

thrive

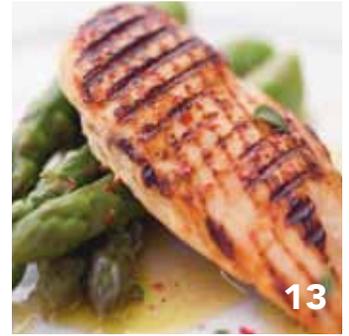


THERE'S NO PLACE LIKE HOME

Home-based treatments
as options



University of Michigan
Comprehensive Cancer Center



thrive

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Play your 'hope card'

Celebrate Cancer Survivors' Day June 3

Lori Hope lives up to her name.

As a lung cancer survivor, she spends her time talking to others about the importance of maintaining hope even in the face of a life-threatening disease like cancer.

Hope, an Emmy Award-winning documentary filmmaker, former newspaper editor and author of the book *Help Me Live: 20 Things Cancer Survivors Want You to Know*, will be the keynote speaker at this year's University of Michigan Comprehensive Cancer Center Survivors' Day celebration, scheduled for June 3.

Her presentation will emphasize the importance of keeping hope alive when living with cancer.

"I want event-goers to take away a sense of hope and renewal, strength and good humor," Hope says. "I want them to feel more forgiving of people and circumstances that may temporarily dash their hope, and I want them to feel comfortable with the tools I share with them that will help them keep hope alive."

U-M's Survivors' Day Celebration is an annual event that coincides with National Cancer Survivors' Day and celebrates the lives of cancer survivors, as well as their caretakers and health care providers. This year's event—which is marking its 18th anniversary at U-M—will take place from 1–3:30 p.m. at the Morris Lawrence Building at Washtenaw Community College.

Celebrating the lives of those affected by cancer and promoting conversation among survivors, their families and friends, the event will feature exhibit tables with information and resources from various cancer-related groups and service providers. Entertainment, light



Survivors' Day speaker Lori Hope encourages other survivors, caregivers and support teams to discuss their challenges and hopes when dealing with cancer.

refreshments and door prizes are also part of the program.

Hope, who was diagnosed with lung cancer in 2002, says she was surprised by how emotionally fragile the disease made her. However, she realized that talking about the disease with others made dealing with the diagnosis easier.

"Most important is for all of us to admit and talk about the fact that having cancer is uncomfortable," she says. "Just by addressing it, we defuse the tension and make it easier for love to flow."

Sandy Reoma, one of the event's planning committee members and a lung cancer survivor, says she looks forward to the celebratory and positive nature of the event.

"To go to the event and see the hundreds of people who have survived this disease, it's a very uplifting experience," she says. "I've attended every year since my diagnosis, and the helpful and supportive atmosphere makes it such a great event."

For Hope, the best part of events like this is the people. Seeing how cancer can bring out the best in a person never gets old, she says.

"I absolutely love meeting survivors, patients, caregivers and care providers," she says. "To know that some good has come of this awful disease heartens and encourages me." 



Look for the Survivors' Day insert in this issue to RSVP or visit mCancer.org/thrive.

Reframing the picture

U-M expert discusses ways to reconsider survivors' guilt

Once cancer treatment ends, many patients report a lingering sense of guilt—for the demands the disease placed on their families, for behaviors that they believe (mistakenly or not) may have caused the cancer, or even just simply for having survived when others didn't.

We talked about this with Brad Zebrack, Ph.D., M.S.W., M.P.H., a University of Michigan associate professor of social work whose research focuses on the psychological and social impact of cancer on long-term survivors. Here's what he had to say.



Can you tell us what you've learned about this notion of survivors' guilt—that some people feel guilty for living when other people die of cancer?

Cancer survivors use the word “guilt,” but the scientist in me is skeptical. When people say they feel guilty about surviving, I think that the comment is really more about an existential crisis. It's about seeking a purpose in life: What is my life about, given that I've survived and others haven't?

You don't think survivors' guilt really exists?

It exists because cancer survivors say it exists, but I think “guilt” may be the wrong word to describe what's going on. Guilt is a detrimental emotion that can lead to depression or the possibility that patients may decide to go off their treatment regimens. There isn't any evidence to show that something called “survivors' guilt” leads to that sort of behavior. In my interviews with patients, many say they feel guilty, but ultimately they often talk about a more positive—and potentially transformative—existential experience of determining what reasons they have to go on living.

So survivors' guilt may be beneficial?

I think survivors' guilt has been assigned a very negative connotation. But if you consider it as a factor that pushes people to have a greater appreciation for life and to take one day at a time, it could be beneficial. A lot of times people talk about living on and doing work in honor of others. That, to me, sounds like a potentially positive experience.

In a more practical sense, though, cancer imposes burdens on patients and families. What about the guilt that surrounds those issues?

Guilt sometimes comes into play if patients feel they've become a burden on their families or caregivers. If that's the case, I would encourage patients to bring up these issues and discuss them with family members. The financial implications of cancer can also play a role in this respect. If you find you can't shake these feelings, it may be helpful to involve a social worker in the conversation. It may also be helpful to consider family counseling to help adjust to life after cancer. A lot of times patients and family members expect life to return to the way it was before the diagnosis; for many patients, that's not possible. Trying to live up to that expectation can provoke negative feelings of guilt.

Brad Zebrack, Ph.D., M.S.W., M.P.H., says survivors' guilt may jump-start a more productive process.

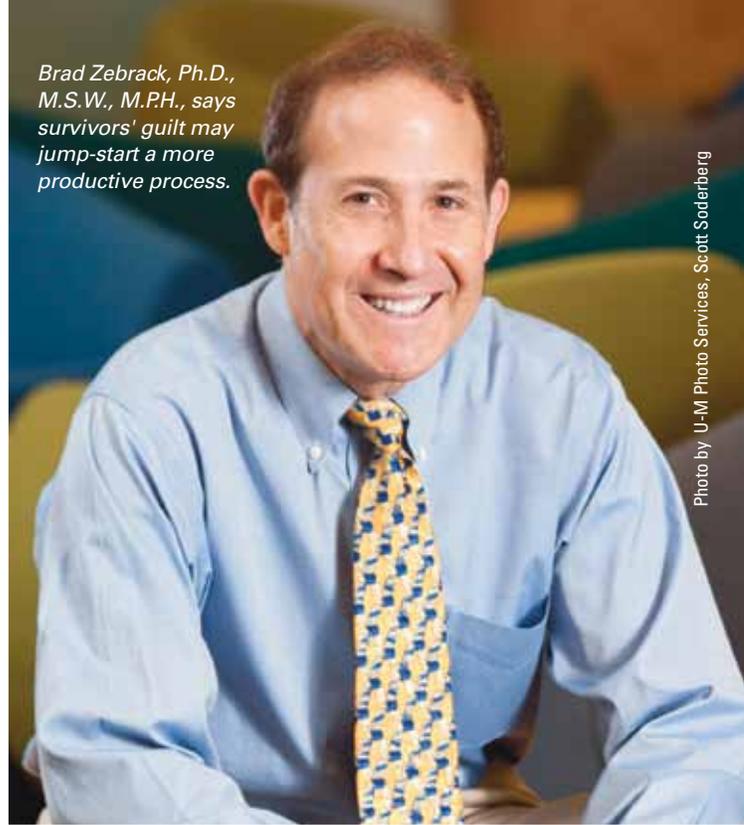


Photo by U-M Photo Services, Scott Soderberg

You mentioned the financial implications of cancer; can you expand on that?

The financial impact of cancer is very real and can linger. In this case, I would encourage families to investigate every option available to them—for example, visit the Cancer Center's Practical Assistance Center to find out whether they qualify for various financial assistance or disability programs. These programs are designed to help families during these difficult times.

Sometimes people with cancer feel that they may have done something to cause their disease. How do these forms of guilt impact patients?

Cancer is caused by many things, so it's often impossible to know why someone develops the disease. But this may be one area where there are more serious implications of this notion of guilt, particularly among lung cancer patients who smoked. Occasionally, a feeling of self-blame can translate into a sense of fatalism: They may believe they were at fault, so they aren't worthy of treatment. In that sort of situation, counseling can help patients reframe their experience to get them thinking about what they have to look forward to.

Can you talk a little bit more about that idea of reframing an experience?

No one can tell you how to feel. If you feel guilt, you feel guilt. But a therapist can help patients find ways to alleviate it and work around it. Often, for patients in this situation, focusing on meaningful milestones—such as living to see a daughter get married or the birth of a grandchild—can serve as motivation to keep living. It's a matter of helping the patient find the things in life that are more important than that sense of self-blame. **t**

TRANSFORM THE EXPERIENCE

The best way to overcome feelings of guilt is to turn your negative experiences into positive actions, says U-M psychiatrist Amy Rosinski, M.D. By devoting your time and energy toward productive and uplifting activities, you will be left with less time to focus on negative thoughts.

- **VOLUNTEER.** Discover a new sense of purpose by volunteering with support groups or cancer awareness fundraisers.
 - **PRACTICE MINDFULNESS.** Mind-strengthening techniques like yoga and meditation help you practice focusing on optimistic thoughts instead of dwelling on feelings of guilt.
 - **DISTRACT YOURSELF.** Fill your schedule with activities that bring you happiness, like exercise or time with friends and loved ones.
 - **KEEP A GRATITUDE JOURNAL.** Maintain a daily diary filled with words, pictures, magazine clippings or photographs that remind you of the things you're grateful for.
 - **CREATE A LEGACY PROJECT.** Writing the story of your life, including the things you are most proud of and the major lessons you've learned in your lifetime, gives you a chance to reflect while producing something your loved ones will cherish.
- Visit mcancer.org/thrive to find out how to get started with any of these activities.



The PsychOncology Program can help patients who are struggling to cope with guilt and other feelings associated with a cancer diagnosis. To make an appointment or to connect with the Practical Assistance Center, which is located on level 1 of the Cancer Center, call 877-907-0859.



Keeping up

When cancer changes your looks, the makeover starts inside

As if confronting a life-threatening illness isn't challenging enough for cancer patients, treating that illness often means coming face-to-face with changes in physical appearance, too. Baldness. Scarring. The loss of a breast. The loss of a limb. We offer some strategies for coping with these changes.

DO LOOKS REALLY MATTER?

When one's health—or life—is at stake, do appearances really matter? According to Claire Weiner, L.M.S.W., a social worker in the University of Michigan Comprehensive Cancer Center's PsychOncology Program, that's one of the first questions many patients—male and female—wrestle with. Weiner and the other members of the PsychOncology team are quick to remind patients that it's normal—not vain—to be concerned about how we look.

“Our looks are part of our identity,” she notes. “Give yourself permission to feel what you're feeling. Even if the loss may have saved your life, you can still grieve it.”



Diane Argyle wears a compression sleeve to ease the symptoms of lymphedema. It helps her maintain arm strength for daily activities.

When it comes to coping with that new face in the mirror, a strong sense of self-worth and a solid support system are invaluable.

“To be honest, I didn’t give my appearance a lot of thought,” recalls Diane Argyle, an eight-year breast cancer survivor who lost her hair during chemotherapy treatments.

Argyle brought great resilience to her cancer battle and drew on the understanding of family and friends to put changes in her appearance into perspective.

Kate Muir, who is currently in treatment for breast cancer, remembers looking in the mirror at one point and seeing “an alien, not someone I knew.” Eventually, she says, she was able to deal with the changes.

“In my family today, who you are is based on what you do, what you speak, what you feel—not on how you look,” she says. From the very start, Muir’s family encouraged her to go out just as she was. Her son, who lives in Ann Arbor, told her, “Who cares? No one cares how they look in Ann Arbor!”

Coming to terms with changes in one’s appearance means not only making an emotional adjustment, but making a number of practical decisions as well. Should I get a wig? What types of prostheses and products are available? What else can I do to look and feel my best? Turn the page for a few suggestions from Argyle and Muir:

appearances



“It was an opportunity to nudge cancer back into

—Kate Muir

WIG OR NO WIG? THE ANSWER IS 'YES.'

“I bought an expensive wig, and wore it once,” remembers Argyle. “I didn’t like the feel of it.” Instead, she chose to wear a lightweight hat during the spring and summer months of her chemotherapy.

Muir, too, purchased a wig. “A \$29 one,” she laughs. She was concerned that her young grandchildren would be upset by her bald head. The opposite proved true. “All three said, ‘no—take it off!’” To this day, the wig makes only occasional appearances—atop the head of a statue of St. Francis, a sort-of patron saint in Muir’s life.

TO LOOK YOUR BEST, FOCUS ON FEELING YOUR BEST

For Argyle, feeling better meant getting back to her normal activities, and for that, she turned first to the experts at Personal Touch, part of the U-M Health System’s Department of Physical Medicine and Rehabilitation. There, she was professionally fitted with a prosthetic bra, as well as a compression sleeve to relieve the symptoms of lymphedema and help her maintain her arm strength.

“They suggested I wear it when exercising and when out in the sun, but eventually I decided to wear it all the time,” Argyle says.

Her other suggestion for people who have had a mastectomy: Make the most of physical therapy and therapeutic massage. “The process helps you heal more smoothly and move more easily,” she notes. Massage sessions and the use of special tape keep muscles working correctly and help prevent adhesions, caused when tissue sticks to the chest wall.



its corner. ”



Kate Muir's St. Francis statue watches over her in her art studio. When Muir decided not to wear her wig, St. Francis inherited it.

STEP IN FRONT OF THE CAMERA

A rather unexpected coping tool came Muir's way when a family member told her about the Oldham Project. Based in the Lansing area, this nonprofit is dedicated to providing free portrait sessions to people with life-threatening illnesses.

A photo shoot may sound stressful, but photographer Terri Shaver makes sure it's just the opposite. In a studio filled with music, flowers and candles, she encourages her subjects to relax, and with compassion and a keen artist's eye, she zeros in on the beauty in every face.

After snapping the first picture, Muir recalls, "she turned the camera around and showed me, saying, 'Look at you, you're beautiful.'" The experience was transformative for Muir, allowing her to focus on her inner "warrior princess," rather than her illness. "It was an opportunity to nudge cancer back into its corner," she says. **t**



Get resources to help cope with appearance issues at mCancer.org/thrive.



Michelle Johnson wears a fanny pack that contains her chemotherapy infusion. It allows her to be at home while getting treatment.

There's no place like home



Home-based treatments are a welcome option

When Michelle Johnson was diagnosed with cancer a second time, she decided to rely upon a resource that had helped her the first time around: the ability to receive inpatient-like hospital services in the comfort of her own home.

Johnson used University of Michigan Home Care services after her initial surgery for esophageal cancer. U-M nurses helped with her PICC line, changed her dressings, provided nutritional supplements and educated her about her home-based chemotherapy—all in the comfort of her own home.

“From day one, I felt completely comfortable and well taken care of,” Johnson says.

When the 32-year-old graphic designer had a recurrence eight months later, she decided to use the home-care route again. Johnson goes to the Cancer Center every other week for her infusion. She stays for about two hours to get one chemotherapy infusion, then goes home with a fanny pack containing a second infusion. She hooks it to her port and wears it continuously for 46 hours before disconnecting it at home. A Home Care nurse helps her several times a week with the fanny pack infusion.

“I feel like a regular person,” Johnson says. “If I had to sit for two or three days in the hospital’s infusion center every week, it would take an emotional toll on me. This way, it doesn’t slow me down. With my home chemo, it enables me to do things I want to do. I go out to dinner with friends, I go to fundraisers, I can even do some freelance work now and then.”

As more cancer treatments can be done in an outpatient clinic, rather than requiring

overnight hospital stays, the next step in care is to bring more services right to patients’ homes. Often, patients or their families are asked to handle connecting or disconnecting catheters or pumps, changing dressings and administering injections themselves.

“One of the reasons home care runs so smoothly is that so many procedures have been standardized and coordinated between HomeMed and the U-M Cancer Center,” says Debra Kovacevich, M.P.H., B.S.N., R.N., nurse manager at HomeMed. “With such high standards of hospital care, it is easy to transfer standard processes to home care. We also have many patient education materials tailored to our patients.”

The Comprehensive Cancer Center’s Skills Lab teaches some of these home care skills so that patients can participate in their own treatment and recovery. The focus is on reducing the uneasiness of performing these tasks at home.

With the initial diagnosis and the recurrence of her cancer, Johnson has now used in-home medical care services during post-surgery recovery, radiation and chemotherapy.

“It has been great to be able to see the same nurse every time,” Johnson says. “It helps with the continuity. And we talk about things other than cancer.”

HomeMed Nurse Theresa Serrine, R.N., has even trained Johnson’s mother, who has a health care background, to disconnect the infusion pump so that Johnson doesn’t have to wait for the nurse to arrive after treatment or return to the infusion area.

WEB EXCLUSIVE

Read an article from the *Thrive* archive about how the infusion pump works at home. Visit mCancer.org/thrive.



U-M is accredited in home-based care by the Joint Commission, a nonprofit organization that accredits more than 19,000 health care organizations in the United States. A majority of state governments have come to recognize Joint Commission accreditation as a condition of licensure and the receipt of Medicaid reimbursement. Most commercial payers also require home infusion providers to be accredited.

“Patients really value home care services,” says Kovacevich. “They like not being admitted to the hospital or making frequent visits to our infusion center. With our service, patients can call anytime about signs or symptoms that concern them when they are infusing drugs in the home. The nurses, pharmacists and dietitians who comprise our interdisciplinary team are very invested in our patients.”

Kovacevich herself is so invested in these patients that she is involved in a number of research projects to make home infusion services even better.

“We’re currently waiting for approval for a program in which we’ll be training patients who want to disconnect themselves from their chemotherapy devices. And we’re looking into using a two-way video program for additional education and training in the home for our antibiotic infusion patients when they are doing the procedures on their own,” she says. So far, the model is a split-screen approach that will show both the nurse and the patient, which will enable staff to record patient technique as they learn the procedure.



In the meantime, Johnson says she enjoys a great deal of support from her mother, her family and her friends, many of whom she has known since junior and senior high school. And her new puppy, Cass, is a bundle of joy.

“I think maintaining a positive attitude is very important,” Johnson says. “And using services that can be provided in the home has been a definite plus in helping me stay positive.”

Johnson’s advice to patients: “Definitely take advantage of the services available to you. And don’t be afraid to ask questions.” 

HOME CARE SERVICES

A variety of services are available through home care. This can include:

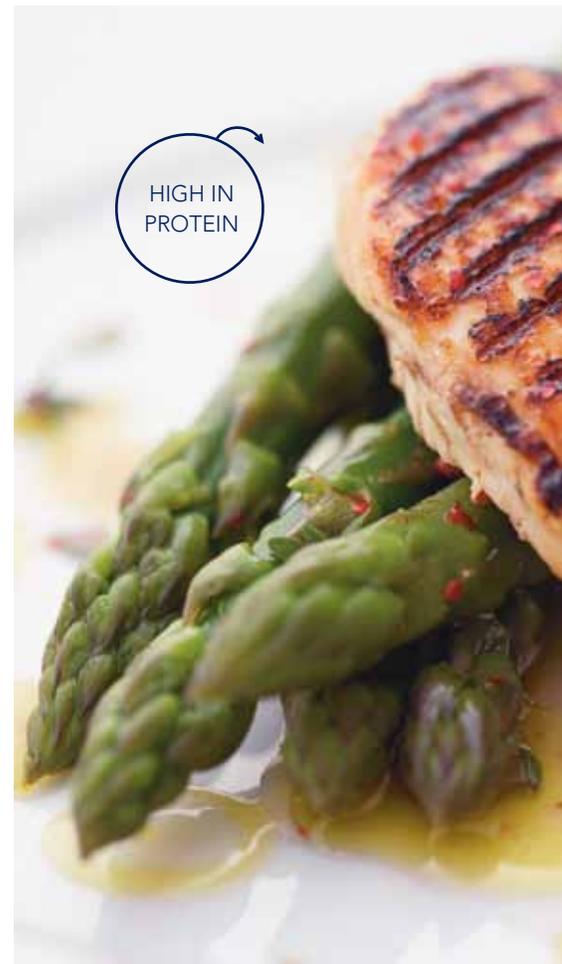
- Access to medical equipment
- Delivery of medication
- Visits from registered nurses, physical therapists and social workers
- Help with running errands, meal preparation and personal hygiene

Talk to your health care team about what options are right for you.



To learn more about Home Care Services, visit mCancer.org/thrive.

Clean



sing confusion

By Nancy Burke, R.D.;
Danielle Karsies, M.S., R.D.; and
Melissa Shannon-Hagen, R.D., CSO,
of the U-M Comprehensive Cancer Center
Symptom Management and
Supportive Care Program



FOOD FOR WELLNESS! Adding fruits, vegetables and nuts is good for your digestive health, but make sure you maintain a healthy intake of protein and overall calories.

Fight cancer, lose weight, get glowing skin, boost your health and well-being. These are just some of the proposed benefits of detoxification.

Advocates for detox claim our bodies are continually bombarded with toxins from our food and the environment, such as pesticides, food additives, pollution and cigarette smoke. They claim these toxins build up in our bodies and cause a variety of health problems. They also claim that special treatments—including herbals, supplements or special diets—help to remove these toxins from our body.

In fact, there is no reliable evidence that our bodies are fatigued through normal digestion or that the body retains toxins that are dangerous to our health. Our kidneys and liver act as efficient filters, processors and eliminators of toxins.

Most detox diets promote more fruit, vegetables, beans, nuts, seeds and lots of water, all of which are healthy, fiber-rich diet changes. The problem lies in the foods that are banned—typically wheat, dairy, meat, fish, eggs, salt and sugar. For people actively receiving cancer treatment, detox diets fall short on many nutrients and could lead to deficiencies, lowered immunity or unwanted weight loss.

Patients with cancer should avoid detoxification programs that restrict consumption of adequate amounts of food or restrict certain food groups, as this could worsen illness or potentially decrease a treatment's effectiveness. For example, an abrupt switch to a high-fiber diet can cause constipation, especially if you don't also get enough fluids.

Other detox methods such as herbal tonics, juicing and colonic cleansing can have more harmful effects. Herbs such as licorice, if used in excess, may produce high blood pressure, low potassium levels and cardiac arrest. Excessive juicing or laxative use can cause diarrhea, which can lead to fluid and electrolyte losses. Colonic enemas, such as coffee enemas, have been linked with at least three deaths due to severe electrolyte losses and infection. The key is not to focus on fad diets or quick fixes, but to make healthy diet and lifestyle choices. **i**



To make an appointment for nutritional counseling, call 877-907-0859.
For additional resources, visit mCancer.org/thrive.

TIPS

Follow these tips for a healthy lifestyle:

- Don't smoke.
- Drink alcohol in moderation: at most, one drink for women per day, two for men.
- Be physically active at least 30 minutes, five days a week.
- Eat a healthy diet with an emphasis on fruits and vegetables, whole grains and legumes.
- Limit your intake of processed and red meats.
- Try to eat foods that have been minimally processed or that are closest to the form in which they were grown.

Keeping nausea at bay

Medication, diet and natural preparations can help curb queasiness

When Edward Rosario came to the University of Michigan Comprehensive Cancer Center, his nausea was overwhelming.

Edward Rosario preps fruit for a smoothie fortified with protein powder.



Rosario had been diagnosed with non-Hodgkin's lymphoma and, between the chemotherapy and the disease itself, his nausea became almost too much to bear. "I had to walk around the hospital with a towel on my head, because I felt so terrible," he recalls.

For many cancer patients, nausea is an unwelcome side effect of dealing with the disease and treatment. Although it can be difficult to find relief, there are several ways to combat an unsettled stomach.

Rosario's relief came when the Cancer Center's Symptom Management and Supportive Care Clinic prescribed him medicine to help treat the symptom.

"My nausea was a 10 when I first visited them," Rosario says. "But now, with the medicine and the other assistance they've offered, it's a one or a two."

Emily Mackler, Pharm.D., a pharmacist in the clinic, says there are different medications to treat nausea. A queasy stomach may be caused by neurotransmitters within the brain, and medications can be prescribed to target these. Other medications target receptors lining the gastrointestinal tract that can contribute to nausea. In some cases, more than one medication may be used to provide the best control.

"We also look at the medicines a person is already taking to see if those are contributing to the nausea," Mackler says. "If so, we'll look at modifying the patient's medical regimen by changing how they take their medicine or perhaps by switching to a different drug so they can feel some relief."

While medicine helped Rosario, he said refocusing on his diet helped treat his nausea as well. He found he was able to tolerate smoothies with protein powder for extra calories. Homemade applesauce or chicken noodle soup were also easier on his stomach.

Danielle Karsies, M.S., R.D., a dietician in the Symptom Management and Supportive Care Clinic, says even though nausea can zap a patient's appetite, it's important to maintain a consistent diet. Eating smaller, more easily digested meals can help relieve some discomfort, she says.

"Skipping meals is not good, and it can actually make you feel worse," she says. "Making sure you drink enough water and avoiding greasy, fried and spicy foods also limits nausea." Ginger, chamomile and mint teas have also been shown to help.

In addition to medications and adjustments in food intake, complementary therapies can help patients deal with nausea, says Donna Murphy, co-director of the PsychOncology Program at the Cancer Center.

Programs such as art and music therapy, relaxation technique training and acupuncture can help patients deal with nausea. "It's mind displacement," Murphy says. "These therapies all refocus the mind on something other than the nausea, which can really help the patient."

Although Rosario says he still deals with nausea discomfort, he's much better than when he first visited U-M.

"Before getting medicine, I couldn't go a day without feeling bad," he says. "It took a while to get under control, but once it did, it really made a difference." 



 To make an appointment with the Symptom Management and Supportive Care Clinic, call 877-907-0859.

FIRST MAJOR GENE MUTATION FOR HEREDITARY PROSTATE CANCER RISK DISCOVERED

After a 20-year quest to find a genetic driver for prostate cancer that strikes men at younger ages and runs in families, researchers have identified a rare, inherited mutation linked to a significantly higher risk of the disease.

Led by investigators at the University of Michigan Comprehensive Cancer Center and Johns Hopkins University School of Medicine, the study found that men who inherit this mutation have a 10 to 20 times higher risk of developing prostate cancer. Results appear in the *New England Journal of Medicine*.

While accounting for only a small fraction of all prostate cancer cases, the discovery may provide important clues about how this common cancer develops and help to identify a subset of men who might benefit from additional or earlier screening.

"This is the first major genetic variant associated with inherited prostate cancer,"

says study author Kathleen A. Cooney, M.D., chief of the division of hematology/oncology at the U-M Medical School.

The researchers used the latest technology to sequence the DNA of more than 200 genes. Researchers started with samples from the youngest patients with prostate cancer in 94 families who had participated in studies at U-M and Johns Hopkins. Each of those families had multiple cases of the disease among close relatives.

Members of four different families were found to have the same mutation in the HOXB13 gene, which plays an important role in the development of the prostate during the fetal stage and its function later in life. The mutation was carried by all 18 men with prostate cancer in these four families.

The researchers then found the HOXB13 gene mutation in 1.4 percent of a broader sample of 5,100 men treated for prostate cancer. Men with the mutation were much more likely to have at least one first-degree relative who also had been diagnosed with prostate cancer.

The researchers say with further study, it may be possible one day to have a genetic test for inherited prostate cancer in much the same way that tests are available to look for BRCA1 and BRCA2 mutations that greatly increase a woman's chance of developing breast or ovarian cancer. A genetic test for prostate cancer is not currently available.



Kathleen A. Cooney, M.D.

AVASTIN, SUTENT INCREASE BREAST CANCER STEM CELLS

Cancer treatments designed to block the growth of blood vessels were found to increase the number of cancer stem cells in breast tumors in mice, suggesting a possible explanation for why these drugs don't lead to longer survival, according to a study by researchers at the University of Michigan Comprehensive Cancer Center.

The drugs Avastin and Sutent have been looked at as potential breast cancer treatments. While they do shrink tumors and delay recurrence, the effect does not last, and the cancer eventually regrows and spreads.

"This study provides an explanation for the clinical trial results demonstrating that in women with breast cancer, anti-angiogenic agents such as Avastin delay the time to tumor recurrence but do not affect patient survival. If our results apply to the clinic, it suggests that in order to be effective, these agents will need to be combined with cancer stem cell inhibitors," says study author Max S. Wicha, M.D., director of the U-M Comprehensive Cancer Center.

The researchers treated mice with breast cancer using Avastin (bevacizumab) and Sutent (sunitinib), both of which work by stopping the growth and formation of blood vessels, a process called angiogenesis. The researchers found that tumors treated with these drugs developed more cancer stem cells, the small number of cells within a tumor that fuel a cancer's growth and spread and that are often resistant to standard treatment.

The U.S. Food and Drug Administration recently revoked approval of Avastin for treating breast cancer. The reversal was in response to clinical trials showing that the drug's benefit was short-lived, with breast cancer patients quickly relapsing and the cancer becoming more invasive and spreading farther throughout the body. Overall, the drug did not help patients live any longer.

The current study, published in the *Proceedings of the National Academy of Sciences*, suggests the possibility of combining anti-angiogenesis drugs with a cancer stem cell inhibitor to enhance the benefit of this treatment. The researchers are testing this approach in mice, and preliminary data looks promising. Clinical trials testing this research are not currently available.



Max S. Wicha, M.D.



View a video of Dr. Wicha discussing his study results, check out currently available clinical trials, and learn more about the latest Cancer Center research at mCancer.org/thrive.

For information about clinical trials at U-M, call the Cancer AnswerLine at 800-865-1125.



Do you have a question for the pharmacist? Email us at **Thrive Magazine@med.umich.edu**.

WEB EXCLUSIVE

Visit mCancer.org/thrive to watch a videocast with Emily Mackler, Pharm.D., talking about constipation.

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734-998-6222

Symptom Management & Supportive Care:
877-907-0859

MANAGING CONSTIPATION DURING CANCER TREATMENT

By Emily Mackler, Pharm.D., U-M Comprehensive Cancer Center Symptom Management and Supportive Care Program

This issue of *Thrive* discusses the many options available for managing nausea. Constipation is one symptom that can often lead to nausea and is very common in our Cancer Center patients. Some causes of constipation are the medications used to treat cancer (such as vincristine and thalidomide), pain medications, some medications used to treat depression or to help with sleep, not drinking enough water or other fluids, inability to exercise, or tumor involvement.

If you are experiencing symptoms of constipation, it's important to let your health care provider know. Here are some possible treatments for constipation:



- Increasing fluid intake by drinking eight 8-ounce glasses of fluid daily



- Exercising regularly, when possible



- Increasing the amount of dietary fiber (consult with our dietitians for additional information)



- Taking medications prescribed by your health care provider



The Cancer Center Symptom Management and Supportive Care Clinic works with patients along with their oncologists to help manage the side effects of cancer treatments. To make an appointment, call 877-907-0859.

THRIVE ONLINE



Thrive doesn't end here! Visit mCancer.org/thrive for more. Here's what you'll find:

- Register for Cancer Survivors' Day (or look for the insert inside this issue!).
- Links to resources that can help you manage appearance issues from cancer and its treatment, including U-M's Personal Touch program.
- Tips for selecting a home-care provider, how to find a home-care agency and resources to help you pay for this service.
- Resources with more advice about managing diet and supplements during cancer treatment, and a link to Cancer Center Recipes Just for You, our customizable database of healthy recipes.
- More information about the latest research at the U-M Comprehensive Cancer Center and resources for connecting with clinical trials.