Anorexia is one of the most commonly reported adverse effects of cancer and its therapy; it is defined as a decrease in appetite accompanied by a decrease in food consumption, which can lead to drastic weight loss (cachexia A – 1 – weight loss with muscle wasting). Anorexia may be due to cancer, its treatment and other physiological and psychological causes. It is important to treat this side effect as weight loss can compromise cancer treatment and lead to poor outcomes. Weight loss can weaken the immune system and cause great discomfort to the patient and family. Patients with cancer and their families often associate weight loss with disease progression; this association can lead to hopelessness.

**Assessment**

Anorexia is usually therapy-related. During assessment, the nurse should help the patient and family to identify the factors that contribute to anorexia (A – 2). Physical symptoms such as fatigue, sore mouth and constipation can make eating difficult. Emotional factors such as depression and anxiety may cause the patient to lose his or her appetite. Further, prescribed medications such as opioid analgesics can also affect the appetite. The assessment should include an evaluation of the patient’s nutritional status (A – 3) and ability to eat.

**Planning**

The goal of care is directed toward maintenance of a good nutritional state and prevention of further weight loss. Other goals of care are to maintain or increase the general comfort of the patient and to maintain daily activities and/or improve function.

**Implementation**

The best management approach for anorexia and weight loss is prevention. Patients and caregivers who are knowledgeable about anorexia will be able to perform activities to prevent anorexia, manage anorexia or both.
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Management includes pharmacological and nutritional measures. Oral supplements, enteral feedings, parenteral nutrition and medications to stimulate the appetite may be given to address the nutritional deficit. **Enteral nutrition (A – 4)** is usually favored over parenteral nutrition because continued stimulation of the intestinal wall prevents atrophy of the microvilli and minimizes the change in the bacterial flora and the risk of sepsis. If the patient is willing and able to take the liquid formula, **oral supplementation (A – 5)** may be used.

The nurse can help to prevent malnutrition by providing supportive care and communicating with members of the health care team. Efficient symptom management such as good oral hygiene, the use of antiemetic agents to prevent or alleviate nausea and vomiting and the use of analgesics to alleviate the pain of mucositis must be encouraged. Further, foods high in calories and traditionally liked by children (for example, ice cream) can be mixed into the enteral formula. Substituting the enteral formula for milk or cream when baking cakes and cookies will also provide the patient with needed calories.

Because eating is a social activity in most cultures, the nurse should encourage the family to eat with the patient. Integrating play with food and eating also provides opportunities for the child and adolescent to eat. Often, decreased food and fluid intake is associated with disease progression and a deteriorating condition; therefore, the family feels pressure to make the patient eat. A more efficient approach is to have foods that the patient likes readily available and to allow the patient to eat at his or her own pace.

**Patient and Family Education**

Being able to manage anorexia (A – 6) often makes the patient and family feel that they are in control of the side effect. The nurse can help the patient and family by reviewing with them ways of managing anorexia, maintaining the nutritional status and preventing weight loss.

**Evaluation**

Evaluation of care should be focused on maintaining optimal nutrition and weight and the ability to manage and/or minimize the effects of anorexia.
Helpful Web Links

Cancer Consultants, Inc., Ketchum, ID
Anorexia and Weight Loss: Treatment and Management

National Cancer Institute
PDQ Nutrition and Cancer
http://www.cancer.gov/cancertopics/pdq/supportivecare/nutrition/patient

Cancer Symptoms.org, Oncology Nursing Society, Pittsburgh, PA
Cancer related Anorexia
http://www.cancersymptoms.org/anorexia/key.shtml

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Akio Inui, MD, PhD Cancer Anorexia-Cachexia Syndrome: Current Issues in Research and Management CA Cancer J Clin 2002; 52:72-91
Abstract: http://caonline.amcancersoc.org/cgi/content/full/52/2/72

Cancer Consultants, Inc., Ketchum, ID
Self-care activities for anorexia

Cancer Symptomos.org, Oncology Nursing Society, Pittsburgh, PA
http://www.cancersymptoms.org/anorexia/selfcare.shtml
APPENDIX

A – 1 Cachexia

Cachexia is a wasting syndrome that can be seen in 20% to 50% of patients with advanced cancer. This wasting syndrome results in rapid weight loss, especially from muscle.

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Andrea Whatman, Zimbabwe
Effects on the Gastrointestinal System:
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A – 2 Factors that may contribute to anorexia

- Changes in taste, smell or saliva
- Mouth sores or mucositis
- Symptoms that involve the gastrointestinal tract (difficulty in swallowing, nausea, vomiting, diarrhea and constipation, bloating)
- Anxiety, depression, fear
- Pain
- Medications such as analgesics, opioids
- Fatigue, anemia
- Loss of sleep
- Difficulty in breathing
- Lactose intolerance
- Early satiety (feeling full earlier than expected)
- Therapeutic diets (special diets prescribed by the health care professional)
- Food aversions (specific foods that are particularly unpleasant)
- Unpleasant odors or sights
- Social isolation

A – 3 Nutritional Assessment

The best indicators of anorexia are the record of the patient’s weight loss over time and a record of the patient’s food intake. The measurements that are usually evaluated are the patient’s current weight, the weight 2 weeks ago, the weight 6 months ago and the weight 1 year ago. Dietary intake can be measured many ways. Some common ways are the following:

- recall of all food eaten in the past 24 hours,
- creation of a 3-day food diary (a record of the type and amount of all food eaten during a 3-day period),
- calorie counting (a record of all the calories eaten during a particular period [usually 3 days]).

Anthropometry is the use of skinfold circumference to determine whether weight loss has included muscle loss.
Common laboratory tests sometimes used as indicators of nutritional status are the following.

- Complete blood count
- Total lymphocyte count
- Measurement of albumin concentration
- Measurement of transferrin concentration
- Measurement of prealbumin concentration
- Measurement of glucose concentration
A – 4 Enteral Nutrition

Enteral nutrition formulas are used as nutritional replacements for patients who are unable to get enough nutrients in their diet. These formulas are taken by mouth or through a feeding tube and are used by the body for energy and to form substances needed for normal functions. Care should be used when enteral nutrition is given to infants as they may have problems eliminating this formula from the body.

A – 5 Oral Supplementation

- Enteral nutrition formulas can be used as snacks in addition to normal meals.
- Powder preparations can provide hypercaloric formulas.
- Enteral formula can be integrated into daily foods. For example, the formula can be mixed with ice cream to make a milkshake, or it can be added to cake mixes or cookie dough.
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A – 6  **Tips for the Patient and Family about Nutritional Management of Nausea, Vomiting and Anorexia**

Eat small meals. Eating small meals often and slowly can be helpful in managing nausea and vomiting.

Eat foods that have enough calories and protein and that are appealing.

Eat in a place that is comfortable. Avoid eating in stuffy places that are too warm or have cooking odors. Eat in a play area if necessary.

Drink something before or after meals but not with your meals.

Drink slowly or sip liquids throughout the day. Use a straw if necessary. Funny straws may be appealing to the child.

Eat food that is at room temperature or cooler.

Do not force yourself to eat foods that you normally like; if you do, this experience may cause you to dislike them later when you feel better.

Rest after eating.

If nausea occurs in the morning, eat crackers or toast before you get up.

Wear loose-fitting clothes.

If nausea occurs during treatment, wait a couple of hours before eating.

Older children can be encouraged to keep a diary of their nausea. Answers to the following questions can provide helpful information that can be recorded: how long did the bout of nausea last, what did you eat before the bout occurred, and where were you when the nausea occurred. A report can then be given to the physician or nurse.

If you vomit, do not eat or drink anything more until the vomiting is under control. Once it is controlled, you can then drink small amounts of clear liquid according to the following guidelines:

- Drink 1 teaspoonful every 10 minutes.
- Gradually increase the amount to 1 tablespoon every 20 minutes.
- Then try 2 tablespoons every 30 minutes.

Continue by switching to full liquid or soft foods such as fruit juices and nectars, milk, cream, margarine, pudding, plain Jell-O®, potatoes pureed in soup, cooked cereal, ice cream, custard, strained or pureed soup and vegetable juice.

Tell the physician, nurse or registered dietitian if you have nausea or vomiting. If your nutritional status is at risk, the health care provider may recommend supplemental foods such as Ensure.