

Nutrition Across the Continuum of Care



Jamie Ritchie, MS, RDN, CSG, LDN
Registered Dietitian/Licensed Nutritionist
Board Certified Specialist in Gerontological Nutrition

Review of Objectives

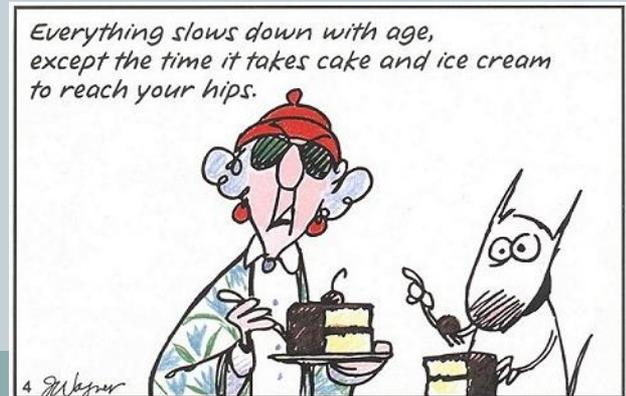


- Define nutrition and hydration risk in aging
- Summarize benefits of liberalization of diets in older adults
- Identify nutrition concerns at end of life

Physiological Changes Associated with Aging



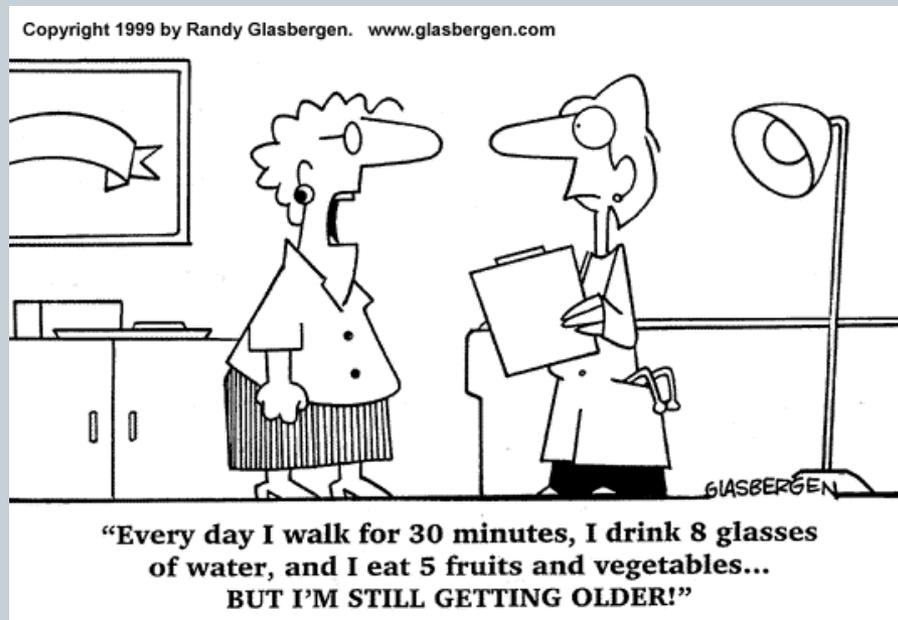
- **Changes in body composition**
 - Decrease in basal energy metabolism
 - Reduction in lean body mass including skeletal and smooth muscle mass losses
 - Loss of water with loss of lean body mass (~70% of total body water is in lean body mass)
 - Total body fat increases with age
 - Bone density decreases
 - Bone mass loss after menopause



Physiological Changes Associated with Aging



- Decline in immune system
 - Declines with age
 - Compromised by nutritional deficiencies
 - Declines with reduced physical activity



Physiological Changes Associated with Aging

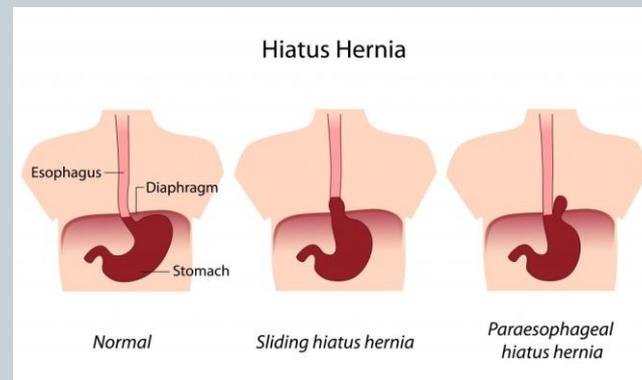


- **Changes in GI tract**
 - Oral Cavity – Gum Disease, Dental Caries, Oral/Throat Cancers
 - Dysphagia
 - Difficulty swallowing or chewing
 - Painful swallowing (often secondary to GERD)

Physiological Changes Associated with Aging



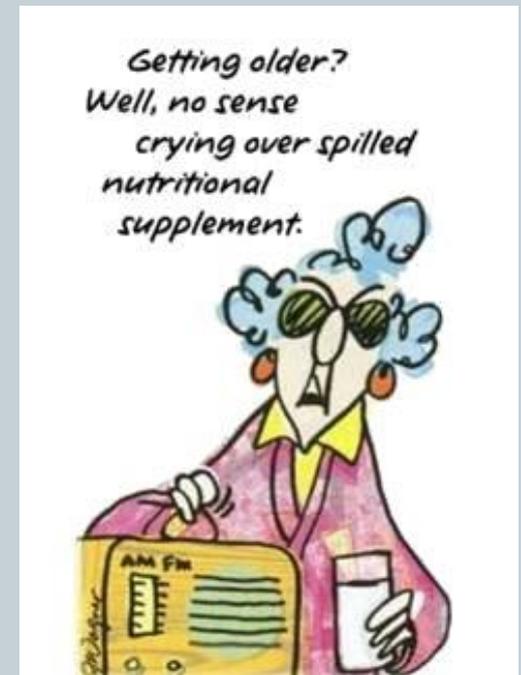
- **Changes in GI tract**
 - Gastroesophageal Reflux Disease (GERD)
 - Hiatal Hernia
 - Peptic Ulcer Disease
 - Gastroparesis
 - Malabsorption (causes include pancreatic insufficiency, anatomic changes and bacterial overgrowth)



Physiological Changes Associated with Aging



- **Sensory losses**
 - Poor eyesight (social isolation, reduced activity, reduced cooking)
 - Poor hearing (social isolation)
 - Sense of thirst declines
 - Smell and taste sensitivity declines



Other Nutrition Factors for Older Adults



- **Eating alone**
 - Difficulty in meal planning and preparation
- **Polypharmacy**
 - Reduced appetite
 - Gastrointestinal side effects
 - Financial burden

Nutrition-Related Diseases Common in Older Adults- Dementia



● **NUTRITION INTERVENTIONS:**

- Finger Foods
- Diet liberalization
- Food fortification
- Frequent snacks
- Supplementation
- Cues and encouragement
- Moderate to maximum assistance with meals may be needed
- Avoid caloric restriction early in disease

Nutrition-Related Diseases Common in Older Adults- Dysphagia



- Dysphagia is a disturbance in the normal transfer of food from the oral cavity to the stomach and refers to the difficulty in swallowing liquids, solids or both.
- The nutritional implications of dysphagia result from inadequate food or fluid intake and can include:
 - weight loss
 - dehydration
 - vitamin and mineral deficiencies
 - Protein-calorie malnutrition
 - Skin breakdown
 - Aspiration pneumonia
 - Depression

<https://www.youtube.com/watch?v=adJHdrQ4CRM>

Nutrition-Related Diseases Common in Older Adults- Dysphagia



- **Diagnosis or conditions of patients who may have difficulty swallowing include:**
 - Alzheimer's disease/dementia
 - Multiple sclerosis
 - Amyotrophic lateral sclerosis (ALS)
 - Muscular dystrophy
 - Cerebral palsy
 - **Parkinson's disease**
 - Closed head injury
 - **Stroke/CVA**
 - Head or neck cancer
 - Guillain-Barre syndrome
 - Huntington's chorea
 - History of aspiration or pneumonia
 - Medical side effects/over-sedation (primarily psychotropic medications)

Nutrition-Related Diseases Common in Older Adults- Dysphagia



- **Warning signs of swallowing problems**
 - Pocketing of food under tongue, in cheeks, or on the hard palate
 - Spitting food out of the mouth or tongue thrusting
 - Poor tongue control
 - Facial weakness
 - Excessive tongue movement
 - Slow oral transit time
 - Coughing before, during or after swallowing
 - Choking
 - Excessive secretions, drooling
 - Gurgling (wet) voice after eating or drinking
 - Hoarse, harsh or breathy voice
 - Regurgitation of material through nose, mouth or trachea
 - Inadequate intake of food or fluid
 - Weight loss
 - Excessive eating time
 - Mealtime resistance - clenching teeth, pushing food away, or clenching throat
 - Recurrent pneumonia

Hydration Factors



- **Water**

- Decreased intake of fluids in older adults due to:

- ✦ Decreased perception of thirst
- ✦ Purposeful restriction to prevent incontinence
- ✦ Purposeful restriction to prevent bathroom trips

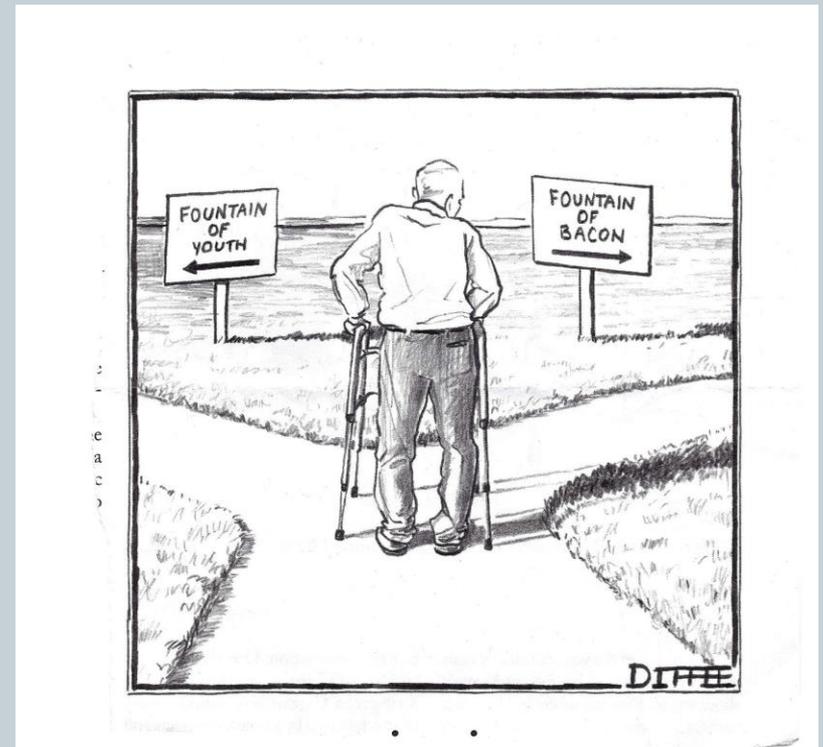
- Reasons for increased fluids:

- ✦ Kidneys with decreased function to concentrate urine increasing dehydration risk
- ✦ Higher rate of infections which increases fluid needs (due to fever)
- ✦ Preventing Urinary Tract Infections
- ✦ Preventing constipation
- ✦ Medication use: Laxatives, Diuretics, Narcotics

Diet Liberalization

- *“It is the position of The American Dietetic Association that the quality of life and nutritional status of older adults residing in health care communities can be enhanced by individualization to less-restrictive diets.”*

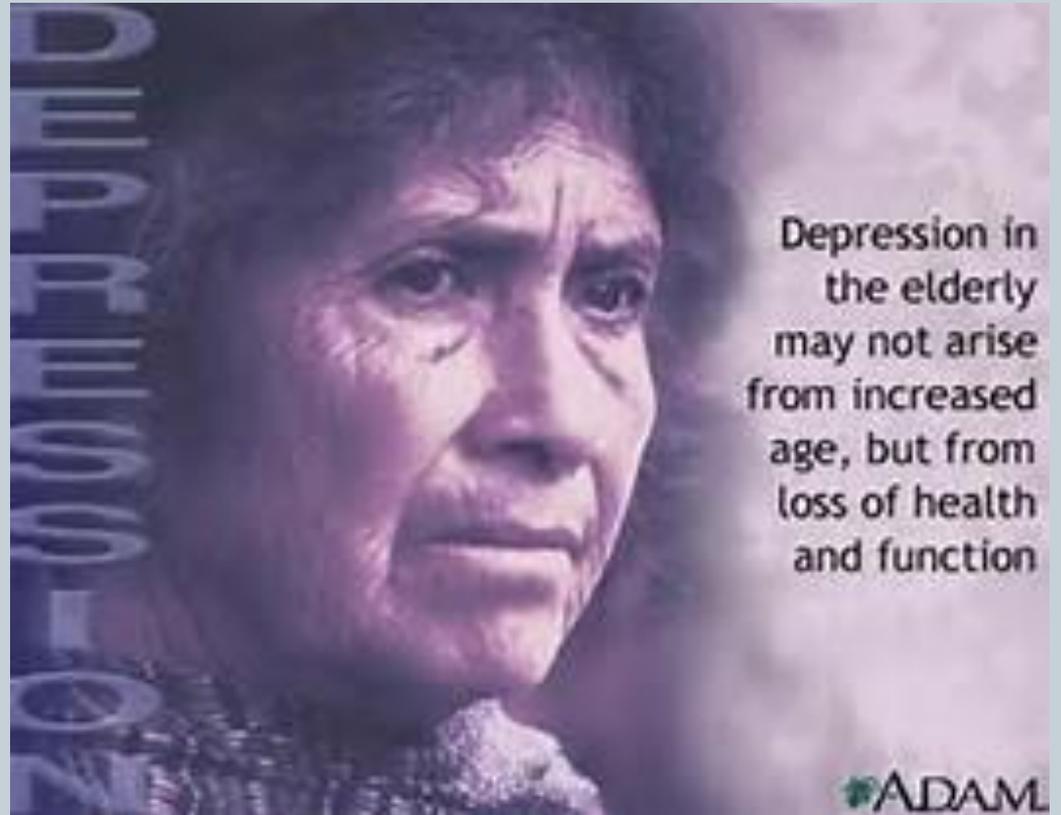
*Journal of the American Dietetic Association 2010;
110:1549-1553*



Diet Liberalization



- Consequences Often Seen with Dietary Restriction
 - Stress
 - Anger
 - Anxiety
 - Depression
 - Decreased intake
 - Weight loss



Diet Liberalization



- **Potential Benefits of Liberalization**
 - Increased quality of life
 - Heightened satisfaction
 - Familiar Foods
 - Improved nutritional status
 - Decreased feelings of isolation
 - Increased meal/nutrient intake

“Including older individuals in decisions about food can increase the desire to eat and improve quality of life.”

Diet Liberalization



Position of the American Dietetic Association: Individualized Nutrition Approaches for Older Adults in Health Care Communities

Journal of the American Dietetic Association 2010; 110:1549-1553

- Priority of nutrition care in health care communities is to consume adequate food and fluids to prevent unintended weight loss and undernutrition.
- Therapeutic diets are designed to improve health in children and adults, however they can have negative affects on older adults (less variety & flavor).
- Restrictive diets can be seen as unpalatable causing reduced pleasure of eating, decreased intake, and unintended weight loss (opposite of intention of health care).

Diet Liberalization



- Liberal diets are associated with an increase in food and fluid intake.
- Older adults living in health care communities have more benefits from a liberalized diet than risk.



“On this diet, you can eat all the steak you want, but a slice of bread will kill you. On this other diet, you can eat all the bread you want, but a steak will kill you.”

Diet Liberalization



- **Diabetes**

- There is no evidence to support “No Concentrated Sweets or No Sugar Added” diets.
- These restricted diets are no longer considered appropriate.
- Most experts agree using medications to control blood sugar, blood lipid levels, and blood pressure improve the joy of eating and reduce malnutrition risk.
- A Regular Diet is appropriate for older adults residing in health care communities. This diet should be consistent in the amount and timing of carbohydrates.

Diet Liberalization



- **Cardiovascular Disease**

- Low Fat, Low Cholesterol Diets is controversial.
- Little data available to support use of lipid-lowering medications in adults over the age of 75.
- Health care providers need to be aware of the balance between cardiac problems, overall medical condition, prognosis and risk of undernutrition when making diet decisions.
- CHF, blood pressure, and sodium intake in the older adults population has not been well studied, however a liberal approach to sodium may be necessary to maintain adequate nutrition status, particularly in the frail elderly.
- The DASH eating pattern (Dietary Approaches to Stop Hypertension) reduces blood pressure and reduce rate of heart failure.
- Physical activity, as tolerated, can help facilitate cardiac health.

Diet Liberalization



- **Chronic Kidney Disease (CKD)**
 - Anorexia, Nausea and Vomiting are common side effects from uremia (uremia in blood/elevated BUN levels).
 - Undernutrition can be difficult to assess in this population due to changes in body weight through shifts in fluids.
 - Additional protein is needed for patients undergoing hemodialysis.
 - Individualizing the diet for CKD patients may increase total energy and protein intake preventing undernutrition.

Diet Liberalization



- **Obesity**

- Weight loss in the obese older adult can increase physical function and quality of life, however it can also cause a decline in lean body mass contributing to functional decline.
- If an obese older adult desires weight loss, the care plan should provide adequate energy and protein along with regular physical activity to preserve lean body mass.
- Caution should be applied in determining a patient's weight loss plan in order to prevent pressure ulcers, undernutrition and infection.

Diet Liberalization



- **Alzheimer's Disease and Dementia**
 - Unintended weight loss is common and part of the disease process
 - Meal intake is often poor, usually due to cognitive decline
 - Develop an individualized care plan considering food preferences, using nutrient-dense foods, providing appropriate assistance (adaptive equipment, restorative dining, feeding assistance), and considering finger foods.



Diet Liberalization



- “The State Operations Manual (SOM) of the Centers for Medicare and Medicaid Services (CMS)—Appendix PP-Guidance to Surveyors for Long Term Care Facilities—states, “A facility must care for its residents in a manner and in an environment that promotes maintenance or enhancement of each resident’s quality of life.
- Facilities must respect ethnic, cultural, religious, and other food and dining preferences, and protect and promote the rights of each resident.
- **Providing a therapeutic diet against a resident’s wishes is a violation of resident rights.**
- Proper counseling must be provided and documented indicating the resident understood the risks vs benefits of not following the therapeutic diet.
- Providing a more liberal diet may help prevent an F-325 citation (nutrition and unintended weight loss) because the intent is to ensure that residents maintain acceptable parameters of nutritional status.”

Diet Liberalization



- Implementing diet liberalization requires collaboration with the resident, family and members of the health care team.
- Develop facility policies and procedures, educate staff, residents and family member on the benefits of a less-restrictive diet based on the individuals needs.



Diet Liberalization



- Remember it is a resident's right to consume foods he/she enjoys regardless of their medical condition.

Resident Bill Of Rights #6

The resident (or his or her authorized representative) is entitled to participate in planning his or her care and medical treatment.

A nursing home patient is entitled to information in advance about care and treatment and of any changes in that care and treatment that may affect the patient's well-being. The nursing home resident is entitled to participate in determining changes in care and medical treatment, unless adjudicated in competent or otherwise found to be incapable under state law.



End of Life Nutrition and Hydration

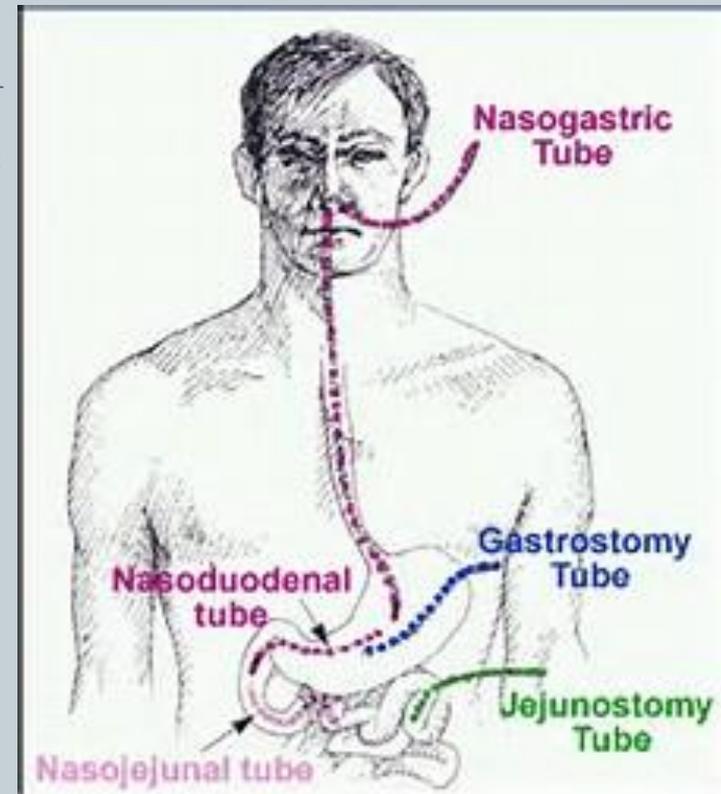


- Advocate for the patient and providing appropriate medical nutrition therapy to meet the individual's changing goals for care.
- Nutrition Interventions may include:
 - Texture and consistency modifications
 - Mealtime support and assistance
 - Adaptive feeding equipment
 - Fortified Foods
 - Oral Nutrition Supplements

End of Life Nutrition and Hydration



- **Tube Feeding**
 - Considered a medical intervention
 - Burden vs benefit must be considered
 - Review advance directives if available



End of Life Nutrition and Hydration



- **Medical Contraindications of Tube feeding:**
 - Severe vomiting or diarrhea
 - Acute pancreatitis
 - Septic shock
 - Inability to obtain or maintain enteral access

End of Life Nutrition and Hydration



- **Questions to consider when making a decision for tube feeding:**
 - Does the individual suffer from a condition that is likely to benefit from the TF?
 - Will nutritional support improve outcome and/or accelerate recovery/improve prognosis?
 - Does the individual suffer from an incurable disease, but one in which TF can improve quality of life?
 - Does the anticipated benefit of TF outweigh the potential risks?
 - Is TF consistent with the individuals wishes (advance directives or otherwise known)?
 - Are there sufficient resources available to manage TF properly?
 - Will TF negatively affect the individuals quality of life?

End of Life Nutrition and Hydration



- **Potential Risks for Enteral Nutrition**
 - Infection around surgical site
 - Intolerance to feeding, resulting in N/V/D
 - Fluid overload for electrolyte imbalances
 - Aspiration pneumonia
 - Possibility of tube being pulled out
 - Additional interventions that may be necessary to monitor or managing complications of feeding tube (Blood draws, medications)
 - Quality of life issues
 - ✦ Limited mobility related to being hooked up to a pump
 - ✦ Lack of socialization at meal time
 - ✦ Deprivation of sensory pleasure of eating
 - ✦ Sleep disruption for feedings/flushes
 - ✦ Need for restraints to prevent confused individuals from pulling the tube.

End of Life Nutrition and Hydration



- **Comfort Care**
 - Provide favorite foods and fluids (of tolerance)
 - Liberalize diet based on individual preference
 - Food/beverage should be provided at appropriate consistency for safe swallowing and ease of consumption
 - Oral Nutrition Supplements and/or fortified foods should be offered if appropriate
 - Self feeding should be encouraged
 - Adaptive feeding equipment used as needed
 - If an individual needs to be fed, food and fluids should be offered but not forced

End of Life Nutrition and Hydration



- **End of Life Symptoms That May Affect Nutritional Care**
 - Anorexia or loss of appetite
 - Taste/smell alterations
 - Dry Mouth
 - Sore Mouth
 - Dysphagia
 - Cramps, Heartburn, Bloating
 - Nausea
 - Vomiting
 - Constipation
 - Diarrhea
 - Dehydration
 - Fluid Overload

References



- Center for Medicare and Medicaid Services (CMS). State Operations Manual (Appendix PP). Washington DC: US Department of Health and Human Services; Revised 2015.
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