## Nutrition and Lung Cancer

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## Objectives

- The goals of nutrition before, during, and after the completion of treatment
- Sources of nutrition for healing and maintenance- what to include and what to avoid

### American Institute for Cancer Research

- Be as lean as possible without becoming underweight.
- Be physically active for at least 30 minutes every day.
- Avoid sugary drinks. Limit consumption of energy-dense foods.
- Eat more of a variety of vegetables, fruits, whole grains and legumes such as beans.
- Limit consumption of red meats (beef, pork and lamb) and avoid processed meats.
- If consumed at all, limit alcoholic drinks to 2 for men and 1 for women a day.
- Limit consumption of salty foods and foods processed with salt (sodium).
- Don't use supplements to protect against cancer.
- And always remember . . . Do not use tobacco in any form

# Maintain a Healthy Weight

- Waist circumference
  - Men < 40 inches
  - Women < 35 inches
- Smaller, more frequent meals and snacks
- Focus on fiber & protein
  - Mindful eating
  - Increase satiety
  - Stabilize blood sugar
    - 25-30 grams fiber per day

# Nutrient Dense Food First

- Minimally processed plant based
  - 8-10 servings of fruits and vegetables every day
    - Green leafy vegetables
      - kale, chard, mustard/collard greens
      - blueberries , blackberries
  - Make your grains "whole"
    - 100% whole wheat/grain, barley, amaranth, rye, quinoa
  - Beans & Legumes
  - Excellent source of iron, protein, fiber and folate
    - Hummus try adding avocado, lima beans, or edamame
- Healthy Fats
  - Nuts, seeds, avocado, olives/olive oil, canola oil, flax seed, fish
- Calcium rich foods
- Lean protein



# Nutrition Through Treatment

#### • Protein

- Building blocks of red & white blood cells
- Maintains strength, rebuilds tissue
- Key nutrient for maintaining immune function
- Vitamins and minerals
  - Iron, Vitamins C and B for making blood cells
  - Antioxidants to help maintain integrity of cells
  - Calcium + Vitamin D for bone health
- Calories
  - Provide energy for all bodily functions
  - Keeps body from breaking down protein
  - Increased need when body is stressed
- Fluids
  - Required for blood volume
  - Electrolyte balance



#### **Proper Nutrition**

- Help the body to maintain healthy cells and support repair
- Maintain a sense of wellbeing
- Reduce risk of illness
- Help to maximize the impact of treatment

#### **Poor Nutrition**

- Can reduce quality of life and functional status
- Increase risk for other illness
- Reduce our body's natural defenses
- Limit body's ability to repair itself

# Maintain Your Weight

- Weight loss during treatment can increase fatigue
- Adequate nutrition are essential for:
  - Rebuilding and maintaining blood cells
  - Immune function
  - Preserving lean muscle mass
  - Optimizing energy
  - Hydration



# Caution when using supplements

- Not FDA regulated
- Blood thinning or thickening properties
  - Vitamin K (K2)
- Altered metabolism
  - Grapefruit, Green tea & Velcade
- Antioxidants and chemo/radiation
- Hormonal properties
  - Soy Isoflavone & Estrogen
- High dose of herb/vitamin toxicity
- Fact check:
  - Memorial Sloan Kettering Herbal Database
  - Quack Watch

Color	Phytochemical	Fruit/Vegetables
Red	Lycopene	Tomatoes and tomato products, pink grapefruit, watermelon
Red/purple	Anthocyanins, polyphenols	Berries, grapes, red wine, prunes
Orange	α-, β-carotene	Carrots, mangoes, pumpkin
Orange/yellow	β-cryptoxanthin, flavonoids	Cantaloupe, peaches, oranges, papaya, nectarines
Yellow/green	Lutein, zeaxanthin	Spinach, avocado, honeydew, collard and turnip greens
Green	Sulforaphanes, indoles	Cabbage, broccoli, Brussels sprouts, cauliflower
White/green	Allyl sulphides	Leeks, onion, garlic, chives
Whole Foods First		

### Resources

- American Institute for Cancer Research
  - <u>www.aicr.org</u>
- Academy of Nutrition and Dietetics
  - <u>www.eatright.org</u>
- www.foodsafety.gov
- Memorial Sloan Kettering Herbal Database
  - www.mskcc.org/mskcc/html/11570.cfm
- Quack Watch
  - www.quackwatch.com