

Top 5 Nutrients for Osteoporosis

Calcium- Building block of strong bones
Daily Recommendation: 1000-1200 mg

8 oz. plain lowfat yogurt- 415 mg
1 cup calcium-fortified orange juice- 349 mg
3 oz. canned sardines with bones- 325 mg
1 cup nonfat milk- 299 mg
1/2 cup firm tofu- 253 mg

Vitamin D- Helps body absorb calcium
Daily Recommendation: 600 IU/15 mcg

3 oz cooked rainbow trout- 645 IU/ 16.2 mcg
3 oz cooked sockeye salmon- 570 IU/14.2 mcg
1/2 cup white sliced mushrooms- 366 IU/9.2 mcg
1 cup 2% Vitamin D-fortified milk- 120 IU/2.9 mcg
1 large scrambled egg- 44 IU/1.1 mcg

Protein- Adds to bone mass and volume
Daily Recommendation: 1-1.2 g/kg body weight

3 oz skinless chicken- 28 g
3 oz salmon or tuna- 22 g
6 oz. Greek yogurt- 18 g
1/2 cup cooked pinto beans- 11 g
1 oz. pumpkin seeds- 9 g

Magnesium- Helps activate Vitamin D
Daily Recommendation: 410-420 mg for men,
310-320 for women, 360 mg for pregnancy

1 oz. roasted pumpkin seeds- 156 mg
1 oz. chia seeds- 111 mg
1 oz. dry roasted almonds- 80 mg
1/2 cup boiled spinach- 78 mg
1 cup soy milk- 61 mg

Vitamin K- Makes proteins that support bones
Daily Recommendation: 120 mcg for men, 90
mcg for women

1/2 cup boiled frozen collard greens- 530 mcg
1 cup raw spinach- 145 mcg
1 cup raw kale- 113 mcg
1/2 cup roasted soybeans- 43 mcg
3/4 cup carrot juice- 28 mcg

SOURCES:

- 1.National Institutes of Health Office of Dietary Supplements. Calcium fact sheet for health professionals. Updated January 3 2024. <https://ods.od.nih.gov/factsheets/Calcium-HealthProfessional/>.
- 2.National Institutes of Health Office of Dietary Supplements. Vitamin D fact sheet for health professionals. Updated September 18, 2023.. <https://ods.od.nih.gov/factsheets/VitaminD-HealthProfessional/>.
- 3.Unknown author. Protein content of foods. Today's Dietitian Magazine 2013 <https://www.todaysdietitian.com/pdf/webinars/ProteinContentofFoods.pdf>
- 4.National Institutes of Health Office of Dietary Supplements. Magnesium fact sheet for health professionals. Updated June 2, 2022. <https://ods.od.nih.gov/factsheets/Magnesium-HealthProfessional/>.
- 5.National Institutes of Health Office of Dietary Supplements. Vitamin K fact sheet for health professionals. Updated March 29, 2021. <https://ods.od.nih.gov/factsheets/VitaminK-HealthProfessional/>.





Osteoporosis Weekly Meal Plan

The meal plan comes with 7 unique breakfasts, lunches, dinners, and snacks that emphasize calcium, Vitamin D, protein, Vitamin K, and magnesium. However, most of the meals make great leftovers and can be re-used throughout the week if desired.

The meals should be viewed as suggestions and you can make substitutions to best suit you and your family's preferences and budget.

Breakfasts

Tofu scramble with spinach & mushrooms

Steel-cut oatmeal with bananas and blueberries

Frittata with salmon, asparagus & peas

Chia seed pudding with yogurt and berries

Nut/seed butter & spinach smoothie

Whole wheat avocado toast with sunflower seeds

Overnight oats with nut /seed butter and sliced apples

Lunches

Kale & Quinoa Salad

Tuscan bean soup with kale

Black bean, spinach & avocado wrap

Tuna salad sandwich on whole wheat bread

Fried rice with meat, fish, or tofu & broccoli

Turkey or salmon burger on whole wheat bun

Broccoli & cheddar soup

Dinners

Roasted salmon with broccoli and potatoes

Chicken with mushrooms, broccoli and whole wheat pasta

Pan-seared tofu or beef steak with asparagus spears

Ground meat or vegetarian chili

Coconut milk curry with rice

Burrito or bowl with black beans and pico de gallo

Skewers with yogurt dip, quinoa, and chopped tomatoes

Snacks

Dried plums + almonds

Carrot sticks + hummus

Apple slices + nut/seed butter

Half banana + nut/seed butter

Canned fish + yogurt + toast

Oats + Greek yogurt

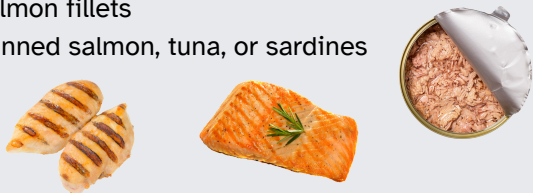
String cheese + strawberries

Weekly Shopping List

The shopping list contains the food items to make all the unique breakfasts, lunches, dinners and snacks provided in the meal plan with many ingredients used for multiple dishes. How much to purchase will depend on your household size, budget, and preferences.

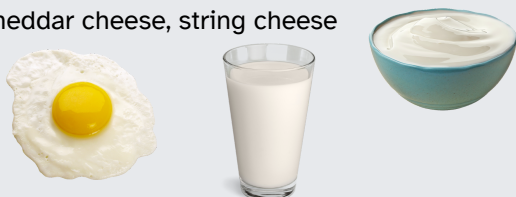
MEAT & SEAFOOD

- Chicken breasts and/or thighs
- Steaks (lean cuts like top sirloin)
- Ground turkey or lean ground beef (such as 80/20)
- Salmon fillets
- Canned salmon, tuna, or sardines



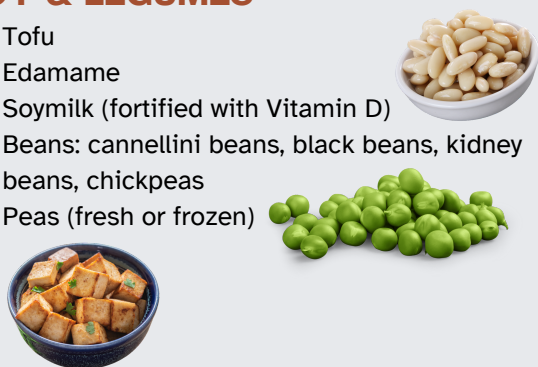
DAIRY & EGGS

- 2%, 1%, or non-fat dairy milk (fortified with Vitamin D)
- Low-fat Greek Yogurt or non-dairy yogurt
- Cheese: cheddar cheese, string cheese
- Eggs



SOY & LEGUMES

- Tofu
- Edamame
- Soymilk (fortified with Vitamin D)
- Beans: cannellini beans, black beans, kidney beans, chickpeas
- Peas (fresh or frozen)



NUTS & SEEDS

- Walnuts
- Almonds
- Chia Seeds
- Sunflower Seeds
- Peanut, almond, cashew, and/or sun butter



FRUITS & VEGGIES

- Spinach, kale, and/or collard greens
- Broccoli
- Asparagus
- Avocados
- Onions
- White mushrooms
- Carrots
- Celery
- Bell peppers
- Tomatoes (fresh and canned)
- Berries: blueberries, raspberries, strawberries
- Apples
- Bananas
- Lemons and limes
- Dried plums, apricots, or raisins



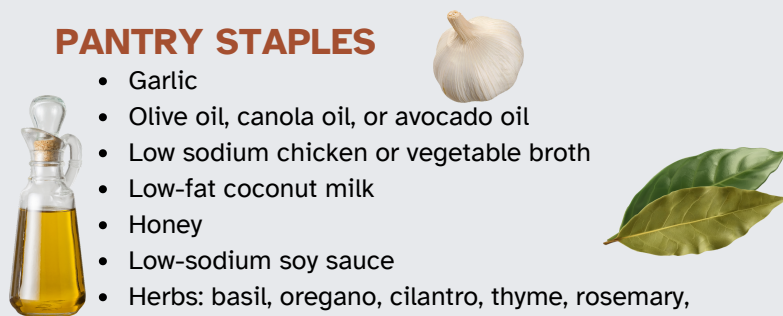
GRAINS & STARCHES

- Whole wheat bread and burger buns
- Whole wheat pasta
- Brown or white rice
- Quinoa
- Tortillas
- Oats (steel-cut is preferred)
- Potatoes



PANTRY STAPLES

- Garlic
- Olive oil, canola oil, or avocado oil
- Low sodium chicken or vegetable broth
- Low-fat coconut milk
- Honey
- Low-sodium soy sauce
- Herbs: basil, oregano, cilantro, thyme, rosemary, bay leaf
- Spices: black pepper, turmeric, paprika, cayenne, garlic powder, onion powder, red chili flakes



Sample Recipe: Breakfast

Tofu Scramble with Spinach & Mushrooms

Turmeric gives tofu a bright, yellow color that closely resembles scrambled eggs and also has anti-inflammatory properties.

Ingredients:

- 2 tablespoons olive oil
- 1 14-oz block firm tofu, patted dry
- 1/2 teaspoon turmeric*
- 4 ounces sliced white mushrooms
- 4 ounces fresh spinach
- 1 yellow onion, diced
- 1/4 teaspoon red chili flakes* (optional)
- Salt and black pepper*



Directions:

1. In a medium bowl, combine tofu, turmeric, 1/4 teaspoon salt, 1/2 teaspoon black pepper, and red chili flakes if using. Crumble tofu just before cooking.
2. In a large skillet, heat olive oil over medium-high heat. Add onion and mushrooms and cook for 3-5 minutes, or until onion is lightly browned and softened. Add spinach, seasoning with salt and pepper, and cook until wilted, about 1-2 minutes. Set cooked vegetables aside.
3. Return skillet to medium-high heat, adding 1 tablespoon of olive oil. Add seasoned tofu and cook for 6-8 minutes or until tofu is lightly browned and resembling scrambled egg.
4. Add cooked vegetables to tofu and stir to combine, adding salt and pepper if desired. Divide evenly and serve.

Makes 2 servings

Nutrition:

Calories 413 **Fat** 31 g **Protein** 26 g **Carb.** 10 g **Sodium** 310 mg **Calcium** 369 mg **Vitamin K** 520 mcg **Magnesium** 108 mg **Vitamin D** 4 IU

SOURCE: USDA FoodData Central

**nutrition does not include seasonings and spices*



Sample Recipe: Breakfast

Steel-cut oatmeal with Bananas and Blueberries

Start your morning off right with this quick and easy breakfast rich in protein, vitamins, minerals, and fiber.

Ingredients:

- 1 cup steel-cut oats
- 3 cups water
- 1 medium banana, sliced
- 1 cup fresh blueberries
- 1/2 cup peanut, almond, or sunflower seed butter
- Salt



Directions:

1. In a medium saucepan, bring water to a boil over high heat. Add oats and 1/2 teaspoon salt, reduce heat to a simmer, cover and cook about 15-20 minutes or until liquid is absorbed and oats are tender. Stir occasionally to prevent burning and boiling over.
2. Divide oatmeal evenly between 4 bowls, seasoning with additional salt if desired, Top each bowl evenly with sliced bananas, blueberries, and scoop of nut/seed butter.

Makes 4 servings

Nutrition:

Calories 280 **Fat** 17 g **Protein** 10 g **Carb.** 26 g **Sodium** 68 mg

Calcium 22 mg **Vitamin K** 8 mcg **Magnesium** 77 mg

SOURCE: USDA FoodData Central



Sample Recipe: Lunch

Kale and Quinoa Salad

Vitamin K-rich kale takes center stage in this tasty lunch that will keep you fueled throughout the workday.

Ingredients:

- 4 cups raw kale, thinly shredded
- 1 cup quinoa
- 2 cups low sodium chicken or vegetable broth
- 1 tomato, diced
- 1/2 cup walnuts or almonds, pulsed lightly in food processor
- Salt and pepper to taste
- Parmesan cheese for serving* (optional)
- **Dressing:**
 - 4 tablespoons olive oil
 - 1/2 lemon, squeezed
 - 1 tablespoon honey
 - 1/2 teaspoon salt*
 - 1/4 teaspoon black pepper*



Directions:

1. In a medium saucepan, combine broth, quinoa, and pinch of salt. Cook quinoa according to package directions, then set aside to cool.
2. In a mixing bowl, add olive oil, juice of 1/2 lemon, honey, salt and pepper and whisk until well-combined. Pour 1/2 of dressing over the kale and gently massage until it is wilted, about 1-2 minutes.
3. If possible, allow kale to sit for at least 30 minutes. Add cooled quinoa, diced tomatoes, nuts, and Parmesan cheese if using, drizzle with remaining dressing and toss before serving.

Makes 4 servings

Nutrition:

Calories 329 **Fat** 26 g **Protein** 8 g **Carb.** 21 g **Sodium** 55 mg **Calcium** 104 mg
Vitamin K 101 mcg **Magnesium** 98 mg

SOURCE: USDA FoodData Central

*nutrition does not include additional seasonings or optional ingredients



Sample Recipe: Lunch

Tuscan Bean Soup with Kale

Packed full of plant-based nutrients, this tasty Mediterranean dish is a great selection for the whole family.

Ingredients:

- 2 tablespoons olive oil
- 2 cans (14-16 oz) cannellini beans, drained and rinsed
- 1 large yellow onion, diced
- 1 cup diced carrots
- 1 cup diced celery
- 4 cloves garlic, minced
- 1 15-ounce can diced tomatoes
- 3 quarts low-sodium chicken or vegetable broth
- 4 cups chopped kale leaves
- Salt and black pepper, to taste
- 1 teaspoon dried thyme*
- 1 teaspoon dried basil*
- 1 bay leaf*
- 1 teaspoon red chili flakes*
- Parmesan cheese for serving* (optional)



Directions:

1. In a large soup pot, heat the olive oil over medium heat. Saute the onion, carrots, celery, and garlic for 3-4 minutes, seasoning with salt and pepper.
2. Add the diced tomatoes, beans, and broth. Season with thyme, basil, bay leaf and red chili flakes and cook for 15-20 minutes then add the kale. Continue cooking until beans are completely tender.
3. Off the heat, remove bay leaf. If using, sprinkle Parmesan cheese before serving.

Makes 8 servings

Nutrition:

Calories 300 **Fat** 12 g **Protein** 17 g **Carb.** 35 g **Sodium** 346 mg **Calcium** 251 mg
Vitamin K 290 mcg **Magnesium** 33 mg

SOURCE: USDA FoodData Central

*nutrition does not include seasonings, spices, or optional ingredients



Sample Recipe: Dinner

Roasted Cajun Salmon with Broccoli and Potatoes

Inspired by Valerie Bertinelli's salmon family dinner, this delicious and bone-boosting recipe is ready in 30 minutes and makes for easy, fast cleanup.



Ingredients:

- 1 lemon
- 1 pound skin-on fingerling potatoes, halved lengthwise
- 4 4-ounce boneless, skinless salmon fillets
- 2 cups broccoli florets cut into 1" pieces
- 4 tablespoons olive oil
- 1/4 teaspoon red chili flakes*
- Salt and pepper to taste
- Cajun Spice Blend*:
 - 1/2 teaspoon cayenne pepper
 - 1/2 teaspoon paprika (regular or smoked)
 - 1/2 teaspoon garlic powder
 - 1/2 teaspoon onion powder
 - 1/2 teaspoon dried oregano
 - 1/2 teaspoon dried thyme
 - 1/2 teaspoon salt
 - 1/2 teaspoon black pepper

Directions:

1. Preheat oven to 425 degrees. Line a sheet pan with aluminum foil. Combine ingredients for Cajun spice blend and set aside.
2. Cut 4 equal round slices of the lemon, set remainder aside. In a large bowl, add halved potatoes with the 4 lemon slices, add 2 tablespoons of olive oil, salt, pepper, and 1/2 of the red chili flakes and stir until well combined.
3. Place potatoes on the sheet pan, cut side down, with lemon slices on top, leaving enough room for the salmon. Bake for 10 minutes, then remove from oven.
4. While potatoes are roasting, add broccoli florets to the bowl used for the potatoes. Add 2 more Tbsp of olive oil, salt, pepper, and remainder of red chili flakes and stir until well combined. Pat salmon dry with paper towels.
5. To the sheet pan, add broccoli on top of potatoes. Place salmon fillets so they are evenly spaced from one another, and then top each with olive oil and Cajun spice blend. Put sheet pan back into oven and bake for 10-12 minutes.
6. Drizzle juice from remaining lemon onto salmon fillets and vegetables as desired.

Makes 4 servings

Nutrition:

Calories 547 **Fat** 29 g **Protein** 32 g **Carb.** 38 g **Sodium** 495 mg **Calcium** 55 mg
Vitamin K 91 mcg **Magnesium** 91 mg **Vitamin D** 577 IU

SOURCE: USDA FoodData Central

*nutrition does not include seasonings or spices



Sample Recipe: Dinner

Marinated Chicken with Mushrooms, Broccoli, and Whole Wheat Pasta

A tasty balsamic marinade helps turn this chicken dinner into a real winner.

Ingredients:

- 4 boneless, skinless chicken breasts or thighs
- 4 ounces sliced white mushrooms
- 2 cups broccoli florets cut into 1" pieces
- 1 package (1 pound) whole wheat pasta, such as penne
- 2 tablespoons olive oil
- Parmesan cheese for serving* (optional)
- Salt and pepper to taste
- **Marinade**
 - 1/4 cup balsamic vinegar
 - 1/4 cup olive oil
 - 1 teaspoon dried oregano*
 - 1 teaspoon dried thyme*
 - 1/2 teaspoon garlic powder*
 - 1/2 teaspoon salt*
 - 1/2 teaspoon black pepper*



Directions:

1. Preheat oven to 425 degrees. In a medium bowl, combine marinade ingredients. Add chicken and mix until all breasts/thighs are fully coated. Cover bowl with plastic wrap and place in refrigerator for 30 minutes-1 hour (no more than 5 hours).
2. Line a sheet pan with aluminum foil. Add mushrooms and broccoli and drizzle with olive oil, salt, and pepper, toss to evenly coat. Move vegetables to the sides of the sheet pan to make room for marinated chicken. Place chicken pieces side by side, adding 1 teaspoon of marinade to each. Bake for 20-25 minutes, or until chicken has reached internal temperature of 165 degrees F.
3. While chicken and veggies are roasting, bring a large pot with salted water to a boil. Add pasta and cook according to package directions. Drain, then drizzle with olive oil
4. Divide chicken, vegetables, and pasta evenly among 4 plates. Top pasta with Parmesan cheese if using.

Makes 4 servings

Nutrition:

Calories 539 **Fat** 28 g **Protein** 36 g **Carb.** 38 g **Sodium** 204 mg **Calcium** 69 mg
Vitamin K 85 mcg **Magnesium** 99 mg **Vitamin D** 6 IU

SOURCE: USDA FoodData Central

*nutrition does not include seasonings, spices, or optional ingredients



Sample Recipe: Snack

Tuna & Greek Yogurt Toast

This protein-powered snack gives you (and your bones!) an extra boost of calcium and Vitamin D.

Ingredients:

- 1 pouch (2.6-3 oz) tuna in water
 - **Note: if using canned tuna, drain before adding to other ingredients*
- 2 tablespoons Greek yogurt
- 1 lemon wedge, squeezed
- 1 slice whole wheat bread, toasted

Directions:

1. In a small bowl, mix together tuna, yogurt, and juice from lemon wedge. Spread onto bread.



Makes 1 serving

Nutrition:

Calories 212 **Fat** 4 g **Protein** 27 g **Carb.** 15 g **Sodium** 473 mg **Calcium** 97 mg **Vitamin K** 2 mcg
Magnesium 56 mg **Vitamin D** 68 IU

SOURCE: USDA FoodData Central

