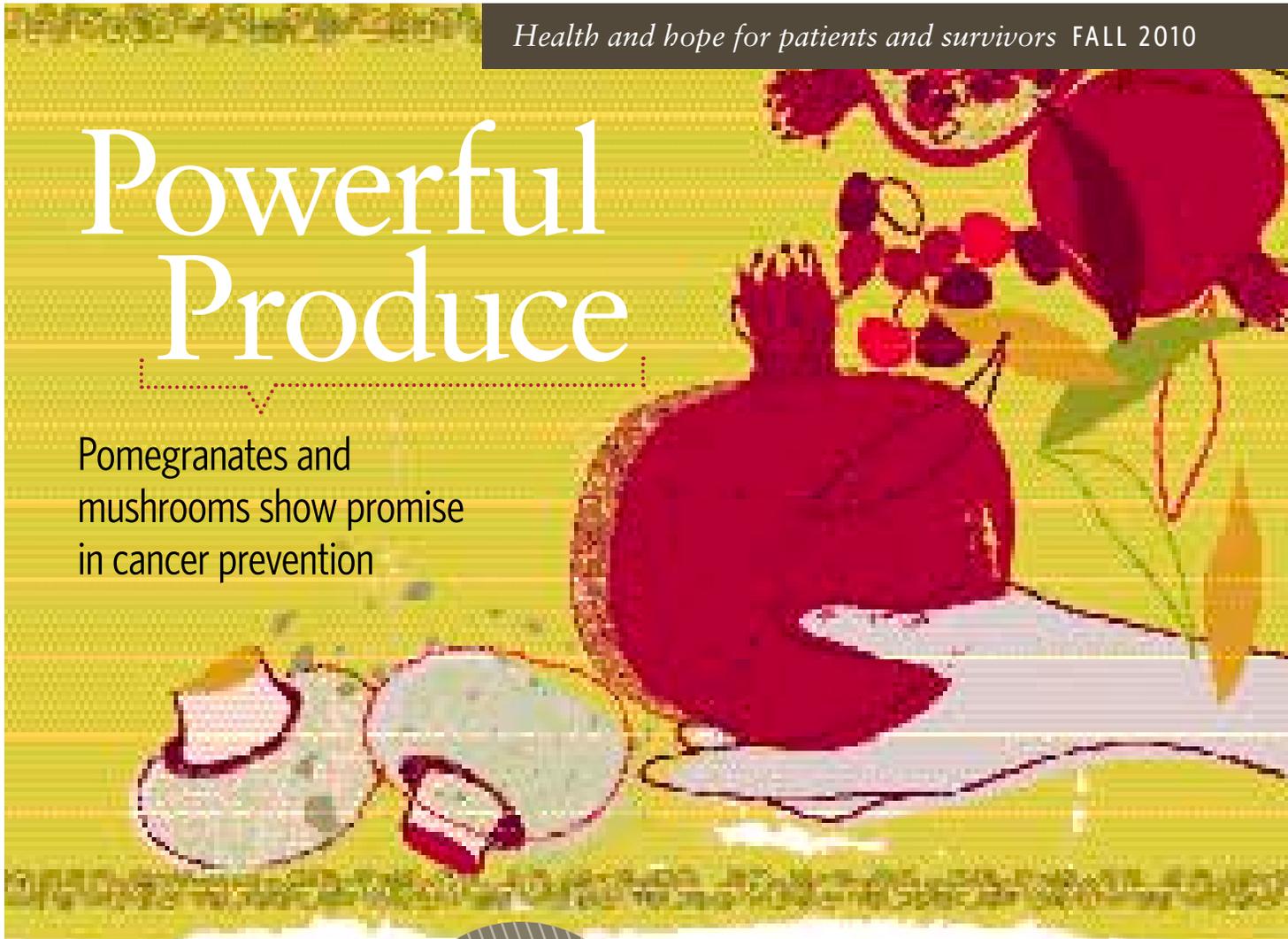


Restore

Health and hope for patients and survivors FALL 2010

Powerful Produce

Pomegranates and mushrooms show promise in cancer prevention



Cancer research usually calls to mind images of microscopes, complex molecules and test tubes filled with elaborate drug concoctions. But scientists at City of Hope also are looking outside the laboratory — and inside the grocery store — for ways to prevent or stop cancer.

Specifically, they're studying the possible cancer-fighting properties of the exotic pomegranate and the common white button mushroom. These powerful produce-aisle items eventually may be

Pomegranates and mushrooms can boost the body's immune system.

used to deter the recurrence of certain breast cancers in women.

Hormone Blocking

“There are three major types of breast cancer,” says Shiuian Chen, Ph.D., director of the Division of Tumor Cell Biology at City of Hope.

“Hormone-dependent breast cancer makes up about 70 percent of cases. In this cancer, estrogen plays a prominent role in tumor growth.”

continued on next page

IN THIS ISSUE

A Daily Aspirin for Cancer Prevention?

Power Over Pain

Hope Network Peer Support Program

Upcoming Events at City of Hope

 **CHECK OUT** the pink-packaged mushrooms supporting City of Hope this fall at a grocery store near you!



continued from previous page

Estrogen is produced in the body. Our body uses a protein, called aromatase, to make that estrogen. Scientists have found that blocking the function, or activity, of aromatase in the body after menopause suppresses the production of estrogen, making inhibiting aromatase a good strategy to stop breast cancer development and recurrence in postmenopausal women.

There are several prescription aromatase inhibitors on the market today, but they do have side effects, most notably bone loss and joint pain. Also, they often stop working after a while.

So City of Hope researchers turned their focus toward natural products that might act like aromatase inhibitors, but more gently. Enter the pomegranate and mushroom.

Special Benefits

The pomegranate's jewel-colored skin and the satin-smooth mushrooms look nothing alike, but it's what they have in common inside that affects tumor growth. Their powerful impact comes from phytochemicals.

Phytochemicals are natural chemical compounds found in plants. They often have beneficial properties, such as boosting the body's immune system. It's the phytochemicals in pomegranates and mushrooms that act as natural aromatase inhibitors.

The mushroom compounds also are being evaluated for their effectiveness in lowering levels of 5-alpha reductase, an enzyme linked to male hormones involved in prostate cancer.

Testing, Testing

The mushroom study at City of Hope, under the direction of medical oncologist Melanie Palomares, M.D., M.S., is a phase I clinical trial. That means mushrooms have gone through lab testing and now warrant further research in humans.

Phase I looks at safety and dosing — how the body responds to certain amounts of the foods. The chemicals in pomegranates need to be further evaluated in the lab before progressing to clinical trials.

“The trial is not to treat breast cancer but to reduce the estrogen level in the blood,” Chen says. “If that becomes clear, then we can look at seeing if it can prevent or treat the disease.”

One of the things Chen says he finds rewarding about working for City of Hope is how quickly research can be moved into practice to start helping patients. “We can translate research to the patient — bench top to bedside, we call it — very quickly,” he says. “That means our patients are among the first to have access to newer drugs and more specialized treatment.” — *Shelley Flannery*



A Daily Aspirin for Cancer Prevention?



“Take two aspirin and call me in the morning” used to be the standard mantra to patients from the family physician. For women who are breast cancer survivors, this recommendation for daily aspirin may reduce the chances their cancer will return.

According to recent research published in the *Journal of Clinical Oncology*, women who were diagnosed with breast cancer in the past and regularly took aspirin (at least two to five times a week) cut their risk of recurrent breast cancer. “Also, there was a significant decrease in breast cancer death,” says Melanie Palomares, M.D., M.S., co-director of the High Risk Breast Clinic at City of Hope.

“There were numerous studies before this one that did not show significant results in primary breast cancer prevention,” says Palomares. “But this one showed promise for the secondary prevention of recurrent breast cancer.”

Palomares has a word of caution, though. “Until there is a clinical trial, we can't recommend that women start to take aspirin regularly for breast cancer recurrence prevention,” she says. However, aspirin has been shown to decrease heart attack risk in men and women. And there are promising studies showing that aspirin can help lower the risks of colon cancer. But men and women who have peptic ulcer disease or

blood-clotting disorders should not take aspirin, she notes.

Her takeaway message? “Women should talk to their doctor about the pros and cons of why they personally should or shouldn't take aspirin.” — *Julie Wlodychak*

POWER Over Pain

Q&A with Jay R. Thomas, M.D., Ph.D.



Despite modern medical advances, feeling pain remains one of the hallmarks of being human.

For cancer patients especially, pain can interfere with treatment and challenge recovery. But treating the physical discomfort is only part of the answer.

Pain usually runs deeper than we think.

Prominent palliative care specialist Jay R. Thomas, M.D., Ph.D., the Arthur M. Coppola Family Chair in Supportive Care Medicine and chair of City of Hope's Department of Supportive Care Medicine, sheds some light on pain and how best to manage it.

Q: What is pain?

Nociceptive pain is the “normal” pain we feel when, for instance, we stub our toe. A pain nerve in our toe picks up the signal and sends it to the spinal cord, then the brain, and we feel and experience that hurt.

Neuropathic pain, on the other hand, usually results from physical nerve damage. For example, a cancer surgeon might cut through a nerve while removing a tumor, and if the nerve grows back abnormally, this can result in pain signals being sent to the brain long after any physical damage.

But pain and its associated suffering is more than just physical. This leads us to the concept of “total pain.”

Q: Will you explain total pain?

Total pain takes into account the fact that the suffering we experience from physical pain can be profoundly affected by our psychological, interpersonal and spiritual concerns.

Experiments show us that people perceive not just physical pain, but suffering, too. Our emotional state plays a big part in this. So our relationships with other people, our psychological health and our spiritual concerns are very important to how we perceive pain.

As health-care providers, we must address pain at each level. Even with the right medicines, we can't optimally control pain without addressing total pain.

➔ WE SUPPORT YOU AND YOUR CAREGIVERS

For more information about supportive care services, visit the Sheri & Les Biller Patient and Family Resource Center online at cityofhope.org/billercenter.

“Our relationships with other people, our psychological health and our spiritual concerns are very important to how we perceive pain.”

Q: What can patients or their loved ones do to alleviate pain?

The best thing is to report pain accurately to your doctor. I recommend keeping a log and answering some basic questions: Where is the pain? How would you describe the pain — sharp, dull, burning, radiating? When did it start? How long does it last — continuous or comes and goes? What makes it better or worse? If patients can come armed with these answers, it really helps physicians understand and intervene appropriately.

Q: How do doctors manage cancer-related pain?

Each person is unique, so their experience with pain will be unique. To effectively address a patient's pain, you must treat total pain. At City of Hope, we've brought together a comprehensive, interdisciplinary group of psychologists, psychiatrists, social workers and spiritual-care providers who work closely with each other as well as with the patient, family and caregivers. Together, we effectively address the total pain experience for the best outcome.

This team approach is vital. No matter how enlightened or skilled a physician, you need a team like this to address patients' needs.

9/10-12/10

All classes and support groups meet at the Sheri & Les Biller Patient and Family Resource Center, City of Hope, 1500 E. Duarte Rd., Duarte, Calif. To sign up, call **626-256-4673, ext. 32273 (3CARE)**, or visit cityofhope.org.

SPECIAL CLASSES

For Your Health

How to reduce your risk of cancer with nutrition and physical activity. Call for date and time to be offered.

Gentle Restorative Yoga

Mondays: 3-4 p.m.

Wednesdays: 3-4 p.m., 5:30-6:30 p.m.

Yoga postures, development of home practice and relaxation techniques.

Hands-on-Harps Concert

1st Tuesday of each month: 6:30-8 p.m.

City of Hope Helford Clinical Research Hospital Lobby.

Look Good ... Feel Better

Sept. 13 and Nov. 1: 10 a.m.-noon

In partnership with the American Cancer Society, this program helps patients look good and manage their recovery with greater confidence.

Music Therapy

1st and 3rd Thursdays of each month, except Sept. 9 and Sept. 23.

Explore instruments, create music or just listen. Music therapy can relieve stress and increase positive thinking. Preregistration is required.

Patient & Family Orientation

Daily: 11 a.m.-noon and 1-2 p.m.

Valuable tips such as who to call when you need help, how to navigate City of Hope and where to find practical resources to make life a little easier.

Strategies for Pain Control

In English and Spanish. Call for date and time to be offered.

SUPPORT GROUPS

Breast Cancer Support Group

2nd Tuesday of each month: 6-7:30 p.m.

Preregistration is required.

Kidney Cancer Support Group

Sept. 13, Oct. 4, Nov. 1 (No December meeting)

Call for meeting time. Preregistration is required.

Leukemia, Lymphoma and Multiple Myeloma Support Group

1st Thursday of each month: 6-7:30 p.m.

Preregistration is required.

Lung Cancer Education for Patients

1st Wednesday of each month: 6-7:30 p.m. (No meeting in December or in January 2011)

Preregistration is required.

Problem-solving Group

"Men and Women Working Together, Getting the Best Out of Each Other." Call for date and time to be offered.

Type 1 Diabetes Resource Group

Last Wednesday of each month: 4-5 p.m. Preregistration is required.

Hope Network Peer Support Program

No one understands the dreams and concerns of a cancer patient in quite the same way as another cancer patient does. The Hope Network Peer Support Program will soon offer City of Hope patients and caregivers the chance to connect with these knowledgeable men and women.

The Hope Network aims to provide City of Hope patients and caregivers with emotional, practical, social and spiritual support by connecting them with a compassionate peer volunteer whose similar experiences, diagnosis or treatment helps him or her uniquely understand the patient's or caregiver's situation.

The Sheri & Les Biller Patient and Family Resource Center and the Department of Supportive Care Medicine will launch a pilot version of the Hope Network among breast cancer patients and those who care for them. Organizers are currently recruiting for peer volunteers.

Anyone who has breast cancer experience — either as a patient or caregiver — and is interested in helping others

along the breast cancer journey may contact Sheila Hammer, M.S.W., at **626-256-4673, ext. 63479**, or e-mail shammer@coh.org for more information.

Biller Patient and Family Resource Center staff members plan to expand the program to all City of Hope patients.



Smita Bhatia, M.D., M.P.H.
Medical Advisor

Sherrie Vamos
Grateful Patient
Program Administrator

Alicia Di Rado
Publications Manager

Carol A. Chaplin
Publications Editor

©2010 City of Hope. To be removed from our mailing list for fundraising communications, send a written request to City of Hope, Attention: Privacy Officer, Wing IV, Room 415, 1500 E. Duarte Rd., Duarte, CA 91010. For address changes, please send your label to City of Hope, 1055 Wilshire Blvd., Suite 1118, Los Angeles, CA 90017, or by e-mail to restore@coh.org. Information in this publication is intended to educate our readers. It is not a substitute for medical advice or diagnosis from a licensed physician.

Designed and published by McMurry | mcmurry.com