



on the cover:

Emanique Joe, a breast cancer survivor, celebrated the holidays during treatment, but found ways to simplify.

Photos by Lin Jones

04 FAMILY MATTERS

Genetic counselor Kara Milliron talks about how genetic testing can provide guidance-even after diagnosis.



06 A REASON TO **CELEBRATE**

Thrive offers seven ways to simplify your holidays during treatment.



09 ANATOMY OF A VISIT

Ever wonder what's going on while you're waiting for infusion? Take a behind-the-scenes look.



13 HEALING ART

Patients like Cynthia Castrodale find peace and joy through sessions with art therapist Margaret Nowak.



14 MAKING EVERY **BITE COUNT**

Getting enough calories during treatment can be a challenge. Our dietitians offer advice.



15 RESEARCH **ROUND-UP**

U-M experts discuss the latest news in cancer research and what it means for you.



We want to know what you think. What kinds of stories would you like to read in Thrive? What type of advice would be helpful? Do you have tips for other patients? Let us know. E-mail us at ThriveMagazine@med.umich. edu or write to us at 2901 Hubbard, Suite 2600, Ann Arbor, Mich., 48109.



THRIVE ONLINE



What Do You Think?

Besides bicyclist Lance Armstrong, which celebrity has been most influential in raising awareness about cancer prevention and treatment?

- Fran Drescher, actress
- Elizabeth Edwards, wife of presidential candidate John Edwards
- Melissa Etheridge, musician
- Tony Snow, former White House press secretary
- Joe Torre, New York Yankees manager

E-mail us at ThriveMagazine@med.umich.edu or write to us at 2901 Hubbard, Suite 2600, Ann Arbor, Mich., 48109. Results will be posted online at mcancer.org/thrive.

Click to Eat Healthy

NEW WEB SITE OFFERS RECIPES TAILORED TO PERSONAL PREFERENCES

FIGURING OUT WHAT
TO COOK FOR DINNER
CAN BE A DRAG IN
ANY HOUSEHOLD, BUT
WHEN A CANCER DIAGNOSIS IS THROWN INTO
THE MIX, IT GETS EVEN
TRICKIER.

That's why the U-M Cancer Center recently launched a new Web site to help spice up your next meal.

Cancer Center Recipes Just for You is a Web site that will help patients and families develop healthy meal plans specific to their needs. It may have the added benefit of encouraging people to consume more fruits and vegetables, which may help to prevent cancer and its recurrence, said Ed Saunders, deputy director of the Center for Health Communications at the U-M Cancer Center.

The searchable database of recipes was developed by Graham Kerr, the former "Galloping Gourmet" star who is now a leading advocate of healthy eating.

"My life's work is focused on finding effective culinary solutions for those caught up in the chaos of our times," Kerr said. "And in so doing, I hope to discover a truly creative synergism between science and the senses." "We hope the Web site will help to pique curiosity about new fruits and vegetables," Saunders said. "We also hope the site helps people find more appealing ways to prepare healthy foods that they already know they like."

Web site users can fill out a questionnaire about food. Based on their preferences, the site generates a suggested meal plan. By completing a free registration, users can save their preferences and recipes to refer back to them later.

In the future, the site will also include options for people who may have eating issues related to their cancer as well as specific dietary restrictions or food allergies, said Cancer Center dietitian Joan Daniels.

"Whether you're looking for options packed with protein to help ward off the side effects of cancer treatment or just hoping to introduce more fruits and vegetables into your diet, the Web site will help you find what you're looking for," she said.



Family Matters: When Cancer Is Inherited

GENETIC COUNSELING PROVIDES GUIDANCE EVEN AFTER DIAGNOSIS

IF YOU'VE BEEN
DIAGNOSED WITH
CANCER, YOU ALREADY
KNOW SOMETHING HAS
GONE WRONG INSIDE
YOUR BODY'S CELLS.

But how do you know if the genetic changes that caused your cancer were something you inherited or something that just happened sometime during the course of your life?

Kara Milliron is a genetic counselor with the U-M Cancer Center's Breast and Ovarian Risk Evaluation Program. We talked with her to find out what patients should know.

Q: Let's put this into perspective: Of women diagnosed with breast cancer each year, how many will have a genetic mutation that led to their disease?

A: The majority of the 200,000 new cases of breast cancer each year is considered sporadic: It happens by chance. But about 5 percent to 10 percent of these cases are due to an inherited susceptibility. What this means is that women have inherited genes from their parents that make them more likely to develop breast cancer.

Q: Can you explain how these genes work to increase risk?

A: Just like eye color, genes that impact cancer risk may be inherited. Two genes in particular, *BRCA1* and *BRCA2*, are involved in increasing the risk for breast and ovarian cancers. Normally, these genes work to prevent cancer, but changes—or mutations—can cause them to function improperly. Women who have *BRCA1* or *BRCA2* mutations face a 55 percent to 85 percent lifetime risk of breast cancer and a 16 percent to 60 percent lifetime risk of ovarian cancer. In comparison, the general population carries a 1.7 percent risk for ovarian cancer and a 12.5 percent risk for breast cancer.

Q: If someone has already been diagnosed with cancer, why would genetic testing be important?

A: Genetic testing may provide information you can use to make medical decisions. For example, it can help guide surgical decisions when a woman is considering a lumpectomy—a procedure that removes the tumor along with a small margin of tissue—or a mastectomy, which removes one or both breasts. Genetic testing can also help a patient understand her ovarian cancer risk, along with helping identify relatives who could be at risk.

For relatives who carry *BRCA1* or *BRCA2* mutations but do not have cancer, we guide them through three decision-making paths that may help to reduce their risk of developing cancer, ranging from increased screening to preventative surgery. These are all very personal decisions that have everything to do with where a woman is in her life.

Q: How does testing work?

A: Before any decisions are made about testing, I review the family history to try to determine the potential risk for either having the condition or passing it on to future generations. The best person for initial testing in the family is a cancer survivor so that we can try to determine which genes contributed to that individual's cancer.





Q: What about genetic discrimination?

A: Federal and state laws specifically state that genetic testing cannot be used to deny a person employment or group health insurance. However, life and disability insurance generally are not covered by these laws, so we encourage people to purchase these insurances before they undergo genetic testing.

Q: How do you help in the process?

A: I explain how genes work. Specifically, we talk about how mutations can lead to cancer development and the differences between mutations that are passed down in families and those that are acquired during an individual's life. We talk about the risks, benefits and limitations of genetic screening, and, along with a physician, we discuss options that may help reduce the risk of developing cancer. Some of our high-risk patients opt not to undergo genetic testing after their counseling appointment. We respect that. The individual's right to not know if they have an inherited susceptibility is just as important as their right to know.

WHO SHOULD BE TESTED?

The American Society of Clinical Oncology recommends that breast cancer patients should be tested for BRCA1 or BRCA2 genes when:

- Multiple cases of breast cancer have occurred in family members younger than 50.
- A woman with ovarian cancer has a family history of breast or ovarian cancer.
- A woman has both primary breast and ovarian cancers. This means that two distinct cancers are in the body, not that one cancer has spread to other organs.
- A man has breast cancer.
- A woman is diagnosed at 40 or younger, regardless of family history.
- A woman is a member of a population-including Ashkenazi Jews, Dutch or Icelanders-known to carry the mutation.



To make an appointment with the Cancer Center's Breast and Ovarian Cancer Risk Evaluation Program, call the Cancer AnswerLine at 800-865-1125. For more information on genetic counseling-which is also available to assess risk for other types of cancer—please visit mcancer.org/thrive.





🕨 1. Delegate

Kris Lessins had already bought food for a 12-person feast when she was diagnosed with metastatic bile duct cancer two weeks before Christmas. Her son, Matthew, roasted the leg of lamb and parceled the rest of the food out to relatives to cook. Everyone showed up for the formal, sit-down meal at Matthew's, instead of Kris's. "The tradition we had established was maintained, but it was totally different," Kris Lessins said. "We got through it and had a good time."

2. Communicate

Talk to family and friends about what their expectations are for the holidays and let them know your needs, said Jane Deering, a Cancer Center social worker. When it comes to children, find out what's most important and include them in planning so that they can anticipate how the holidays will be different. Give them choices: For example, if you're cutting back on baking, are sugar cookies more important than gingerbread cookies? "Whether it's Hanukkah, Christmas or New Year's Day that you're celebrating," Deering said, "you don't have to do it the way you've always done it."

3. Pick and Choose

Decide what traditions are most important to you this year and let the rest fall by the wayside. It may be difficult to make changes, but being selective can help to prevent exhaustion and make the activities you maintain more enjoyable. Emanique Joe was diagnosed with breast cancer in July 2004, and by the time the holidays rolled around that year, the cumulative effects of her treatment were starting to kick in. She knew her fatigue wouldn't allow her to bake and shop the way she would have liked. But since she and her family had just moved to Ann Arbor from Philadelphia, she decided Christmas cards stuffed with a family newsletter were a top priority. "I lowered my standards and decided what was important to me," Joe said. "Since we hadn't been communicating with friends as much during treatment, I wanted to thank everyone for their support and let them know we were OK."



Suzie Spence celebrates Christmas with her grandma Ruth Hirst.

For the Spence family, drives to look at Christmas lights took the place of holiday parties.

For Emanique Joe, shown here with her sons, Edrick and Jordan, and her husband, Sean, Christmas cards were top priority.

COVER STORY

4. Just Say No

Setting limits is especially important, Deering said. It's OK to say no to cookie exchanges, parties and difficult relatives. "Survivors often find that after they've reevaluated their priorities, they don't have to do everything they used to," she said.

5. Plan a Restful Holiday

Last year, Shannon Spence planned ahead to make sure that her then 4-year-old daughter, Suzie—who has acute lymphoblastic leukemia—got enough rest during the holidays. Celebrations with extended family were spread out over a few days, rather than their traditional back-to-back dinners on Christmas Eve and Christmas Day. Instead of going to parties, the family enjoyed lower-key activities, like watching holiday cartoons and taking drives to look at Christmas lights. "I think it really did help to simplify," Shannon Spence said. "We really enjoyed the holiday."

6. Appreciate—Don't Emulate— Norman Rockwell

Recognize that the perfect holiday is an unrealistic expectation and accept that the holidays may be emotionally difficult, Deering said. People often see holidays as markers in time, triggering reflections on past losses and hopes for the future. If you find yourself struggling with depression, consider seeking out a social worker, therapist or clergy member for counsel. "Focus on what you have in this moment on this day," Deering said. "Focus on what you have to appreciate and who is in your life."

7. Give Back

Bring a little more meaning to your holiday season by helping others. Volunteering or making a contribution can be especially fulfilling for those who are beyond treatment, but one Cancer Center family didn't wait for that. Ari Mabry, a 6-year-old who has acute lymphoblastic leukemia, and his parents, Johanna and Deanna, donated toys to C.S. Mott Children's Hospital in celebration of the eighth night of Hanukkah. "It's nice to give back to the hospital," Johanna Mabry said. "There are so many kids out there in need. It makes sense to say to Ari, 'What can you pick to give to someone else?'"

SHOP SMART

- Skip the crowds and shop at home in your bathrobe. Internet and catalog shopping offer convenient options for gift-giving. Check the box for gift wrapping and cross another chore off your to-do list.
- Consider simple, homemade gifts—and the key word here is "simple." Homemade gifts can save money, but don't stress yourself out racing to complete complicated crafts. Instead, consider framing a favorite photograph or giving away projects created during art therapy sessions (see page 13 for more information).
- In the spirit of simplification, consider whether you really need to exchange gifts with as many people as you normally do. Talk to your friends and family to let them know that you're just not up to it this year.
- Delegate the shopping to someone else. Make a list and ask a friend or family member to pick up necessary gifts while they're out running their own errands.



Top: Ari Mabry lights a menorah during Hanukkah. Bottom: Suzie Spence poses with her new baby doll.

GLUTTONY-FREE HOLIDAY

We know, you've heard this advice ad nauseum, but holiday excess tends to get the better of us. This year, you have even more reasons to stick to your guns and try hard not to:

- Wear yourself out;
- Overspend;
- Eat too much;
- Drink too much alcohol; or
- Skimp on exercise.



Anatomy of a Visit

BEHIND THE WAITING ROOM WALLS IN THE U-M CANCER CENTER

IT'S ABOUT 2:30 P.M.
ON A TUESDAY, AND
THE INFUSION PHARMACY IS BUZZING AS ITS
STAFF HUNKERS DOWN
TO GET THROUGH THE
U-M CANCER CENTER'S
BUSIEST DAY.

Pharmacist Diane Klemer breaks away—as a pharmacist does every day about this time—to huddle with nurses who coordinate each of the center's five infusion areas.

Klemer scans the list of 130 patients scheduled for infusion treatments the next day. Her goal is to trouble-shoot bottlenecks and problems: Are there too many patients coming in at 7:30 and 8 a.m.? Have patients who receive carefully timed treatments been scheduled appropriately?

"We find that if we spend 10 to 15 minutes the day before with each infusion area, talking through the next day's schedule, we can address staff concerns, make corrections, if necessary, and provide better service the next day for our patients when they are here," said Kelly Wright, manager of the Cancer Center's Infusion Pharmacy.

Nothing about chemotherapy is simple, especially not for those patients who have to endure its side effects while relying on it to treat their cancers. But few patients ever see the more than 100 health-care professionals working through a complex series of checks and balances to ensure the 36,000 infusion treatments delivered each year at the Cancer Center are appropriate and safe.

This is the story of just one of those many treatments.

2:30 p.m., Tuesday

Twenty-four hours before treatment is scheduled to begin, Diane Klemer has spotted Barbara Friesen's name on the list of the next day's patients. Klemer confers with Lynn Lamirand, the nurse coordinating the Med Inn Infusion Area that day, during a daily phone call. Friesen, an eight-year sarcoma survivor, is coming in for treatment she receives once every three weeks as part of a research study. Everything looks in order.



9:30 a.m., Wednesday

Friesen gets in her car for the 150-mile trek from her Berrien Springs home to the U-M Cancer Center. Because she lives so far away, her blood has already been tested at a facility near her home to make sure she is able to receive treatment.

NOON

Pharmacy technician Lisa Aunins fills an IV bag with saline solution that will be used to prepare Friesen's treatment. Although the pharmacy will not receive a prescription until Friesen has seen her physician, Aunins is getting a head start, shaving 15 minutes off of the time it will take to prepare the drug later.

1:30 p.m.

Having already checked Friesen's vital signs, medical assistant Amy Fardig escorts Friesen back to Exam Room 37. Nurse practitioner Denise Reinke enters about five minutes later and asks Friesen how she has been feeling since her last treatment. Friesen, a former physical education teacher who now works on special projects for Andrews University, says she's been working 12-hour days and feeling pretty good. "You can sit down and shrivel up or keep going," she says.

1:40 p.m.

Laurence Baker, D.O., examines Friesen and says her latest diagnostic scans look stable. Friesen asks a question about her level of monocytes—a type of white blood cell—and some swelling in her wrist.

"I think I'm doing well," Friesen says.

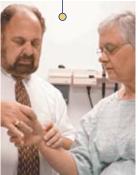
"Yeah, I think you are, too," Baker replies.

"As long as we're in agreement."

1:55 p.m.

As Friesen leaves the clinic, nurse Diane Neelands faxes an order for Friesen's chemotherapy to both the Infusion Pharmacy and the Med Inn Infusion Area. Dr. Baker has already doublechecked the prescription Reinke wrote.











2:05 p.m.

Donald "Joe" Carter, an infusion pharmacist, receives the fax, checks the calculations and puts the order into the Cancer Center's computer system. He prints out a label and passes it along to Klemer, who re-checks all calculations and ensures the accuracy of the label.

2:14 p.m.

Friesen checks in at the Med Inn Infusion Area. The pharmacy will not begin work on the prescription until a nurse in the infusion area has verified that a patient is healthy enough to undergo treatment. One minute later, a nurse in the infusion area clicks a button on her computer; the message pops up in the pharmacy: "patient go."

2:20 p.m.

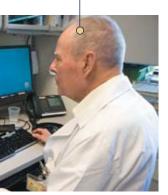
Nine vials of a drug used to make ET473, Friesen's treatment, are pulled from the freezer and put in a plastic basket with the formula's other components. Pharmacy tech Pam Pavuk grabs the basket along with a thick binder containing instructions on how to prepare ET473. Because this drug is part of a study, she must complete inventory paperwork. This takes about 15 minutes—just long enough to allow the vials to defrost.

2:28 p.m.

Pavuk checks the calculations on the order and snaps off the light under the hood where she works to protect the lightsensitive drug. The hood's exhaust fan cleans the air of toxic fumes, and Pavuk wears a gown along with glasses and gloves to protect herself. She fits each of the vials with a special plastic top shaped like a miniature airhorn to prevent toxic chemicals from dripping. Needles and IV tubing are also fitted with specially designed plastic parts to prevent leaks. "All the pieces fit together like a jigsaw puzzle, so none of the liquid escapes," Pavuk says.

2:53 p.m.

Pavuk injects each vial with sterile water to dilute the drug and then drains each of the nine vials with a needle. She pops off the safety valve on one of the vials to squeeze out the last milliliter.











FEATURE STORY



3:02 p.m.

Pavuk pushes a red button. Kelly Wright, Infusion Pharmacy manager, comes over to check her work: Is it the right drug? Are the vials right? Have they expired? What did Pavuk use to dilute the drug? Is the dilution amount right? Is the math correct? Only at this point does Wright turn to the hood to inspect the needle Pavuk has filled. After Wright checks the label and gives her the OK, Pavuk injects the drug into the prepared IV bag. The tech manipulates it to eliminate all air bubbles, which could cause Friesen's pump to shut down.

Pavuk slips the finished product into a brown plastic cover to protect it from light. Another tech sends a message to infusion: Time for pick-up.



3:21 p.m.

Medical assistant Deborah Rattai stops at the Infusion Pharmacy window to pick up the bag. She heads back to Med Inn Infusion, pausing outside the elevator to help a patient's wife and daughter find Big Bird in C.S. Mott Children's Hospital. "Oh, she's a doll," Rattai says of the girl.



3:25 p.m.

Rattai arrives in Med Inn Infusion just as Friesen returns from lunch in the University Hospital Cafeteria. Rattai escorts Friesen back to a private room, where she confirms her name and birth date before affixing a wristband.



4:16 p.m.

Lynn Lamirand numbs the area around the port in Friesen's chest-a device implanted under the skin that allows easy access to a vein. Then nurse Theresa Sirrine administers two anti-nausea drugs. She checks the calculations on the doctor's order and the pharmacy's label. "Perfect," she says, continuing to scan the results of Friesen's blood work.



4:48 p.m.

Sirrine returns with Maria Armstrong-Anderson, another infusion nurse, to check the calculations again as well as the calibrations. Because Friesen's infusion takes 24 hours, a home nurse will disconnect the infusion at the end of her treatment.

5:01 p.m.

Friesen leaves the clinic and heads for home.



FREE TO ROAM

Ever wish you could stretch your legs, but worried you'll miss your appointment if you leave the waiting room? Next time, ask for a pager. As part of a new pilot program, check-in clerks in the Cancer Center's Main Infusion Area offer pagers that allow patients to wander as far as the University Hospital Cafeteria. When the clinic is almost ready to begin treatment, a medical assistant will call the pager early enough to allow the patient to return on time.

WONDERING WHAT TO DO WITH YOUR NEW-FOUND FREEDOM? HERE ARE OUR TOP FIVE PICKS.

- Visit the Patient Education Resource Center. Located on Level B-1, the PERC is a full-service lending library providing the most current cancer information. Ask for help researching your situation or log onto a PERC computer.
- Explore guided imagery, music therapy and other services offered by the Complementary Therapies program. Check the calendar near the elevators.
- Relax in the new Patient & Family Center. Located on Level 1, the center is open to those seeking a quite place to relax or surf the Web.
- Forgot to pack your lunch? Infusion Snack Rooms may help to tide you over with new offerings, such as yogurt, cheese and granola bars, courtesy of a gift from Bello Vino Market. But sometimes you need a little more. Check out University Hospital's new Einstein Bros. Bagels and Fresh 'n' Healthy Café.
- Take a walk to the U-M Health System courtyard and explore the peaceful sanctuary of the Friends Meditation Garden.



CANCER CENTER'S ART THERAPY PROGRAM OFFERS RELIEF THROUGH EXPRESSION

CYNTHIA CASTRO-DALE ARRIVES FOR HER SESSION WITH **INSPIRATION IN HAND:** A COFFEE TABLE BOOK OF GEORGIA O'KEEFE PAINTINGS.

Margaret Nowak, the Cancer Center's art therapist, has Castrodale's latest work ready and waiting. It's a solitary yellow flower holding its own against the stark white page. It's bright and bold, the petals bearing a slight resemblance to a lion's mane.

Cancer leaves many legacies. For Castrodale, following a year of art therapy, it has brought her an unexpected passion for painting.

"I had never put paint to paper before. It never occurred to me," said Castrodale, a world traveler who had long admired great works of art. "But painting is very peaceful. It has been good for me, especially in such a tumultuous time."

At the U-M Cancer Center, thanks to the generous support of donors including the Robert Bruce Dunlap Endowment, Margaret Nowak leads patients like Castrodale through exercises that use art as a means of coping and an avenue of self-expression.

Art therapy has been shown to reduce pain and anxiety in cancer patients, according to a small study in the Journal of Pain and Symptom Management. During a four-month study involving 50 patients, researchers observed a decrease in pain, tiredness, depression, anxiety, drowsiness, lack of appetite and shortness of breath following art therapy sessions.

"Art therapy creates a positive emotional state. For some of the patients I work with, it's the first time they've been in a state of joyful relaxation in a long time," Nowak said. "It might just be for that hour,

but if you've been in a constant state of high anxiety, an hour is a really wonderful gift."

At the end of many sessions, Nowak asks her patients to tell her about their work. Although she never imposes her own interpretations, she guides the discussion to help patients think about why they have drawn a particular image or chosen a certain color.

Anyone can participate in art therapy, regardless of experience or artistic ability. Nowak said patients sometimes are surprised by what they create. Projects range from painting to jewelry to journal making.

"You merely need to be interested to see where art takes you," Nowak said. "Patients might be in chemotherapy for three or four hours, but with art therapy, they're having so much fun, they can't believe how quickly the time flew by."



CALL

To participate in art therapy, call Margaret Nowak at 734-615-7288 or e-mail her at mrnowak@med.umich.edu.







Cynthia Castrodale, right, has worked through her diagnosis with the help of art therapist Margaret Nowak.

Making Every **Bite Count**

PROTEIN, FAT PLAY SPECIAL ROLE DURING TREATMENT

By Joan Daniels, R.D., and Nancy Burke, R.D.

"HEALTHY EATING" USUALLY IS SHORT-HAND FOR A DIET LOADED WITH FRUITS AND VEGETABLES: You limit your meat intake to a portion the size of a deck of cards. You choose whole-grain carbohydrates to ensure you're getting the fiber your body needs. You eat lots of fruits and vegetables, especially the green, leafy ones.

That's an excellent plan for most people, but when a cancer diagnosis is involved, "healthy eating" means something different. Your body's needs radically change while it's weathering the effects of treatment and fighting back against your cancer. And the diet we just described sometimes won't meet those needs.

It's important to include enough carbohydrates, protein and fat in your meals to maintain weight during treatments. Cancer causes changes in the way your body uses food for energy. The protein that you'll find in that single chicken breast isn't enough during treatment. Protein is an essential nutrient for healing, tissue maintenance and growth. Your body requires protein to maintain its muscle mass; people who keep their muscle mass generally have fewer side effects during cancer treatment and recover better.

Here are some tips for ways to include healthy protein and fat in your diet. Particularly when side effects are impacting your appetite, it's important to make every bite count.



For recipes and more tips, visit mcancer.org/thrive. To make an appointment with a Cancer Center dietitian, call 734-936-6000.



- Switch from skim milk to whole milk, if you're struggling with weight loss.
- Melt cheese on sandwiches, stir it into scrambled eggs or grate on top of soups, starches or meats.
- Add cottage or ricotta cheese to fruits and vegetables, egg dishes or desserts.
- Get an extra boost by mixing powdered milk into milkshakes and smoothies.
- Consider drinking nutritional supplements, like Boost or Ensure. Several brands and flavors are available. They also can be mixed with fruits, ice cream and syrups to make milkshakes.
- Eat more eggs. Add extra eggs to pancakes. Sprinkle chopped, hard-boiled eggs over salads. Add hard-cooked egg yolks to sandwich spreads.

- Spread peanut butter and other nutbased spreads on sandwiches, toast and vegetables or swirl them into shakes, smoothies, yogurt and soft ice cream.
- Sprinkle nuts over cereal, salads, vegetables, pancakes or fruit. Think of it as a crunchy topping.
- Add chopped meat to salads, omelets and quiches.
- Eat more beans and tofu. Hummus is high in protein and can be spread on breads and vegetables.



U-M STUDY FINDS LYMPHOMA DRUG EFFECTIVE **OVER LONG TERM**

Eight years after being treated with a new drug for non-Hodgkin's lymphoma, 86 percent of patients were still alive and half had not had a relapse of their disease, according to researchers from the University of Michigan Comprehensive Cancer Center. The patients had follicular lymphoma, a type of cancer that is not considered curable using traditional treatments. Even if patients initially respond to treatment, the disease almost always returns and becomes more difficult to treat.

The study followed 76 patients who received the drug Bexxar as their first treatment for the disease. Ninety-five percent of the patients saw their tumors shrink from the treatment, and three-quarters of patients went into complete remission. Patients were followed for a median of eight years, and nearly two-thirds have remained in complete remission.

"For years we have known radioimmunotherapy

such as Bexxar is one of the most effective treatments for patients with relapsed follicular lymphoma. These data show Bexxar is particularly effective when used as a front-line treatment," says Mark Kaminski, M.D., director of the Cancer Center's Adult Hematology Clinic, who recently presented the results at the American Society of Clinical Oncology annual meeting. "These results compare quite favorably with those achieved with state-of-the-art chemotherapy regimens that take months to deliver. But Bexxar is given as a single treatment, completed within one week, which makes it an extremely convenient regimen for patients."

Non-Hodgkin's lymphoma, the nation's sixth leading cause of cancer death, is a cancer of the lymph system, which is part of the immune system. Follicular lymphoma is the second most common type of non-Hodgkin's lymphoma.



Mark Kaminski, M.D., recently presented findings demonstrating the long-term effectiveness of Bexxar, a lymphoma drug.



A patient who was among the first to participate in studies of this drug was featured in a recent Thrive story about clinical trials. Visit mcancer.org/thrive to view the story or to learn more about Bexxar.

FRUITS, VEGETABLES STILL MAY PLAY ROLE IN PREVENTION OF BREAST CANCER RECURRENCE, DESPITE RECENT STUDY

A recent study in the Journal of the American Medical Association found that a diet including far more than the recommended serving of five fruits and vegetables per day showed no benefit in preventing breast cancer recurrence. However, Zora Djuric, Ph.D., a professor of family medicine at the U-M Cancer Center, still believes that health foods can play a significant role in reducing risk.

"This study doesn't mean you can eat fast food," she said. "The women in the study, on average, were already eating seven servings of fruits and vegetables per day. It makes you wonder what additional benefit there is for increasing that even further."

The study involved 3,000 women who had been successfully treated for early stage breast cancer. Half were assigned to a diet that included 12 servings of fruits and vegetables and a reduced fat intake, while the other half were provided educational materials about the government's 5-A-Day guidelines. Researchers saw no difference in the recurrence rate between the two groups.

However, the study showed a 43 percent decrease in cancer recurrence among women who had high levels

of carotenoids—vitamin-like compounds found in fruits and vegetables—in their blood when they enrolled in the study. Recurrence was also decreased among women who both ate at least five servings of fruits and vegetables and also exercised moderately at least six days a week for 30 minutes before joining the study.

"It may be that what you do your whole life is more important than what you do for a short while," Djuric said. She added that breast cancer survivors are also at risk for cardiovascular disease, a risk that can be lessened through healthy eating.



Zora Djuric, Ph.D., is researching whether a Mediterranean diet will have an impact in preventing colon cancer. The study will look at adults who have had colon polyps, colon cancer or a family history of colon cancer. For more information, dial 800-742-2300, ext. 6504 or visit mcancer.org/thrive.



thrive

Published quarterly by the University of Michigan Comprehensive Cancer Center, 1500 E. Medical Center Dr., Ann Arbor, MI 48109-5944. If you do not wish to receive future issues of Thrive, please call Martha Towas at 734-936-0434.

Max S. Wicha, M.D., director

Marcy B. Waldinger, M.H.S.A., chief administrative officer

Karen Hammelef, M.S., C.S., director of Patient & Family Support Services

Nicole Fawcett, communications lead

Jennifer Day, editor

Photography by Lin Jones, U-M Photo Services

Enrique Cruz Jr., art director, GLC

Executive Officers of the University of Michigan Health System:
Robert P. Kelch, Executive Vice President for Medical Affairs; James O.
Woolliscroft, Dean, U-M Medical School; Douglas Strong, Chief Executive
Officer, U-M Hospitals and Health Centers.

The Regents of the University of Michigan: Julia Donovan Darlow, Laurence B. Deitch, Olivia P. Maynard, Rebecca McGowan, Andrea Fischer Newman, Andrew C. Richner, S. Martin Taylor, Katherine E. White, Mary Sue Coleman (ex officio)

The University of Michigan, as an equal opportunity/affirmative action employer, complies with all applicable federal and state laws regarding nondiscrimination and affirmative action, including Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973. The University of Michigan is committed to a policy of nondiscrimination and equal opportunity for all persons regardless of race, sex, color, religion, creed, national origin or ancestry, age, marital status, sexual orientation, gender identity, gender expression, disability, or Vietnam-era veteran status in employment, educational programs and activities, and admissions. Inquiries or complaints may be addressed to the Senior Director for Institutional Equity and Title IX/Section 504 Coordinator, Office of Institutional Equity, 2072 Administrative Services Building, Ann Arbor, Michigan 48109-1432, 734-763-0235, TTY 734-647-1388. For other University of Michigan information call 734-764-1817.

*Includes discrimination based on gender identity and gender expression. Copyright ©2007 The Regents of the University of Michigan, Ann Arbor,

For more information about the stories in *Thrive* or any other cancerrelated information, please call the Patient Education Resource Center at 734-647-8626.

JUST A PHONE CALL AWAY



Would you like to learn how you can give back to the U-M Comprehensive Cancer Center? Please visit www. mcancer.org/giving or call 734-998-6893.



Cancer AnswerLine: 800-865-1125
Child and Family Life: 734-647-6418

Complementary Therapies Program or Patient & Family

Support Services: 734-615-4012

Development: 734-998-6893

Discharge Planning Services: 734-764-0589
Customer Service/Billing: 734-764-8663

Fertility Counseling and Gamete Cryopreservation:

734-615-8143

Financial Counselor: 734-647-8663

Guest Assistance Program, Social Work, Peer Counseling or Wig Bank: 800-888-9825
Grief and Loss Program: 734-615-4012
Nutrition Services: 734-936-6000

Occupational Therapy: 734-936-7175
Patient Education Resource Center: 734-647-8626

Peer Counseling: 800-888-9825

Personal Touch Program: 734-973-2400

Physical Therapy: 734-936-7070
PsychOncology Clinic: 734-647-8906
Ronald McDonald House: 734-994-4442

Skills Lab: 734-763-9642

Speech-Language Pathology: 734-763-4003

Social Work: 800-888-9825

Volunteer & Community Resource Program:

734-936-8307

$\stackrel{ ext{My Best}}{ ext{Advice}}$

Make a list of everyone's name and when they are available—and then use it! I was so sick of being the one who needed help, but my girlfriend told me someday it will be my turn to help. Today, I'm a really great helper because of this.

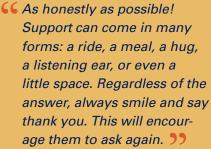
—Becky Cwiek, 43, a member of the U-M Breast Cancer Advocacy and Advisory Committee who lives in Brighton

Q: How do you answer when people ask, "How can I help?"

Treat us like you would have treated us before. Still call, still come over, still try to act as close to normal. Ask us about the weather.

—Jennifer Valinski, of Belleville, mother of 3-year-old Andrew Valinski, who has acute lymphoblastic leukemia





—Karen Wingrove, 38, a rectal cancer survivor who lives in Canton