

Eat the Rainbow for Cancer Prevention

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Concepts Taught:

- Learn lifestyle modifications for cancer prevention.
- Be able to identify foods, nutrients that can lessen our risk for cancer.

The Burden of Cancer:

- Second leading cause of death in the U.S.
- Long term side effects from cancer treatment and reduced quality of life
- 18.2% of cancer cases & 15.8% of cancer deaths in the U.S. can be attributed to lifestyle, such as weight and poor nutrition.
 - #1 attributing factor is cigarette smoking.

American Institute for Cancer Research recommendations for cancer prevention:

- Keep weight in healthy range and avoid weight gain as an adult.
- Be active daily - walk more and sit less.
- Limit sugar-sweetened drinks; drink mostly water and unsweetened drinks.
- Eat no more than 3 portions of red meat (beef, pork, lamb) per week. Eat little to no processed meat (hot dogs, deli meat, bacon).
 - 1 portion of red meat = 3-4 oz. (about the size of palm of hand or deck of cards)
- Make most of your meals and snacks be whole grains, vegetables, fruit, and beans or lentils.
- Drink little to no alcohol.
- Limit fast food.
- Meet nutrient needs with food rather than supplements.
- If you have a cancer diagnosis, follow these recommendations as able.
- For mothers, breastfeed your baby if able.

Nutrients for cancer prevention:

- **Vitamin A:** An antioxidant; protects cells from DNA damage.
 - Food sources: carrots, spinach, red grapefruit, butternut squash, milk, tuna, and bell peppers
- **Vitamin C:** An antioxidant; protects cells from DNA damage.
 - Food sources: broccoli, pineapple, kiwi, strawberries, kale, citrus fruit (oranges, lemons, grapefruit, limes)
- **Vitamin D:** An antioxidant; responsible for regulation of hormones.
 - Few foods contain vitamin D. Choose foods that have vitamin D added (fortified) - milk, juice, yogurt.
 - Food sources: Fortified milk (dairy and plant-based), cereal, fortified juice, salmon, tuna, cod, egg yolk, fortified yogurt
- **Flavonoids:** A plant compound and antioxidant that may detoxify carcinogens (cancer causing agents)
 - Food sources: blueberries, blackberries, raspberries, red cabbage, kale, parsley, green tea, dark chocolate.
- **Folate:** Responsible for DNA repair and blood cell formation
 - Food sources: Beans (black, kidney, garbanzo), lentils, leafy greens (kale, spinach), avocado, brussel sprouts.
- **Omega-3:** Reduces inflammation, good for heart and brain health
 - Food sources: Oysters, chia seeds, walnuts, salmon, flax seeds
- **Soy isoflavones:** Plant derived compound with estrogenic-like activity
 - Lower rates of breast and other cancers
 - Food sources: Edamame, miso, tempeh, tofu

Ideas:

- **Tofu:** crisp in air fryer and add to stir fry, silken tofu in smoothie or pasta sauce, use as egg replacement
- **Chia & flax seeds:** sprinkle on yogurt, add to meatballs or meatloaf, add to muffins or smoothies
- **Red cabbage:** add to stir fry or salads, mix with coleslaw for fish tacos, make an egg roll bowl
 - <https://www.spendwithpennies.com/egg-roll-in-a-bowl/>

Recipes & Resources:

- <https://www.aicr.org/cancer-prevention/recipes/>
- <https://www.cancer.org/cancer/risk-prevention/diet-physical-activity/eat-healthy/find-healthy-recipes.html>
- <https://stanfordhealthcare.org/medical-clinics/cancer-nutrition-services/care-team.html>
- <https://www.bronsonhealth.com/services/nutrition/education/>