

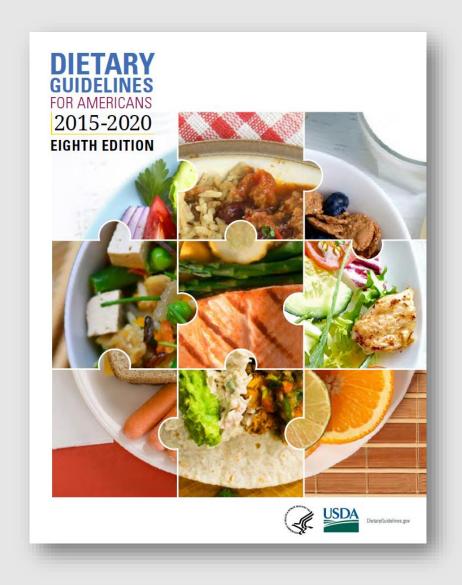
# NUTRITION FOR VULNERABLE POPULATIONS

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#### DIETARY GUIDELINES FOR AMERICANS (DGA)



# Issued every 5 years by the United States Department of Agriculture (USDA) and Health & Human Services (HHS)

- Look at what we eat and drink as a nation and make recommendations
- Help establish dietary patterns that help prevent disease

USDA & HHS are proposing a life stage approach for this edition of DGA, this will include:

- Infants/toddlers from birth to 24 months for the first time
- Guidance for women who are pregnant for the first time

For each life stage, the following will be described:



Dietary intake patterns, including intakes of food groups, beverages, and individual nutrients



Nutrients of public health concern



Prevalence of nutrition-related chronic health conditions

**Nutrition Guidelines** set the direction for federal nutrition programs & policies, including:



Supplemental Nutrition Assistance Program (previously known as food stamps) Special Supplemental Nutrition Program for Women, Infants, and Children National School Lunch Program

## WHAT MAKES INFANTS A VULNERABLE POPULATION?

**GROWTH** 

Infants are in a critical time of growth and development.
Neurocognitive development and meeting developmental milestones are particularly important for this population.

IMMUNE FUNCTION

Infant immune systems are not fully developed, making it tougher for them to fight off an illness.

DEPENDENT

Infants are reliant on someone else to meet their needs.

#### INFANT NUTRITION GUIDANCE



What if a mother can't breastfeed or isn't able to provide care?

Infant formula is a safe & recommended alternative for breastmilk and provides infants with the nutrients needed to support healthy growth & development.

#### INFANT NUTRITION GUIDANCE





#### **BREASTFEEDING**

- Recommended exclusively for the first 4-6 months
- Expect to breastfeed every 2-3 hours initially



#### **INFANT FORMULA**

- Most babies take 4 ounces and feed 4-5 times per day
- Total formula intake should be 16-24 ounces in 24 hours



#### **FEEDING**

- Wait until 4-6 months to start solids, when baby is developmentally ready
- Continue to breastfeed and/or formula feed up through at least the 1<sup>st</sup> year

## WHAT MAKES OLDER ADULTS A VULNERABLE POPULATION?

## Physiological Changes of Aging

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- Taste sensation
- Decline in olfactory function
- Difficulty chewing
- Changes in digestion & absorption
- Polypharmacy & metabolism of medication
- Reduction in muscle mass, bone density, and immune function

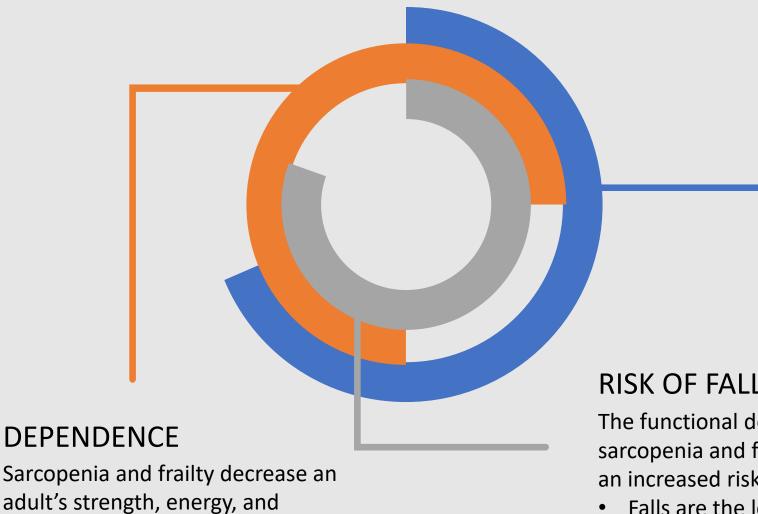
#### Comorbidities

- Cardiovascular disease
- Overweight/obesity
- Type 2 diabetes
- Cancer
- Sarcopenia
- Neurocognitive diseases

#### **SARCOPENIA & FRAILTY**

mobility, making it difficult to

complete ADLs alone



#### RISK OF ILLNESS

When an adult is frail, their immune system does not function as well, making it more difficult to fight off illnesses

#### **RISK OF FALLS**

The functional decline resulting from sarcopenia and frailty puts older adults at an increased risk for falls

Falls are the leading cause of injury in older adults<sup>1</sup>

#### INTERVENTIONS FOR SARCOPENIA & FRAILTY

#### Protein

- The Recommended Dietary Allowance (RDA) for protein is 0.8 grams of protein per kg of body weight for all adults
- To help maintain and regain lean body mass, studies show that older adults should consume 1.0-1.3 grams of protein per kg of body weight<sup>1</sup>
- Multimodal exercise
  - Remaining active can help older adults build muscle to increase strength and energy
  - The World Health Organization recommends older adults perform multimodal exercise, including progressive strength resistance training<sup>2</sup>



# OF OLDER ADULTS ARE NOT MEETING THE RDA FOR PROTEIN (0.8 g/kg/day)<sup>3</sup>

- 1. Nowson, O'Connell. Nutrients. 2015;7(8):6874-99.
- 2. ICOPE: Guidelines on community-level interventions to manage declines in intrinsic capacity. Geneva: World Health Organization; 2017.
- 3. Krok-Schoen JL, Price AA, Luo M, et al. J Nutr Health Aging. 2019.

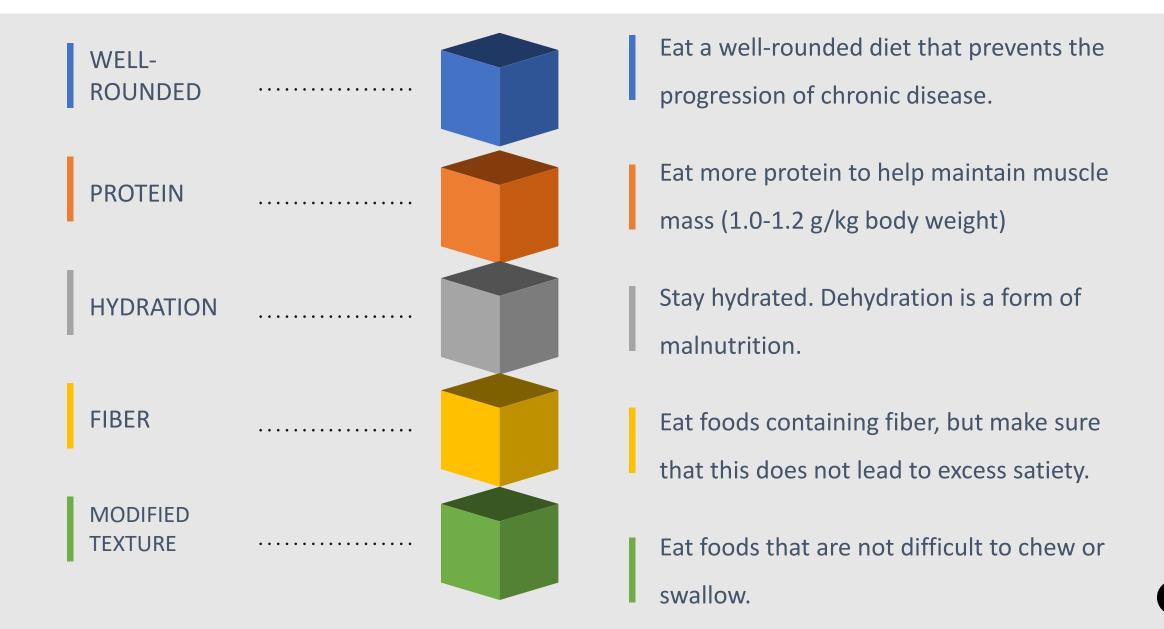
#### **MALNUTRITION**

Disease-Associated Risk Factors Function-Associated Risk Factors

Social & Mental Health Risk Factors MALNUTRITION IN OLDER ADULTS

Hunger & Food Insecurity Risk Factors

#### NUTRITION RECOMMENDATIONS FOR OLDER ADULTS



#### WHAT CAN MDs DO?

### SCREEN [] 1

Make sure you are screening patients for malnutrition



### REFER 02

If a patient is malnourished or at risk for malnutrition, recommend Oral Nutrition Supplements and/or refer to a Registered Dietitian Nutritionist (RDN)

### INFORM

Inform patients of senior nutrition programs (if needed):

- OAA
- SNAP
- Senior Farmers Market Program
- Commodity Supplemental Food Program

#### **SUMMARY**

- New DGA are opportunity for recommendations to provide support & education
- Infants and older adults are two vulnerable populations
- Ask about food security for mothers and older adults and refer to nutrition programs as needed
- Make sure caregivers have adequate information to provide good nutrition for their care recipient
- Refer to a Registered Dietitian Nutritionist (RDN) if needed

#### INFANTS

- Breastfeeding is the optimal source of nutrition for the first 4-6 months, and should be continued with the introduction of solid foods
- Infant formula is safe & recommended if mother cannot or chooses not to breastfeed or infant is cared for by caretaker

#### OLDER ADULTS

- Protein is essential in older adult nutrition
- Nutrition and resistance exercise can combat sarcopenia & frailty in older adults
- Validated malnutrition screening tools can be used with older adult patients

#### **RESOURCES**

