Let Food be Your Medicine: Diet and Cancer Prevention

By Hwaseung Yoo, MD (DKM), PhD, Visiting Associate Professor, Peiying Yang, PhD, Assistant Professor, and Lorenzo Cohen, PhD, Director, Integrative Medicine Program

Diet plays an important role in cancer prevention. Though the association between diet and cancer prevention is still not definitive, recent evidence suggests that diet may modify the risk of many cancers including gastric, colorectal, breast, prostate, and lung cancers. For example, intake of dietary fiber and high consumption of fruit, vegetables, and fish has been associated with reduced risk of a number of cancers. Some population studies also demonstrate that vegetarianism is associated with lower risk of overall cancer and female-specific cancers. On the other hand, red and processed meat, dairy, alcohol, and saturated fat increases the risk of certain cancers.

Research has found that vegetables and fruits containing high level of carotenoids (carrots, sweet potatoes, spinach, kale, papaya, tomatoes, etc.), cruciferous vegetables (cauliflower, cabbage, cress, bok choy, broccoli, etc.), and anti-oxidant rich foods (blueberries, blackberries, green tea, garlic, etc.) are linked to lower cancer incidence. Population studies also have suggested that increased plasma level of vitamins A, B, C, E (α-tocopherol), D, and certain types of carotenoids is associated with a decreased risk of cancer. However, the cancer prevention effects of these micronutrients has not been confirmed by a number of large cancer prevention trials including vitamin E and β-carotene for lung cancer (ATBC and CARET trials), Vitamin E, C and β-carotene for prostate cancer (PLCO trial), selenium and vitamin E for prostate cancer prevention (SELECT trial), and folic acid and vitamin B for overall cancer prevention (Norwegian Vitamin Trial). In fact, some trials resulted in an increased incidence of cancer or cancer-related death.

Although it is important to better understand the specific mechanisms within plants that confer health benefits, a purely reductionist approach to isolate specific compounds has not been successful. Whole foods contain a wide array of nutrients including vitamins, minerals, and a number of other biologically active compounds, collectively known as phytonutrients. These phytonutrients, such as 3,3‘-diindolylmethane (DIM) in broccoli or isoprenoids and polyphenols in other vegetables, may work in concert to provide the best support for cancer prevention. Recent provocative research demonstrated that plant microRNAs (miRNA acts as a regulator of gene expression) that enter the body in food are present in our body and may influence gene function and ultimately affect our health.

Although more research is needed, there is no doubt that diet plays a role in cancer prevention. Without scientific support for which individual nutrients are most effective in cancer prevention, people should not take supplements to prevent cancer. These recommendations are consistent with the American Cancer Society and American Institute for Cancer Research guidelines. A whole foods approach is ideal to ensure a balanced intake of protective phytonutrients. A diet that is mainly composed of whole grains, a variety of vegetables and fruits, legumes, tea (green and/or black), and nuts and seeds should work synergistically to offer protection against many types of chronic diseases, including cancer.

For more dietary advice on cancer prevention and control make an appointment to meet with our Integrative Medicine Center nutritional counselor today!

Group Clinical Services

Physical

Guest Chef – Local chefs demonstrate their cooking skills and provide tasty samples for the audience. Clinical Dieticians also discuss the nutritional component of the recipe.

Nutrition Lecture – Learn about the special nutritional needs for cancer patients, information on organic foods, and more.

Nia: Body Energizer – Explore this gentle, yet lively, restorative movement class. The class incorporates techniques from yoga, Tai Chi, and Nia dance (play).

Pilates – Come learn and practice a series of exercises in deep muscle strengthening that improve skeletal alignment and overall flexibility.

Tai Chi – Find balance and strength through continuous flowing movements that link mind to body.

Mind-Spirit

Exploring Music for Relaxation – Learn to use your favorite recorded music to help you relax or become energized.

P.I.K.N.I.C. – An educational forum for patients, caregivers, family members, volunteers, faculty and staff who want to learn more about issues relevant to cancer.

Tibetan Bon Meditation – Learn to relax and access a deeper awareness through connecting your mind, body, and heart through practices of breath and sound.

Yoga (Hatha) – Stretch your mind as well as your body by learning the postures, breathing exercises, and meditation.

Qigong – Experience this ancient Chinese system of self care using meditation, breath, and movement to balance the body’s energy flow.

Therapeutic Group Drumming – Through immersion in active music making, participants will explore creative self-expression to facilitate meaningful insights.

Social

The Celebration Singers – Are you a cancer survivor or caregiver who enjoys singing? If you are, this special choir is for you! Please contact Michael Richardson at 713-563-0858 for rehearsal information.

Expressive Arts – Classes include: Paint Your Own Pottery, Beading Class, Shibori, Chinese Ink Art, and much more! Underwritten by COLLAGE: The Art for Cancer Network

Laughter for Health – A blend of deep breathing, stretching, and simulated laughter exercises that may help reduce stress, depression and more.

Look Good, Feel Better – Licensed cosmetologists help patients adjust to temporary or permanent changes in their appearance. MUST pre-register at (713) 792-6039.

Support Groups – Professionally-led support groups provide education, and sharing for patients, family and friends. For a complete list of support groups, please call the Social Work department at (713) 792-6195.

Visit mdanderson.org/CIMER to check out the videos on our Multimedia page including:

- Chemobrain: Is It Real?
- Gentle Chair and Bedside Yoga
- Safe Massage Techniques for the Cancer Patient
- Tibetan Bon Meditation
- plus much more!

Please call 713-794-4700 to sign up for a class.

ALL CLASSES ARE FREE.
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<th>MONDAY</th>
<th>TUESDAY</th>
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<td>11:00-12:00 Expressive Arts: Pottery</td>
<td>9:30-10:30 Tibetan Bon Meditation: The Power of the Breath</td>
<td>11:30-12:45 Yoga (Hatha)</td>
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<td>10:00-12:00 Nia Body Energizer</td>
<td>12:00-1:00 Laughter for Health</td>
<td>11:00-12:00 Look Good, Feel Better (Must pre-register at 713-792-6039)</td>
<td>11:30-12:45 Yoga (Hatha)</td>
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<td>1:00-2:00 Pilates</td>
<td>12:00-1:00 PIKNIC: Lung Cancer Screening: Is it for me?</td>
<td>12:00-1:00 PIKNIC: Patient and Caregiver Resources at MD Anderson</td>
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<td>2:00-3:00 Exploring Music for Relaxation</td>
<td>3:30-4:30 Tai Chi</td>
<td>2:00-4:00 Expressive Arts COLLAGE: Handmade Valentine Cards</td>
<td>12:00-1:00 Caregivers: I’ve Got Feelings, Too!</td>
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<td>3:30-4:30 Therapeutic Group Drumming</td>
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Group programs are open to patients, survivors, caregivers and families regardless of where treatment is received. All classes are offered at the Mays clinic location.

mdanderson.org/integrativemed | 713-794-4700
Individual Clinical Services

Please ask your MD Anderson physician to submit an online consultation request if you would like to schedule these services. For additional details, please call 713-794-4700.

Integrative Oncology
Physician Consultation
Our physicians will provide guidance on a comprehensive and integrative approach to your cancer care. Most insurance plans will cover the cost of your consultation.

Acupuncture
Acupuncture is a safe and often effective medical treatment that can be used to manage side effects from cancer and related treatments, including: nausea & vomiting, pain, neuropathy, hot flashes, fatigue, dry mouth. Services are by appointment and limited to MD Anderson patients. Our fees are:
- Initial Assessment & First Treatment – $80.00
- Each Follow-up Treatment – $65.00

Oncology Massage
Massage therapy may help patients relax and improve sleep quality. It may also relieve fatigue, pain, anxiety, and nausea. Services are by appointment for patients and their caregivers.
- Inpatient Brief Relaxation bedside massage limited availability - NO COST
- Assessment & massage ½ hour–$30.00; One hour–$60.00

Music Therapy
Benefits of Music Therapy include: relaxation, creating calming environments, encouraging self expression, reducing stress, improving coping skills, and implementing protocols to improve cognitive, motor, communication and socialization skills. There is NO COST for this service.

Nutritional Consultation
Nutritional counseling to help you assess, plan, and reach nutritional goals with an emphasis on cancer prevention and control and an overall healthy lifestyle based on whole foods. There is NO COST for this service.

Meditation Consultation
Learn to relax and access a deeper awareness through connecting your mind, body, and heart through practices of breath and sound. There is NO COST for this service.

Friends of Integrative Medicine
proudly presents
Aging, Cancer, and How We Are Making Cancer History”

Tuesday, February 19, 2013
6:00 pm–7:30 pm

Ronald DePinho, MD
President, The University of Texas MD Anderson Cancer Center

President of the Number 1 ranked cancer hospital in the United States, Dr. Ronald DePinho, MD, is internationally recognized for basic and translational research in cancer, aging, and age-associated degenerative disorders. Dr. DePinho will discuss MD Anderson’s new vision for curing cancer and his work on aging and neurodegeneration.

South Campus Research Building
Conference Room
7435 Fannin Street, Houston, TX 77054
RSVP Required
Email: IntegrativeMed@mdanderson.org or call 713-794-4700

FIM Members ..........Free
Non-members ..........$25 suggested donation
Students with ID ....Free