



MISSOURI DEPARTMENT OF
**HEALTH &
SENIOR SERVICES**

Nutrition and Aging

Unique nutritional needs and risks of older adults

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**Decreased Caloric
Needs/ Increased
Nutrient Needs/
Decreased Ability
to Absorb Nutrients**

Changing Needs

As we Age

**Decreased
Caloric
Needs**



**Increased
or Flat
Nutrient
Needs**

**Decreased
Nutrient
Absorption**



Protein

10-35% of daily calories / 46 g for women and 56 g for men

Component	Dairy	Protein	Fruits/Vegetables	Grains
Required amount per meal	One one-cup equivalent	Two to three one-ounce equivalents	One to two one-cup equivalents	One to two one-ounce equivalents
Examples	Examples of a one-cup equivalent: 1 cup milk 1 cup yogurt 1 cup fortified soymilk 1.5 ounces of natural cheese such as cheddar 2 ounces of processed cheese.	Examples of a one-ounce equivalent: 1-ounce lean meats 1-ounce poultry 1-ounce seafood 1 egg ¼ cup cooked beans ¼ cup cooked tofu 1 tablespoon nut or seed butter ½ ounce nuts ½ ounce seeds	Examples of a one-cup equivalent: 1 cup raw vegetable 1 cup raw fruit 1 cup cooked vegetable 1 cup cooked fruit 1 cup vegetable juice 1 cup fruit juice 2 cups leafy salad greens ½ cup dried fruit ½ cup dried vegetable	Examples of a one-ounce equivalent: ½ cup cooked rice ½ cup cooked pasta ½ cup cooked cereal 1-ounce dry pasta 1-ounce dry rice 1 medium (1-ounce) slice of bread 1 medium (1 ounce) tortilla 1 medium (1 ounce) flatbread 1 ounce of ready-to-eat cereal (about 1 cup of flaked cereal)
Additional requirements and explanation	<p>A. The use of nonfat or low-fat products is recommended to control the total fat content of the meal.</p> <p>B. Dairy may include lactose-free dairy options.</p> <p>C. Other products sold as "milk" but made from plants (e.g., almond, rice, coconut, oat, and hemp "milk") may contain calcium and be consumed as a source of calcium, but they are not included as part of the dairy group because their overall nutritional content is not similar to dairy milk and fortified soy beverages.</p>	<p>D. Legumes (beans and peas) may be considered part of this group OR the vegetable group, but not both groups simultaneously.</p> <p>E. The use of low-sodium protein products is encouraged.</p>	<p>F. Legumes (beans and peas) may be considered part of this group OR the protein group, but not both groups simultaneously.</p> <p>G. A variety of vegetables from all sub-groups is strongly recommended (dark green, red & orange, legumes, starchy, other).</p> <p>H. The use of no to low-sodium frozen, fresh, and canned vegetables is encouraged.</p>	<p>I. Whole grains must be offered at least 5 times per week. For meal programs serving less than 5 days per week, half of grains offered shall be whole grains.</p>

Protein

10-35% of daily calories / 46 g for women and 56 g for men



1

Cheddar cheese (28g), Cottage cheese (25g), Greek yogurt (24g), milk (8g), per 1 cup

2

Brown rice (5g), beans (15g), edamame (17g), lentils (17g), oatmeal (6g), peas (8g), quinoa (8g), per cooked cup

3

Almonds (6g), chia seeds (4.7g), peanuts (7g), pumpkin seeds (8g), and sunflower seeds (6g) per 1 ounce

4

Artichokes (3g), asparagus (2g), avocado (2g), broccoli (3g), Brussels sprouts (3g), cauliflower (2g), per 100 grams

Vitamin B12

2.4 mcg



1

**Beef liver (20mcg),
ground beef
(.6mcg), chicken
(.1mcg), pork
(.2mcg)**
Per 1 ounce



2

**Canned sardines
(2.5mcg), salmon
(.9mcg), canned
tuna (.8mcg)**
Per 1 ounce



3

**1 egg (.6mcg), milk
(1.1mcg), cottage
cheese (1mcg),
Greek yogurt
(1.3mcg)** Per 1 cup



4

**Fortified cereals
(varies), fortified
nutritional yeast
(117mcg)**
Per 100g, **fortified
soy milk (2.1mcg)**
Per 1 cup

Calcium

1,000mg for men under 71 and 1,200mg for women and men 71+



1

Plain yogurt (488mg), Milk (305mg), Greek yogurt (261mg) Per 1 cup



2

Collard greens (268mg), Spinach (245mg), Kale (177mg) Per 1 cup



3

Lambsquarters (464mg), Nopales (244mg), Taro root, Bok choy (185) Per 1 cup.



4

Canned sardines (325mg) Per 3 ounces
Tofu (434mg) Per ½ cup
Fortified drinks (283-442mg) Per 1 cup

Vitamin D

600iu



1

**Milk (117iu),
Plain yogurt
(116iu)**

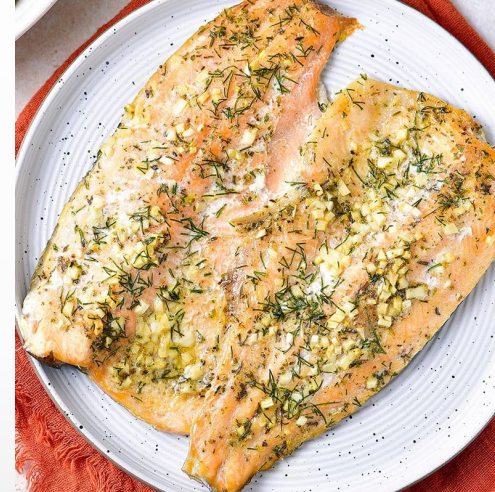
Per 1 cup



2

**Soy milk (119iu),
Almond Milk (107iu),
Rice Milk (101iu),
Fortified orange
juice (100iu)**

Per 1 cup



3

**Rainbow trout
(645iu), Canned
sardines (164iu),
Tilapia (127iu)**

Per 3 ounces

Cod liver oil (1,360iu)

Per 1 Tb



4

**Mushrooms (0-
1,110iu)**

Per 1 cup

Potassium

2,600mg for women and 3,400mg for men



1

Plain yogurt
(625mg), Milk
(382mg),
Greek yogurt
(320mg)
Per 1 cup



2

Potato w/skin
(926mg)
Per 1 medium
Cooked spinach
(839mg)
Per 1 cup



3

Banana
(451mg)
Per 1 medium
Cantaloupe
(473mg)
Per 1 cup



4

White lima beans
(955mg)
Per 1 cup
Canned sardines
(338mg)
Per 3 ounces

Dietary Fiber

22g for women and 28g for men



1

Chickpeas (22g), Black or Pinto beans (15g), Lima Beans (13g)
Per 1 cup



2

Barley (6g), Quinoa (5g), Oatmeal (4g), Brown rice (4g)
Per 1 cup



3

Green peas (9g), Sweet potato (6g), Broccoli, Cauliflower, or Carrots (5g),
Per 1 cup



4

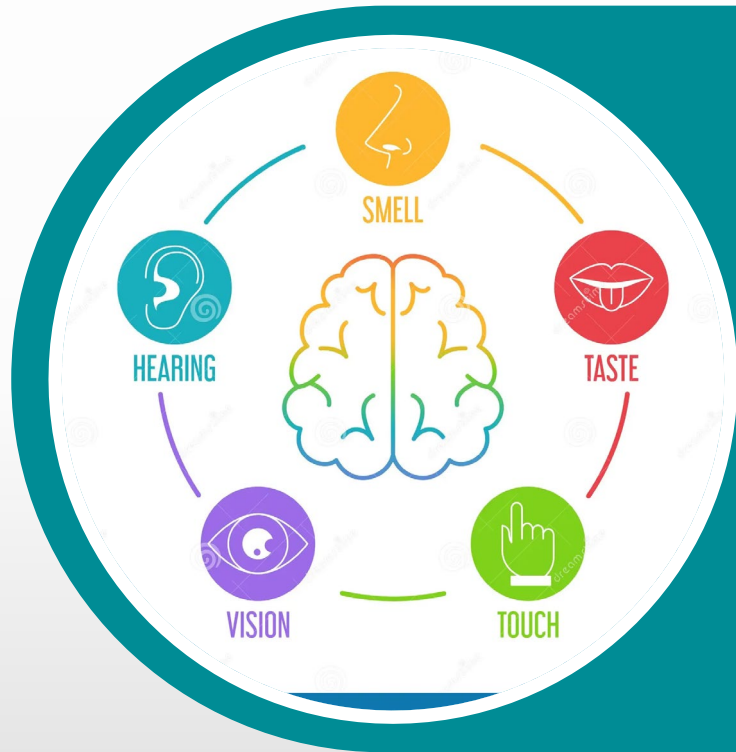
Pear (6g), Apple (5g), Orange (4g)
Per 1 medium



**Increased Risk of
Mobility and
Dexterity Concerns**



Increased Risk of Dental and Swallowing Problems



**Decreased
Senses/
Decreased
Appetite**

Hungry for More Nutrition Information?

Come back to this room at 2:00 for
Nutrition Trends to Unfollow

Brooke and Tracey will give advice on how to navigate nutrition in a digital world. Social media and AI have made the nutrition landscape difficult to navigate. Join Brooke and Tracey to figure out how to help your clients feel confident with nutrition information online.