A Cancer Fighting Diet

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Objectives

- To promote knowledge of preventative measures individuals can take to reduce cancer risk
- Understand how nutrition may prevent promotion of cancer
- Review the AIRC and World Cancer Fund’s recommendations for cancer prevention
- Identify common foods that have been researched for cancer fighting properties
“Control the Controllables”

Cancer Prevention
WHAT YOU NEED TO KNOW ABOUT OBESITY AND CANCER

After not smoking, BEING AT A HEALTHY WEIGHT is the most important thing you can do to prevent cancer.

Overweight and obesity INCREASE RISK FOR¹

ESOPHAGEAL CANCER
GALLBLADDER CANCER
KIDNEY CANCER
COLORECTAL CANCER
ADVANCED PROSTATE CANCER
POST-MENOPAUSAL BREAST CANCER
PANCREATIC CANCER
OVARIAN CANCER
ENDOMETRIAL CANCER

AICR ESTIMATES THAT EXCESS BODY FAT IS A CAUSE OF APPROXIMATELY
112,000 U.S. CANCER CASES EVERY YEAR.²

AND YET...
7 in 10 Americans are currently overweight or obese.³
69%

AND...
Only about half of all Americans are even aware of the obesity-cancer link.⁴
52%

PROTECT YOURSELF!

Move More  Eat Smart

For tips on getting to, and staying at, a healthy weight, visit www.alcr.org
How may nutrition help?

Figure reproduced from: Oncology Nutrition for Clinical Practice, DPG; Leser et al.
Phytochemicals

- Provide plants with color, odor, and flavor

- Researched benefits:
  - Stimulate the immune system
  - Block substances we eat, drink, and breathe from becoming carcinogens
  - Reduce inflammation
  - Prevent DNA damage and help with DNA repair
  - Reduce oxidative damage
  - Slow the growth rate of cancer cells
  - Triggers cell apoptosis
  - Helps regulate hormones

Recommendations for Cancer Prevention

- World Cancer Research Fund & AICR
  - “We help people make choices that reduce their chances of developing cancer.”

- Last Updated Report: 2007

- 10 recommendations for Cancer Prevention drawn from the WCRF/AICR Second Expert Report

Body Weight

Be as lean as possible without being underweight.
Physical Activity

Be physically active as part of everyday life.
Foods and Drinks that Promote Weight Gain

Limit consumption of energy-dense foods. Avoid sugary drinks.
Plant Foods

Eat mostly foods of plant origin.
Animal Foods

Limit intake of red meat and avoid processed meat.
Limit alcoholic drinks: 1 per day for women, 2 per day for men.
Preservation, Processing, and Preparation

Limit consumption of salt.
Dietary Supplements

Aim to meet nutritional needs through diet alone.
Breastfeeding

Mothers to breastfeed; children to be breastfed.
Cancer Survivors

Follow the recommendations for cancer prevention.
Foods You Should Know About

Recommendations from AICR

Apples

- Good source of fiber & vitamin C
- Diets high in fiber convincingly decrease risk for: colorectal cancer
- “Research is pointing to the fact there is not one single phytochemical that supplies apples’ anti-cancer properties... It’s the whole apple.”
  - Rui Hai Liu, Cornell University.
Blueberries & Other Berries

- May help reduce age-related memory loss
- Excellent source of vitamins C & K, manganese, and a good source of fiber
- Among the highest in antioxidants due to many phytochemicals
- Aim for 1 serving daily
Broccoli & Cruciferous Vegetables

- Four-petal flowers which resemble a cross
- Includes: broccoli, Brussels sprouts, rapini, cabbage (green), cauliflower, turnips (white), dark green leafy vegetables
- Glucosinolates are found in all cruciferous vegetables
  - May induce detoxification of carcinogens, limit production of cancer related hormones, block carcinogens and prevent tumor growth

Coffee & Tea

- Good source of riboflavin (B-Vitamin)
- Concentrated source of antioxidant phytochemicals
- Probably lowers risk for endometrial and liver cancers
- Skip cream and sugar!
- Tea: Limited but suggested evidence; phytochemicals
Dried Beans, Lentils, and Peas (Legumes)

- Aim for intake of at least ½-1 cup every day.
- Kidney and black beans, yellow split peas, lentils, etc.
- Excellent source of dietary fiber
  - Contain resistant starch
    - Used by healthy bacteria to produce short-chain fatty acids which seem to protect colon cells
- Good source of protein, folate
  - Folate may be protective against pancreatic cancer as it is essential for healthy DNA and maintaining control of cell growth

Flaxseed

- Excellent source of magnesium, manganese, thiamin, fiber
- Omega-3’s & Lignans
- Ground is preferable
- Add to cereals, yogurt, smoothies, salads, baked goods
- Aim for 1 TBSP per day
Garlic

- Allium family: onions, scallions, leeks, and chives
- *Probably* protective against stomach cancer
- Many substances that may protect against cancer

**Animal Studies**
- Slowed development of cancer for stomach, breast, esophagus, colon, and lung

- Activate substances by chopping and letting sit for 10-15 minutes
Walnuts

- All nuts are cancer-preventive
- Omega-3
- Phytosterols: help lower blood cholesterol

"Several animal studies show that including walnuts in the diet slows or prevents the growth of breast and prostate cancers. The addition of walnuts to your plate is a good cancer preventive measure."

- Lauri Byerley, PhD, LSU Health New Orleans
Take Away

- No single food or food component can protect you against cancer by itself. But strong evidence does show that a diet filled with a variety of plant foods such as vegetables, fruits, whole grain and beans helps lower risk for many cancers.

“Eat food. Not too much. Mostly plants.”

–Michael Pollan
Questions?

Thank you!