

## International Hospital Accreditation and its Relationship With Inpatients Diet <sup>(1)</sup>

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### **Therapeutic Diets**

- Modifications of normal diet used to improve specific health conditions
- Normally prescribed by doctor and planned by dietician
- May change nutrients, caloric content and/or texture
- May seem strange and even unpleasant to the patient
- Patient's appetite may be affected by anorexia or loss of appetite, weakness, illness, loneliness, self-pity and other factors
- Use patience and tact to convince patient to eat food
- Understand purpose of diet and provide simple explanations to patient
- Regular diet
- Liquid diet
- Soft diet
- Diabetic diet
- Calorie controlled diet

- Low cholesterol diet
- Fat restricted (low-fat) diet
- Sodium restricted diet
- Protein diet
- Bland diet
- Low residue diet

### **Regular Diet**

- Balanced diet usually used for ambulatory patients
- At times it has a slightly reduced caloric content
- Foods such as rich desserts, cream sauces, salad dressings and fried foods may be decreased or omitted.

### **Liquid Diets**

- Nutritionally inadequate and should only be used for short periods of time
- Uses:
  - After surgery or a heart attack
  - Pts with acute infections or digestive problems
  - To replace fluids lost by vomiting or diarrhea
  - Before some Xrays of digestive tract
- 2 types
  - Clear liquid diet

- Water, apple or grape juice, fat-free broths, plain gelatin, popsicles, ginger ale, tea, coffee

– Full liquid diet

- Everything on clear liquid diet plus strained soups and cereals, fruit and vegetable juices, yogurt, hot cocoa, custard, ice cream, pudding, sherbet, and eggnog.

### **Soft Diet**

- Similar to regular diet but foods must require little chewing and be easy to digest
- Avoid meat and shellfish with tough connective tissue, coarse cereals, spicy foods, rich desserts, fried foods, raw fruits and veggies, nuts, and coconuts.

### **Diabetic Diet**

- Used for pts with diabetes mellitus (body does not produce enough insulin to metabolize carbohydrates)
- Diet contains exchange lists
- Goods are grouped according to type, nutrients, and calories
- Pts are allowed a certain number of items from each exchange list according to individual needs
- Avoid sugar-heavy foods such as candy, soft drinks, desserts, cookies, syrup, honey, condensed milk, sugared gum, jams, and jellies
- New trend is to count only carbs as blood sugar levels are most affected by carbs
- Pt then takes an amount of insulin based upon amount of carbs eaten.

### **Calorie Controlled Diet**

### **Low-Calorie Diet**

- Used for pts who are overweight

- Avoid or limit high calories foods such as:
  - Butter, cream, whole milk, cream soups or gravies, sweet soft drinks, alcoholic beverages, salad dressings, fatty meats, candy and rich desserts
- Used for pts who are underweight, or who have anorexia nervosa, hyperthyroidism, or cancer
- Extra proteins and carbs are included
- Avoid high-bulk foods such as green salads, watermelon and fibrous fruits
- Avoid high-fat foods such as fried foods, rich pastries, and cheese cake because they digest slowly and spoil appetite.

### **Low Cholesterol Diet**

- Restricts foods containing cholesterol
- Used for pts with atherosclerosis and heart disease
- Limit foods high in saturated fats such as beef, liver, pork, lamb, egg yolk, cream, cheese, natural cheeses, shellfish, whole milk, and coconut and palm oil products.

### **Fat Restricted or Low-Fat Diet**

- Used for pts with gallbladder and liver disease, obesity, and certain heart diseases
- Avoid cream, whole milk, cheese, fats, fatty meats, rich desserts, chocolate, fried foods, salad dressings, nuts, and coconut.

### **Sodium Restricted Diet**

#### **(Low Sodium or Low Salt Diet)**

- Used for pts with cardiovascular diseases such as hypertension or congestive heart disease, kidney disease, and edema

- Avoid or limit addition of salt to any food, smoked meats or fish, processed foods, pickles, sauerkraut, olives, and processed cheeses.

### **High Protein Diet**

- Used for children and adolescents who need additional growth, pregnant or lactating women, before and/or after surgery, pts suffering from burns, fevers, or infections
- Regular diet with added protein rich foods such as meats, fish, milk, cheese, and eggs.

### **Low Protein Diet**

- Used for pts with certain kidney diseases and for certain allergic conditions
- Regular diet with limited or decreased protein rich foods.

### **Bland Diet**

- Consists of easily digested foods that do not irritate the digestive tract
- Used for pts with ulcers and other digestive diseases
- Avoid coarse foods, fried foods, highly seasoned foods, pastries, raw fruits and veggies, alcohol, carbonated beverages, nuts, coffee, tea, smoked and salted meats and fish.

### **Low Residue Diet**

- Used for pts with digestive and rectal diseases such as colitis or diarrhea.
- Eliminates or limits foods high in bulk or fiber such as raw fruits and veggies, whole grains and cereals, nuts, seeds, beans and peas, coconut, and fried foods.

■ Therapeutic nutrition = Medical nutrition therapy.

■ The role of food and nutrition in the treatment of various diseases and disorders.

### **The role of Therapeutic Nutrition**

1. To maintain or improve nutritional status.

2. To improve clinical or subclinical nutritional deficiencies.
3. To maintain, decrease, or increase body weight.
4. To eliminate particular food constituents to which the individual maybe allergic.
5. To rest certain organs of the body.
6. To adjust the composition of the normal diet to meet the ability of the body to adjust, metabolize, and excrete certain nutrients and other substances.

### **Hospital Diets**

- A basic routine diet served to patients not requiring a therapeutic diet is a necessity in hospitals for many reasons
- This is referred to as: the house, regular, full diet, or diet as tolerated (DAT)
- Many factors effect the choice of food types.

### **How is therapeutic diet modified to become therapeutic?**

1. The energy value (kilo calories) may be increased or decreased.
2. Fiber (bulk) may be increased or decreased.
3. Specific nutrients may be increased or decreased.
4. Specific foods or types of food (e.g. allergins) may be increased or decreased.
5. Modified diet may be altered further to become a soft or liquid diet.
6. Any specific foods not tolerated may be eliminated.

### **Naming and describing of therapeutic diets**

- Named according to diet modification- not name of disease (except diabetic diet).
- Described as:

- a) Qualitative: change in types of food.
- b) Quantitative: change in quantity of nutrients or calories.
  - Written as energy requirements and divided into protein, fat, carbohydrates etc
  - Translated into meals.

### **Diet modification for a patient who can not eat enough at meal time**

1. Between meal nourishment.
2. Addition of high kilocalories items on meal-tray
3. Liquid nutritional supplements with or between meals.
4. Tube feeding when all fails.

### **Activities needed to carry out plan to meet patient centered nutritional goals**

1. Diet prescription.
2. Necessary modifications of food consistency.
3. Nutritional supplements.
4. Nutritional support if needed.
5. Assistance and encouragement at meal time.
6. Counseling, and advice about meeting the individual nutritional needs after discharge.

### **The implementation of activities needs**

1. On going monitoring of laboratory data.
2. Weight records.
3. Food and fluid intake records.

**Some common test diets:**

1. Fecal fat determination diet: in diagnosis of cystic fibrosis or mal absorption- 100g of fat/day for 2-3 days before test.
2. Glucose tolerance test diet: high CHO (300g for 3 days) before test.
3. Meat free test diet: meat free for 4 days before test (for GIT bleeding)
4. Calcium test diet: 1000g Ca/day to determine urinary calcium.

**The role of the nurse in implementation of therapeutic nutrition**

1. Reinforce the importance of therapeutic diet.
2. Identify and communicate needed changes in the patient's diet.
3. Identify and implement changes in method of feeding & time of feeding.
4. Reinforce the meal plan with the patient and the patient's family.
5. Encourage the patient to depend on himself (the restorative approach).
6. Encourage the patient to eat, provide adaptive equipment, and right atmosphere.
7. Make sure that all health care professionals are consulted with respect to diet plan and implementation.

The Role of Nutrition in Maintaining Health in the Nation's Elderly: Evaluating Coverage of Nutrition Services for the Medicare Population.

**9 Nutrition Services in the Acute Care Setting**

In 1967, inpatient hospital costs comprised close to 63 percent of all Medicare payments, while the combined payments to skilled nursing facilities (SNFs), home health agencies (HHAs), and outpatient services were less than 9 percent. During the past two decades, Medicare payment reforms and cost containment initiatives have changed the proportion of payments to inpatient hospitals. By 1996, inpatient hospital costs had dropped to 48



percent of Medicare payments and SNF, HHA, and outpatient services had increased to almost 26 percent of total Medicare payments. However, Medicare spending was concentrated on a relatively small percentage of enrollees. In 1996, approximately 12 percent of Medicare enrollees accounted for more than 75 percent of Medicare payments. The three groups of high-cost users were those with end-stage renal disease, beneficiaries who died (services became more intense as they approached death), and beneficiaries who required an inpatient hospital stay. The leading diagnoses for hospitalized beneficiaries, in terms of Medicare dollars spent, were malignant neoplasms, heart disease, fractures, pneumonia, and cerebrovascular disease (Health Care Financing Administration, 1998). Nutrition is involved in the primary, secondary, and/or tertiary prevention of each of these diseases or conditions.

#### **MEDICARE REIMBURSEMENT IN ACUTE CARE, SHORT-STAY HOSPITALS**

A prospective payment system is used by Medicare to reimburse for inpatient hospital costs. This system is based on diagnosis-related groups. Coverage includes room, meals, nursing services, operating and recovery rooms, intensive care, inpatient prescription drugs, laboratory tests, and x-rays. Professional nutrition services, formulas, and parenteral solutions are also included in this payment.

#### **ROLE OF THE NUTRITION PROFESSIONAL**

Licensing standards require that hospitals employ a registered dietitian full-time, part-time, or on a consulting basis. Nutritional needs of patients must be met in accordance with recognized dietary practices and in agreement with orders of the practitioner responsible for the care of the patient (Code of Federal Regulations, 1998).

The Joint Commission on Accreditation of Health Care Organizations (JCAHO) requires that all patients are screened for nutrition problems and, when a problem exists, there is appropriate nutrition intervention. This is an interdisciplinary process. Examples of the roles that various health care providers play can be found in Box 9.1. JCAHO standards also require that a patient's readiness to learn be evaluated and that discharge planning

and good transitional care begins when the patient is admitted to the hospital. The JCAHO designates the geriatric population as a high-risk group and has emphasized nutrition in its inspections during the last few years (JCAHO, 1996).

**BOX 9.1 Roles of Health Care Professionals Providing Nutrition Care in Short-Stay, Acute Care Hospitals**

Health Care Professional	Role in Nutrition Care
Physician	Overall responsibility for patient care, including identification of nutrition problems on physical examination (e.g., weight or lean body mass loss, abnormal lab values), ordering, monitoring and evaluating nutrition care. The physician needs to recognize how other kinds of therapy affect nutritional status.
Registered Nurse	Overall responsibility for coordinating patient care. Administering nutrition support regimens. Ongoing monitoring and reporting of effects of nutrition care on patient (e.g., food intake, weight, blood glucose monitoring, food intolerances, other complications), reinforces patient education. Supervises feeding and observation of food intake.
Registered Dietitian	Assessment of nutritional status. Planning, implementing, and evaluating nutrition care for high-risk patients. Integrates nutrition care with other forms of care (e.g., drug food interactions). Oversees work of support personnel (e.g., dietetic technician).

Dietetic Technician	Screens patients for nutrition problems. Provides nutrition care for patients at moderate risk. Plans modified diets. Helps patients choose appropriate foods. Liaison with food service. Monitors and calculates nutrient intake.
Pharmacist	Identifies potential drug-nutrient/food interactions, particularly as they relate to drug bioavailability. Works with dietitian, nurse, physician to order and monitor parenteral nutrition support.
Respiratory Therapist	Observes effects of respiratory problems on food intake or effects of poor nutritional status on respiratory function. May measure and help interpret energy expenditure.
Social Worker	Coordinates transition from hospital to home or other level of care (e.g., provides assistance to patients about community agencies that can help with food access, home nutrition support).
Clergy	Identifies food preferences related to religion.
Rehabilitation–Occupational Therapy Speech Therapy Physical Therapy	Identifies and evaluates limitations in functional status that may affect food intake (e.g., dysphagia, immobility).

### Identification of Nutrition Problems at Admission

Because of the JCAHO standards, most acute care hospitals have procedures to identify or screen patients for nutrition problems within 24 hours of admission. This may be done by the nurse, dietetic technician, or dietitian. The most common criteria used in this evaluation are diagnosis, weight, weight change, need for diet modification or education, problems with chewing or swallowing, diarrhea, constipation, and food dislikes or intolerance. The screening tool may also include specific laboratory values, such as serum albumin and cholesterol concentrations, and hematologic values such as hemoglobin and

total lymphocyte count.

### **Nutrition Assessment**

If a problem is identified in the screening, the patient is to be evaluated further by the dietitian. In-depth nutrition assessments may include such things as evaluation of anthropometric, biochemical, and clinical data; evaluation of energy and nutrient intake at home or in the hospital; evaluation of access to food at home; calculation or measurement of energy and nutrient needs; and assessment of learning needs. All of this is done within the context of the patient's disease or condition and any other treatment received. Interventions may include diets that are modified in macro- or micronutrients, diets that are modified in consistency, nutrient or energy supplementation using liquid dietary supplements, vitamin and mineral supplements, enteral or parenteral nutrition support, or nutrition counseling.

### **Continuum of Care**

The nature of nutrition counseling has changed with decreased lengths of stay in acute care facilities. For the most part, patient education in hospitals involves teaching "survival skills" and linking the patient with a dietitian in the ambulatory setting where conditions are more conducive to helping people make long-term behavior changes. However, the lack of reimbursement for nutrition services in the ambulatory setting often limits the resources available to people once they have been discharged from the hospital. Patient education and the ability of people to manage their own care has been reported to be negatively impacted by short stays and inadequate ambulatory nutrition services (Weinberger et al., 1988).

Hospital dietitians also work with discharge planners, attempting to provide a smooth transition between the hospital and nutrition services in skilled nursing facilities or home care. However, few dietitians work in home care and the hospital dietitian is often called upon to advise home care agencies or home infusion companies about patients long after they have been discharged from the hospital.

Hospital dietitians may also refer patients with continuing nutrition or food assistance needs to community agencies, such as food banks, congregate feeding programs, and

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### **Older People Needing Intervention for Undernutrition**

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Hospitalized people have more complicated and costly illnesses today than they did 20 years ago (Duffy and Farley, 1995). Although the overall length of stay has decreased, those patients with the most complex nutrition problems often have longer stays than the average patient and use more nutrition services during their hospital stay. The 24-hour requirement by JCAHO for screening is unrealistic and labor intensive. The methods adopted by many institutions to meet this requirement lack validity in the identification of undernourished patients, often depending on information that is unreliable (see chapter 4) or unavailable.

A sample of 250 older patients, admitted to a Department of Veterans Affairs hospital was

studied prospectively beginning at hospital admission (Sullivan et al., 1989). A medical and nutritional profile was developed based on information extracted from each patient's chart. This included admitting diagnosis, secondary diagnoses, laboratory values at admission or when first obtained in the hospital, and the physician's and dietitian's work-up. Patients were classified as low risk (44 percent of patients), moderate risk (24 percent), and very high risk (15 percent) of having protein–energy undernutrition, based on serum albumin, total lymphocyte count, and weight for height or body mass index. The rest of the patients (17 percent) had so little data that nutritional status could not be determined. During the entire study period only 36 percent of the study patients and 44 percent of the at-risk patients received a formal evaluation by a dietitian. Dietary intake data for the patients at risk were questionable and nurses reported having inadequate time to monitor nutrient intakes. Patients at risk for protein–energy undernutrition were significantly older and had longer hospital stays.

The most commonly cited reason that nutrition problems are not addressed in the hospital is lack of education or understanding of the importance of nutrition by physicians (Burns and Jensen, 1995; Mowé and Böhmer, 1991; Sullivan et al., 1989).

## **EFFECTS OF UNDERNUTRITION ON FUNCTIONAL STATUS IN THE ELDERLY**

□ In 1994, more than one-third of the admissions to nonfederal acute care, short-stay hospitals were for people at least 65 years old. Functional status in the elderly may be lost during acute care hospitalization (Sager et al., 1996). In a large study, the Hospital Outcomes Project for the Elderly, activities of daily living such as bathing and dressing, deteriorated significantly between baseline admission to an acute care hospital and discharge. Forty-one percent of the older individuals were reported to have a continued decline in functional status 3 months after hospitalization; they were unable to recover from hospital-acquired disabilities and had developed additional ones since discharge (Riedinger and Robbins, 1998). The functional decline was attributed to the illness, medical and surgical treatment, and adverse events associated with hospitalization, such as drug events and bed rest or reduced mobility (Sager et al., 1996). Older patients often enter the hospital in an undernourished state which is then exacerbated by changes in diet or inadequate intake as

the patient undergoes various diagnostic and therapeutic procedures (Palmer et al., 1998; Riedinger and Robbins, 1998).

## **FUTURE AREAS FOR RESEARCH**

Although the optimal method for identification of undernutrition in hospitalized older people has not been determined, the methods currently employed lack validity and are cumbersome and resource intensive. Additional research needs to be conducted in this area.

## **SUMMARY**

Acute care hospitalizations are associated with a decline in functionality of older people. Poor nutritional status at admission and inadequate nutrient intake during hospitalization may contribute to this decline. Evidence in the literature indicates that identification and intervention for nutrition problems in older patients may be inadequate. Education in the hospital setting is often limited to teaching patients “survival skills” and referring them to the ambulatory setting for additional counseling. However, lack of reimbursement in ambulatory settings limits the resources available to people once they have been discharged from the hospital. Hospital dietitians often provide guidance to home health agencies and home infusion companies who may not have adequate staffing of qualified nutrition professionals.

## **RECOMMENDATIONS**

□ Current standards for screening and assessing nutritional status in hospitalized Medicare beneficiaries need to be reassessed and revised. JCAHO requirements for hospital-based nutrition screening, assessment, intervention, and surveillance warrant comprehensive review. In particular, the methods adopted by many institutions to meet 24-hour screening requirements lack validity in the identification of undernourished patients, often depend upon information that is unreliable or unavailable, and are cumbersome and resource intensive.

□ Changes in reimbursement have to be made in the ambulatory and home-health settings

to provide additional nutrition resources for individuals once they have been discharged from the hospital (see chapters 11 and 12).

### **The Joint Commission (TJC) Mock Survey Questions for Dietary Staff**

□ The Joint Commission (TJC) Mock Survey Questions

for Dietary Staff

□ General

□ How do you know when a patient's diet order has changed?

□ Where could you find more information about a particular diet?

□ How do you know which patients receive snacks and what those snacks should consist of?

□ How could I find out about how a patient's food intake is?

□ What is the policy regarding food brought into the hospital by a patient's family or friends?

□ What is the process for providing food or supplements outside of normal mealtimes?

□ How do you ensure that a patient's meal tray is appropriate for the patient's diet?

□ How do you measure the quality of the food that you serve? How do you know if you are doing a good job?

□ Where do you document food temperatures? What precautions do you take to ensure that food arrives at the proper temperature?

□ How do you ensure that food is attractive?

□ What is your policy regarding menu substitutions? How do you ensure that the substitutions are of similar nutritive value? How are patients made aware of the substitutions that are available to them?



- What is the process for the ordering physician to prescribe therapeutic diets? How are those orders communicated to dietary staff?
- How is it ensured that patients do not go longer than 14 hours between the evening meal and the morning meal? (Can extend to 16 hours if evening nourishment is provided.)
- How is it assessed which patients need special eating utensils and equipment? What is the procedure for making sure that these adaptive devices are available at mealtimes?
- Who provides feeding assistance to patients who need it?
- Where is meal consumption data recorded? How is this information communicated to physicians, nursing staff, and registered dietitians or registered dietitian nutritionists?

### **Staffing**

- How do you ensure that the department is staffed appropriately?
- What is the minimum number of employees who work each shift?
- What is your plan for staffing emergencies?

### **Safety and security**

- What is the environment of care?
- What are some potential emergencies that would impact your department and the hospital as a whole?
- What is your route of evacuation in case of emergency?
- Where is the closest fire extinguisher?
- What is the proper method of operating a fire extinguisher?
- What would you do if the fire alarm went off right now?
- What would you do if the water was shut off?
- What would you do if the power went out?
- What would you do if the phones did not work?

- What are the emergency codes?
- What are some examples of protective equipment that you use to prevent injury?
- What patient safety issues are we focusing on this year?
- What are some examples of hazardous materials stored in this department?
- What would you do if you spilled a hazardous material?
- What is the procedure for filling out an Incident Report?
- How do you know what the risks are for the chemicals used in this department?
- What does MSDS stand for?
- Where is the MSDS Manual located?
- Who is the safety officer in this hospital?
- How do you report safety-related issues?
- What is your role in security?
- How do we keep the hospital safe and secure?
- What is the phone extension for Security?

### **Infection control**

- What infection-control risks exist in this hospital?
- How do you prevent the spread of infection?
- What are standard precautions?
- How do you keep food safe for patients?
- What is our policy for using leftover food?
- When do you wash your hands?
- When do you take temperatures of food and equipment?
- How is kitchen garbage and refuse disposed of?
- What is the procedure for delivering meal trays to patients who are under isolation pre-

cautions?

### **Patient rights**

- How do we find out about, and then take into account, patients' cultural, ethnic, or religious food preferences?
- What is the Patient Bill of Rights?
- What would caregivers do if they disagreed with the quality of care provided by an employee?
- Who chairs the Ethics Committee?
- What does the Ethics Committee do?
- What is the process if a patient and/or patient's family member has a complaint about patient care?
- What does HIPPA stand for? What is HIPPA?
- What are advance directives?
- What is informed consent?
- What is the facility's philosophy on restraint use?
- How are patients' preferences regarding types of food and timing of meals accounted for?

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