## ALTERED NUTRITIONAL STATUS

CARE PROCESS STEP	EXPECTATIONS	RATIONALE		
RECOGNITION/ASSESSMENT				
- Did the staff review and define the individual's nutritional status?	- The staff and practitioner should adopt and use a consistent approach to approximating nutritional requirements. Use tools from reputable, reliable sources such as the ADA, Dietary Managers Association.  - Upon admission and periodically thereafter, staff should identify and document key aspects of nutritional status including: 1) <i>intake</i> : approximating food and fluid intake, including total calories, protein and fluid; 2) <i>appetite</i> : whether appetite is intact or impaired; 3) <i>weight</i> : whether weight is stable or unstable; 4) <i>appearance</i> : whether the individual appears well-nourished or cachectic; 5) <i>intake route</i> : whether food intake is by the normal oral, impaired oral, or non-oral (enteral, parenteral/intravenous, etc.) routes, or a combination; 6) <i>intake assistance</i> : whether the individual can eat adequately, and the extent of any assistance needed; 7) <i>consequences</i> : whether clinically significant complications or abnormalities related to nutrition are present; 8) <i>treatment choices</i> : whether there are advance directives and other treatment choices related to nutrition including artificial nutrition and hydration; 9) <i>medical conditions and diagnoses</i> : whether conditions exist relevant to nutritional status, including recent or current diagnoses of dehydration or malnutrition; 10) <i>eating habits and food preferences</i> .  - Qualified staff should calculate each individual's approximate calorie and protein needs, fluid requirements, and some summary of overall nutritional status, or document why these could not be, or should not have been done. (see AMDA ANS CPG, Table 2).	<ul> <li>Altered nutritional status (ANS) is common among the population of long-term care facilities.</li> <li>Nutritional issues can be addressed successfully by using a systematic approach.</li> <li>Choice of specific forms and screening tools is less important than whether the resulting information is analyzed and addressed effectively.</li> <li>Food intake can be approximated; for example, meal percentages eaten of various food groups. Precise measurement is challenging, because no current method is that precise. This measurement is important as 1) a way to help identify if diet and intake are meeting the individual's needs; and 2) as a trigger for additional assessment of possible at-risk situations; for example, a marked change in the amount of food eaten compared to usual.</li> <li>Because many individuals are affected by multiple, chronic and acute conditions and risk factors, nutritional requirements can be approximated and interventions adjusted over time depending on the response and desired goals.</li> <li>Frequently, clinical observation of nutritional status is sufficient, and additional lab tests and other measurements may not add meaningful information.</li> <li>Long-term care facilities generally don't have access to more precise measures of caloric balance such as indirect calorimetry.</li> <li>BMI is one reasonably relevant way to summarize nutritional status, but may not be as helpful with a BMI &gt; 25</li> </ul>		

- Did staff weigh the individual, or indicate why it was not feasible or indicated?
- The staff should weigh the individual upon admission and at appropriate intervals, or document why weighing is not compatible with goals, prognosis, etc.
- Weighing should be done consistently; for example, as much as possible, attempt to weigh at the same time of day, using the same scale, with the same amount of clothing, etc.
- Weighing should occur at least monthly and 1) when there is a significant persistent condition change; 2) when decline in food intake has persisted for more than a week; 3) when signs and symptoms of undernutrition appear.
- The staff should have a system for verifying weights; for example, reweigh someone within 24 hours to confirm a change in weight (for example, >3-5 pounds).
- In general, staff should 1) verify admission weight within 48 hours and 2) reweigh within a week to monitor a response to interventions to address anorexia or weight loss--at least until the weight is stable or increasing (or it is determined that the weight cannot be stabilized or increased)--and then routinely thereafter.
- The staff and/or practitioner should indicate when weight monitoring is not indicated; for example, a terminal condition.
- The staff should evaluate weight and appetite in light of previous lifestyle and intake, and current condition and prognosis.

- Weight can be a useful indicator of nutritional status.
- Significant changes in weight, or a continuing weight loss trend, may indicate a nutritional problem.
- Anorexia may indicate a significant underlying medical cause, regardless of whether weight loss is present.
- Weighing may not be indicated if the individual is terminally ill or has declined to be weighed.
- The rate of weight change may be equally or more significant than the amount of change. Rapid or abrupt changes in weight may help identify significant fluid and electrolyte imbalance.
- Sometimes, apparent weight change is due to procedural problems and is not confirmed on reweighing.

- Did staff identify risk factors for impaired nutrition?
- Whether or not the individual is currently nutritionally impaired, the staff and practitioner should identify any significant nutrition risks, including factors known to increase the risk of anorexia and weight loss.
- Assessment should include situations or symptoms related to appetite, food intake, digestion, or excretion and conditions associated with weight loss including 1) significant change in mood, behavior, or level of consciousness affecting food intake; 2) presence of physical/medical factors contributing to recent or current weight loss or risk of subsequent weight loss (e.g., cancer, medications, diuretics, recent changes in
- Many risk factors for anorexia and weight loss have been identified; for example, acute or persistent symptoms such as vomiting, diarrhea, fever, and infection, significant or recurrent discomfort or pain associated with eating, chewing or swallowing, environmental factors, depression, and chronic cognitive and functional impairments such as dementia and hemiparesis due to a stroke.
- Many medical conditions and medications that are common in the long-term care setting somehow affect appetite, food intake, digestion, excretion, or utilization of nutrients.

	edema); 3) level of activity; and 4) environmental factors affecting food intake or appetite (see AMDA ANS CPG, Tables 3 and 6).	- Aggregate risk scores may not add much to the information provided by evaluating individual risk factors.		
DIAGNOSIS/CAUSE IDENTIFICATION				
- Did the staff and/or practitioner evaluate and clarify the significance and causes of any nutrition-related abnormalities?	- The staff and practitioner should clarify the significance and causes of identified nutritional risks and weight changes.  - The practitioner should decide whether lab testing or additional diagnostic evaluations would potentially change the diagnosis, management, outcome, or quality of life or otherwise add materially to what is already known.  - The staff and/or practitioner should document the basis for concluding that they have enough information to develop a pertinent care plan.	<ul> <li>If nutritional status is otherwise clear from a clinical assessment or previous diagnostic evaluation, or if the resident is already receiving calculated amounts of calories, protein, and other nutrients, then additional testing may not add to what is already known.</li> <li>Testing should be based on clinical need (for example, in individuals being treated with diuretics for congestive heart failure).</li> <li>All abnormal findings should be considered and addressed in the proper context. Abnormal lab test results do not necessarily imply that clinical problems exist or that an intervention is needed, unless confirmed by additional clinical confirmation or evidence (e.g., food intake, overall condition, etc.).</li> <li>Even when supplementation is indicated, repeated follow-up lab testing is not routinely necessary and is only sometimes useful.</li> </ul>		
- Did the staff and/or practitioner consider medical and nonmedical causes of nutrition risk and altered nutritional status?	<ul> <li>The staff and practitioner should review potential causes of anorexia and weight loss, in addition to consulting with the dietician.</li> <li>In conjunction with a health care practitioner, the staff should identify and document medical conditions (cancer, renal disease, etc.) and medications that could affect an individual's appetite and cause weight loss, or they should document why causes in that individual should not have been or could not be evaluated.</li> <li>The staff and practitioner should consider a possible mood or behavior disorder.</li> <li>In individuals who are not eating well or who are losing weight or who have significant functional or cognitive</li> </ul>	<ul> <li>There are diverse causes of impaired nutritional status and unplanned weight loss.</li> <li>Commonly, multiple causes of weight loss or impaired nutrition coexist in the same individual.</li> <li>Making the differential diagnosis of causes of anorexia and weight loss often requires participation of a health care practitioner who can consider multiple simultaneous possibilities.</li> <li>Sometimes, environmental factors (for example, distractions during meal times, staff availability to assist with eating) cultural factors, and personal preferences affecting food intake and appetite can be readily identified and addressed.</li> </ul>		

impairments that could jeopardize adequate food intake, the staff should identify any 1) environmental and functional factors affecting food intake or appetite; 2) oral and dental factors affecting eating; and 3) relevant cultural and personal factors affecting eating, such as food preferences and meal frequencies (i.e., how often and when an individual is accustomed to eating).

- In individuals with rapid or short-term acute weight loss, the staff and practitioner should consider fluid and electrolyte imbalance as a possible cause.
- Fluid loss or imbalance can cause rapid or short-term weight loss or gain. Such a situation requires the involvement of a health care practitioner.
- Although depression is common in the nursing home population, other important causes of anorexia such as fluid and electrolyte imbalance and adverse drug reactions that can present with the same general symptoms should be considered, especially when an individual's symptoms are not specific.
- It is generally inappropriate to just speculate about possible depression or to prescribe antidepressants without collecting specific clinical evidence and considering other possible significant causes. While some antidepressants affect appetite and weight in some individuals, no antidepressant is an "appetite stimulant."
- Interdisciplinary communication should focus on identifying and analyzing relevant findings, as a basis for determining causes and interventions, to try to avoid premature conclusions about underlying causes and potential interventions.

- Did the staff and/or practitioner analyze and document relevant information and provide a clinically pertinent basis for their conclusions?
- The staff should document (for example, physician and/or interdisciplinary progress note) how they established relevant goals for nutrition interventions and weight based on circumstances and evidence relevant to that individual (e.g., condition, prognosis, causes, comorbid conditions, etc.).
- Conclusions should include: 1) approximate calorie and protein needs, based on actual or adjusted body weight; 2) presence of other clinically significant nutritional deficits; 3) whether weight loss is anticipated or expected to be unavoidable; 4) whether a target range for weight is realistic or attainable, based on individual's overall condition, goals, prognosis, etc.
- The staff and practitioner should consider whether altered nutritional status could be secondary to an underlying problem (e.g., possible fluid and electrolyte imbalance, medication-related anorexia, or an infection) instead of a

- The staff and health care practitioner should collaborate to assess the significance of any findings.
- Adjusted body weight (i.e., BMI>30) refers to calculation of nutritional needs based on the Harris/Benedict equation.
- Addressing issues of nutrition and weight involves medical, ethical, and functional considerations that are beyond the domain of any one discipline.
- Nutritional and weight goals should be realistic and pertinent, considering significant illnesses and conditions that affect appetite, metabolism, and body structure and function.
- Sometimes, multiple impairments have a common cause or a single nutritional problem may have multiple causes. Therefore, it is important to look at the "big picture" before addressing individual impairments.
- After an acute illness or as part of an end-stage condition,

primary nutritional problem.

- The staff and practitioner should identify end-stage, terminal, or other irreversible conditions affecting food intake, nutrition status, and weight goals, and document factors that make it difficult or inappropriate to try to maintain or improve weight and nutritional status.

weight and other nutritional parameters (e.g., albumin) may not return to their previous levels, and may stabilize at a lower level.

- The facility should involve health care practitioners who can evaluate complex evidence and reach a meaningful differential diagnosis of symptoms; for example, is weight loss a fluid or solid weight loss; what is causing anorexia or weight loss; are medical causes treatable or reversible; or, what is the likely effect of nutritional interventions on condition and prognosis?
- There should be a plausible explanation for any conclusions that an individual's weight loss was unavoidable.
- Documenting clinically pertinent reasons for not addressing potentially significant nutritional risk factors helps to demonstrate that the issues weren't simply overlooked.

## TREATMENT/MANAGEMENT

- Did the staff provide basic nutritional needs?
- The staff should provide a diet that includes the minimum amount of calories and protein calculated to reach or maintain a desired weight goal.
- The staff and/or practitioner should begin to address significant nutritional issues including calorie and protein undernutrition within 48 hours of identifying them.
- The staff and practitioner should identify and address underlying causes of impaired nutrition or increased nutritional risk, or indicate why these could not or should not be addressed.
- The staff should assist functionally impaired individuals with eating, especially when functional impairment affects food intake.
- The staff should provide nutritional and related interventions that are consistent with an individual's condition, needs, wishes, values, goals, and prognosis.

- It is appropriate to take a simple, step-wise approach to addressing impaired nutrition; for example, starting with giving more of what is already being eaten, and adjust the approach based on results. Supplementation may not be needed.
- Although factors that affect nutritional needs are known, many such factors may be present simultaneously; thus, their exact contribution to overall nutritional status cannot be identified precisely.
- Nutritional deficits and imbalances often take time to correct, (or may not be totally correctable), especially when longstanding or due to a serious acute illness.
- It is important to seek underlying causes while also making nutritional interventions.
- Dietary restrictions, therapeutic diets, and modified consistency diets are only occasionally helpful and may

- Did the staff and/or practitioner address underlying causes of impaired nutrition or risk?

- The staff and practitioner should address underlying causes of anorexia and weight loss (for example, adverse drug reactions, delirium, psychosis, pain, oral/dental problems, upper extremities disability, etc.) or indicate why they could not, or should not have been, addressed.
- The staff and practitioner should consider each identified risk factor, regardless of how many there are or any total scores on an aggregate risk scale.
- The staff in conjunction with the practitioner and resident should liberalize restricted diets (altered consistency, calorie restricted, low fat, markedly sodium restricted, etc.) especially in undernourished or at risk individuals or provide a clear medical justification for not doing so.
- The staff should address issues related to palatability of food, food delivery and presentation (e.g., prepare food with seasonings, serve food at proper temperatures, etc.), and setup.
- The staff should address environmental factors that may affect appetite or food intake, or indicate why they could not or should not be addressed (see AMDA ANS CPG, table 6).
- The staff and practitioner should adjust or stop medications associated with anorexia or with other indirect causes of anorexia or weight loss such as lethargy or confusion and then reevaluate the situation after the weight has stabilized or intake improved OR they should document a clinically pertinent rationale for not doing so.
- The staff and practitioner should address the root cause of an apparent chewing or swallowing problem (oral or dental problems, medication side effects, etc.).
- The staff should provide a clear rationale for restricting diet or food consistency, which is pertinent to that individual, based on an appropriate analysis of relevant factors, considering relative risks and benefits.
- The staff and practitioner should be able to show that treatable causes of an eating or swallowing problem have

inhibit adequate nutrition.

- A plan for nutritional interventions should consider diverse causes; for example, the need for eating assistance, reduction of medication side effects, offering additional portions of food that someone will eat, offering alternative foods and snacks, or implementing other relevant alternatives based on an individual's specific situation and causes of insufficient food intake.
- Many risk factors can be addressed, at least partially, while others may not be modifiable.
- When someone is not eating well or is losing weight, the problems for which dietary restrictions were instituted are often of secondary importance in the short-term to the immediate issue of stabilizing weight and improving appetite.
- -Ability to taste food declines with age, and appetite is often affected positively by the smell, taste, appearance, and consistency of food.
- Numerous medications are associated either with anorexia or with causing symptoms such as lethargy or confusion that can lead to or exacerbate anorexia or weight loss. When someone is not eating well or is losing weight, the problems for which medications were instituted are often of secondary importance in the short term to the immediate issue of stabilizing weight and improving appetite.
- As with all symptoms, it is important to look at the "big picture" before addressing individual impairments. Many swallowing abnormalities are not clinically significant and do not need dietary modification.
- The diagnosis and management of medical causes of eating and swallowing problems must involve practitioners with the training to make differential diagnoses.
- Numerous medications and medical conditions may cause dysphagia and coughing, or may cause lethargy or confusion that result in swallowing disturbances.

	been ruled out or that it has been determined that they cannot or should not be identified or addressed, before altering dietary consistency or limiting oral intake.	<ul> <li>A decision to impose eating and swallowing restrictions without appropriate consideration of all relevant issues is not desirable.</li> <li>Altered consistency diets may place some individuals at greater risk for impaired food and fluid intake.</li> </ul>
MONITORING		
- Did the staff monitor the subsequent course of weight loss or other significant nutritional imbalance?	<ul> <li>The staff should monitor an individual's nutritional status and weight including the subsequent course of any weight loss or other significant nutritional imbalances.</li> <li>The staff and practitioner should monitor the progress of causes of impaired food intake and nutritional status, often enough to identify progress towards nutritional goals and the effectiveness of any interventions, based on a facility protocol. (See also Recognition/Assessment Section on monitoring weight.)</li> </ul>	<ul> <li>Weight stabilization may be the most reasonable goal, especially after an acute or prolonged illness.</li> <li>Repeated lab/diagnostic testing is only rarely helpful, and should not ordinarily be used as the primary means to monitor nutritional status or as the sole basis for adjusting nutritional interventions.</li> </ul>
- Did the staff and practitioner review and adjust interventions based on a clinically appropriate rationale?	<ul> <li>The staff and practitioner should adjust nutrition-related interventions based on reevaluating the situation, using the same steps, tools and criteria as before (see previous Sections).</li> <li>If weight loss continues despite attempts to improve oral intake, or oral intake was not feasible, the staff and practitioner should review potential alternatives such as tube feeding or end-of-life care OR explain why such alternatives were not appropriate or feasible.</li> </ul>	<ul> <li>Subsequent adjustment of interventions will depend on progress, underlying causes, overall condition, prognosis, etc.</li> <li>Unmodifiable conditions and circumstances may impede or preclude improved or stabilized nutritional status, and should be noted.</li> <li>Despite divergent views on the topic, decisions about the use of artificial nutrition and hydration should be made in conjunction with the resident and/or appropriate substitute decision maker. Depending on a person's wishes, prognosis, and so on, it remains both ethically and medically acceptable to not use artificial nutrition and hydration, especially for those who are in end-of-life situations.</li> </ul>