• Manage food intake. A stomach that is partly filled is less prone to nausea. Eat small meals every hour or two, rather than three big meals. Hunger makes nausea worse. Frequently drink small quantities of liquids as above. Add clear soups, jelly, Vegemite® tea, Ribena®, etc. as desired. To the extent that you are eating solid food, reduce the amount you drink at meal times. Continue to take nutritious drinks between meals. If you find milk hard to tolerate try milk diluted with chilled soda water, or try a spider (icecream in fizzy drink). Experiment with cold and frozen foods. Hot foods can be harder to tolerate. Salty, tart and sour foods may be easier to take than sweet, spicy, rich or greasy foods. Nutritional supplements (Ensure®, Sustagen®) can be diluted with soda water etc. If a supplement tastes too sweet, you can switch to the unsweetened, enteric formula (designed for tube feeding) taken by mouth. As nausea settles, gradually introduce a wider variety of foods, but continue to keep portions small and meals frequent (two to three hours apart).

• Eat what you want. As nausea recovers, experiment with small serves of favourite foods, including those with little nutritional benefit other than calories. Try foods that are associated with happy memories, but avoid food favourites when nausea is severe. Many people like to suck mints or lemon drops between meals.

• Make use of complementary therapies. Relaxation therapy, hypnosis, meditation, or simply being totally involved in an activity can help to reduce the misery of chronic nausea.

Comedy movies are known to be effective, but the key is to find a diversion that promotes as much involvement in something outside of the self as you can find.

• Remember small, frequent and delicious.
Nausea is the unpleasant, wavelike feeling that one is about to vomit. It involves the back of the throat, oesophagus (gullet) and stomach. Nausea can be experienced for a long time prior to vomiting, or vomiting may not occur. Vomiting is the forceful expulsion of the contents of the stomach through the mouth. Nausea and vomiting are among the most distressing symptoms in advanced cancer. Nausea and vomiting can also occur in other advanced diseases.

Nausea can be even more distressing than vomiting, which can feel like relief after severe nausea. Both nausea and vomiting can significantly impair the person’s quality of life. While both can occur in association with chemotherapy and radiotherapy, these causes of nausea and vomiting are not discussed in this leaflet.

What causes nausea and vomiting in advanced disease?

- Nausea and vomiting in advanced disease have a number of causes. The part of the central nervous system that controls non-voluntary actions of the body controls nausea and vomiting. Nausea and vomiting can be triggered by:
  - particular smells, tastes, sights, or movements, sensations such as pain, and emotions such as anxiety.
  - chemical triggers include some drugs and body imbalances, including dehydration or over hydration, constipation, bowel obstruction and any cause of electrolyte imbalance (infection, kidney problems, liver toxicities).
  - tumour growth in the brain or gut.
  - coughing and pain, left untreated.

Often, there are several factors operating at one time that make nausea and vomiting more likely.

Opioids, such as codeine and morphine often cause nausea and occasionally also vomiting, in the first few days of treatment. Suitable drugs (anti-emetics) are used to control these symptoms, which usually settle in a few days. Constipation is a significant cause or contributory cause of nausea, (and to a lesser extent vomiting). It is important to continue anti-constipation treatment for as long as opioids are in use. A regular bowel routine needs to be followed, even if the person is not eating well. Let a Palliative Care (PC) team member know if constipation occurs.

What are the complications of nausea and vomiting?

The main result of nausea is the person’s increasing misery, along with inability to eat well. Vomiting has additional effects including exhaustion, as well as potentially serious effects on the level of hydration, and on absorption of medications given.

How is sudden onset vomiting managed?

If vomiting suddenly occurs, contact a member of the PC team straight away. The doctor or nurse will want to know details such as the time (especially in relation to meals or activities) amount and colour of vomitus etc. The doctor or PC nurse will identify any immediately treatable cause and institute treatment, as well as helping the patient and carer to understand and limit the many possibly contributing causes.

- When vomiting ceases, rinse the mouth, clean the teeth, and take small sips of water, or suck on an ice cube.

- As soon as possible, take regular sips of water with lemon juice or a piece of lemon added, soda water, ginger ale, lemonade, or energy drinks. Experiment with temperature (iced or room temperature) fizziness (bubbly or flat) and degree of sweetness/tartness.

- As you recover you can try chilled tomato or diluted fruit or vegetable juice.

- Gradually introduce a wider variety of drinks and a small amount of plain food, such as a slice of dry toast.

- Take the re-introduction of food slowly.

How is chronic nausea managed?

- Management of constipation and review of medication are the first steps. Other steps are:
  - Manage the environment. Keep food or other unpleasant smells to a minimum. Introduce plenty of fresh air. Microwaving generates fewer smells than stove cooking. Use perfumed products (cosmetics, air fresheners, cleaners) and scented flowers carefully.
  - Manage posture. Avoid lying down straight after eating. Sit or recline instead. If body movement induces nausea, eat something small and light such as a slice of dry toast or two plain or salty biscuits before trying to sit up.
  - Lying on the right side (opposite side to stomach) with a pillow positioned into the back and knees drawn up and an optional pillow in front to cuddle, is known to give relief.

- Manage freshness. Before eating, clean the teeth or rinse the mouth. Use a face washer, can freshen the face and hands.