Eating and drinking are highly pleasurable experiences for most people, and serve as a form of social interaction for most individuals. However, in the later stages of PD many people with Parkinson’s are denied this pleasure due to difficulties with eating and swallowing. The medical term used to describe a swallowing difficulty is ‘dysphagia’ or “a swallowing disorder characterised by difficulty in oral preparation for the swallow or in moving material from the mouth to the stomach”. Dysphagia can negatively impact these social opportunities and joys associated with mealtimes.

Although dysphagia may occur in the early stages of Parkinson’s disease, it mainly occurs in the later stages of the condition. This fact sheet explains the changes that occur in the swallowing process in ageing and Parkinson’s disease, and looks at the role of the Speech-Language therapist in the assessment and management of swallowing difficulties.

Swallowing changes in Parkinson’s disease
As you age it is normal for swallowing difficulties to occur with many elderly people experiencing decreased saliva production and lessening of the ability to taste food. Weakened muscles of the lip, tongue and jaw, along with dental changes may prevent the person from chewing food properly. People with Parkinson’s are particularly prone to swallowing difficulties. As many as 40% of those with dysphagia will experience silent aspiration. Silent aspiration occurs when food/drink enters the airway without eliciting a reflexive cough.

Characteristic motor symptoms of Parkinson’s disease may also be evident in the jaw, tongue and throat muscles. The person may have difficulties in attaining a tight lip seal, leading to drooling of saliva, food or drink during mealtimes. Moving the food from the front to the back of the mouth may also be difficult due to impaired co-ordination, making mealtimes longer. Swallowing may be slow to initiate, allowing food to enter the throat before the airway is protected.

Complications of dysphagia
In Parkinson’s, dysphagia is one of the leading causes of pneumonia (chest infection) due to food or drink entering the airway. Inadequate food and drink intake can lead to malnutrition or dehydration if not attended to.

Signs of a swallowing difficulty
If you have Parkinson’s disease, you may experience some of the following during mealtimes:
- Swallow hesitation or inability to initiate swallowing
- Food sticking in the throat
- Swallowed food backs up into nose
- Choking
- Frequent need for repetitive swallowing to clear food
- Frequent throat clearing
- Hoarse voice or recurrent sore throat
- Coughing during or after swallowing
- Necessity to “wash down” solid foods with sips of water
- Regurgitation of food.
Some other signs of swallowing difficulties that you or a caregiver may notice include:

- Unexplained weight loss
- Recurrent episodes of pneumonia
- Dehydration
- Refusal to eat / loss of appetite
- Taking a long time to finish a meal
- Coughing, weak cough, choking during meals
- “Gurgly” voice after eating
- Difficulty chewing
- Drooling of saliva
- Food left in mouth after meals.

If you experience any of the above symptoms, you should seek a referral to a Speech-Language therapist. It is important to remember that identification of dysphagia can be difficult if the individual does not have a cough. It is thus very important to pay very careful attention to less obvious signs of swallowing impairment.

**Role of the Speech-Language Therapist**

As well as providing advice on speech, language and voice problems, Speech-Language therapists can also assess and manage dysphagia. An assessment of swallowing ability includes taking a detailed case history of dysphagia, and an assessment of the mouth and throat structures important for swallowing. Following this, some food and drink may be given to ascertain the safest consistency for the person.

**Management of swallowing difficulties**

Main objectives of dysphagia management are to ensure:

1. **Safety** - reduce risk for choking and aspiration of food and drinks
2. **Sufficiency** - ensure adequate oral intake
3. **Satisfaction** - with route of intake and quality of recommended diet.

In order to achieve the above goals, the Speech-Language therapist will introduce manoeuvres or exercises to improve swallowing. In the later stages of Parkinson’s, rehabilitation may not be feasible. In such cases, compensatory techniques may be indicated. These may include diet or environmental modification, such as taking smaller bites or eating in a distraction-free environment. Alternative feeding methods may be necessary in some cases.

**Suggested food**

It is important that you continue eating your regular food until you are no longer able to do so safely. A regular diet with a wide range of tastes and textures is important keep all of your muscles working, and encourage proper nutrition and hydration. Only if you begin experiencing significant difficulty, you may need to adapt your diet. While each individual will have different problems and therefore different solutions, the following suggestions may help.

- Food that is soft and moist, with a good flavour and smell, tends to be easier to swallow: custards, jelly, pureed fruit, sauces, spices and herbs.
- Avoid foods which are hard, dry, crumbly or stringy.
- Avoid mixed consistencies (e.g. solid plus liquid).
Parkinson's New Zealand fact sheet

- Be careful with foods which stick to the roof of the mouth or get caught around the mouth: dry mashed potatoes, tomato with skin on, biscuits, bran flakes, hard-boiled eggs.
- Thicker fluids (e.g. nectars, milk shakes) may be easier to control and swallow than thin clear liquids, as they move more slowly.
- Keep food presentation appetising: flavour, smell and appearance of food.
- Relax and enjoy your food. It is good to have a break between mouthfuls and take sips of water during the meal. This will not only help you relax but also allow you to clear your throat and mouth. You may need to swallow twice to clear each mouthful.
- Eat smaller portions more frequently, especially if time for meals is limited.

Possible problem foods
- mixed textures, like liquid with bits in (e.g. minestrone soup or watery mince);
- flakey biscuits;
- hard toast or nuts, chocolate, grains, seeds;
- stringy, fibrous vegetables

Foods that may be easier to swallow
- milk
- mousse, custard, yoghurt, ice cream
- souffle, omelette
- casseroles
- soup
- fruit juice, pureed fruit
- pancakes (with syrup etc.)
- soft boiled rice
- well cooked vegetables
- banana.

If you are using more and more liquid meals, it is important to keep up your energy intake. Your dietician may recommend appropriate supplements and guidelines. You can make liquid foods thicker by using instant pudding, yoghurt, gelatine or instant potato powder.

Alternative means of nutrition
For some people, eating and drinking would not be enough to maintain adequate nutrition. Your physician may recommend an alternative feeding method to supplement oral intake. These may include provision of food through a nasogastric tube (NGT) or Percutaneous Endoscopic Gastrostomy (PEG).

Precautions in preventing aspiration
There are some good practices which may help to reduce the risk of aspiration:
- For those on medication for Parkinson’s, time mealtimes during the ‘on’ phase of the medication
- As far as possible maintain an upright position during mealtimes
- Do not tilt head backwards during eating/drinking as this makes it harder to swallow
- If modified food/drinks are prescribed, feed only the diet/fluid consistencies that have been recommended
- Do reinforce compensatory techniques if required
- Do supervise impulsive persons and keep distractions to minimum during mealtimes
If you are experiencing any of the swallowing difficulties described above, or are concerned about someone you are caring for, you should seek a referral to a Speech-Language Therapist. In New Zealand, self referral to a therapist is possible via your primary care physician or the local district health board. Researchers at the Van der Veer Institute for Parkinson’s and Brain Research carry out studies to investigate swallowing difficulties and the mechanisms for airway protection for persons with Parkinson’s. If you would like to participate in this research, or would like more information about this research, please contact the investigators at (03) 378 6098, or email: lpl17@student.canterbury.ac.nz

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Please do not interpret anything in this fact sheet as personal medical advice, always check any medical problem with your Doctor.

Further information may be obtained from your local branch of Parkinsons New Zealand or Freephone 0800 473 463