Dementia patients frequently lose weight regardless of whether they are cared for at home or in a long-term care facility. Weight loss can be distressing to family and hunger can cause agitation in the Alzheimer patient. Most Alzheimer patients lose weight for a variety of reasons and accurate diagnosis is the first step in an effective plan to maintain adequate body mass. The clinician or family member must approach weight loss in a systematic way to identify simple correctable causes of weight loss. Treatment teams should focus on fluid, fiber and calories in the dementia patients. Dementia patients need proper hydration, sufficient fiber to assure proper caloric function and sufficient quantities of food to maintain weight and nutrition.

Dementia can be divided into three stages early, middle and late. The causes of weigh loss in each phase may differ. The boundary between early and middle stage dementia is vague. Early stage patients are usually forgetful and sometimes anxious. These patients function reasonably well with minimal supervision. Middle stage patients have multiple intellectual losses and need extensive assistance with daily living activities. Late stage patients have severe intellectual limitations and cannot care for themselves.

**EARLY STAGE**
Early stage dementia patients usually maintain adequate body weight. Physical problems such as cancer, diabetes or thyroid disease should be considered in any mildly demented patient who is losing weight. Depression is common in early dementia and will result in weight loss as a result of anorexia. Early stage dementia patients should be capable of describing symptoms such dental problems, swallowing difficulties, abdominal pain etc., that cause patients to stop eating. These patients should maintain adequate fluid, fiber and nutrition.

**MIDDLE STAGE**
Middle stage dementia patients frequently lose weight. Weight loss results in muscular weakness, falls, health problems, and other complications that lower the patient's quality of life and complicate management. Middle stage dementia...
patients lose weight for three distinct reasons: (1) metabolic i.e., burning large number of calories, (2) physical/mechanical i.e., can't consume enough food, and (3) psychiatric, i.e., not interested in eating. The clinician should carefully evaluate patients to exclude medical causes (e.g., cancer, diabetes, thyroid disorder). Dementia patients frequently pace, wander, and are constantly in motion -- a level of physical activity requiring increased numbers of calories. Dementia patients often burn more calories than cognitively intact elders.

Psychiatrically disturbed patients may be delusional about food and will not eat for fear of poisoning. Psychotic patients may be distracted during dining hours, refuse to enter the dining room because of voices or leave the table before completion of the meal. Psychotic patients can be distracted by the noise in a dining hall. Depressed patients will lose their appetite and stop eating. Dementia patients lose the ability to recognize food. Alzheimer patients may sit at the table and not eat unless utensils are placed in their hands and they are encouraged to eat. Many patients develop feeding apraxia (i.e., they forget how to use utensils). Patients may be hungry but forget how to get the food into their mouths. Most nursing homes serve food in plastic compartmentalized containers that are unfamiliar to elders who ate vegetables from a plate at home. Gastrointestinal disease can be difficult to diagnose in dementia patients.

Denture problems can cause malnutrition. Dentures began to misfit from bone resorption and in patients with substantial weight loss. Amnestic patients frequently misplace dentures and arrive in the dining hall unable to eat. Patients with oral disease such as tooth abscess may be unable to explain symptoms and simply stop eating. Oral pharyngeal disease such as ulcers, thrush or carcinoma can also lead to weight loss and remain unrecognized because of the patient's inability to communicate. Secondary to poor communication, moderately demented patients may have unrecognized esophagitis, ulcer disease, diverticulitis or other gastrointestinal problems. The incidence of ulcer disease, esophagitis and other stress related gastro-intestinal problems is unclear in dementia patients. Patient's food preferences change as the dementia progresses and "old favorites" no longer appeal to patients. Many patients desire specific types of food such as sweets, etc. Middle stage patients may neglect part of their tray because of hemi-neglect. Visually impaired patients may not see the food and hearing impaired patients may not hear instructions on eating. Patients may receive medications such as theophyline that lower appetite. Anxious, hyperactive, frail elderly patients need adequate hydration to avoid thirst, maintain health, avoid rectal impaction and assure comfort. Aggressive hydration of all patients is essential to appropriate behavior management and patients should take about 2,000cc or 2 quarts of fluid per day unless the patient is fluid restricted or has congestive heart failure.
Dehydration is common in dementia patients and contributes to behavioral problems. Although active hydration increases incontinence, well hydrated patients are more comfortable and easier to manage.

**END STAGE**

End stage dementia patients lose weight for many reasons. Feeding apraxia is common (i.e., the patient forgets how to chew or swallow). These patients are still able to bite. The mechanical ability of severely demented patients is similar to that of a small child who has not learned to eat solids. Patients with end stage dementia lose the drive to eat and recognition of food as sustenance. Feeding apraxia occurs slowly in severely demented patients. The abrupt onset of refusal to eat is more likely secondary to stroke, depression or some mechanical problem. The gastrointestinal tract continues to function in dementia despite the inability to consume food substances. End stage patients are at risk for aspiration (i.e., inhaling food or mechanical obstruction of upper airway).

**MANAGEMENT STRATEGIES**

Dementia patients should eat with glasses, dentures and hearing aids intact with batteries. Patients with visual impairment should have the food placed within their field of attention. Patients with feeding apraxia should be prompted or fed. Patients with swallowing apraxia should be given food consistencies that they can tolerate. Medical problems such as peptic ulcer disease, chronic constipation or rectal impaction can be medically treated to lessen patient discomfort and increase appetite. Hallucinations, delusions and depression can be treated with appropriate doses of psychotropic medications. Patients unable to sit for more than 15 minutes for a meal can be given frequent snacks between meals as hunger is a common reason for agitation in patients.

End stage patients require feeding tubes or G-tubes to maintain body mass. Patients unable to swallow, eat or care for themselves have permanent severe neurological damage and will not regain cognitive function. The decision of whether to prolong suffering in an otherwise severely brain-damaged patient is a difficult, ethical consideration. The decision requires the input of family, pastor and other responsible individuals. Hospice care is appropriate for Alzheimer's patients and individuals dying with dementia should be treated like those with cancer or other terminal medical problems.