremely thick fluids:

Extremely thick fluids are described as having “no flow”. These fluids have a similar thickness to pudding.

Extremely thick fluids hold their shape on a spoon. A spoon is needed to place extremely thick fluid into the mouth.



Figure I

Drinks of varying consistencies can be ordered pre-made in a select range of flavours. However, any drink can be thickened to the required texture using thickening agents.¹⁸

MODIFIED DIET

There are 3 levels of modified diets:

- Soft diet
- Minced and moist diet
- Smooth, pureed diet

Soft Diet:

A soft diet consists of naturally soft food or those foods that have an altered ‘softer’ texture from cooking.

Food in a soft diet can be chewed however, it should not require cutting. Food should also not be served with sauces that increase its moistness.¹⁸



Figure J

Minced and moist diet:

A minced and moist diet consists of food that is soft and moist and able to be easily formed into a ball.

Food in a minced and moist diet can be easily broken up in the mouth. It may present with soft, rounded lumps.



Figure K

Smooth pureed diet:

A smooth pureed diet consists of smooth, lump free foods that have a pudding consistency.

Food in a smooth pureed diet should be moist and cohesive. Foods in this category do not need to be further broken up in the mouth. ¹⁸



Figure L

Figures G, H, I, J, K L from The Australian Standardised Terminology and Definitions for Texture Modified Foods and Fluids, Nutrition & Dietetics, 2007; 64 (Suppl. 2): S53-S-76.

SOFT DIET

The following are types of food that may be suitable and those that should be avoided by someone on a soft diet. These foods are a general guide and should be carefully considered for each individual; especially those also on modified (thickened) liquids.

SUITABLE	AVOID
<p>Breakfast</p> <ul style="list-style-type: none"> • Breakfast cereal with small moist lumps, e.g. porridge or milk soaked Weetbix • Smooth yoghurt 	<p>Breakfast</p> <ul style="list-style-type: none"> • Grainy cereals • Dried fruit and nuts
<p>Fruit</p> <ul style="list-style-type: none"> • Mashed soft fresh fruits • Finely diced soft pieces of canned or stewed fruit 	<p>Fruit</p> <ul style="list-style-type: none"> • Fruit pieces larger than 0.5 cm • Fruit that is too hard to be mashed with a fork dried/hard fruit or with pips, stones and skin
<p>Vegetables</p> <ul style="list-style-type: none"> • Mashed well cooked vegetables 	<p>Vegetables</p> <ul style="list-style-type: none"> • Vegetable pieces larger than 0.5 cm or too hard to be mashed with a fork
<p>Meat, Fish and Poultry</p> <ul style="list-style-type: none"> • Coarsely minced, tender, meats with a sauce. • Coarsely blended or mashed fish with a sauce • Soft tofu • Tinned tuna and salmon 	<p>Meat, Fish and Poultry</p> <ul style="list-style-type: none"> • Casserole or mince dishes with hard or fibrous particles, e.g. peas and onion • Grilled meat • Battered, crumbed or fried fish • Dry, stringy, gristly and chunky meat
<p>Pasta and Rice</p> <ul style="list-style-type: none"> • Small, moist pieces of soft pasta, cut up or finely mashed 	<p>Pasta and Rice</p> <ul style="list-style-type: none"> • Rice that does not hold together • Crispy or dry pasta
<p>Eggs</p> <ul style="list-style-type: none"> • Soft and moist egg dishes, e.g. scrambled eggs, soft quiches 	<p>Eggs</p> <ul style="list-style-type: none"> • Dry, tough, chewy, or crispy egg dishes or those that cannot be easily mashed
<p>Bread</p> <ul style="list-style-type: none"> • Soft breads without crust, e.g. the inside of a roll 	<p>Bread</p> <ul style="list-style-type: none"> • Avoid
<p>Soup</p> <ul style="list-style-type: none"> • All vitamised soup 	<p>Soup</p> <ul style="list-style-type: none"> • Soups with large pieces of meats or vegetables
<p>Sweets/Desserts</p> <ul style="list-style-type: none"> • Smooth puddings, dairy desserts, custards, yogurt and ice-cream • Soft moist sponge cake desserts with lots of custard, cream or ice-cream • Soft fruit-based desserts without hard bases, crumbly or flaky pastry or coconut 	<p>Sweets/Desserts</p> <ul style="list-style-type: none"> • Desserts with large, hard or fibrous fruit particles (e.g. sultanas), seeds or coconut • Pastry and hard crumble • Bread-based puddings
<p>Snack Food</p> <ul style="list-style-type: none"> • Plain biscuits completely dunked in hot tea or coffee • Salsa's, sauces and dips with small soft lumps • Very soft, smooth, chocolate 	<p>Snack Food</p> <ul style="list-style-type: none"> • Lollies including fruit jellies and marshmallow • Scones and biscuits • Nuts and chips

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MOIST AND MINCED DIET

The following are types of food that may be suitable and those that should be avoided by someone on a moist and minced diet. These foods are a general guide and should be carefully considered for each individual; especially those also on modified.

SUITABLE	AVOID
<p>Breakfast</p> <ul style="list-style-type: none"> • Instant porridge • Weetbix soaked in milk • Smooth yoghurt 	<p>Breakfast</p> <ul style="list-style-type: none"> • Coarse or hard breakfast cereals that do not moisten easily, for example toasted muesli • Cereals with nuts, seeds and dried fruit
<p>Fruit</p> <ul style="list-style-type: none"> • Fresh fruit pieces that are naturally soft, e.g. mashed banana • Stewed and canned fruits in small pieces 	<p>Fruit</p> <ul style="list-style-type: none"> • Fruit with pips/stone/skin e.g. grapes or cherries • Dried fruit, seeds and fruit peel • Fibrous fruits, for example pineapple
<p>Vegetables</p> <ul style="list-style-type: none"> • Well cooked vegetables soft enough to be mashed or broken up with a fork • Soft canned vegetables 	<p>Vegetables</p> <ul style="list-style-type: none"> • All raw vegetables and salad (including chopped and shredded) • Corn kernels, peas and green beans
<p>Meat, Fish and Poultry</p> <ul style="list-style-type: none"> • Soft moist meat and fish • Casseroles with small pieces of tender meat • Moist fish • Tinned tuna and salmon 	<p>Meat, Fish and Poultry</p> <ul style="list-style-type: none"> • Grilled meat • Dry, stringy, gristly and chunky meat • Chicken skin or bones
<p>Pasta and Rice</p> <ul style="list-style-type: none"> • Soft, well cooked pasta 	<p>Pasta and Rice</p> <ul style="list-style-type: none"> • Uncooked/dry pasta • All other rice dishes
<p>Eggs</p> <ul style="list-style-type: none"> • Moist egg dishes 	<p>Eggs</p> <ul style="list-style-type: none"> • Fried egg • Omelettes containing hard pieces
<p>Bread</p> <ul style="list-style-type: none"> • Soft sandwiches with very moist fillings 	<p>Bread</p> <ul style="list-style-type: none"> • Dry or crusty breads, breads with hard seeds or grains, hard pasty, pizza
<p>Soup</p> <ul style="list-style-type: none"> • All vitamised soup 	<p>Soup</p> <ul style="list-style-type: none"> • Soups that are not fully vitamised, or of mixed consistency, e.g. minestrone
<p>Sweets/Desserts</p> <ul style="list-style-type: none"> • Puddings, custards, yoghurt and ice-cream • Moist cakes • Soft fruit-based desserts without hard bases, crumbly or flaky pastry or coconut • Creamed rice, moist bread and butter pudding 	<p>Sweets/Desserts</p> <ul style="list-style-type: none"> • Dry cakes • Pastry • Crumble • Nuts, seeds, coconut, dried fruit
<p>Snack Food</p> <ul style="list-style-type: none"> • Soft, smooth, chocolate 	<p>Snack Food</p> <ul style="list-style-type: none"> • Popcorn, chips, biscuits, crackers, nuts, edible seeds

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SMOOTH PUREED DIET

The following are types of food that may be suitable and those that should be avoided by someone on a moist and minced diet. These foods are a general guide and should be carefully considered for each individual; especially those also on modified.

SUITABLE	AVOID
<p>Breakfast</p> <ul style="list-style-type: none"> • Pureed porridge • Weetbix fully soaked in milk • Smooth yoghurt 	<p>Breakfast</p> <ul style="list-style-type: none"> • Cereals with coarse lumps or fibrous particles • Dried fruits and nuts
<p>Fruit</p> <ul style="list-style-type: none"> • Pureed fruits • Stewed, vitamised compote 	<p>Fruit</p> <ul style="list-style-type: none"> • Pureed fruit with visible lumps • Pineapple • Dried fruit
<p>Vegetables</p> <ul style="list-style-type: none"> • Pureed vegetables • Well mashed potato 	<p>Vegetables</p> <ul style="list-style-type: none"> • Coarsely mashed vegetables • All uncooked/raw vegetables • Salads • Corn kernels, peas and beans
<p>Meat, Fish and Poultry</p> <ul style="list-style-type: none"> • Pureed meat/fish (pureed with sauce/gravy to achieve a thick moist, lump-free texture) • Vitamised well cooked stews and casseroles 	<p>Meat, Fish and Poultry</p> <ul style="list-style-type: none"> • Minced or partially pureed meats • Grilled meat • Chicken skin • Bones • Battered, crumbed or fried fish
<p>Pasta and Rice</p> <ul style="list-style-type: none"> • Avoid 	<p>Pasta and Rice</p> <ul style="list-style-type: none"> • Avoid
<p>Eggs</p> <ul style="list-style-type: none"> • Vitamised scrambled eggs • Vitamised omelette 	<p>Eggs</p> <ul style="list-style-type: none"> • Fried or boiled eggs • Omelette with hard pieces
<p>Bread</p> <ul style="list-style-type: none"> • Avoid 	<p>Bread</p> <ul style="list-style-type: none"> • Avoid
<p>Soup</p> <ul style="list-style-type: none"> • All soups that are vitamised to remove lumps 	<p>Soup</p> <ul style="list-style-type: none"> • Soup that is not fully pureed
<p>Sweets/Desserts</p> <ul style="list-style-type: none"> • Smooth puddings, custards, yogurt and ice-cream • Soft meringue 	<p>Sweets/Desserts</p> <ul style="list-style-type: none"> • Desserts with fruit pieces, seeds, nuts, crumble, pastry or non-pureed garnishes
<p>Snack Food</p> <ul style="list-style-type: none"> • Yoghurt • Smooth dips • Ricotta or cream cheese 	<p>Snack Food</p> <ul style="list-style-type: none"> • Nuts and chips • Hard lollies and chocolate • Scones and biscuits

Tables adapted to comply with The Australian Standardised Terminology and Definitions for Texture Modified Foods and Fluids, Nutrition & Dietetics, 2007; 64 (Suppl. 2): S53-S-76.

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SAFE SWALLOWING GUIDELINES

- **Reduce/eliminate distractions in the mealtime environment.**

This may lead to an overwhelming sense of confusion and distraction from the meal. For example, turn off the television and radio. ^{7, 11}



- **Check the resident is wearing necessary hearing, visual and dental aids.**

Many residents with dementia may also have hearing, visual deficits or reduced dentition, and require the use of aids (e.g. glasses, hearing aids, dentures). ⁹

- **Ensure that the resident is alert and awake prior to the meal.**

Decreased alertness and fatigue will increase the risk of aspiration.⁹ The resident's ability to enjoy the meal is also considerably diminished.

- **Position the resident fully upright in their chair at a 90° angle to the table. Avoid feeding in bed if possible.**

Appropriate posture will reduce the risk of aspiration and decrease effort and fatigue during mealtime. ^{2, 11}

- **Allow time for the resident to swallow each mouthful.**

Rushing the resident will decrease the safety and pleasure of their mealtime experience and increase the risk of aspiration. ²

- **Check if the resident has any diet modifications.**

This is to ensure that food/fluid intake is enjoyable and safe. Meals must be consistent with speech pathology, dietetic and medical recommendations.

- **Check for any food left in the mouth after swallowing. If so, verbally prompt the resident to clear it with their finger or tongue.**

Food residue can increase the risk of aspiration as it can be inhaled. It can also compromise the resident's oral hygiene.

- **Stop feeding if the resident is frequently coughing, choking, has shortness of breath, watery eyes or a wet/'gurgly' voice.**

These are signs that the resident may be aspirating. These signs must be reported.

- **Be sure that the resident remains sitting upright (90°) for at least 30 minutes after eating/drinking.**

This will reduce the risk of aspiration. This posture will also prevent food/fluid re-entering the throat and mouth. Reflux is acidic to the mouth and throat and can compromise oral and vocal hygiene.

- **Don't feed the resident food and fluid in the same mouthful.**

This can increase the risk the aspiration because the dual consistencies are harder control within the mouth.

- **Be sure the resident avoids talking with food and fluid in their mouth.**

Airway protection is compromised because the airway may be open during speech when a swallow takes place.

- **Ensure the resident takes small mouthfuls.**

Smaller sized mouthfuls allow residents to have greater oral control of their food. ⁸



GOOD FEEDING GUIDELINES

The following ideas are aimed to ensure that carers optimise their skills to create a positive mealtime experience within the nursing home.

- Always use the residents' name to get their attention.⁵
- Make eye contact when communicating with the resident.
- Use a gentle tone of voice.
- Tell the resident who you are and what you are going to help them with.
- Make allowances for hearing and visual deficits (speak to their 'good' ear, sit where they can see you, with light on your face).⁵
- Ensure that the resident's dentures are in place before the meal.
- Sit facing the resident when feeding them.¹¹
- Some residents may benefit from sitting near others in order to model appropriate feeding behaviours.
- Ensure sensory aids are accessible, in situ, and turned on.
- Serve one course at a time.
- Pay attention to facial expressions and gestures.⁵
- Avoid rushing the resident to eat. Use a calm approach.
- Residents may need prompts to:
 - Start, continue and finish off their meal
 - Chew their food
 - Take another mouthful
 - Swallow
- Encourage the resident to use any remaining physical skills.
- During assisted feeding, bring the spoon up where the resident can see it.
- Tell the resident what is on each spoonful.
- Don't do anything to a resident's plate without asking them first.
- Do not mix foods together.
- Never scrape the food off teeth or gums.
- Offer drinks regularly to moisten the mouth and provide hydration.

- During mealtimes, avoid conversations among staff that do not include the residents.
- Be aware of food temperatures. Due to decreased tactile sensations, residents may not be able to judge when food is too hot or cold.
- Keep in mind the resident's past diet history. Their feeding and eating behaviours may be normal for them (e.g. they may have always had a small appetite prior to the onset of dementia).
- Record strategies and ideas for other carers that help a resident to eat and drink their meals.¹¹

TROUBLESHOOTING ISSUES DURING MEALTIMES

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The following suggested strategies and ideas which may alleviate issues faced during mealtimes. 'Dining with Dementia' recognises that these strategies and ideas may not be appropriate and applicable for all residents.

Please photocopy pages relevant to the resident and stick in a prominent position (e.g. above bed) so other carers and family members can benefit from using the strategies.

1. The resident has reduced alertness (drowsiness):

- Allow time for the resident to become alert and awake
- Check if the residents' medications cause increased drowsiness¹⁶
- Turn on lights and move the resident to the dining area if possible⁹
- Gently pat the resident's face with a cool damp cloth to increase their alertness
- Avoid feeding the resident when they are drowsy

2. The resident has difficulty remaining seated for their meal:

- Allow the resident to walk around until their meal arrives ⁹
- To increase the residents' orientation to the mealtime, verbally direct their attention towards their meal¹⁶
- Use physical prompts to reorientate attention back to the meal such as gently guiding them back to table or placing utensils back in their hands ⁶
- Give extra servings when the resident is more settled ⁹
- Use finger foods as these can be eaten by the resident while they move around ⁹

Refer to poster section for ideas

3. The resident is easily distracted during meal times:

- Reduce distractions (TV, radio, nearby objects, other loud residents) ⁷
- Create a calming environment ⁸. Provide plain crockery that is a different colour to the table/table cloth ⁸
- Take the resident to the toilet prior to mealtime ⁹
- Give constant verbal and visual prompts to keep the resident's attention on the mealtime ^{8, 9}
- Give gentle physical prompts to assist the resident eating (e.g. Place utensils back in their hands, guide them back to the table) ^{7, 9, 16}
- Do not serve dessert until the end of the meal
- After use, remove condiments from the dining table ⁵

4. The resident is distracted by multiple food items on their plate:

- Verbally and visually introduce the meal (show and tell what is on their plate) ¹⁶
- Have clear space between different foods on a plate ¹⁶
- Serve food items separately
- Do not serve dessert until the end of the meal.
Serve one course at a time
- After use, remove condiments from the dining table ⁵

5. The resident is slow to begin their meal:

- Visually and verbally draw the residents' attention to their meal and explain what is on the plate (show and tell) ¹⁶
- Provide continual verbal & physical prompts throughout meal to continue to eat ⁹
- If possible, initially, only feed the first mouthful then encourage self-feeding ²
- Prompt the first mouthful with a positive verbal cue (e.g. "This smells good!") and physical cues (e.g. Put utensils in their hand) ^{5, 16}
- Seat the resident with other 'self-feeding residents' so their feeding behaviour can be copied ⁹
- Eat with the resident so they are can copy you ⁵
- Ensure that dentures, hearing aids and glasses are well fitted



6. The resident has difficulty self-feeding:

- Move the resident closer to the table
- Ensure the resident is sitting in a supported position ⁵
- Direct the resident toward the meal and cutlery ^{5, 9}
- Cut up the meal before serving it to the resident
- Simplify feeding by providing the resident with minimal utensils ¹⁶
- Simplify table and eating environment (removing unnecessary condiments, use plain table cloths and reduce distractions such as TV) ^{5, 9}
- Place utensils in the residents' hands
- Serve one course at a time
- Use a non-slip mat under the meal, large utensils, sipper cups and/or plate guards (refer to occupational therapist for more information)
- Provide finger foods if utensil use is too difficult ⁹
Please refer to poster section for ideas
- Provide verbal and physical prompts to encourage eating to continue
- Take over feeding only if difficulties are severe

7. The resident refuses foods and/or drinks:

- Be aware of the residents' food/fluid preferences ¹¹
- Encourage the resident to take the first mouthful to get a taste of the meal
- Allow some time before re-offering the meal
- Verbally discuss the food using positive descriptors ¹⁶
- Ensure the food being offered is familiar to the resident and is something they enjoy eating
- Ask what the resident would like to eat at the time, and see if it can be offered
- Offer finger foods as an alternative ¹¹
- Offer nutrition in fluid form (e.g. Soups, broth, liquid supplements)
- Offer snacks or grazing meals throughout the day instead of 3 large meals ¹⁶
- Offer a variety of options (with different tastes and textures) to stimulate appetite ⁹
- Offer drinks before mealtime to stimulate appetite
- Encourage physical activity throughout the day to stimulate hunger
- Reduce environmental distractions
- Check the food provided is consistent with dietary requirements and prescribed modifications
- Ensure that dentures are well-fitted ¹⁶
- Ensure the resident is monitored for signs of weight loss.
- To evaluate possible solutions, record specific behaviours such as moods, foods accepted and refused, successful strategies and times of day the food is presented ⁹



8. The resident eats/drinks too quickly:

- Prepare meals that are cut into smaller pieces ^{8, 9}
- Provide verbal cues to the resident to slow down
- Encourage the resident to put utensils down after each mouthful ⁹
- Encourage the resident to completely finish each mouthful before preparing the next mouthful ¹⁶
- Serve different courses separately
- Provide smaller utensils
- Avoid rushing the resident ¹⁶
- To avoid choking, alter meals to contain softer & moister foods (if no prescribed diet is already in place)
- The resident may have to be restrained in order to eat more slowly, e.g. by gently placing your hand on theirs

9. The resident eats/drinks too slowly:

- Serve courses separately to try to retain heat and increase consumption ⁹
- Use heat-retaining bowls/plates ⁹
- Serve small meals more frequently
- Serve foods high in calories and nutrients (check with the dietitian) ⁹
- Provide snacks between meals ¹⁶
Please refer to poster section for ideas
- Record daily intakes and closely monitor weight ⁹
- Refer to dietitian if concerned with nutrition status



10 The resident eats non-food items:

- Ensure all staff and volunteers are aware of this issue and supervision of the resident is increased ⁹
- Lock away all harmful substances ⁹

11. The resident eats/drinks from other residents' plates/cups:

- Increase space between residents during mealtimes ⁹
- Use verbal prompts during mealtime to help the resident identify their own food and boundaries ^{9, 17}
- Provide supervision ⁹



12. The resident has excessive drooling of saliva or food:

- Improve posture ⁵
- Check side effects of medication
 - Some medications can cause increased saliva production, decreased oral sensation or reduced oro-motor control
- Prompt the resident to wipe their saliva and offer assistance when needed
- Consider whether modifications to food/fluid would reduce drooling
- Refer to medical team

13. The resident does not eat a large portion of their meal regularly:

- Give smaller and more regular meals throughout the day ¹⁶
- Increase the calorie values of meals
- Prompt the resident to continue the meal
- Consider why this may be happening, such as the time of day, emotions, food dislikes
- Ensure that dentures are worn during mealtimes and are well fitted
- Provide snacks between meals ¹⁶
Please refer to poster section for ideas
- Keep a record of dietary intake and weight
- Refer to dietician for advice

14. The resident has an insatiable hunger:

- Provide smaller meals more frequently throughout the day
- Have snacks available
- If necessary, lock some foods away ¹⁹

15. The resident has excessive sweet cravings:

- Check the residents' medications for any side effects which cause a craving for sweets
- Try milk shakes or low calorie ice cream ¹⁹

16. The resident may forget to drink or not recognise the “thirst sensation”:

- Ensure the resident is offered regular sips of fluids between meals to avoid dehydration
- Encourage the resident to drink throughout mealtime

17. The resident has difficulty chewing their food:

- Apply light pressure on the lips or under the chin when the resident has the food in their mouth to prompt chewing and swallowing
- Present an empty spoon to the residents mouth to prompt chewing
- Verbally prompt the resident to chew
- Demonstrate chewing for the resident so they can copy you
- Ensure that dentures are worn and are well fitted
- If problems are secondary to fatigue, offer smaller, more frequent meals throughout the day ¹⁶
- Moisten food or offer smaller bites, one at a time
- Ensure the resident is provided with a dental check up of gums, teeth and dentures
- Refer to speech pathologist if problems are more severe ¹⁷

18. The resident has difficulty swallowing:

- Verbally prompt the resident to swallow ^{9, 16}
- Physically prompt the resident to swallow by gently stroking their throat
- Present an empty spoon to the residents mouth to prompt swallowing
- Check the residents' mouth to ensure that food has been swallowed
- Avoid foods that are generally hard to swallow.
For example, hard, dry or crumbly foods
- Ensure the resident is provided with a dental check up of gums, teeth and dentures
- Moisten food (whilst adhering to any dietary modifications) and offer smaller mouthfuls ¹⁷

19. The resident is unable to clear food from the mouth after they swallow:

- Ensure the resident does not lie down within 30 minutes of their meal
- Prompt the resident to clear the remaining food with their tongue ¹¹
- Massage the residents' cheeks ¹¹
- Wash dentures at the end of the meal ¹¹
- Implement a mouth care plan
- Check the mouth after the meal ¹⁷

20. The resident eats in bed: ¹¹

- Sit the resident 90° upright
- Ensure that the residents' back, neck and head are well supported in the upright position ⁵
- If possible, bend the residents' knees and support with a pillow
- Check and maintain this posture during the meal

MORE INFORMATION

Further information can be found at through the following avenues

Speech Pathology Australia

www.speechpathologyaustralia.org.au

National Dementia Helpline

1800 500 100

Alzheimer's Australia

www.alzhiemers.org.au

**Australian Government Department of Health
and Ageing: Dementia**

www.health.gov.au/dementia

Victorian and Tasmanian Dementia website

www.timefordementia.org

**The National Dementia Behaviour Advisory
Service (NDBAS)**

1300 366 448

Dietitians Association of Australia

www.daa.asn.au

GLOSSARY

Aspiration: The accidental movement of food/fluids through the air passages and into the lungs.

Bolus: Food/fluid that has been masticated and formed into a cohesive ball.

Larynx: The “voice box” located in the neck. The vocal folds are located within the larynx.

Epiglottis: a flap of elastic cartilage attached to the bottom of the tongue. It flips down and covers the entrance to the larynx during a normal swallow.

Oesophagus: Muscular tube through which food passes from the pharynx and into the stomach.

Soft Palate: Soft part at the back of the roof of mouth. It assists the swallow by elevating and forming a barrier between the nasal cavity and the pharynx; preventing nasal regurgitation.

Trachea: The “wind pipe” where oxygen passes from the oral cavity and into the bronchiole tubes and lungs.



SAFE SWALLOWING CHECKLIST

Follow all diet (food/drink) modifications

Ensure that hearing, visual aids and dentures are in use

Residents' must be alert and awake before, during and after their meal

**Position residents' at 90° angle during and after their meal.
After the meal for at least 30 minutes**

Reduce distractions in the residents' environment



Ensure the resident takes only small mouthfuls of food/drink

Don't feed the resident food and drink at the same time

Discourage talking whilst the resident has food/drink in their mouth

Check for any food left in the mouth after each swallow

**Stop feeding if you observe coughing, choking,
shortness of breath or a wet/'gurgly' voice**

EFFECTIVE FEEDING SUPPORT

Communication:

- Always use the residents' name and a gentle tone of voice
- Make eye contact when communicating with a resident and tell them what you are there to help with ⁶



Before the meal:

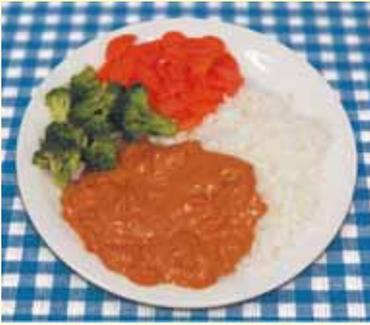
- Ensure that the residents' dentures are in place before the meal
- Ensure sensory aids (hearing/visual) are in situ, and turned on
- Sit facing the resident when feeding them ¹¹

During the meal:

- Serve one course at a time
- Pay attention to facial expressions and gestures ⁵
- Avoid rushing the resident to eat. Use a calm approach
- Prompt to:
 - Start, continue and finish each meal
 - Chew and swallow
 - Take another mouthful
- Tell the resident what is on each spoonful
- Never scrape food off teeth or gums
- Always ask before doing anything to a residents' plate
- Offer drinks regularly to moisten the mouth and provide hydration
- Avoid conversations among staff that do not include the residents
- Be aware of food temperatures. Avoid food that is too hot or cold!

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MODIFIED FOOD AND FLUIDS

Fluids	Food
<p>Mildly thick Fluid runs freely off the spoon but leaves a mild coating on the spoon</p>	<p>Soft Food may be naturally soft or may be cooked or cut to alter its texture</p>
	
<p>Moderately thick Fluid slowly drips on dollops off the end of the spoon</p>	<p>Minced and Moist Food is soft, moist and easily mashed with a fork; lumps are smooth and rounded</p>
	
<p>Extremely thick Fluid sits on the spoon and does not flow off it</p>	<p>Smooth Pureed Food is smooth, moist and lump free; may have a grainy quality</p>
	

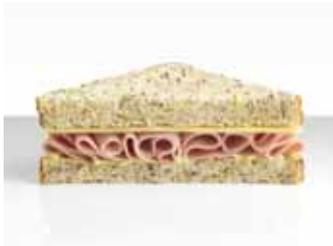
The Australian Standardized Terminology and Definitions for Texture Modified Foods and Fluids. *Nutrition & Dietetics* 2007; 64 (Suppl. 2): S53–S76

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FINGER FOODS

**Many residents may benefit from being offered finger foods to eat.
Some ideas for finger foods include:**

Normal Diet



- Fruits (peeled &/ cut up)
- Cut up sandwiches
- Biscuits and Crisps
- Popcorn and pretzels
- Muesli bars, fruit bars and cereal bars
- Crackers with cheese or spreads
- Sausage in bread or mini hamburger
- Slices of cooked meats
- Mini pastry's (quiche, pie, sausage rolls)
- Sticks of carrots, celery, capsicum etc.
- Pizza slices
- Muffins (savoury and sweet)
- Crumpets and toast
- Pieces of cheese
- Fish Fingers and chicken nuggets
- Dried Fruit and nuts

Soft Diet



- Hot chips dunked into gravy
- Small steamed dim-sims
- Fish fingers
- Skinless cocktail franks with tomato sauce
- Banana
- Fruit pieces/wedges: Watermelon, pineapple, soft pear, mango, kiwi, peach slices, most canned fruits etc
- Cheese sticks (soft cheese)
- *can be dipped in smooth dips*
- Crumpets with smooth toppings
- Soft bread without crusts (inside of rolls) - *add smooth spreads (curried egg, tuna/mayo, smooth pate, smooth cheese, philly cheese and smoked salmon etc)*
- Jacket potatoes with sour cream and avocado dip
- Jelly and Jelly fruit cups (if can handle mixed consistencies)
- Soft Fruit bars
- Boiled egg cut in halves/quarters
- Soft cakes/muffins
- Marshmallows

Minced & Moist Diet



- Soft bread without crusts (inside of rolls)
- *add butter, jams, spreads, dip etc.*
- Moist cake
- Soft hot chips (not crispy)
- Smooth soups (pumpkin, potato & leek)
- Ardmona fruit purees
- Mashed banana
- Cooked & skinned sausages

Puree Diet



- Ardmona fruit purees
- Smooth yoghurt
- Fruche
- Chocolate mousse (Yogo's)
- Crème caramel

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GOING FOR A WALK?



TAKE A SNACK

- Fresh fruit
- Cut up vegies
- Marshmallows

Some people with dementia experience increased physical activity through pacing and wandering. This means they will need to consume larger amounts of food to prevent them from losing weight. Encourage those who pace or wander to take a snack.



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WHICH ONE WOULD YOU RATHER EAT?



DON'T BE A STIRRER!

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TIME SPENT EATING IS TIME WELL SPENT



TAKE YOUR TIME EATING AND FEEDING



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MEAL MANAGEMENT CHECKLIST

Don't let warning signs go unchecked

The following questions may be an indication that the person in your care may have swallowing problems that put their health at risk and undermine their quality of life.

Do you have people in your care who:

YES	NO	
		Have an obvious facial/oral musculature paralysis or weakness?
		Have a constantly open mouth?
		Drool?
		Are messy eaters? e.g. food or drink falls out of mouth, food residue is left in the mouth between swallows and after eating is completed.
		Excessively chew their food or drink?
		Take longer than anyone else to eat?
		Frequently cough and/or splutter during or between meals?
		Seem to have trouble drinking?
		Have had or currently have episodes of choking or near choking?
		Have a gurgly or hoarse voice?
		Have recurring chest infections?
		Are loosing weight?
		Have a diminished cough reflex [i.e. cough sounds weak or person can't seem to cough]
		Have fluctuating levels of awareness/attention during mealtimes?
		Have slurred speech?

If you answered 'yes' to any of the above, a referral to a speech pathologist is strongly advised.

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Disclaimer: The information contained in this manual is designed to provide information and ideas for mealtimes when feeding residents with dementia in nursing homes. The authors of the manual accept that not all ideas will be applicable to every resident.

At the time of publication, information is thought to be up-to-date and accurate however, the authors and LaTrobe University does not guarantee this and accepts no responsibility for any loss, damage or negative consequence that may result from using the information supplied within this manual.

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