



CHAPTER CAPSULE

Celebrating 32 Years

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Providing optimal care through promotion of professional standard, networking and development

WHEN IT COMES TO PREVENTING CANCER, KNOWLEDGE IS POWER

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Unfortunately, almost everyone knows someone that has had cancer. Coming in a very close second to heart disease, each year cancer ranks among the highest causes of death in the United States. With all of the environmental, genetic and behavioral risk factors out there, it is important to know what you can do to help lower your risk of getting such a dreadful disease.

So what is cancer? By definition, cancer is a disease caused by an uncontrolled division of abnormal cells. There are more than 100 different types of cancer that occur in various parts of the body. Ranging from the most common such as lung, breast, and melanoma to the rarest like angiosarcoma of the breast or heart. Everyday factors can affect an individual's chance of developing cancer. Smoking, a poor diet, physical inactivity or simply being overweight are just a few significant risk factors. The American Institute for Cancer Research estimates that approximately one third of the most common cancers are preventable through diet, physical activity and body weight, which accounts for over 374,000 cases every year.

Approximately seven out of every ten Americans are currently overweight or obese. According to scientific literature, excess body fat increases risk for cancers such as esophageal, pancreatic, endometrial, kidney, post-menopausal breast, gallbladder, ovarian, and colorectal.

The American Institute for Cancer Research estimated that excess body fat is a cause of approximately 120,400 U.S. cancer cases every year. However, less than half of Americans are even aware of the obesity-cancer link. With body weight playing such a crucial role, it is often left out of the cancer prevention conversation. So what can we do to change this? Nutrition education is the answer.

The first step in education is building a strong foundation. In the U.S., almost everyone has learned about the food pyramid. However, they may not know that it has been replaced. Ending 19 years of the USDA food pyramid guide, on June 2nd, 2011 MyPlate was introduced depicting a place setting with a plate and a glass divided into five food groups. The new MyPlate icon emphasizes the fruit, vegetable, grains, protein, and dairy groups. Balancing and incorporating the MyPlate method into each meal and keeping an active lifestyle, are essential for cancer prevention. The key to a long term and sustainable healthy diet is balance, moderation and sticking with the key food groups. A balanced diet is the foundation of weight

control and cancer risks can be greatly reduced by eating specific foods within the five food groups of MyPlate.

Cancer risk can be reduced with whole grains which provide fiber, vitamins, minerals, antioxidants, phenols, resistant starch, and lignans. Not only do whole grains reduce cancer risk, but they are hearty, flavorful and filling. Studies show whole grains may reduce inflammation which is important because chronic inflammation appears to play a role in the development of cancer. Eating six ounces of whole grains daily links to a 21 percent decreased risk in colorectal cancer. However, you must be careful with the whole grains you choose, as there are many new whole grain food products that are actually really low in fiber. Foods such as breakfast cereals and sweets like cookies may say they have whole grains in them, but they can still be low in fiber. When choosing from food items such as brown rice, oatmeal, whole-wheat bread, and barley, be sure to look for "100% whole grain" on the package. Words like multi-grain or wheat do not necessarily mean the product contains whole grain. Be sure to check

out the ingredient list and look for the term "whole" or a specific grain, such as oats, listed as the first ingredient.

Fruits and vegetables play an important role in cancer prevention and can assist getting to and maintaining a healthy weight.

One apple provides at least ten percent of the recommended daily amount of vitamin C and fiber. Apples also contain a variety of phytochemicals that scientists are studying for their anti-cancer effects. Make sure to keep the skin on, as the skin of an apple contains

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Continued on following page

WHAT'S INSIDE...

FROM THE EDITOR	2
HIGHLIGHTING A MEMBER	3
MEETING SUMMARIES.....	3
FROM THE PRESIDENT.....	6
OFFICERS AND STAFF	8

FROM THE EDITOR

DENISE WEISS

I would like to take this opportunity to introduce myself as your new co-editor of the newsletter. My name is Denise Weiss and I am a nurse practitioner at Karmanos Cancer Institute in the department of experimental therapeutics—a fancy name for Phase I clinical trials. As you recall from your pharmacology days, there are phases of clinical research before a drug is approved for medical treatment. Prior to Phase I there are pre-clinical studies testing investigational drugs conducted in vitro (test tube) and in vivo (animal) to assess for scientific merit. Phase I studies assess the safety and tolerability of the drug and the maximum tolerated dose in human volunteers. Phase II studies investigate drug efficacy. Phase III trials utilize randomized controlled multicenter large patient groups to determine the definitive effectiveness of the drug compared with the current gold standards of treatment. Phase IV studies utilize post-marketing surveillance to assess safety on a large patient population over a long period of time. Harmful side effects noted in Phase IV trials may result in the discontinuation of the drug, for example rofecoxib-Vioxx.

A relatively recent (February 22, 2013) FDA approved drug that I had the privilege to work with was ado-trastuzumab emtansine-Kadcyla. Currently in Phase IV, this antibody drug conjugate was approved to treat Her2-positive metastatic breast cancer. It has been a pleasure to work with this compound through all Phases of investigation. Another impact on my appreciation of the importance of clinical research was from viewing the HBO documentary on our second president of the United States, John Adams. In the 1700s

smallpox was the plague of the Colonies, half of Boston's population was affected with nearly 17% mortality. In the year 1776, Abigail Adams had her family immunized against smallpox, at a time when inoculation was controversial—and with good reason. The village physician would remove a smallpox lesion from an infected individual and apply this virus to an open wound on the healthy host. Can you imagine that? There was no dose; the inoculation itself could lead to fulminant disease, death, and place families and communities at risk. This leads to the recommendation of a must read—The Immortal Life of Henrietta Lacks, by Rebecca Skloot. Please read or listen (available on CD to enjoy on your travel to work) to this account of a patient and the ethical issues of medical research conducted 63 years ago.

Well, we have come a long way sister in the conduction of clinical trials. By virtue of research, science will continue to make strides toward improvement in health and welfare. An example are recent Phase I studies, and those in the pipeline, that use the application of personalized medicine. Personalized medicine is using an individual's genomic and biologic information to make clinical decisions about treatment. Examining tumors for specific mutations or targets, such as non-small cell lung cancer (NSCLC) tumors with the echinoderm microtubule-associated protein-like 4 (EML4) gene fused to anaplastic lymphoma kinase (ALK), is a subset of NSCLC that has demonstrated response to the experimental agent from Pfizer PF-02341066. Despite the scientific advances, cancer is the second leading cause of death in the United States. Improvements in survival have been due in part to improved cancer treatment. For that reason, new drug development is a national priority. Oncology nurses are in a prime position to facilitate patient's enrollment in clinical trials, assist in symptom management, help families cope while enhancing quality of life.

WHEN IT COMES TO PREVENTING CANCER, KNOWLEDGE IS POWER

Continued from front page

a third or more of its phytochemical compounds. Another great fruit option is cherries. Did you know that Michigan produces most of our tart cherries and northwestern states produce 60 percent of sweet cherries? Some studies show that both sweet and tart cherries are a good source of fiber, vitamin C, and potassium. They also contain a variety of phytochemicals contributing to both the color and antioxidant activity. Remember, fresh is best.

Broccoli and other cruciferous vegetables are good sources of vitamin C, folate, potassium, fiber, magnesium, carotenoids, and various polyphenols. Probably the most popular of the cruciferous vegetables is broccoli, but don't limit yourself to just this. Choose from brussel sprouts, rapini, cabbage, and cauliflower. Other dark leafy green vegetables like spinach, kale, romaine lettuce, leaf lettuce, mustard green, collard greens, chicory, and Swiss chard are also excellent sources of fiber, folate and a wide range of carotenoids and flavonoids. Some laboratory research has found that the growth of certain types of skin cancer cells, breast cancer cells, stomach cancer, and lung cancer can be inhibited by the carotenoids in dark green leafy vegetables.



With all these fruit and vegetable recommendations a very popular question is, "Should I buy organic?" According to the Environmental Working Group (an organization of scientists, researchers and policymakers) certain types of organic produce can reduce the amount of toxins you consume on a daily basis by as much as 80 percent. The group came up with two lists "The Dirty Dozen" and "The Clean Fifteen" to help consumers know when they should buy organic. The "Dirty Dozen" includes apples, strawberries, grapes, celery, peaches, spinach, sweet bell peppers, imported nectarines, cucumbers, cherry tomatoes, imported snap peas, and potatoes. Hot peppers, kale and other collard greens were just recently added to this group as the "Dirty Dozen Plus." The "Clean Fifteen" includes avocados, sweet corn, pineapples, cabbage, frozen sweet peas, onions, asparagus, mangoes, papayas, kiwi, eggplant, grapefruit, cantaloupe, cauliflower, and sweet potatoes. Organic produce can be pricey, so keep in mind that the health benefits of a diet rich in fruits and vegetables outweigh the risk of pesticide exposure.

Within the protein food group, meat may be the most widely consumed, so try to choose the leanest meats possible. Limit red meats such as beef, pork, lamb, and avoid processed meats such as ham, bacon, pastrami, salami, hotdogs, and sausages. There is convincing evidence that both red meat and processed meats are linked to colon cancer. Studies also show that people who eat a

Continued on page 7

WHEN IT COMES TO PREVENTING CANCER, KNOWLEDGE IS POWER

Continued from page 2

lot of red meat tend to eat less plant-based foods, so they benefit less from their cancer-protective properties. For a healthy protein option choose from lean meats, poultry, fish, eggs, tofu, nuts, seeds, legumes, and beans. When cooking, it is best to use relatively low temperature methods and limiting your intake of char-grilled meats and foods. The recommended low temperature cooking methods include steaming, boiling, poaching, stewing, casseroles, braising, baking, or roasting. The last food group to be discussed is dairy. When choosing dairy make sure it is low in fat or fat free. One standard dairy serving is one cup of milk or yogurt, or 1 1/2 ounces of cheese. If you are unable to consume dairy or want an alternate choice, you can get this amount of calcium in 1 cup of calcium-fortified soy milk or soy yogurt. Soy has been very controversial because it contains estrogen-like compounds and there was fear that soy may raise the risk of hormone-related cancers. However, so far evidence shows that this is not true. Soy's possible effect on health is an active area of ongoing research. Adequate calcium intake from diet and supplements is associated with lower incidence of colorectal cancer. However, too much calcium from diet and supplements is associated with increased risk for prostate cancer. Therefore, a healthy balance is necessary for bone health and cancer prevention.

Along with the five main food groups, there are also two very popular beverages we drink daily. Coffee and green tea have been on the radar for cancer fighting activity for many years. Coffee is a good

source of the B vitamin riboflavin, and is also a concentrated source of antioxidant phytochemicals. Early in the research, some studies implied that coffee might increase cancer risk. Recently, larger and more, well designed studies now suggest the opposite, and that it may even be protective for some cancers. Classes of flavonoids called catechins have recently become the focus of widespread study for their anticancer potential. Catechins are found in teas, with green tea containing about three times the quantity of catechins found in black tea.

Everyday choices affect your risk of getting cancer, choices which we are able to control daily. These small and simple choices add up to thousands of factors that can drastically affect your chances of getting cancer. Be sure to talk to your healthcare team, including a Registered Dietitian before trying a new cancer fighting approach. Some of the key factors for cancer prevention are simply being physically active, maintaining a healthy weight, and consuming a healthy balance of the five food groups. Remember, when it comes to cancer prevention, knowledge is power. ●

Reference:

American Institute for Cancer Research (AICR): AICR. (n.d.). Retrieved August 5, 2014, from <http://www.aicr.org/>

ChooseMyPlate.gov. (n.d.). Retrieved August 5, 2014, from <http://www.choosemyplate.gov/>

Environmental Working Group. (n.d.). Retrieved August 5, 2014, from <http://www.ewg.org/>

National Cancer Institute - Comprehensive Cancer Information (n.d.). Retrieved August 5, 2014, from <http://www.cancer.gov/>

THE LATEST FROM MDONS



Exemestane Improves Outcomes for Premenopausal Breast Cancer

A trial compared tamoxifen plus ovarian function suppression (OFS) to the aromatase inhibitor exemestane plus OFS in 4,690 premenopausal women with hormone receptor-positive early breast cancer. The researchers found that the five-year disease-free survival was significantly better with exemestane than with tamoxifen. [Read More >>](#)



Get a Cheat Sheet on Personalized Medicine, Genomics, and Pharmacogenomics in Oncology

The fields of genomics, pharmacogenomics, and personalized medicine are helping scientists and healthcare providers better study and treat genetic diseases such as cancer. In his article in the August 2014 issue of the Clinical Journal of Oncology Nursing, Andrew Blix gave an overview of personalized medicine, genomics, and pharmacogenomics and how they relate to oncology. He also explained key considerations for oncology nurses and why they need a basic understanding of this area to provide the best care to today's patients with cancer. [Read More >>](#)



When Things Aren't Quite What They Seem

Oncology nurses have the opportunity to interact with a unique variety of people. Cancer does not pick on just the feeble; healthy people, young and old, can be plunged into a dark and scary place by hearing the word: cancer. [Read More >>](#)

THE CHAPTER CAPSULE

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