

DIET & LIFESTYLE CHOICES

FOR A
**Healthy
Prostate**



Introduction

Prostate cancer is the most frequently diagnosed cancer in men and the second leading cause of cancer death in men. The American Cancer Society estimates that 220,800 new

cases of prostate cancer and 27,540 deaths from the disease will occur in the U.S. during 2015.¹ Although prostate cancer death rates have been decreasing since the early 1990s, rates in African American men remain more than twice as high as rates in Caucasian men. African American men have the highest incidence of prostate cancer in the world. Prostate cancer is much more common in the U.S. than in Asia, where the disease is rare. Although age, ethnicity, family history of prostate cancer, and obesity are well-established risk factors, certain diet and lifestyle changes can play an important role in decreasing your risk.

Diet and Lifestyle Choices for a Healthy Prostate

This booklet is designed to help you make changes for a healthy prostate. These changes will not only benefit your prostate, but may also decrease your risk of other chronic diseases, such as heart disease, diabetes and other cancers.

The first section, “Ten Steps to a Healthy Prostate,” outlines these changes and provides an explanation of why each step is important.

Next, “The Prostate-Healthy Diet Guidelines” section explains

exactly what foods a prostate-healthy diet should contain, how many servings of various foods to eat per day, and the amount of food that is actually considered to be one “serving.”

The prostate-healthy menus and recipes that follow will help put all of this information together and set you on the way to a healthier prostate.

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10 Ten Steps to a *Healthy Prostate*

1. **Decrease the amount of fat in your diet:**

A diet high in fat is not good for your prostate, heart, or waistline. Some studies have shown higher rates of prostate cancer among men with high saturated fat intake.^{2,3} Fat does have many important functions in the body, but some fats are healthier than others. Eat less saturated fat and trans fat by limiting foods such as fried foods, baked goods (cakes, doughnuts, cookies), ice cream, and potato chips to a small serving once or twice per week. Other fats such as monounsaturated and polyunsaturated are healthy in moderation, so choosing the right fat is important. For example, use olive or canola oil instead of vegetable oil for cooking. Snack on a few walnuts or almonds instead of potato chips.

2. **Eat less meat and dairy:**

Meat and dairy can be high in saturated fat and cholesterol. Dairy also

contains calcium, and too much calcium has been linked in some studies to an increased risk of prostate cancer.⁴ If you eat meat every day, considering switching 2-3 meals per week to a vegetarian meal as a healthier alternative. Aim to limit your milk and dairy intake to two or fewer servings per day.

3. **Eat more fish:**

Fish is a healthy alternative to red meat. Fattier fish, such as salmon, mackerel, herring, trout, and swordfish, contain omega-3 fats (EPA and DHA), which are healthy for your prostate and heart. Research has shown that eating fish may decrease the risk and recurrence of prostate cancer.^{5,6} Eat fatty fish at least twice a week, or choose a high-quality fish oil supplement containing at least 500 mg of EPA plus DHA per softgel.

4. Eat more tomatoes:

Tomatoes contain lycopene, which is a plant pigment that gives them their vibrant red color. Lycopene is also found in pink grapefruit, guava, and watermelon. This powerful antioxidant has been associated with a decreased risk of prostate cancer.⁷ Lycopene is more easily absorbed by your body when it is heated; therefore, choose cooked tomato products such as tomato sauce or stewed tomatoes. Much of the lycopene is found in the bright red skin, so do not peel your tomatoes before eating and choose canned tomatoes with skin. If you do not eat many cooked tomatoes, try a nutritional supplement containing 30 mg of lycopene from a tomato extract such as Lyc-O-Mato®.

5. Increase the amount of soy in your diet:

Soybeans contain plant estrogens called isoflavones, which may decrease prostate cancer risk.⁸ Soy foods such as tofu, soy milk, edamame (boiled soybeans), and tempeh are also healthy for the heart and bones. Many choices of soy foods are available in supermarkets, so try

one today. If you do not like soy foods, a nutritional supplement containing 50 mg of soy isoflavones from a soybean extract (such as Novasoy®) is another option.

6. Eat more fruits, vegetables, legumes, whole grains and cereals:

As a general rule, make half your plate vegetables and fruits. These are packed with vitamins, minerals, dietary fiber, antioxidants, and phytochemicals, which together may play a role in decreasing cancer risk. Eat at least five servings of vegetables and fruits per day (see serving size charts on pages 6 and 7). Choose fruits and vegetables of all colors (green, yellow/orange, red/purple, and white) to get a good variety of cancer-fighting phytochemicals.

Legumes include beans, peas and lentils and are very nutritious. They contain very little fat, no cholesterol, and are high in folate, potassium, iron, magnesium and fiber. They can easily be added to stews, casseroles, soups and tossed into salads.

Make sure most of the grains you eat are whole grains.

7. Drink at least one cup of green tea per day:

Green tea contains antioxidants called catechin polyphenols, which may play a role in decreasing cancer risk. It may also contribute to strong bones and decrease cholesterol levels. Drinking three to four cups of green tea per day is recommended for maximum benefits. Green tea naturally contains about 10-20% the amount of caffeine as coffee. Although decaffeinated green tea is available, certain solvents used in the decaffeination process may decrease the amount of polyphenols in the tea, thus decreasing the health benefits. If you are sensitive to caffeine and prefer decaffeinated green tea, choose one that uses carbon dioxide and water as the solvent (effervescence). This is the preferred method of decaffeination because it retains about 95% of the catechins found in green tea.

8. Weight control:

Studies indicate that being overweight or obese increases the risk of

prostate cancer mortality (death).⁹ Maintaining a healthy body weight is important to reduce the risk of cancer as well as other chronic diseases, such as heart disease and diabetes. If you need to lose weight, try to do so slowly by reducing fat and calories and eating a diet rich in fruits, vegetables, whole grains, and legumes. Aim for losing 1-2 pounds per week for healthy weight loss.

9. Exercise regularly:

In addition to a healthy diet, daily exercise and physical activity are very important in maintaining a healthy body weight and reducing risk of cancer and other chronic diseases. Regular exercise releases tension, decreases stress, keeps hormone levels healthy, and improves immune function. For men with prostate cancer, resistance exercise (strength training) improves muscular strength and performance, decreases fatigue, and improves quality of life.¹⁰ Aim for at least 30 minutes of moderately intense physical activity per day, 5 days a week. Talk with your healthcare provider to

determine what activities are best for you.

10. Manage stress:

Relax to improve your health. Stress management activities can include anything that helps you better handle the daily stressors in your life. Some stress-reducing activities include meditation, deep breathing and relaxation, and yoga. These practices work together to optimize immune function, which is essential for preventing disease.

Other Prostate-Healthy Choices

Research has shown that certain other foods and nutrients may be healthy for the prostate. Maintaining a normal vitamin D level is important. Vitamin D can be acquired through exposure to sunlight, from some foods (wild-caught fatty fish is a good source) and through dietary supplements. Adequate vitamin E and selenium intake, either from foods or a supplement, is also important for prostate health.

References:

1. American Cancer Society. Available at: <http://www.cancer.org/cancer/prostatecancer/detailedguide/prostate-cancer-key-statistics>
2. Giovannucci E. A prospective study of dietary fat and risk of prostate cancer. *J Natl Cancer Inst.* 1993; 85(19):1571-9.
3. Ramon JM et al. Dietary fat intake and prostate cancer risk: a case-control study in Spain. *Cancer Causes Control.* 2000; 11(8):679-85.
4. Aune D et al. Dairy products, calcium, and prostate cancer risk: a systematic review and meta-analysis of cohort studies. *Am J Clin Nutr.* 2015; 101(1):87-117.
5. Lovegrove C et al. Systematic review of prostate cancer risk and association with consumption of fish and fish-oils: analysis of 495,321 participants. *Int J Clin Pract.* 2015; 69(1):87-105.
6. Chan JM et al. Diet after diagnosis and the risk of prostate cancer progression, recurrence, and death (United States). *Cancer Causes Control.* 2006; 17(2):199-208.
7. Miller EC et al. Tomato products, lycopene, and prostate cancer risk. *Urol Clin North Am.* 2002; 29(1):83-93.
8. Yan and Spitznagel. Soy consumption and prostate cancer risk in men: a revisit of a meta-analysis. *Am J Clin Nutr.* 2009; 89(4):1155-63.
9. Cantarutti et al. Body mass index and mortality in men with prostate cancer. *Prostate.* 2015; 75(11):1129-36.
10. Hasenoehrl et al. The effects of resistance exercise on physical performance and health-related quality of life in prostate cancer patients: a systematic review.



The Prostate-Healthy *Diet Guidelines*

The following chart lists the number of servings recommended per day for each food group and should be used as a basic guideline for a healthy eating plan. The number of servings you need will vary according to your level of physical activity.

FOOD GROUP	DAILY SERVINGS
Vegetables	3 or more servings per day
Fruits	2 servings per day
Whole grains and Cereals	3-6 servings per day
Peas, Beans, and Legumes	1 or more servings per day
Whole Soy Foods	1-2 servings per day
Fish	3 or more servings per week
Meat	2 or fewer servings per day
Dairy	2 or fewer servings per day
Nuts and Seeds	1 serving per day

What counts as a serving size?



Fruit:

- One small to medium piece of fresh fruit
- 1 cup 100% fruit juice
- 1 cup canned fruit or applesauce
- About 17 grapes
- $\frac{1}{2}$ cup dried fruit
- $\frac{3}{4}$ cup blueberries
- 1 $\frac{1}{4}$ cup whole strawberries
- 1 $\frac{1}{4}$ cup watermelon
- $\frac{3}{4}$ cup fresh pineapple
- $\frac{1}{2}$ large grapefruit

Vegetables:

- 1 cup raw or cooked vegetables
- 2 cups raw leafy greens
- 1 cup vegetable juice

Whole grains and Cereals:

(choose whole-wheat bread and pasta, brown rice, and whole-grain cereal)

- $\frac{1}{2}$ cup cooked cereal, pasta, or rice
- $\frac{1}{2}$ bun or bagel
- 1 tortilla (corn or flour – 6 in. in diameter)
- 1 small roll (1 oz.)
- 1 slice regular bread
- 1 cup dry cereal (flakes or rounds)



Peas, Beans, and Legumes:

- $\frac{2}{3}$ cup cooked lima beans
- $\frac{1}{2}$ cup lentils or green peas
- $\frac{1}{2}$ cup cooked garbanzo, pinto, kidney, white beans; split, black-eyed peas, etc.



Soy Foods:

- $\frac{1}{2}$ cup cooked green soybeans (edamame)
- $\frac{1}{2}$ cup soynuts
- $\frac{1}{2}$ cup tofu
- $\frac{1}{2}$ cup tempeh
- 1 cup soymilk
- $\frac{1}{4}$ cup soy flour

Nuts and Seeds:

- $\frac{1}{2}$ ounce of nuts (12 almonds, 24 pistachios, 7 walnut halves)
- 1 tablespoon peanut butter or almond butter
- $\frac{1}{2}$ ounce of seeds (pumpkin, sunflower, squash seeds)

Red Meat, Poultry, Fish, Eggs, and Dairy:

- 3 oz. cooked meat or poultry
- 4-6 oz. fish
- 1 cup milk or yogurt
- 1 $\frac{1}{2}$ oz. cheese
- $\frac{1}{2}$ cup ice cream or frozen yogurt
- 1 egg
- 2 cups cottage cheese





Prostate-Healthy *Menus*

Breakfast ideas

- Whole-grain cereal
Soy milk
Banana (or fruit of choice) or orange juice
Green tea
- Whole-grain toast
Nut butter
Apple
Green tea
- Omelet: eggs, peppers, onions, spinach (choice of veggies)
Fresh cantaloupe slices
Whole-grain toast
Green tea
- Whole-wheat pancakes with fresh strawberries and blueberries
Whole-wheat pancakes: Follow any pancake recipe, substitute $\frac{1}{2}$ the flour with whole-wheat flour. Also, applesauce or other fruit purée can be used as a substitute for oil in baked goods.

Lunch ideas

- Stuffed baked potato: Fill with steamed vegetables, plain Greek yogurt, and salsa, or try topped with low-fat vegetarian chili.
- Tuna salad*: Serve with a mixed vegetable salad or on whole-grain bread with lettuce and tomato.
- Spinach salad with grilled salmon. Toss with your choice of vegetables and vinaigrette dressing.
- Vegetarian burrito: Fill whole-grain tortilla with black beans, brown rice, roasted vegetables, and salsa.

* Recipe on page 10

Snack ideas

- Vegetables and hummus: slice raw vegetables (carrots, broccoli, red peppers, cucumbers, etc) and dip into hummus.
- Trail mix (mixed nuts, soynuts, raisins or other dried fruit).
- Cherry tomatoes with goat cheese: Halve 5 large cherry tomatoes and top each with 1/2 teaspoon of fresh goat cheese.
- A small bowl of cut-up watermelon, cantaloupe and honeydew or fruit of your choice.

Dinner ideas

- Grilled fish, coleslaw*, baked french fries, fresh fruit salad.
- Vegetable stir-fry with tofu and brown rice*.
- Japanese dinner: sushi/ sashimi with edamame (soy beans) as an appetizer.
- Grilled soy-glazed salmon* with garlic mashed potatoes* and steamed asparagus. For dessert: grilled peaches and cream*.
- Poached flounder* with warm lentil salad*.

*Recipes on next pages



Prostate-Healthy *Recipes*

Tuna Salad

- 1 can tuna (6 oz.)
- 1-2 tablespoons mayonnaise
- 1 small red apple
- $\frac{1}{4}$ celery stalk
- $\frac{1}{2}$ teaspoon black pepper

Drain tuna. Combine tuna with mayonnaise and pepper. Grate apple, and finely chop celery. Add apple and celery to tuna mixture. Stir and chill. Great alone, as a sandwich, or as a salad topper.

Baked Sweet Potato Chips

Heat oven to 350° F. Peel sweet potato and slice thin, as if for a thick potato chip. Cover a cookie sheet or baking pan with foil, sprayed lightly with vegetable oil. Lay sweet potato chips on the foil, lightly spray the tops with oil, and sprinkle with your favorite spice (cinnamon or other). Bake for 20 minutes, turn, sprinkle that side with spice, and bake for another 10 minutes.

Coleslaw

- 1 cup low-fat mayonnaise
- 2 tablespoons lemon juice
- 2 tablespoons sugar
- 1 package (1 pound) shredded coleslaw mix (you may substitute 6 cups shredded cabbage)

In large bowl, blend mayonnaise, lemon juice, sugar and salt. Add coleslaw mix; toss well. Cover and chill.

Warm Lentil Salad

- 1 tablespoon olive oil
- 2 $\frac{1}{2}$ cup baby spinach, washed
- $\frac{1}{2}$ onion, diced
- $\frac{1}{2}$ red bell pepper, diced
- 2 celery stalks, diced
- 2 cloves garlic, minced
- 1 $\frac{1}{2}$ cup mushrooms, sliced
- 1 teaspoon fresh thyme, chopped
- $\frac{1}{4}$ teaspoon dried red pepper flakes

- 1 cup lentils
- 3 cup water
- 2-3 teaspoons white balsamic vinegar (regular balsamic will work just fine too)
- Salt-free seasoning and pepper, to taste

Add 1 cup dried lentils to 3 cups boiling water. Bring back to a boil, reduce heat to a simmer, cover & cook until just tender (about 20 minutes). Drain and set aside. Heat oil in a medium-sized saucepan over medium heat. Add onion, bell pepper & celery. Cook for 3 minutes until vegetables begin to get tender. Add mushrooms, garlic, the spices, and a little salt & pepper to taste. Cook until the mushrooms are cooked (3-5 minutes stirring frequently). Add cooked lentils, and toss together. NOTE: Do not overcook lentils as they will get mushy and smashed up. Toss the warm lentils with the spinach. Drizzle with the vinegar and season to taste.

Vegetable Stir-fry with Tofu and Brown Rice

- 2 tablespoons water
- 1 ½ tablespoons cornstarch
- 1 cup vegetable broth
- 2 tablespoons low-sodium soy sauce
- 1 tablespoon rice vinegar
- 1 teaspoon sugar
- 1 teaspoon sesame oil
- ½ teaspoon crushed red pepper
- 1 ½ teaspoons olive oil
- 1 (12-oz.) package firm tofu, drained and cut into ½-inch cubes
- 1 cup thinly sliced onion
- 1 cup red bell pepper strips
- 3 cups sliced zucchini (about ¾ pound)
- 1 cup snow peas, trimmed
- ½ cup diagonally sliced carrot
- 1 (8-oz.) can sliced water chestnuts, drained
- 1 cup cilantro sprigs
- 3 cups hot cooked long-grain brown rice

Combine water and cornstarch in a bowl; stir with a whisk. Stir in broth and next five ingredients (broth through crushed red pepper). Heat 1 teaspoon of olive oil in a large nonstick skillet over medium-high heat. Add tofu; stir-fry eight minutes or until golden brown, stirring occasionally. Remove tofu from pan. Place tofu on several layers of paper towels. Add 1/2 teaspoon olive oil to pan. Add onion and bell pepper and stir-fry two minutes. Add the zucchini, snow peas, carrot, and water chestnuts; stir-fry one minute. Add tofu and broth mixture. Bring to a boil and cook two minutes. Stir in cilantro. Serve with rice.

Grilled Soy-Glazed Salmon

- 3 tablespoons low-sodium soy sauce
- 2 tablespoons honey
- 1 tablespoon olive oil
- 1/2 teaspoon red chili paste
- 4 salmon fillets, 5 ounces each

Estimated Time: 40 minutes. Prepare grill. Combine soy, honey, oil, and red chili paste in a medium-sized mixing bowl; stir thoroughly. Place salmon in soy mixture to marinate for at least 15 minutes. Grill salmon

over medium heat (to prevent excessive charring of outside flesh) until salmon is firm, about five minutes on each side. Transfer grilled salmon to a holding platter until ready to serve.

Garlic Mashed Potatoes

- 1 whole garlic head
- 1 tablespoon olive oil
- 1 pound peeled Yukon Gold or red potatoes, quartered
- 3 cups water
- 1/2 cup milk or soy milk
- 1/4 teaspoon salt
- 1/4 teaspoon pepper

Estimated Total Time: 1 hour, 40 minutes. Preheat oven to 375° F. Remove white papery skin from garlic head (do not peel or separate cloves). Rub oil over garlic head; wrap in foil. Bake at 375° F for 1 hour; cool 10 minutes. Separate cloves; squeeze to extract garlic pulp. Set aside. Discard skins. Place potatoes in a saucepan and cover with water. Bring to a boil; cook 15 minutes or until very tender. Drain. Heat milk in pan over medium heat until hot (do not boil). Add potatoes, salt, and pepper, and beat at medium speed with a mixer until potato mixture is smooth. Add garlic pulp and stir well.

Poached Flounder

- 6 cups cold water
- ¼ cup lemon juice
- 2 tablespoons white vinegar
- 3 medium shallots, thinly sliced
- 1 medium-sized carrot, peeled & thinly sliced
- 2 teaspoons salt
- 2 medium bay leaves
- 1 tablespoon black peppercorns
- 4 (6-ounce) flounder fillets
- 1 tablespoon parsley, coarsely chopped

Combine water, lemon juice, vinegar, shallots, carrot, salt, bay leaves, and peppercorns in a large, shallow pot and bring to a boil over high heat. Once boiling, reduce heat to low until liquid is at a simmer. Add fish in a single layer, making sure the fish is completely covered with liquid. Poach until flesh is opaque and flakes easily, about 7 minutes. Carefully remove filet from pan and serve over brown rice or lentil salad. Drizzle with poaching liquid.

Grilled Peaches and Cream

- 4 fresh peaches, halved and pitted
- 2 tablespoons clover honey
- 1 cup soft cream cheese
- 1 tablespoon vegetable oil

Preheat a grill to medium-high heat or preheat oven to 350°F. Brush peaches with a light coating of oil. Place pit side down onto the grill or on a baking sheet and put into oven. Grill or bake for 3-5 minutes. Turn the peaches over and drizzle with a bit of honey. Place a dollop of the cream cheese in the place where the pit was. Grill or bake for another for 2 to 3 more minutes, or until the filling is warm. Serve immediately.



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