

Older Adults & Gut Health: A Guide for Dietary Professionals



The “gut” is comprised of the stomach, intestines, and colon – this is where food is digested, nutrients are absorbed, and the body rids itself of waste.

- **The bacteria and other micro-organisms in the gut are known as the gut microbiome.** These help break down food, turning it into nutrients the body can use
- **Gut microbiome is affected by what you eat,** so it's important to provide the gut with the right fuel
- **Research has shown that gut health can be linked to the immune system,** mental health, autoimmune diseases, sleep, cardiovascular diseases, endocrine disorders such as type 2 diabetes, and gastrointestinal disorders such as IBS

How does aging affect gut health?

As we age, immune function can decline, putting the older population at risk of developing infections and other diseases. Given the correlation between gut health and the immune system, it is especially important for seniors to maintain a healthy gut.

- Older adults are often on multiple **medications which can affect the gut microbiome**
- Suboptimal dental health in seniors can cause **chewing difficulty, limiting the variety of nutritious foods in the diet**
- **Decreased physical activity can slow digestion,** may decrease blood flow to the gut, and can cause other issues such as constipation



Tips for supporting gut health in older adults

1 **Serve prebiotic foods**

Fiber-rich foods help foster growth of beneficial bacteria in the gut. Fiber also helps to regulate bowel movements by moving food through the GI tract and sweeps any “bad” bacteria with it.



Senior-friendly prebiotic foods may include:

- ✓ Oatmeal
- ✓ Bananas
- ✓ Whole grains
- ✓ Beans and legumes

Try this [Three Bean Salad Recipe!](#) ➔

And this [Sesame Brown Rice](#) ➔

2 Incorporate probiotic foods

Probiotic foods contain live bacteria that are beneficial to the gut.



Senior-friendly probiotic foods may include:

- ✓ Yogurt with live and active cultures
- ✓ Kefir
- ✓ Sourdough bread
- ✓ Cheeses
- ✓ Kimchi
- ✓ Miso
- ✓ Sauerkraut

Try this [Berry Yogurt Parfait Recipe](#) ➔

3 Provide a variety of fruits and vegetables

Vitamins, minerals, and antioxidants found in plant-based foods support immune and gut health. Meals with a variety in color will help ensure intake of beneficial antioxidant nutrients.

Try this [Chicken Stir Fry Recipe](#) ➔
featuring colorful veggies!

Supporting seniors with chewing and swallowing difficulties:

- Offer fruit and vegetable blended smoothies (remember to include the pulp), and add some yogurt to increase the “good bacteria”
- Yogurt and kefir are rich in certain types of bacteria that have shown to decrease inflammation, and as a result, a number of chronic conditions
- Serve soft foods including fruits, vegetables, legumes, bean soup, etc. This will provide good sources of nutrition for those with chewing difficulties
- Add a fiber supplement – to be taken with water or added to juice, soup or other liquid or soft foods. Always ensure adequate fluid with fiber-rich foods to help maintain a healthy gut and bowel function

Bean Salad Three (Three Bean Salad)

COOK METHOD	SERVING SIZE
Mix & Chill	1/2 Cup

	INGREDIENTS	SERVINGS	SERVINGS	SERVINGS	SERVINGS	INGREDIENT PREP	PREPARATION STEP
		25	40	60	75		
1							WASH HANDS before beginning preparation & SANITIZE surfaces & equipment.
2	Beans, Wax Frz	1 lb 7 Oz	2 lb 5 Oz	3 lb 7 Oz	4 lb 5 Oz		Cook green and wax beans, careful to not overcook. Beans should be firm. Chill before mixing with remaining ingredients.
	Green Beans, Cut Frz	1 lb 7 Oz	2 lb 5 Oz	3 lb 7 Oz	4 lb 5 Oz		
	Beans Kidney f/Dry	3 3/4 Cup	1 1/2 Qt	2 1/4 Qt	2 3/4 Qt	Prepared	
3	Onion, Yellow	13 Oz	1 lb 5 Oz	1 lb 15 Oz	2 lb 7 Oz	Chopped Fine	Mix thoroughly onion, vinegar and seasonings. Add beans to vinegar mixture. Cover and marinate overnight in refrigerator.
	Vinegar, Cider Apple	1 1/2 Cup	2 1/3 Cup	3 1/2 Cup	1 1/8 Qt		
	Sugar, Granulated Bulk	1 1/2 Cup	2 1/3 Cup	3 1/2 Cup	1 1/8 Qt		
	Parsley, Dried	2.0 tsp	1 Tbsp	1 Tbsp 2 tsp	1 Tbsp 3 tsp		
4	Oil, Vegetable	1/2 Cup	2/3 Cup	1.0 Cup	1 1/3 Cup		Just before serving, drain vegetables well. Add oil and toss lightly.

Bean Salad Three (Three Bean Salad)

	INGREDIENTS	SERVINGS 25	SERVINGS 40	SERVINGS 60	SERVINGS 75	INGREDIENT PREP	PREPARATION STEP
5							CCP -- Maintain <40F/4C; discard unused product.
6							Note: This recipe should be prepared the day before service.

Beans Kidney f/Dry (Kidney Beans)

COOK TIME	COOK TEMP	COOK-END TEMP	COOK METHOD	SERVING SIZE
120 Min	0.0 °F	145 °F	Boil	1/2 Cup

INGREDIENTS	SERVINGS	SERVINGS	SERVINGS	SERVINGS	PREPARATION STEP	
	25	40	60	75		
1					WASH HANDS before beginning preparation & SANITIZE surfaces & equipment.	
2	Beans, Kidney Dry	2 lb 2 Oz	3 lb 6 Oz	5 lb 1 Oz	6 lb 5 Oz	Sort through dried beans to remove any debris. Rinse thoroughly.
	Water, Tap	1 Gal 2 Cup	2 Gal	3 Gal	3 Gal 5 Cup	
3						Place beans in a large pot or steam-jacketed kettle and cover with water.
4						Bring water to a boil and skim any foam off the top. Reduce heat to a slow simmer and occasionally stir gently.
5	Salt, Iodized	1 1/2 tsp	2 1/2 tsp	1 Tbsp 1 tsp	1 Tbsp 2 tsp	Cook for approximately 2 hours or until beans are just slightly tender. Add salt and continue cooking until desired consistency is reached. Drain well.
6						For Milk & Cheese or non-hazardous items: Cook to internal temp of 145F/62C held for 15 sec.
7						CCP -- Maintain: Product held at >135F/57C Temperature should be taken every 2 hours during holding. *Maintaining at the proper temperature will present no food safety issue; long hot holding times can affect food quality.

Beans Kidney f/Dry (Kidney Beans)

	INGREDIENTS	SERVINGS	SERVINGS	SERVINGS	SERVINGS	PREPARATION STEP
		25	40	60	75	
8						CCP -- Cool: Product must reach 135F/57C to 70F/21C within 2 hrs and 70F/21C to 40F/4C within 4 hrs.
9						CCP -- Reheat: To internal temperature of 165F/74C held for at least 15 seconds.
10						Note: Soaking beans in water overnight can reduce cooking time, if desired.

Chicken Stir-fry f/Pulled (Chicken Stir-Fry)

COOK-END TEMP	COOK METHOD	SERVING SIZE
165 °F	Stir Fry	3/4 Cup

INGREDIENTS	SERVINGS	SERVINGS	SERVINGS	SERVINGS	INGREDIENT PREP	PREPARATION STEP
	25	40	60	75		
1						WASH HANDS before beginning preparation & SANITIZE surfaces & equipment.
2	Cornstarch	3/4 Cup	1 1/4 Cup	1 3/4 Cup	2 1/4 Cup	Combine sugar, black pepper and cornstarch in kettle.
	Pepper, Black Ground	1/4 tsp	1/2 tsp	3/4 tsp	1.0 tsp	
	Sugar, Granulated Bulk	3 tsp	1 Tbsp 1 tsp	2 Tbsp	2 Tbsp 2 tsp	
3	Sauce, Soy Bulk LS	3.44 fl. oz	5.5 fl. oz	8.25 fl. oz	10.31 fl. oz	Combine water, base and soy sauce. Gradually pour into cornstarch mixture. Stir with wire whip over low heat. Cook and stir until sauce thickens and looks clear. Reduce heat. Cover until needed.
	Base, Chicken Paste LS G-F	2 Tbsp 2 tsp	1/4 Cup	1/3 Cup	1/2 Cup	
	Water, Tap	2 1/4 Qt	3 1/2 Qt	1 Gal 2 Cup	1 Gal 4 Cup	
4	Chicken, Meat Pulled Ckd	5 lb	8 lb	12 lb	15 lb	Stir-fry chicken in oil.

Chicken Stir-fry f/Pulled (Chicken Stir-Fry)

	INGREDIENTS	SERVINGS	SERVINGS	SERVINGS	SERVINGS	INGREDIENT PREP	PREPARATION STEP
		25	40	60	75		
	Oil, Vegetable	1 Tbsp 2 tsp	2 Tbsp 2 tsp	1/4 Cup	1/3 Cup		
5	Water Chestnuts, Sliced Cnd	1 lb 5 Oz	2 lb 2 Oz	3 lb 2 Oz	3 lb 15 Oz	Drained	Add broccoli and red pepper to chicken & stir-fry until vegetables are crisp-tender. Add garlic, sugar snap peas, mushrooms and water chestnuts and cook until thoroughly heated. Stir in sauce.
	Mushrooms, Pieces Cnd	1 lb 12 Oz	2 lb 13 Oz	4 lb 3 Oz	5 lb 4 Oz	Drained	
	Peas, Sugar Snap Frz	1 lb 12 Oz	2 lb 13 Oz	4 lb 3 Oz	5 lb 4 Oz	Lightly Steamed	
	Garlic, Whole Fresh	1 Tbsp 1 tsp	2 Tbsp	3 Tbsp	3 Tbsp 2 tsp	Minced	
	Pepper, Red Fresh	1 each	1.6 each	2.4 each	3 each	Julienne	
	Broccoli, Florets Fresh	1 lb 5 Oz	2 lb 2 Oz	3 lb 2 Oz	3 lb 15 Oz	Bite Size	
6							For Whole, Cut, or Ground Poultry (e.g., Chicken, Turkey, Duck): Cook to internal temp of 165F/74C held for 15 sec.
7							CCP -- Maintain: Product held at >135F/57C Temperature should be taken every 2 hours during holding. *Maintaining at the proper temperature will present no food safety issue; long hot holding times can affect food quality.

Chicken Stir-fry f/Pulled (Chicken Stir-Fry)

	INGREDIENTS	SERVINGS	SERVINGS	SERVINGS	SERVINGS	INGREDIENT PREP	PREPARATION STEP
		25	40	60	75		
9							CCP -- Reheat: To internal temperature of 165F/74C held for at least 15 seconds.

Rice Brown Sesame (Sesame Brown Rice)

COOK TIME	COOK TEMP	COOK METHOD	SERVING SIZE
60 Min	350.0 °F	Bake	1/2 Cup

INGREDIENTS	SERVINGS	SERVINGS	SERVINGS	SERVINGS	INGREDIENT PREP	PREPARATION STEP
	25	40	60	75		
1						WASH HANDS before beginning preparation & SANITIZE surfaces & equipment.
2	Rice, Brown Raw	1 lb 8 Oz	2 lb 6 Oz	3 lb 10 Oz	4 lb 8 Oz	Place rice, margarine, and salt in shallow baking pan. Add boiling water and stir. Cover pan with heavy duty foil. Bake at 350F/177C for 50-60 minutes until liquid is absorbed.
	Margarine, Solids	2 Tbsp 2 tsp	1/4 Cup	1/3 Cup	1/2 Cup	
	Salt, Iodized	1 tsp	1 1/2 tsp	2 1/2 tsp	1 Tbsp	
	Water, Tap	2 Qt	3 1/4 Qt	1 Gal 1 Cup	1 Gal 3 Cup	Boiled
3	Oil, Sesame	1 1/2 tsp	2 tsp	1 Tbsp 1 tsp	1 Tbsp 2 tsp	Remove from oven, uncover and fluff with fork. Drizzle sesame oil over rice, add sesame seeds and green onions and mix well to combine.
	Seeds, Sesame	1 Tbsp 2 tsp	2 Tbsp 1 tsp	3 Tbsp 2 tsp	1/4 Cup	
	Onion, Green/Spring/Scallions	1/4 Cup	1/3 Cup	2/3 Cup	3/4 Cup	

Rice Brown Sesame (Sesame Brown Rice)

	INGREDIENTS	SERVINGS	SERVINGS	SERVINGS	SERVINGS	INGREDIENT PREP	PREPARATION STEP
		25	40	60	75		
4							CCP -- Maintain: Product held at >135F/57C Temperature should be taken every 2 hours during holding. *Maintaining at the proper temperature will present no food safety issue; long hot holding times can affect food quality.
5							CCP -- Cool: Product must reach 135F/57C to 70F/21C within 2 hrs and 70F/21C to 40F/4C within 4 hrs.
6							CCP -- Reheat: To internal temperature of 165F/74C held for at least 15 seconds.

Yogurt Parfait Berry (Berry Yogurt Parfait)

COOK METHOD	SERVING SIZE
Chill	1 each

	INGREDIENTS	SERVINGS	SERVINGS	SERVINGS	SERVINGS	INGREDIENT PREP	PREPARATION STEP
		25	40	60	75		
1							WASH HANDS before beginning preparation & SANITIZE surfaces & equipment.
2	Strawberries, Sliced Unsweetened Frz	1 lb 8 Oz	2 lb 6 Oz	3 lb 10 Oz	4 lb 8 Oz	Thawed	Mix together thawed berries.
	Blueberries, Unsweetened Frz	3 1/8 Cup	1 1/4 Qt	2.0 Qt	2 1/4 Qt	Thawed	
3	Yogurt, Vanilla Low Fat Bulk	3 1/8 Qt	1 Gal 2 Cup	1 Gal 5 Cup	2 Gal 2 Cup		Layer 1/4 cup yogurt into the bottom of dessert/parfait dishes and top with 1/8 cup berries. Repeat another layer with 1/4 cup yogurt and 1/8 cup berries. Top with 1/8 cup granola.
	Granola, Toasted Oat	3 1/8 Cup	1 1/4 Qt	2.0 Qt	2 1/4 Qt		
4							CCP -- Maintain <40F/4C; discard unused product.

Nutrient Summary: Bean Salad Three (Three Bean Salad)

Serving Size: 1/2cup (163.64gm) | **Allergens:** AllergenSulphites, Beans/Legumes, Apples, Onion

MacroNutrients	
Calories	130 kcal
Carbohydrates	24 g
Total Dietary Fiber	5 g
Soluble Fiber	0 g
Insoluble Fiber	0 g
Insoluble Fiber	0 g
Total Sugars	13 g
Added Sugar	0 g
Protein	4 g
Total Fat	4 g
Alcohol	0 g
Caffeine	0 mg
Water	129.72 g

Minerals	
Calcium	40 mg
Iron	1.25 mg
Potassium	225 mg
Sodium	50 mg
Zinc	0.22 mg
Magnesium	14.1 mg
Phosphorus	21.2 mg
Copper	0.05 mg
Manganese	0.22 mg

Vitamins	
Vitamin A	7.08 RE
Vitamin C	3.28 mg
Vitamin D	0 mcg
Vitamin K	23.2 mcg
Vitamin E	0.7 mg
Thiamin (B1)	0.03 mg
Riboflavin (B2)	0.05 mg
Niacin (B3)	0.22 mg
Pantothenic Acid	0.04 mg
Vitamin B6	0.05 mg
Total Folacin	14.87 mcg
Vitamin B12	0 mcg

Fatty Acids	
Cholesterol	0 mg
Trans Fats	0.02 g
Saturated Fat	0 g
Linoleic FA	0.75 g
Oleic FA	2.36 g
Monounsaturated Fat	2.42 g
Polyunsaturated Fat	1.12 g

Other Information

Calories from Carbohydrates	65%	Calories from Fat	26%	Calories from Protein	10%
Ply/SatFat	3.61:1	Sodium/Potassium	0.24:1	Calcium/Phosphorus	1.43:1

* Indicates 1 or more Unreported values

Nutrient Summary: Chicken Stir-fry f/Pulled (Chicken Stir-Fry)

Serving Size: 3/4cup (305.01gm) | **Allergens:** Peas, AllergenWheat, Onion, Broccoli, Corn, AllergenSoy, Mushroom, Chicken, Garlic, Pepper (spice), Peppers Bell

MacroNutrients	
Calories	230 kcal
Carbohydrates	14 g
Total Dietary Fiber	3 g
Soluble Fiber	0 g
Insoluble Fiber	0 g
Insoluble Fiber	0 g
Total Sugars	4 g
Added Sugar	0 g
Protein	28 g
Total Fat	7 g
Alcohol	0 g
Caffeine	0 mg
Water	255.43 g

Minerals	
Calcium	50 mg
Iron	2.5 mg
Potassium	450 mg
Sodium	380 mg
Zinc	2.37 mg
Magnesium	42.92 mg
Phosphorus	205.28 mg
Copper	0.21 mg
Manganese	0.28 mg

Vitamins	
Vitamin A	49.83 RE
Vitamin C	50.18 mg
Vitamin D	0.2 mcg
Vitamin K	35.86 mcg
Vitamin E	0.98 mg
Thiamin (B1)	0.15 mg
Riboflavin (B2)	0.23 mg
Niacin (B3)	6.62 mg
Pantothenic Acid	1.41 mg
Vitamin B6	0.42 mg
Total Folacin	44.46 mcg
Vitamin B12	0.2 mcg

Fatty Acids	
Cholesterol	80 mg
Trans Fats	0 g
Saturated Fat	2 g
Linoleic FA	1.42 g
Oleic FA	2.44 g
Monounsaturated Fat	2.82 g
Polyunsaturated Fat	1.8 g

Other Information

Calories from Carbohydrates	23%	Calories from Fat	29%	Calories from Protein	48%
Ply/SatFat	0.99:1	Sodium/Potassium	0.92:1	Calcium/Phosphorus	0.23:1

* Indicates 1 or more Unreported values

Nutrient Summary: Rice Brown Sesame (Sesame Brown Rice)

Serving Size: 1/2cup (106.49gm) | **Allergens:** Onion, AllergenSoy, Rice, AllergenSesame, AllergenMilk

MacroNutrients	
Calories	110 kcal
Carbohydrates	21 g
Total Dietary Fiber	1 g
Soluble Fiber	0 g
Insoluble Fiber	0 g
Insoluble Fiber	0 g
Total Sugars	0 g
Added Sugar	0 g
Protein	3 g
Total Fat	2.5 g
Alcohol	0 g
Caffeine	0 mg
Water	80.21 g

Minerals	
Calcium	20 mg
Iron	0.75 mg
Potassium	100 mg
Sodium	110 mg
Zinc	0.59 mg
Magnesium	41.81 mg
Phosphorus	75.73 mg
Copper	0.1 mg
Manganese	1.03 mg

Vitamins	
Vitamin A	12.65 RE
Vitamin C	0.18 mg
Vitamin D	0.2 mcg
Vitamin K	3.39 mcg
Vitamin E	0.24 mg
Thiamin (B1)	0.12 mg
Riboflavin (B2)	0.01 mg
Niacin (B3)	1.2 mg
Pantothenic Acid	0.41 mg
Vitamin B6	0.14 mg
Total Folacin	6.6 mcg
Vitamin B12	0 mcg

Fatty Acids	
Cholesterol	0 mg
Trans Fats	0.09 g
Saturated Fat	0 g
Linoleic FA	0.8 g
Oleic FA	0.99 g
Monounsaturated Fat	1.01 g
Polyunsaturated Fat	0.89 g

Other Information

Calories from Carbohydrates	73%	Calories from Fat	19%	Calories from Protein	8%
Ply/SatFat	2.07:1	Sodium/Potassium	1.36:1	Calcium/Phosphorus	0.23:1

* Indicates 1 or more Unreported values

Nutrient Summary: Yogurt Parfait Berry (Berry Yogurt Parfait)

Serving Size: 1 Each (183.74gm) | **Allergens:** Blueberry, AllergenWheat, AllergenMilk, Strawberry

MacroNutrients	
Calories	190 kcal
Carbohydrates	33 g
Total Dietary Fiber	2 g
Soluble Fiber	0 g
Insoluble Fiber	0 g
Insoluble Fiber	0 g
Total Sugars	25 g
Added Sugar	0 g
Protein	8 g
Total Fat	4 g
Alcohol	0 g
Caffeine	0 mg
Water	98.3 g

Minerals	
Calcium	225 mg
Iron	0.5 mg
Potassium	350 mg
Sodium	105 mg
Zinc	1.29 mg
Magnesium	29.43 mg
Phosphorus	196.59 mg
Copper	0.05 mg
Manganese	0.24 mg

Vitamins	
Vitamin A	15.05 RE
Vitamin C	16.95 mg
Vitamin D	0 mcg
Vitamin K	1.41 mcg
Vitamin E	0.38 mg
Thiamin (B1)	0.08 mg
Riboflavin (B2)	0.27 mg
Niacin (B3)	0.46 mg
Pantothenic Acid	0.74 mg
Vitamin B6	0.08 mg
Total Folacin	18.19 mcg
Vitamin B12	0.66 mcg

Fatty Acids	
Cholesterol	10 mg
Trans Fats	0 g
Saturated Fat	2.5 g
Linoleic FA	0.36 g
Oleic FA	0.8 g
Monounsaturated Fat	0.87 g
Polyunsaturated Fat	0.4 g

Other Information					
Calories from Carbohydrates	66%	Calories from Fat	19%	Calories from Protein	15%
Ply/SatFat	0.17:1	Sodium/Potassium	0.32:1	Calcium/Phosphorus	1.11:1

* Indicates 1 or more Unreported values

