Welcome

General Mills
FOODSERVICE

WEBINAR:
Combating Malnutrition in Older Adults:
Assessment and Food-Based Solutions

March 11, 2025:
1:00 – 2:00 pm CST
2:00 – 3:00 pm EST

FREE General Mills Webinar - Earn 1 CEU Credit!

Combating Malnutrition in Older Adults: Assessment and Food-Based Solutions

We will begin shortly

Featured Speakers

Elaine Farley-Zoucha, RDN, LMNT was the founder and owner of EZ Nutrition Consulting, PC, which recently partnered with DiningRD. She has over 20 years of experience in Food Service Management, Culinary Arts, and Medical Nutrition Therapy.

She began her career as a Dietetic Technician, Registered and Chef with an Associate Degree from Southeast Community College-Lincoln in Food Service Management, Culinary Arts, and Dietetic Technology.

She completed her Bachelor of Science in Nutrition Science and Dietetics at the University of Nebraska - Lincoln and her internship at the University of Iowa Hospital & Clinics. Contact Elaine at Education@DinngRD.com

Since joining the Chefs of the Mills in 2006, **Chef Sonja Kehr** has focused on troubleshooting recipes and product performance, reverse-engineering products, developing and standardizing recipes, mapping flavor combinations, maximizing ingredients, and menu engineering. These skills help Chef Sonja lead product-knowledge workshops and training sessions for General Mills Foodservice's internal and external partners.

Chef Sonja built more than 25 years of previous foodservice experience working in restaurants, bakeries, colleges and universities, hospitals and healthcare, and catering organizations. Additionally, Chef Sonja has earned certifications including Executive Chef, Sous Chef, Dietary Manager, and Food Protection Professional.

A dedicated learner, Chef Sonja has an associate degree in culinary arts from the University of Toledo and a bachelor's degree in culinary management from the Art Institutes International of Minnesota. She has also completed the Cook's Apprenticeship with the American Culinary Federation.

COMBATING MALNUTRITION IN THE ELDERLY

ELAINE FARLEY-ZOUCHA RD, LMNT

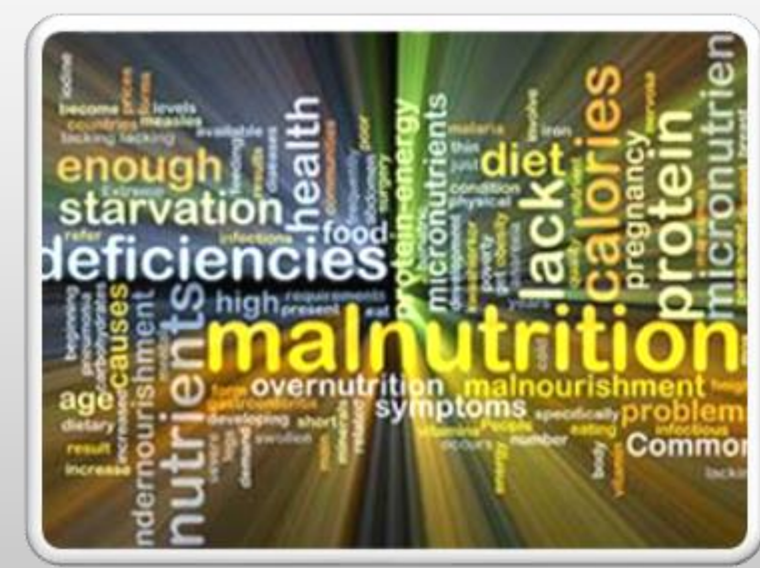
OBJECTIVES

- IDENTIFY CRITERIA FOR DIAGNOSIS OF MALNUTRITION.
- DISCUSS NUTRITION INTERVENTIONS FOR RESIDENTS WITH MALNUTRITION.
- IDENTIFY OUT OF THE BOX APPROACHES TO COMBAT MALNUTRITION.
- UNDERSTAND THE IMPORTANCE OF DOCUMENTATION WITH THE NEW PDPM PROCESS.

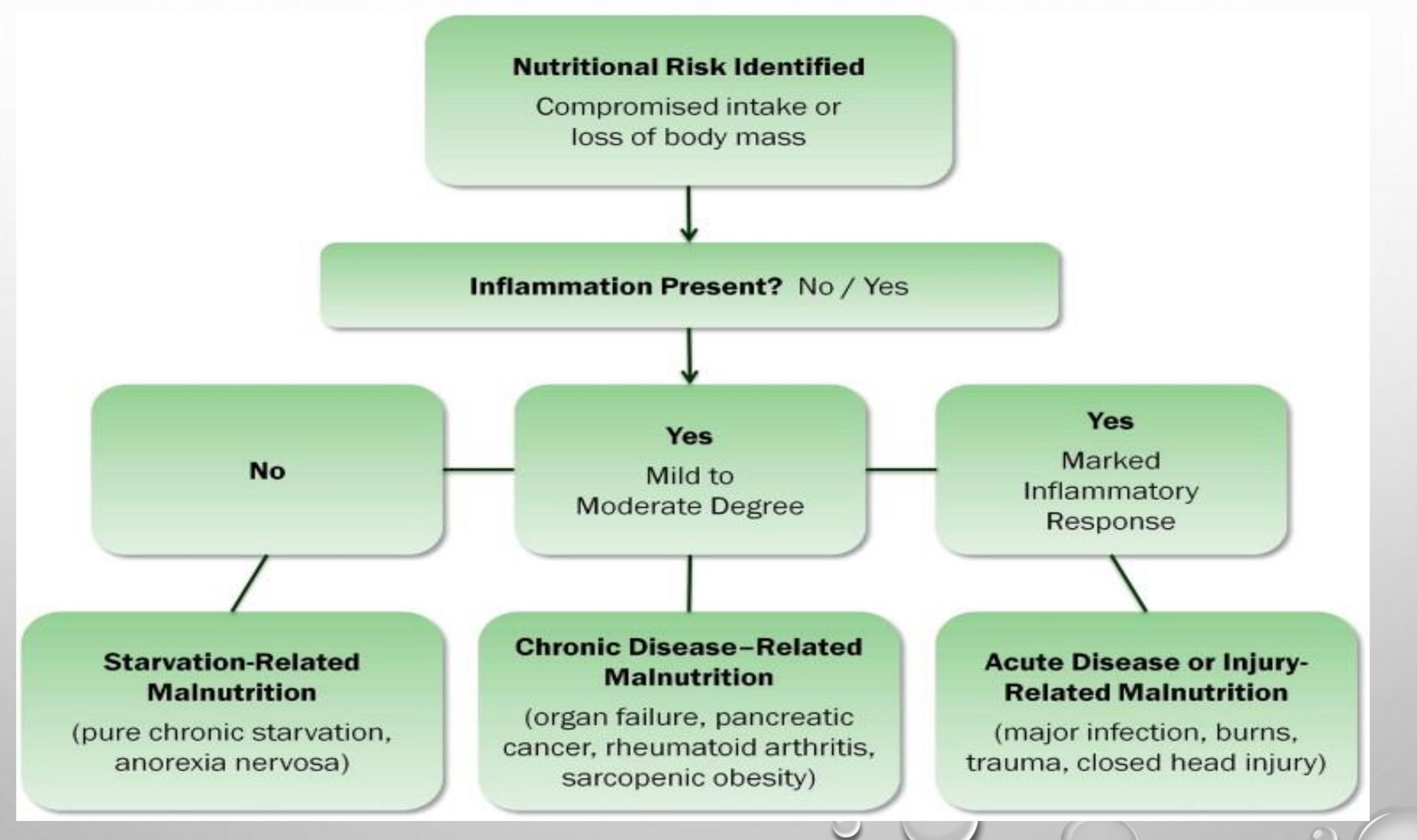
DEFINITION OF MALNUTRITION

AN ACUTE, SUBACUTE OR CHRONIC STATE OF NUTRITION, IN WHICH A COMBINATION OF VARYING DEGREES OF OVERNUTRITION OR UNDERNUTRITION WITH OR WITHOUT INFLAMMATORY ACTIVITY HAVE LED TO A CHANGE IN BODY COMPOSITION AND DIMINISHED FUNCTION.

THIS CAN INVOLVE INADEQUATE INTAKE OF PROTEIN AND/OR ENERGY OVER PROLONGED PERIODS OF TIME RESULTING IN LOSS OF FAT STORES AND/OR MUSCLE WASTING.



ETIOLOGY BASED MALNUTRITION DEFINITIONS



JPEN 2012; 36:275-283

WHO IS AT RISK?

Older Adults	People with Chronic Diseases	Hospitalized Patients	Long-Term Care Residents
Dietary needs change with age and older adults are particularly vulnerable because of physical and social factors such as:	Chronic diseases like cancer, diabetes, heart disease, chronic pain, GI disease, dementia, and depression can:	Malnutrition can lead to hospitalization, and hospitalization itself puts people at risk because:	Residents are more likely to have multiple chronic diseases and conditions and may also:
Dental/oral problems	Reduce appetite	Surgeries and other procedures may require restricted diets	Feel socially isolated or depressed
Appetite-reducing medications	Make it physically difficult to shop, cook, and eat	Illnesses and procedures can decrease appetite	Lack interest in food
Social isolation	Make it difficult to remember to eat	People may eat less because they don't feel well, like their food choices, or are worried or depressed	Depend on staff for help with eating
Disability	Change metabolism and digestion		
Financial barriers	Require the use of appetite-reducing medications		

WHAT WE KNOW….

- 60+ YEAR OLDS ARE THE **FASTEST GROWING SEGMENT** OF THE POPULATION.
- PREVALENCE OF MALNUTRITION IS ACROSS CARE SETTINGS – COMMUNITY, ACUTE, & POST ACUTE
- EVALUATION & DOCUMENTATION OF NUTRITION STATUS IS MISSING IN THE TRANSITION OF CARE
- THE ELDERLY ARE AT RISK FOR WEIGHT LOSS, MALNUTRITION, DEHYDRATION, AND SKIN BREAKDOWN.

http://defeatmalnutrition.today/sites/default/files/documents/Dialogue%20Infographic_Malnutrition%20Transitions%20of%20Care_20180806.pdf

HOW COMMON IS MALNUTRITION IN OLDER ADULTS

- 1 IN 2 OLDER ADULTS ARE AT RISK.
- ELDERLY LIVING IN THEIR OWN HOMES, ABOUT **1 IN 10 ARE SUFFERING FROM UNDER-NUTRITION.**
- **THOSE HOSPITALIZED -UP TO 60%INCREASED RISK** OF BECOMING UNDERNOURISHED
- **UP TO 85% OF PEOPLE WHO LIVE IN LONG-TERM CARE FACILITIES EXPERIENCE MALNUTRITION IN SOME FORM.**

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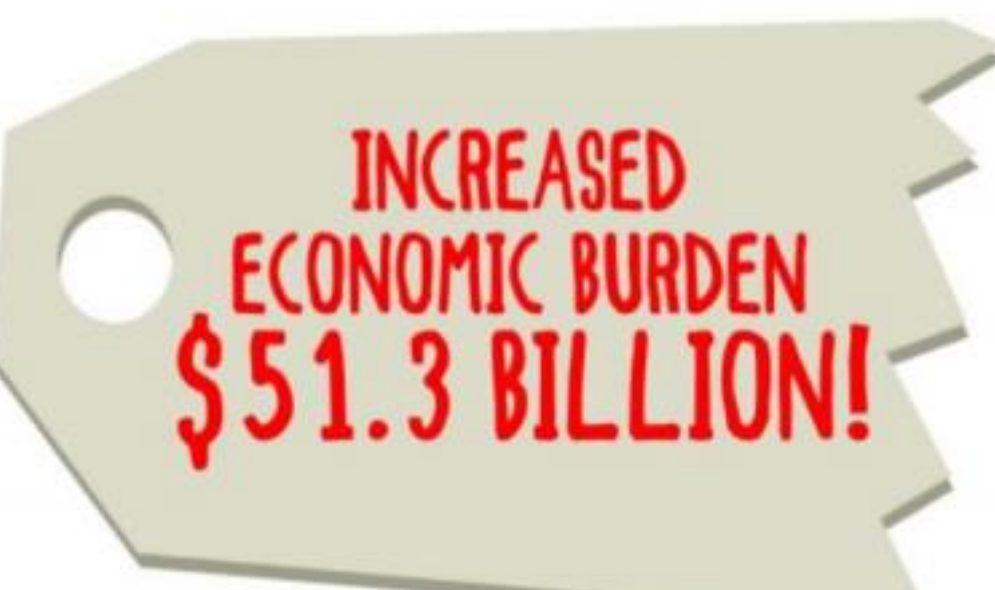
Risk Factors:

- Chronic disease
- Hospitalization
- Social isolation
- Disability
- Dietary restrictions
- Long-term care residency

https://www.agingresearch.org/app/uploads/2016/09/pdfresizer.com-pdf-resize.pdf

- Falls and broken bones
- Weight loss and muscle loss
- Loss of independence
- Weakened immune system
- Disability



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WARNING SIGNS

- LOSS OF SENSATION.
- SIGNS OF DEHYDRATION
- DECREASED URINATION.
- CONSTIPATION.
- DRY MUCOUS MEMBRANES
- BRUISING EASILY.
- SUDDEN, UNINTENDED WEIGHT LOSS.
- LOSS OF APPETITE AND DECREASED FOOD INTAKE.
- POOR CONCENTRATION/CONFUSION.
- DIFFICULTY BREATHING.
- TROUBLE STAYING WARM.

AND/ASPEN CONSENSUS MALNUTRITION CHARACTERISTICS

- UNINTENTIONAL WEIGHT LOSS
- EVIDENCE OF INADEQUATE INTAKE
- LOSS OF MUSCLE MASS
- LOSS OF SUBCUTANEOUS FAT
- LOCALIZED OR GENERALIZED FLUID ACCUMULATION
- REDUCED HAND GRIP STRENGTH

THE PRESENCE OF **TWO OR MORE CHARACTERISTICS** NECESSARY FOR THE DIAGNOSIS OF MALNUTRITION

JPEN 2012; 36:275-283

NOT JUST PROTEIN CALORIES - VITAMINS AND MINERAL DEFICIENCIES

- VITAMIN D
- IRON
- CALCIUM
- B VITAMINS
- POTASSIUM
- MAGNESIUM
- SODIUM

CAUSES AND SYMPTOMS

RESEARCHERS HAVE IDENTIFIED A NUMBER OF RISK FACTORS THAT MAY INCREASE THE CHANCE OF BECOMING MALNOURISHED AS YOU GET OLDER. THESE INCLUDE:

- PHYSICAL
- SOCIAL
- PSYCHOLOGICAL

PHYSICAL RISK FACTORS

- GENERAL LOSS OF APPETITE.
- BAD TEETH OR PROBLEMS WITH CHEWING.
- PROBLEMS WITH SWALLOWING, CAUSING CHOKING OR FOOD GOING DOWN "THE WRONG WAY".
- A FEELING OF BEING FULL TOO EARLY.
- DEXTERITY PROBLEMS, SUCH AS SEVERE ARTHRITIS THAT MAY MAKE IT DIFFICULT TO HOLD UTENSILS OR FEED ONESELF.
- SENSORY PROBLEMS, SUCH AS CHANGES IN TASTE, SMELL, AND VISION.
- OVERALL REDUCTION IN ABILITY TO DIGEST AND ABSORB MANY FOODS (BECAUSE OLDER PEOPLE PRODUCE LESS STOMACH ACID AND FEWER DIGESTIVE ENZYMES).
- MOBILITY OR TRANSPORTATION DIFFICULTIES THAT MAKE FOOD SHOPPING TOO MUCH OF A CHALLENGE.

CLINICAL RISK FACTORS

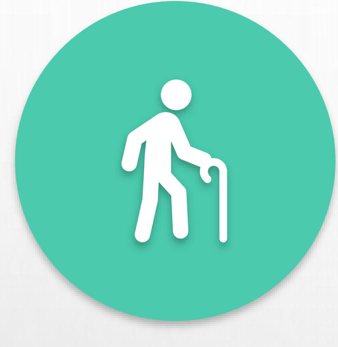
- RESPIRATORY DISORDERS - EMPHYSEMA
- GASTROINTESTINAL DISORDERS - MALABSORPTION
- ENDOCRINE DISORDERS – DIABETES, THYROID
- NEUROLOGICAL DISORDERS - CEREBROVASCULAR ACCIDENT, PARKINSON'S DISEASE
- INFECTIONS - URINARY TRACT INFECTION, CHEST INFECTION
- PHYSICAL DISABILITY - ARTHRITIS, POOR MOBILITY
- DRUG INTERACTIONS - DIGOXIN, METFORMIN, ANTIBIOTICS, ETC
- OTHER DISEASE STATES – CANCER
- FOOD INTOLERANCES - LACTOSE

Older adults with dementia are at extra risk for malnutrition because they are unlikely to be able to shop and cook for themselves.

Dementia affects approximately 65% of LTC residents

People with dementia need a lot of help actually finishing the food that is placed in front of them. This is because these patients may not be physically able to chew and swallow well.

DEMENTIA



Depression among institutionalized older adults is common and can be caused by several factors, including loss of loved ones, loss of independence, loneliness, and failing health.

Many older adults take a variety of medicines and some of these may bring on a depressive mood.

Try to make mealtimes an enjoyable social occasion, with satisfying foods in a pleasant setting.

Increasing physical activity or an exercise routine can improve appetite, improve social interactions (if exercising in a group), and lessen depressive mood.

DEPRESSION

DECLINE IN INDEPENDENT EATING

- DATA COLLECTED BY THE CMS INDICATES THAT **28% OF NURSING FACILITY RESIDENTS REQUIRE ASSISTANCE WITH EATING, AND 19.2% ARE TOTALLY DEPENDENT ON EATING ASSISTANCE.**
- A DECLINE IN FUNCTIONAL ABILITY CAN BE A FACTOR IN ACCESSING ADEQUATE NUTRITION. THE PROBLEM IS ENHANCED BY STAFF SHORTAGES AND THE LENGTH OF TIME REQUIRED TO FEED A TOTALLY DEPENDENT RESIDENT.

ADDITIONAL RISK FACTORS IF RESIDENT IS HOSPITALIZED

- UNPLEASANT SIGHTS, SOUNDS, AND SMELLS.
- INCREASED NUTRIENT REQUIREMENT, FOR EXAMPLE, BECAUSE OF INFECTIONS, CATABOLIC STATE, WOUND HEALING, ETC.
- LIMITED PROVISION FOR RELIGIOUS OR

  CULTURAL DIETARY NEEDS.
- "NOTHING BY MOUTH" OR MISS MEALS

  WHILE HAVING TESTS.

SOCIAL RISK FACTORS

- LIVING ALONE (PARTICULARLY FOR OLDER MEN).
- LONELINESS/ISOLATION.
- RECENT ADMISSION TO A NURSING HOME OR REHABILITATION CENTER.
- LACK OF KNOWLEDGE ABOUT FOOD, COOKING AND NUTRITION.
- CULTURAL OR RELIGIOUS TRADITIONS, ALLERGIES, OR FOOD INTOLERANCES THAT MAY LIMIT FOOD OPTIONS.

COMPOUNDING FACTORS WITH MALNUTRITION

Dehydration is the state of not having enough fluids in your body.

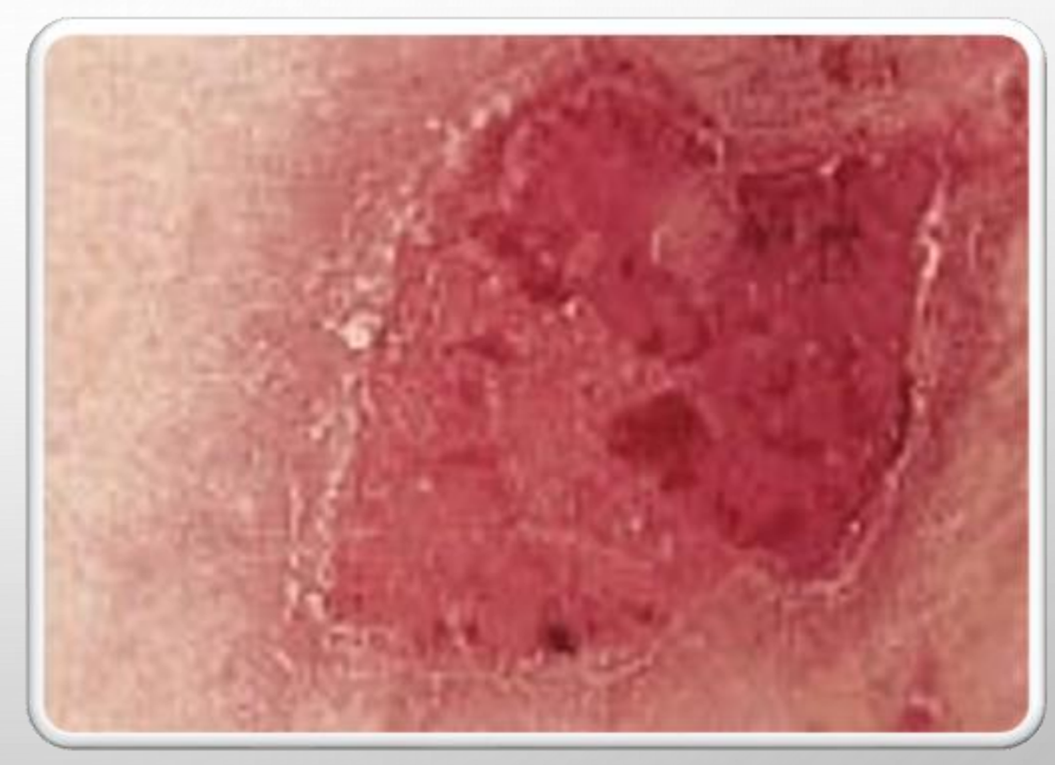
Dehydration can be common in many older people because they do not feel thirsty even when they need to take in fluids.

Consider diuretic, laxatives, and acute or chronic infections when assessing fluid needs.

FLUIDS/HYDRATION– F692

SKIN PROBLEMS AND PRESSURE ULCERS

- MALNUTRITION IN OLDER ADULTS CAN LEAD TO POOR SKIN HEALTH.
- PARTLY A RESULT OF PROTEIN DEFICIENCY.
- TYPICALLY SEE MICRONUTRIENT DEFICIENCIES AS WELL.
- CALORIES BEFORE PROTEIN!



OTHER CONSEQUENCES OF MALNUTRITION

- Loss of strength and function
- Immune dysfunction
- Delayed recovery – increase length of stay
- Hospitalization or Rehospitalization

DETECTING MALNUTRITION IN THE LTC SETTING

Conduct a physical examination.

Review medications (prescription and over-the-counter remedies).

Affect appetite, digestion (including constipation), and nutrient absorption and may interfere with taste and smell.

Asking about their daily routine and ability to carry out regular functions.

Asking questions about memory and mood.

MALNUTRITION SCREENING AND ASSESSMENT TOOLS

- **MINI NUTRITION ASSESSMENT (MNA)** – QUICK AND EASY-TO-USE SCREENING TOOL. CALF CIRCUMFERENCE CAN BE SUBSTITUTED FOR BMI IN RESIDENTS WHO CAN'T BE WEIGHED OR MEASURED.
- **DETERMINE CHECKLIST** – THIS CHECKLIST HELPS IDENTIFY WHETHER AN INDIVIDUAL IS AT NUTRITIONAL RISK.
- **SIMPLIFIED NUTRITIONAL APPETITE QUESTIONNAIRE**.
- **MALNUTRITION UNIVERSAL SCREENING TOOL (MUST)** – VALIDATED SCREENING TOOL SUITABLE FOR ADULTS IN ACUTE AND COMMUNITY SETTINGS.
- **MALNUTRITION SCREENING TOOL (MST)** – IS A VALIDATED TOOL TO SCREEN RESIDENTS FOR RISK OF MALNUTRITION. NUTRITION SCREEN PARAMETERS INCLUDE WEIGHT LOSS AND APPETITE.
- **SUBJECTIVE GLOBAL ASSESSMENT (SGA)** – PROVEN NUTRITIONAL ASSESSMENT TOOL THAT HAS FOUND TO BE HIGHLY PREDICTIVE OF NUTRITION-RELATED COMPLICATIONS IN ACUTE, REHAB, COMMUNITY, AND RESIDENTIAL AGED CARE SETTINGS. NUTRITION ASSESSMENT PARAMETERS INCLUDE A MEDICAL HISTORY (WEIGHT, INTAKE, GI SYMPTOMS, FUNCTIONAL CAPACITY) AND PHYSICAL EXAMINATION.

ASSESSMENT

- REVIEW OF H & P
- REVIEW OF MEDICATIONS
- REVIEW OF LABS
- INTERVIEW
  - UBW, RECENT WT./APPETITE CHANGE
  - TYPICAL EATING PATTERNS
  - VISION, HEARING, ORAL & DENTAL ISSUES
  - FOOD PREFERENCES
- PHYSICAL ABILITIES
- COGNITIVE ABILITIES
- MEAL OBSERVATION
  - CORRECT TABLE PLACEMENT
  - NEED FOR ADAPTIVE EQUIPMENT
  - FLUIDS CONSUMED DURING MEALS
  - FOOD CHOICE – COMPLETE MEAL?
  - PERCENT CONSUMED, ESP. PROTEIN

LABORATORY TESTING

- **LABORATORY TESTING IS NOT USEFUL FOR DIAGNOSING MALNUTRITION.**

- SOME TESTS MAY BE REQUIRED TO DETECT SPECIFIC DEFICIENCIES SUCH AS IRON, FOLATE AND VITAMIN B12.

- ALBUMIN HAS BEEN SUGGESTED IN THE PAST AS A MARKER OF NUTRITIONAL STATUS BUT IT IS NOW REGARDED AS UNHELPFUL DUE TO THE FACT THAT IT CAN BE ALTERED BY CLINICAL CONDITIONS SUCH AS DEHYDRATION AND INFLAMMATION.

PREVENTION AND TREATMENT

FOOD FIRST APPROACH

- Assess and honor preferences.
- If on a therapeutic diet – liberalize.
- Use fortification during meals and snacks.
- Make meals a pleasant social event by including friends or family when possible.
- Serve more frequent small meals instead of three large ones.
- Provide finger foods if needed.
- Assess need for adaptive equipment to maintain independence.
- Offer nutritious snacks, including nutrient-rich drinks.

INTERVENTIONS

- IN SOME SITUATIONS A **FOOD FIRST** APPROACH CAN BE SUFFICIENT TO CORRECT MALNUTRITION OUTCOMES.
- FOR PATIENTS WHO ARE AT VERY HIGH RISK OF MALNUTRITION OR FOR WHOM FIRST-LINE DIETARY MEASURES ARE NOT SUFFICIENT, ORAL NUTRITIONAL SUPPLEMENTS SHOULD BE CONSIDERED IN COMBINATION WITH THE FOOD FIRST APPROACH.

NUTRITIONAL SUPPLEMENTS

Nutritional supplements **should not** replace regular meals.

Use them as snacks between meals or before bedtime.

In the form of RTF nutritional drinks, bars and cookies, or powders that can be added to drinks or other foods.

Nutrient-dense, may have high or low calorie options, and often have good concentrations of vitamins and minerals.

OUT OF THE BOX APPROACHES TO IDENTIFY APPROPRIATE NUTRITION INTERVENTION

- **EDUCATE STAFF ON DEMENTIA RESIDENTS SO THAT THEY CAN IDENTIFY FACTORS THAT MAY BE AFFECTING NUTRITIONAL STATUS**
  - SEEKING THE DINING ROOM PRIOR TO MEALS-MAY MEAN THEY ARE HUNGRY
  - SITTING AND STARING AT THEIR FOOD—DO THEY KNOW WHAT TO DO WITH THEIR UTENSILS? CAN THEY SEE THEIR FOOD? DO THEY HAVE A SWALLOWING/CHEWING ISSUE?
  - DO THEY PRIMARILY JUST DRINK INSTEAD OF EAT FOOD?
- **ENCOURAGE FAMILY MEMBER TO EAT WITH RESIDENT AND CONTRIBUTE TO RESIDENT'S DIETARY HISTORY**
- **PROMOTE AND ENCOURAGE STAFF TO GO THE EXTRA MILE TO FOR THE RESIDENT**
- **ASK QUESTIONS ON RESIDENT'S HISTORY THAT GIVE INSIGHT ON HOW THEY HAVE EATEN AT HOME—**
  - **DOES THE RESIDENT HAVE A HISTORY OF DISORDER EATING?**
  - **WHAT WAS THERE OCCUPATION DURING THEIR LIFETIME?**
    - IS THERE A DAILY ROUTINE THEY ARE USED TO SUCH AS WORKING OVERNIGHTS FOR YEARS
    - DID THEY EAT IN A CERTAIN PLACE OR HAVE CERTAIN DINNERWARE? WHAT WAS THEIR ENVIRONMENT FOR DINING?

PHYSICAL ACTIVITY

- RESEARCHERS HAVE FOUND THAT PHYSICAL ACTIVITY HAS MANY BENEFITS IN OLDER PEOPLE, PARTICULARLY IF THEY ARE UNDERNOURISHED:
  - IT CAN INCREASE YOUR APPETITE.
  - IT CAN IMPROVE YOUR BRAIN FUNCTION, WHICH HELPS YOU NOURISH YOURSELF IN A HEALTHIER WAY.
  - IT MAY STRENGTHEN MUSCLES AND BONE.
  - IT MAY IMPROVE MANY OTHER TYPES OF CONDITIONS, INCLUDING TYPE 2 DIABETES, OSTEOPOROSIS, ARTHRITIS, AND PSYCHOLOGICAL ILLNESSES SUCH AS DEPRESSION.

SOCIAL & PSYCOSOCIAL

- DEPRESSION AND OTHER DISORDERS, IF PRESENT, SHOULD BE TREATED. TREATING THESE DISORDERS MAY REMOVE SOME OF THE OBSTACLES TO EATING.

- FOR OLDER PEOPLE LIVING IN INSTITUTIONS, MAKING THE DINING ROOM MORE ATTRACTIVE AND GIVING THEM MORE TIME TO EAT MAY ENABLE THEM TO EAT MORE.

MEDICATIONS

People who are very undernourished are sometimes given drugs to increase appetite, such as Remeron, Marinol, or Megestrol.

Sometimes drugs are given to increase muscle mass, such as growth hormone or an anabolic steroid (for example, Nandrolone or testosterone).

MALNUTRITION IN THE GERIATRIC INDIVIDUAL CAN LEAD TO SIGNIFICANT NEGATIVE OUTCOMES, THEREFORE ACCURATE AND TIMELY IDENTIFICATION OF MALNUTRITION IS ESSENTIAL TO RESIDENT SUCCESS.

FOREGOING A COOKIE CUTTER APPROACH

AND INDIVIDUALIZING NUTRITION INTERVENTION

IS KEY TO THE SUCCESS OF THE RESIDENT.

Questions?

Elaine Farley-Zoucha, RD, LMNT

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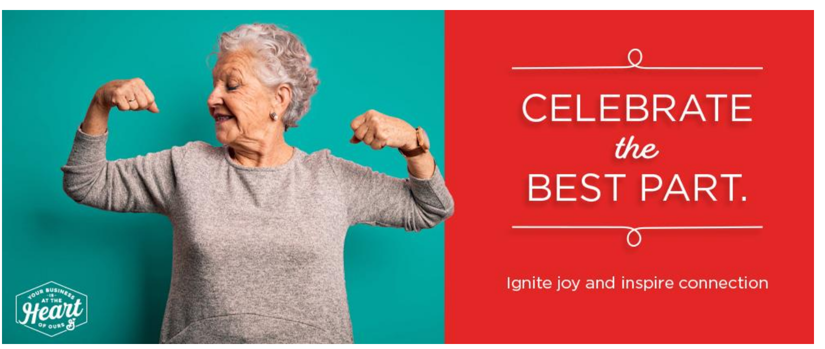
Need some menu ideas?

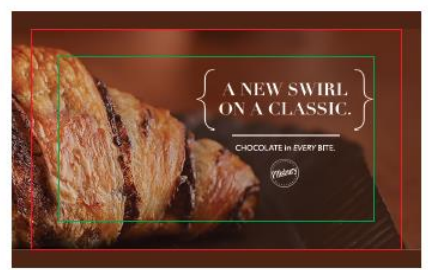
Check out our Senior Living Event Calendar!



Best of Senior Living: A Round Up of the Top Senior Living Resources

Marketing Tools

- Point of sale danglers and clings
- Social toolkit with imagery



Healthcare Food Service Resources

Best of Hospital: A Round Up of Top Hospital Resources

Check out our rebates page for these and more!

Rebates | Earn and Save Foodservice Products (generalmillscf.com)

Pillsbury™ Frozen Baked Goods Rebate

Save $10 per case on Pillsbury™ Frozen Baked Goods

March 1, 2023 - May 31, 2023

Yoplait® Plant Based Parfaitpro® Rebate

Save $10 per case on Yoplait® Parfaitpro® Dairy Free Vanilla, Coconut Based Yogu...

March 1, 2023 - May 31, 2023

Bulk Cereal & ParfaitPro Rebate

Save $10 per case on Bulkpak Cereal and Yoplait® ParfaitPro® Yogurt

March 1, 2023 - May 31, 2023

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Bell Institute of Health & Nutrition at General Mills

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