

NUTRITION STATUS AND MALNUTRITION

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NUTRITIONIST FOR

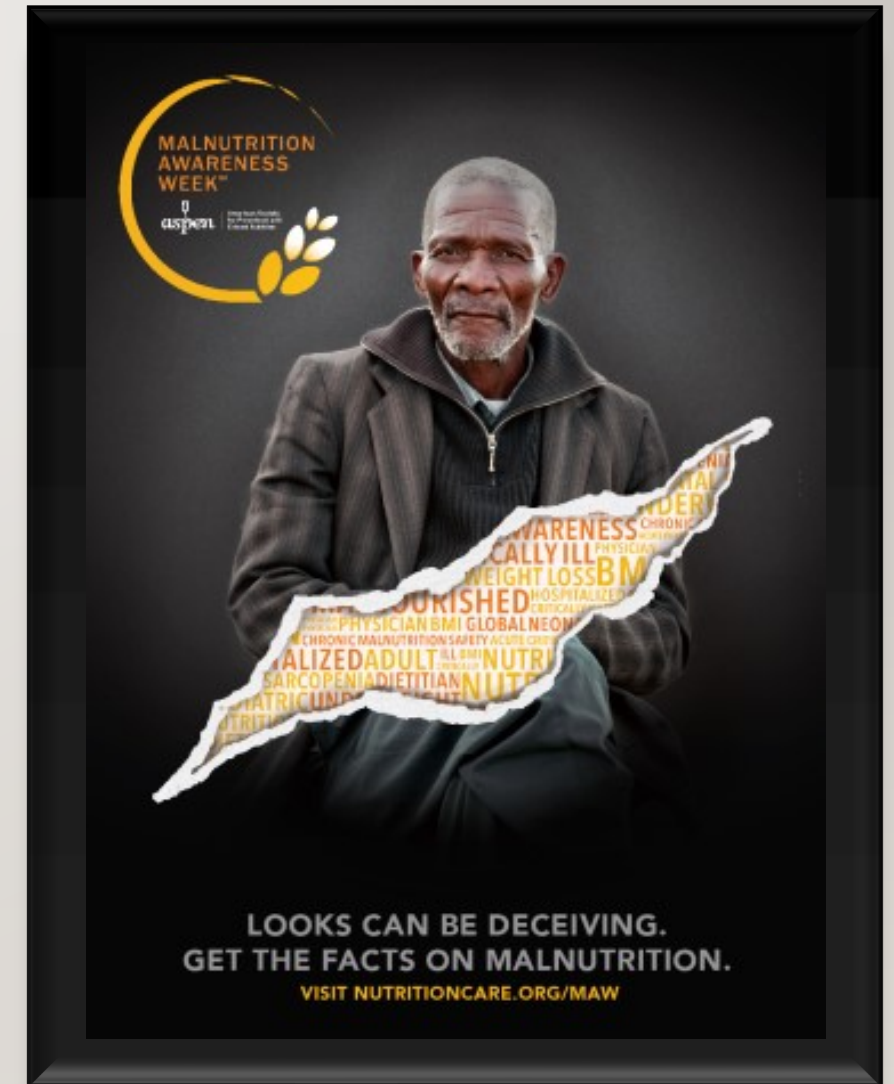


2 OBJECTIVES

- Identify the association between poor nutrition/malnutrition and quality of life.
- Improve knowledge of the DETERMINE nutrition screening tool/questions.
- Describe the steps to follow when someone is at high nutritional risk.
- Learn about the benefits of using a malnutrition screening tool and resources available to help address malnutrition.

3 OCTOBER 4TH – 8TH MALNUTRITION AWARENESS WEEK

- Malnutrition can affect anyone, not just individuals with low income or those that are homeless.
- It can affect individuals that have a great support system and family caring for them.
- Even active and independent seniors, that have plenty of food in their home can still be at risk for malnutrition.
- Having enough money and eating three balanced meals every day does not prevent someone from becoming malnourished.



4 2020 OLDER AMERICANS ACT REAUTHORIZATION

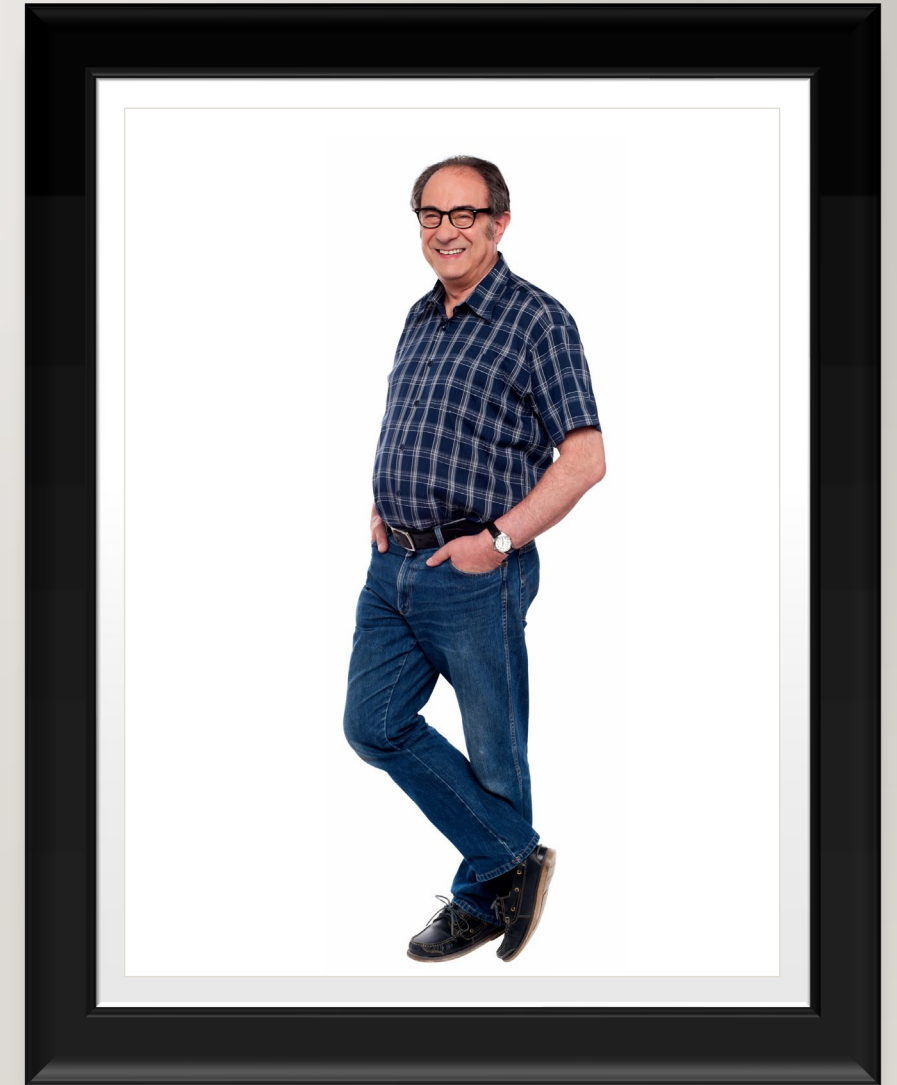
- The 2020 Reauthorization of the OAA revised the Purpose of Title III-C Nutrition Services to (OAA Section 330):
 1. Reduce hunger, food insecurity, and ***malnutrition***;
 2. Promote socialization of older individuals; and
 3. Promote the health and well-being of older individuals by assisting such individuals to gain access to nutrition and other disease prevention and health promotion services to delay the onset of adverse health conditions resulting from poor nutritional health or sedentary behavior.¹

5 WHAT IS MALNUTRITION?

- Malnutrition is defined as **too little or too much** energy, protein, and nutrients that can cause adverse effects on a person's body and its function, and clinical outcomes (Agarwal, et al., 2013).²
- A physical state of **unbalanced nutrition**.
 - It can result from undernutrition or overnutrition.
- It can affect anyone, but the elderly are at an increased risk.
- Malnutrition negatively impacts a person's weight, functions, and/or ultimate clinical outcomes.³

6 MALNUTRITION IS NOT ALWAYS OBVIOUS

- ***Undernutrition*** is caused by not consuming enough calories, protein, or other nutrients.
 - This occurs frequently in parts of the world that do not provide adequate access to food and clean drinking water.
 - Often people think of malnutrition as undernutrition, but this is not always the case.



7 MALNUTRITION IS NOT ALWAYS OBVIOUS

- **Overnutrition** is caused by consuming more calories than a person needs.
 - A person can eat more calories than their body needs and be malnourished at the same time.
 - Consuming too many calories and not enough variety of nutritious foods like fruits, vegetables, whole grains, lean protein, beans, low-fat dairy, nuts, and seeds can lead to vitamin, mineral, or protein deficiencies.



8 TWO OR MORE OF THE FOLLOWING MAY INDICATE MALNUTRITION

- Suboptimal energy intake
- Weight loss (without trying)
- Loss of muscle mass
- Loss of subcutaneous fat
- Localized or generalized fluid accumulation
- Diminished functional status⁴



5 FACTS ABOUT OLDER ADULT MALNUTRITION

9



10 FACTORS THAT MAY INCREASE MALNUTRITION RISK

- Alcoholism
- Changes in taste, smell, or appetite caused by age or illness
- Dementia
- Depression
- Illness
- Impairment in the ability to eat
- Limited access to food
- Limited income
- Medications
- Reduced social contact
- Restricted diets ⁵

DIETARY GUIDELINES FOR AMERICANS (DGA)

Healthy U.S. Style Eating Pattern Recommendations for Seniors

Calorie Level of Pattern	1,600	1,800	2,000
Food Group	Daily Amount of Food from each group (Vegetable & protein foods subgroup amounts are per week)		
Vegetables	2 c-eq	2 ½ c-eq	2 ½ c-eq
Dark-green vegetables (c-eq/wk)	1 ½	1 ½	1 ½
Red & Orange vegetables (c-eq/wk)	4	5 ½	5 ½
Beans, Peas, Lentils (c-eq/wk)	1	1 ½	1 ½
Starchy vegetables (c-eq/wk)	4	5	5
Other vegetables (c-eq/wk)	3 ½	4	4
Fruits	1 ½ c-eq	1 ½ c-eq	2
Grains	5 oz-eq	6 oz-eq	6 oz-eq
Whole grains (oz-eq/day)	3	3	3
Refined grains (oz-eq/day)	2	3	3
Dairy	3 c-eq	3 c-eq	3 c-eq
Protein Foods	5 oz-eq	5 oz-eq	5 ½ oz-eq
Seafood (oz-eq/wk)	8	8	9
Meats, poultry, eggs (oz-eq/wk)	23	23	26
Nuts, seeds, soy products (oz-eq/wk)	4	4	5
Oils	22 gm	24 gm	27 gm

12 DO YOU SEE EVIDENCE OF MALNUTRITION IN YOUR PARTICIPANTS?

Physical indications of possible malnutrition:

- Visible clavicle
- Appearance of weight loss
- Poor-fitting dentures
- Visible muscle loss (for example around triceps)
- Temporalis (pitting at the temples)
- Interosseous (loss of muscle on hands)
- Sunken cheeks



13 DO YOU SEE EVIDENCE OF MALNUTRITION IN YOUR PARTICIPANTS?



Functional indications of possible malnutrition:

- Poor grip strength
- Tires easily
- Unable to stand for long periods
- Decline in ability to rise from a chair

14 NUTRITION SCREENING VS. NUTRITION ASSESSMENT

- ***Nutrition Screening*** – The purpose of doing a nutrition screening is to **determine whether an assessment** is needed.
 - Used to identify characteristics associated with dietary or nutrition problems and distinguish those at high nutrition risk that should be referred for further assessment or nutrition counseling.
 - Does not need to be conducted by a Registered Dietitian.

15 NUTRITION SCREENING VS. NUTRITION ASSESSMENT

- ***Nutrition Assessment*** – The purpose of doing a nutrition assessment is to gather all detailed **information needed for a treatment plan** that meets the individuals needs.
 - It is a measurement of nutrition-related or dietary indicators (e.g. BMI, nutrient intake, lab values), which is used to identify the presence, type, and degree to which their nutritional status are impaired.
 - Registered Dietitian's are licensed and qualified to perform comprehensive Nutrition Assessments.

16 THE *NUTRITION SCREENING INITIATIVE'S* DETERMINE CHECKLIST IS A SCREENING TOOL

- The current federally mandated nutrition screen is the (NSI) **DETERMINE nutrition checklist**.
 - It is used to identify the nutritional risk for our participants.
- Developed by the American Academy of Family Physicians and the Academy of Nutrition and Dietetics.
- It is **required by** the Illinois Department on Aging's (IDoA) **Community Care Program (CCP)**.
- It is **required by** the U.S. Administration on Aging/ACL and IDoA for all **senior nutrition programs** funded by the Older Americans Act within the Area Agencies on Aging (AAA).

17 THE *NUTRITION SCREENING INITIATIVE'S* DETERMINE CHECKLIST IS A SCREENING TOOL

- Used to help increase older adults' awareness about nutrition and health.
- A screening tool that can assess the risk for poor nutritional status.
- It can measure an individual's level of nutrition risk over time.
- **There are times when a participant may not be screened at nutritional risk but might be at risk for malnutrition.**

DETERMINE IS A NUTRITION SCREENING TOOL

- It is NOT considered an assessment or re-assessment tool.
- It suggests risk but **does not represent a diagnosis** of a condition.
- It does not assess risk for malnutrition.

The warning signs of poor nutritional health are often overlooked. Use this checklist to find out if you or someone you know is at nutritional risk.

Read the statements below. Circle the number in the yes column for those that apply to you or someone you know. For each yes answer, score the number in the box. Total your nutritional score.

Determine Your Nutritional Health

	YES
I have an illness or condition that made me change the kind and /or amount of food I eat.	2
I eat fewer than two meals per day.	3
I eat few fruits or vegetables, or milk products.	2
I have three or more drinks of beer, liquor or wine almost every day.	2
I have tooth or mouth problems that make it hard for me to eat.	2
I don't always have enough money to buy the food I need.	4
I eat alone most of the time.	1
I take three or more different prescribed or over-the-counter drugs a day.	1
Without wanting to, I have lost or gained 10 pounds in the last six months.	2
I am not always physically able to shop, cook and/or feed myself.	2
TOTAL	

Total your nutritional score. If it's --

0-2 Good! Recheck your nutritional score in 6 months.

3-5 You are at moderate nutritional risk. See what can be done to improve your eating habits and lifestyle. Your office on aging, senior nutrition program, senior citizens center or health department can help. Recheck your nutritional score in 3 months.

6 or more You are at high nutritional risk. Bring this checklist the next time you see your doctor, dietitian or other qualified health or social service professional. Talk with them about any problems you may have. Ask for help to improve your nutritional health.

Remember that warning signs suggest risk, but do not represent diagnosis of any condition. Turn the page to learn more about the Warning Signs of poor nutritional health.

19 NUTRITION RISK SCREEN

- Federally required nutrition risk screening questions from the validated DETERMINE Your Nutritional Health screening tool.
- Choose Yes or No on the fillable PDF or circle the points Yes or No based on the client's response to the 10 questions on the print version.
- Total will automatically calculate on the fillable PDF.
- 6 or more points suggests "High Nutritional Risk."



☐ New Client ☐ Reassessment ☐ Ineligible/Termination

Reason:

Nutrition Referral/Assessment for Home Delivered Meals

This form must be completed and forwarded to the appropriate Home Delivered Meal nutrition provider agency.

Referral Source: <input type="checkbox"/> Care Coordination Unit (CCU) <input type="checkbox"/> Managed Care Organization (MCO) <input type="checkbox"/> Area Agency on Aging <input type="checkbox"/> Nutrition Provider			
Days Older Adult to receive meals (check all that apply): <input type="checkbox"/> Mon <input type="checkbox"/> Tues <input type="checkbox"/> Wed <input type="checkbox"/> Thurs <input type="checkbox"/> Friday <input type="checkbox"/> All M-F <input type="checkbox"/> Weekend <input type="checkbox"/> 2nd meals			
Type of meal(s) <input type="checkbox"/> Hot <input type="checkbox"/> Cold <input type="checkbox"/> Frozen		Special Notes:	
Priority Level:			
Duration of meals: (Check only one) <input type="checkbox"/> Short Term <input type="checkbox"/> Long Term Re-evaluate Date:			
Special Diet Needs: <input type="checkbox"/> General <input type="checkbox"/> Diabetic <input type="checkbox"/> Low sodium <input type="checkbox"/> Other (specify):			
Older Adult Demographic Information			
Name:		DOB:	
Address:		City:	
Phone:		State:	
Cell Phone:		Zip:	
Authorized Representative:		Phone:	
Emergency Contact Name #1:		Emergency Contact Name #2:	
Relationship:		Relationship:	
Daytime/Cell Phone:		Daytime/Cell Phone:	
Ethnicity: <input type="checkbox"/> Hispanic or Latino <input type="checkbox"/> Not Hispanic or Latino		What is your gender? (Check only one) <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other	
Race (Check all that apply): <input type="checkbox"/> White <input type="checkbox"/> Black or African American <input type="checkbox"/> Native Hawaiian or Pacific Islander <input type="checkbox"/> American Indian or Alaskan Native <input type="checkbox"/> Asian or Asian American		Marital Status: <input type="checkbox"/> M <input type="checkbox"/> D <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/> Domestic Partner <input type="checkbox"/> Legally Separated	
Are you a Veteran? <input type="checkbox"/> Yes <input type="checkbox"/> No		Type of Housing: <input type="checkbox"/> Home <input type="checkbox"/> Apt (# :) <input type="checkbox"/> Other (specify):	
Subsidized Housing: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Below Poverty <input type="checkbox"/> Yes <input type="checkbox"/> No		Monthly Income:	
Limited English Speaking: <input type="checkbox"/> Yes <input type="checkbox"/> No		# of Individuals in household:	
If yes, primary language spoken:			

Nutrition Risk Screen (select points under Yes or No)	Yes/No
I have an illness or condition that has made me change the kind or amount of food I eat.	
I eat less than two meals a day.	
I eat few fruits and vegetables, or milk products.	
I have three or more drinks of beer, liquor or wine almost every day.	
I have tooth or mouth problems that make it hard for me to eat.	
I don't always have enough money to buy the food I need.	
I eat alone most of the time.	
I take three or more different prescribed or over-the-counter drugs a day.	
Without wanting to, I have lost or gained ten pounds in the last six months.	
I am not always physically able to shop, cook and/or feed myself.	
TOTAL	/21 possible points
Six or more points = high nutritional risk	
<input type="checkbox"/> Nutritional Risk was explained to client.	
<input type="checkbox"/> Client is considered at High Nutritional Risk. A recommendation was made to follow-up with a healthcare provider.	

20 NUTRITION RISK SCREEN

- **CHECK BOX:** *Nutritional Risk was explained to client.*
 - CCUs/MCOs/Nutrition Providers: **This box must be checked after explaining their score/risk for all participants.**
- **CHECK BOX:** *Client is considered at High Nutritional Risk. A recommendation was made to follow-up with a healthcare provider.*
 - CCUs/MCOs/Nutrition Providers: **This box should be checked for individuals that screen at “High Nutritional Risk” and a recommendation to follow-up with a healthcare provider should be made.**

Note: Nutrition Providers are to give the client the IDoA Nutritional Risk and Your Health brochure upon starting HDMs to reiterate the Nutrition Risk Screening and their risk level (see brochure on next 2 slides).

Use the word
DETERMINE
to remind you of the
warning signs.

Disease
Eating Poorly
Tooth Loss/Mouth Pain
Economic Hardship
Reduced Social Contact
Multiple Medicines
Involutionary Weight Loss/Gain
Needs Assistance In Self Care
Elder Years Above Age 80



TALK TO YOUR HEALTHCARE PROVIDER ABOUT YOUR NUTRITIONAL STATUS

Share this brochure and review the DETERMINE questions. Ask about your specific health conditions and nutrition. Discuss other services that you might be eligible for.



One Natural Resources Way, Suite 100
Springfield, IL 62702-1271
www.illinois.gov/aging

Contact your local Area Agency on Aging
or the Senior HelpLine at 1-800-252-8966
(1-888-206-1327 TTY) for more information
about available services and programs in
your community.

The Illinois Department on Aging does not discriminate in admission to programs or treatment of employment in programs or activities in compliance with appropriate State and federal statutes. If you feel you have been discriminated against, call the Senior HelpLine at 1-800-252-8966, 1-888-206-1327 (TTY).

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Nutritional Risk and Your Health

*Reducing nutritional risk
among older adults*



DETERMINE Your Nutritional Health Questionnaire	YES	NO
I have an illness or condition that made me change the kind and/or amount of food I eat.	2	0
I eat fewer than 2 meals per day.	3	0
I eat few fruits or vegetables or milk products.	2	0
I have 3 or more drinks of beer, liquor, or wine almost every day.	2	0
I have tooth or mouth problems that make it hard for me to eat.	2	0
I don't always have enough money to buy the food I need.	4	0
I eat alone most of the time.	1	0
I take 3 or more different prescribed or over-the-counter drugs a day.	1	0
Without wanting to, I have lost or gained 10 pounds in the last 6 months.	2	0
I am not always physically able to shop, cook, and/or feed myself.	2	0
TOTAL		

The DETERMINE checklist was developed and distributed by the Nutrition Screening Initiative, a project of the American Academy of Family Physicians, The American Dietetic Association and The National Council on the Aging, Inc.

WHAT DOES YOUR SCORE MEAN?

SCORE

0-2: GOOD

Recheck your nutritional score in 6 months or annually.

3-6: MODERATE NUTRITIONAL RISK

Lifestyle changes may be necessary. Recheck your score in 3 to 6 months.

6-21: HIGH NUTRITIONAL RISK

Bring this questionnaire to your healthcare provider, registered dietitian, or social service professional to help improve your nutritional health.

Remember that warning signs suggest risk, but do not represent a diagnosis of any condition.

YOUR HEALTH AND NUTRITION RISK

Your nutritional status can impact your overall health. If your score is a **6 or more** on the Questionnaire (High Nutritional Risk), you should talk with your healthcare provider and other professionals to further understand your nutritional status.



MALNUTRITION IS A CONCERN

Signs of poor nutritional health are often overlooked. It is estimated that up to half of older adults are at risk of malnutrition. Being malnourished can lengthen hospital stays by 4 to 6 days and poor nutritional status can increase healthcare costs by 300%. Chronic health conditions can increase the risk for malnutrition and being malnourished leads to further complications, falls, and readmissions to the hospital.

23 MALNUTRITION SCREENING TOOLS

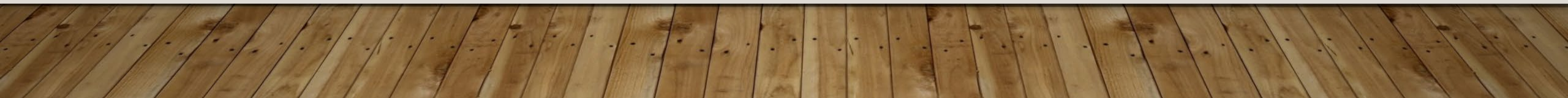
MST Tool (Malnutrition Screening Tool)

- *Data Needed:* Recent weight loss (within last 3-6 months), recent poor intake.
- *Appropriate Use:* For inpatients or outpatients and can be administered by self or staff.

MUST (Malnutrition Universal Screening Tool)

- *Data Needed:* BMI, weight loss (%) in last 3-6 months, acute disease.
- *Appropriate Use:* In acute and community settings and staff will need to administer.

Self-MNA (Self Mini Nutritional Assessment)

- *Data Needed:* Recent intake, recent weight loss, recent acute disease or psychological stress, dementia or depression, BMI
 - *Appropriate Use:* In community settings and can be administered by self or staff.
- 

24 MALNUTRITION SCREENING TOOLS

- Based upon current evidence, it is the position of the Academy of Nutrition and Dietetics that the **Malnutrition Screening Tool (MST)** should be used to screen adults for malnutrition (undernutrition) regardless of their age, medical history, or setting. ⁶

Malnutrition Screening Tool (MST)

STEP 1: Screen with the MST

1 Have you recently lost weight without trying?

No	0
Unsure	2

If yes, how much weight have you lost?

2-13 lb	1
14-23 lb	2
24-33 lb	3
34 lb or more	4
Unsure	2

Weight loss score:

2 Have you been eating poorly because of a decreased appetite?

No	0
Yes	1

Appetite score:

Add weight loss and appetite scores

MST SCORE:

STEP 2: Score to determine risk

**MST = 0 OR 1
NOT AT RISK**

Eating well with little or no weight loss

If length of stay exceeds 7 days, then rescreen, repeating weekly as needed.

**MST = 2 OR MORE
AT RISK**

Eating poorly and/or recent weight loss

Rapidly implement nutrition interventions. Perform nutrition consult within 24-72 hrs, depending on risk.

STEP 3: Intervene with nutritional support for your patients at risk of malnutrition.

Notes: _____

Ferguson, M et al. Nutrition 1999 15:458-464

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 Abbott
Nutrition

25 WHAT ELSE CAN YOU DO TO HELP?

- Encourage individuals to come to a meal site to eat each day (or virtually attend, if possible).
- If they are a home delivered meal client, encourage them to call someone each day, this can help reduce feelings of isolation, which can help improve mood and appetite.
- Talk to them about the prescription assistance program if available.
- They may need help with grocery shopping, grocery delivery, or transportation.



26 WHAT ELSE CAN YOU DO TO HELP?

- See if they are interested in the Seniors Farmers' Market Nutrition Program (SFMNP), which normally runs July 10th - October 31st.
- Plan a reassessment (nutrition screen) sooner than the required annual assessment, especially if they are at “high nutritional risk.”
- Provide nutrition education to older adults and caregivers on a variety of nutrition related topics such as malnutrition, osteoporosis, low sodium, etc.
- Provide information on nutrition assistance programs they may be eligible for such as the Supplemental Nutrition Assistance Program (SNAP), The Emergency Food Assistance Program (TEFAP), Commodity Supplemental Food Program, etc.

27 WHAT IS OUR GOAL?

We should do more than ask the nutrition screening questions to fulfill a requirement.

Use the information from the nutrition screen as a starting point to know what additional services they may benefit from.

We should use the information we obtain to reduce their nutritional risk over time.

Connect them with resources, refer to a healthcare professional, provide information on additional nutrition assistance programs they are eligible for to help reduce their risk, and/or screen for malnutrition.

We should re-screen individuals at High Nutritional Risk sooner than on an annual basis to improve their outcomes.

If there is a decrease in risk category, then we know the individual's needs are being met and they have taken steps to improve their health and wellbeing.

28 ADDITIONAL RESOURCES

- Commodity Supplemental Food Program (CSFP)
- Supplemental Nutrition Assistance Program (SNAP)
- The Emergency Food Assistance Program (TEFAP)
- Senior Farmers Market Nutrition Program (SFMNP)
 - IL SFMNP
- Malnutrition Screening Tool (MST)

29 REFERENCES

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QUESTIONS?

- **CCUs should contact:**
aging.occs@illinois.gov.
- **AAAs should contact:**
Melanie.Kluzek@illinois.gov
or their Regional Coordinator.
- **Nutrition Providers should contact:** their AAA.

ASK ABOUT YOUR NUTRITION

Good Nutrition Can Help You Prevent Infections,
Heal Faster, Feel Stronger

MALNUTRITION AWARENESS WEEK™

aspen | American Society for Parenteral and Enteral Nutrition

ARE YOU OR YOUR LOVED ONE EXPERIENCING ANY OF THESE?

- Unplanned Weight Loss**: Icon of a person on a scale with a question mark.
- Loss of Appetite**: Icon of a person sitting at a table with food.
- Not Able to Eat or Only Able to Eat Small Amounts**: Icon of a person with their arms crossed.
- Feeling Weak or Tired**: Icon of a person bending over with wavy lines above their head.
- Swelling or Fluid Accumulation**: Icon of a person with a large, rounded belly.

TALK TO YOUR HEALTHCARE PROVIDER

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Go to nutritioncare.org/YourNutrition for more