

Nutrition Confusion: What Should Prostate Cancer Fighters Really Be Eating?

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Before we start...

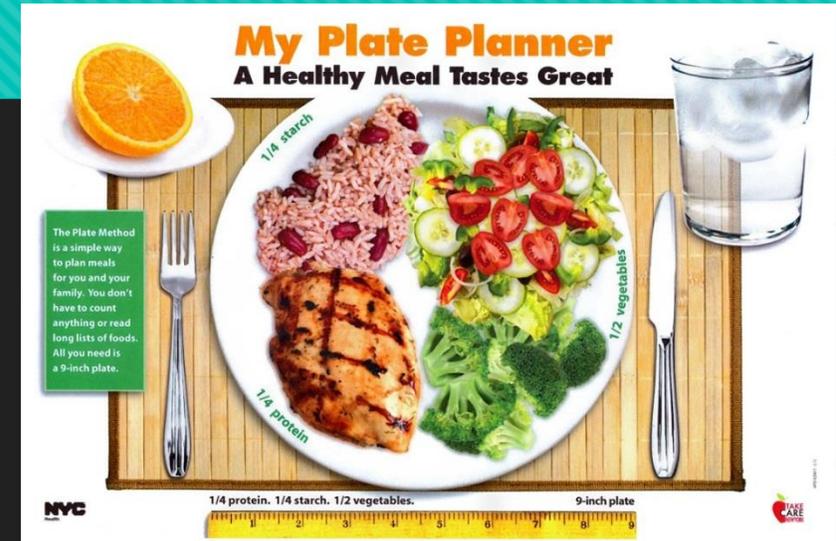
- Disclaimer: All information provided within this presentation and Powerpoint should not be used as a substitute for individualized medical care.

Why is nutrition important?

- Your body **may** need more calories as it fights against cancer because it is burning energy faster.
- Good nutrition can prevent deficiencies or breakdown of muscles and can help decrease side effects of treatment.
- It will also help you maintain your weight, keep your strength, and maximize your quality of life.

Optimizing nutrition during cancer treatment

- **The importance of good nutrition**
 - Eat 3 meals per day or several small meals throughout the day
 - Eat high protein foods
 - Stay hydrated
- **Prepare yourself and your home. Involve family and friends.**
 - Stock your home with comfort foods and easy-to-prepare pantry staples
 - Ask family/friends to cook in advance
 - Have snacks close by



Common side effects

- **Why do side effects occur?**
 - Healthy cells get damaged in the process of destroying cancer cells
 - Not everyone will have the same side effects
 - Some symptoms linger even after treatment is over
- **Side effects from prostate cancer treatment which can be modified by diet include:**
 - Constipation
 - Diarrhea
 - Fatigue
 - Weight changes
 - Hot flashes
 - Osteopenia or osteoporosis



Constipation

- Increase the amount of high fiber foods in your diet
- Drink plenty of liquids during the day
- Start breakfast with a hot drink
- Try taking a walk
- Limit beverages and foods that cause excessive gas



Diarrhea

- Drink non-caffeinated liquids during the day to prevent dehydration
- Increase soluble fiber foods as well as foods and liquids that contain sodium and potassium
- Avoid high fiber, gas-producing or raw vegetables or fruits
- Avoid greasy, fatty, or fried foods
- Limit dairy products
- Avoid sugar-free candies and gums that contain sugar alcohols



Fatigue

- Focus on protein-rich meals
- Have easy-to-eat foods like smoothies, soups, and quiche
- Cook or ask friends and family to cook in advance and freeze foods in meal-sized portions
- Keep nutritional shakes on hand



Weight changes

- Unintentional **weight gain**

- Be mindful of your calorie intake.
- Work with a dietitian to ensure you are meeting your nutritional needs.
- Fill up on fruits and vegetables! Focus on lean protein and have modest portions of carbohydrates.

- Unintentional **weight loss**

- Try to have 5-6 small meals or snacks throughout the day instead of 3 large meals
- Eat with other people or with TV/music in background if you have a low appetite
- Drink commercially prepared nutritional shakes or homemade high calorie and protein smoothies
- Increase your protein intake & add extra calories to meals
- Eat your biggest meal when your appetite is strongest

Hot flashes

- Avoid spicy foods, alcohol, caffeine
- Consume one serving of whole soy food daily
 - 1 cup soymilk
 - ½ cup tofu
 - ½ cup tempeh
 - ½ cup edamame
 - ¼ cup soy nuts
 - 1 tablespoon miso paste



Nutrition for bone health

- Research shows that calcium and vitamin D keep bones strong.
- For adults ages 19 to 50 and men ages 51 to 70, the recommended dietary allowance (RDA) is **1,000 mg** of calcium a day. The recommendation increases to **1,200 mg** a day for women after age 50 and for men after age 70.
 - It's best to have calcium-rich foods throughout the day.
- For adults ages 19 to 70, the RDA of vitamin D is **600** international units (IUs) a day. The recommendation increases **to 800 IUs** a day for adults age 71 and older.
 - Get your vitamin D level checked!

Calcium-rich foods

- Low-fat yogurt (1 cup = 415 mg)
- Blackstrap molasses (2 tbsp = 400 mg)
- Collard greens, cooked (1 cup = 350 mg)
- Calcium-fortified orange juice (1 cup = 350 mg)
- Low-fat milk (1 cup = 295 mg)
- Sardines (3 ounces with bones = 270 mg)
- Canned salmon (3 ounces = 270 mg)
- Firm tofu (1/2 cup = 225 mg)
- Kale, cooked (1 cup = 180 mg)
- Bok choy, cooked (1 cup = 160 mg)
- Broccoli (1 cup, cooked = 60 mg)



Vitamin D-rich foods

- Cod liver oil (1 tbsp = 1360 IU)
- Salmon (3 oz = 450 IU)
- Tuna (3 oz = 150 IU)
- Fortified OJ (1 cup = ~140 IU)
- Milk (1 cup = ~120 IU)
- Yogurt, fortified (6 oz = 80 IU)
- Sardines (2 pieces = 50 IU)
- Liver (3 oz = 40 IU)
- Egg (1 large = 40 IU)
- Cereal, fortified (~1 cup = 40 IU)



Prostate cancer-fighting foods

Your nutrition prescription!

- 5 servings of vegetables per day (with emphasis on cruciferous vegetables)
- 3 servings of fruits per day (with emphasis on lycopene-rich foods)
- 30-45 grams of fiber per day (whole grains, legumes and vegetables!)
- Omega 3-rich fish 2x/week (salmon, sardines, mackerel)
- 2 tbsp ground flaxseeds per day
- 1-3 servings of whole soy foods per day
- 1 cup or more of green tea per day
- 1000-1200 mg of calcium per day
- 600-800 IU of vitamin D per day



Foods to avoid that can promote prostate cancer cell growth

- Avoid refined carbohydrates
- Limit red meat intake
- Avoid processed, grilled, or fried meats
- Moderate dairy food intake (2 servings per day)
- Moderate egg intake (2 egg yolks per week)
- Limit alcohol intake (no more than 2 drinks/day; 1 serving = 1 oz liquor, 5 oz wine, 12 oz beer)



GEMINAL study by Dr. Dean Ornish

- Whole foods diet, high in plant-based protein, fruits, vegetables, unrefined grains, legumes and low in fat
- Moderate aerobic exercise (walking 30 min/d, 6 days/wk)
- Stress management (gentle yoga, stretching, breathwork, meditation, imagery, progressive relaxation for 60 min/d)
- Increased social support (60 min/week in group sessions)

The result:

- Disease-promoting genes were downregulated, health-promoting genes were upregulated
- Weight loss
- Lower blood pressure
- Lower cholesterol levels
- Lower triglyceride levels
- Lower CRP
- Longer telomere length

MEAL Study

- “Diet may substantially influence prostate cancer initiation and progression, and altering dietary intake— specifically, **switching to a diet that emphasizes vegetable intake and de-emphasizes meat and fat intake**—might decrease the risk of clinical progression.”
- Guidelines for those in the intervention arm:
 - **7 servings of vegetables**, including at least 2 servings of cruciferous vegetables and 2 servings of tomatoes
 - **2 servings of fruit**
 - **2 servings of whole grains**
 - **1 serving of legumes**
 - Encouraged to consume “bold” (“big color” and “strong flavor”) vegetables and fruit – i.e. dark green leafy vegetables, deep orange vegetables and fruits, allium vegetables (onions, garlic), berries, and citrus fruit.



Common nutrition myths

Does sugar feed cancer?

- All carbohydrates break down to sugar which both healthy and cancer cells use for fuel. Research shows that the body responds to a high sugar intake by making more insulin and related growth factors, which influence cancer cell growth. However insulin levels also depend on genetic factors, physical activity, BMI (body mass index), metabolic syndrome (a group of medical conditions linked to insulin resistance) and the type of sugar you eat. **Therefore just avoiding sugar is not the right plan for everybody.**
- The important question to ask is “**How much and what type of carbohydrates should I eat?**”

If my calcium is high should I cut down on dairy?

- Serum calcium and dietary calcium have little to do with each other, therefore you should not limit your dietary intake.
- However, if you have high potassium levels and compromised kidney function, you may need to limit your dairy intake. Your doctor or dietitian will advise you if you need to make dietary changes based on your blood work.

Should I take curcumin?

- Do we really know how they will interact with chemotherapy? Not really.
- Secondly, there is some research that shows that curcumin may *interfere* with several chemotherapies
- My approach: FOOD FIRST



Should I eat only organic?

- Organically grown produce have lower pesticide residues and synthetic food additives, but following an organic diet does not guarantee a healthy diet.
- Avoiding conventionally grown produce may eliminate some healthy food options.
- The consensus among major peer-reviewed studies is that consuming non-organic fruits and vegetables is not harmful to your health.

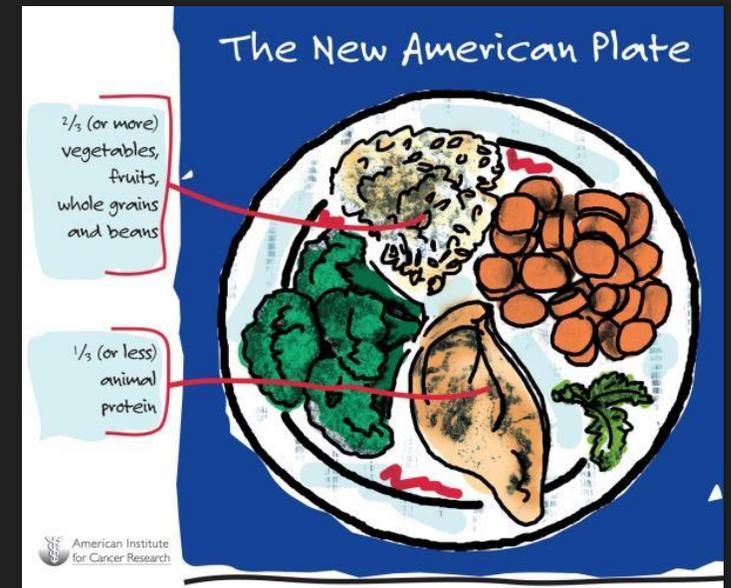


Can I eat soy foods?

- It is safe to eat soy!
- Choose whole soy foods such as such as soymilk, tofu, tempeh, edamame, soy nuts, and miso.
 - A serving would be 1 cup of soymilk; ½ cup of tofu, tempeh, or edamame; ¼ cup of soy nuts; or 1 tablespoon of miso paste.
- It is best to get soy from foods sources; we do not recommend taking a soy isoflavones supplement.

What is the best diet for cancer survivors?

- **Mostly plant-based diet, rich in fruits, vegetables, whole grains and legumes**
- **Avoid:** sugary drinks, processed meats, processed foods high in sugar / fat / salt, or low in fiber
- **Limit:** red meat, alcohol, and salty foods



Additional resources

- OncologyNutrition.org
- AICR.org
- Sloan Kettering – “About Herbs, Botanicals & Other Products”
<https://www.mskcc.org/cancer-care/diagnosis-treatment/symptom-management/integrative-medicine/herbs>
- CookForYourLife.org

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Our services include:

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- **Acupuncture**
- **Massage therapy**
- **Stress reduction techniques such as meditation, mindfulness, and guided imagery**
- **Reiki**
- **Yoga**
- **Pilates**
- **Integrative Medicine physician consultation**



→ **To make an appointment, please call: 646-962-8690** ←

Thank you!

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