

# COREnews



Colorectal Research in Epidemiology

Winter/Spring 2003

#### CORE Family Studies

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Preventable. Treatable. Beatable! Founded by the Cancer Research Foundation of America

### March is National Colorectal Cancer Awareness Month!

What better time to talk with your physician and make sure you are up-to-date on cancer screenings? Remember the following recommendations for colorectal cancer screening:

- People with no known risk factors should start screening at age 50.
- People with a family history should begin at age 40, or 10 years younger than the youngest family member with colon cancer.

As part of our continued commitment to colorectal cancer prevention research, CORE Studies has some exciting new activities planned for the coming months... see inside for details!

#### **Topics for this Issue:**

**Feature:** New study finds moderate exercise reduces intra-abdominal fat.

**Specialist's Corner:** Cancer registries and the colorectal cancer burden

**Genetics 101:** New genes for colorectal cancer?

**Participant Story:** A local nurse tells her story.

**Activities:** Check out these upcoming events!

#### Greetings!

We are pleased to bring you our sixth edition of **CORE News**. We hope this newsletter finds you and your family well.

We have been very busy since we received news that our research has been funded for 5 more years. We are excited about our upcoming research plans, the first of which is our follow-up data collection project. We will begin contacting participants in our case and family member groups to update health and medical history records within the month. Our aim is to conduct this interview 4 years after the initial interview. Thus, participants interviewed in late 1998 will be contacted first. As before, this follow-up interview will be conducted over the phone; however, it will be substantially shorter. Look for our letter, which we will send before we call to schedule the followup interview.

In addition, we have a number of molecular studies planned that will put this valuable data to good use. These studies will be conducted in collaboration with our research partners around the world. An example of such a project is described on page 5 of this issue.

Thank you again for your participation and contributions to this research. You are key to our success in developing improved methods for preventing, detecting, and treating this serious disease.

Warmest Regards,



John D. Potter MD, PhD



Polly Newcomb PhD, MPH



Deborah Bowen PhD

#### Fred Hutchinson Study Supports the Benefits of Moderate Exercise

By Kristen Woodward

Getting regular, moderate-intensity exercise may be critically important for post-meno-pausal women who want to reduce their risk of cancer, heart disease and other chronic diseases. The reason: exercise effectively reduces intra-abdominal fat, a hidden risk factor for many chronic illnesses. That's the result of a study, led by Dr. Anne McTiernan and colleagues at Fred Hutchinson Cancer Research Center, published Jan. 15 in the Journal of the American Medical Association.

Reducing intra-abdominal, or visceral, fat is important because this type of fat increases the risk of cardiovascular disease, diabetes and other conditions, and can raise insulin levels, which promotes the growth of cancer cells. Further, visceral fat is often hidden, forming primarily around internal organs within the abdomen. "Most American women gain one to two pounds on average every year, and that adds up to dangerous levels over a lifetime," McTiernan said. "Regular, moderate-intensity exercise can help keep the weight from creeping on, which can translate to improved health in the long run."

Many physical activities can benefit your health, but here are a few examples of moderate exercise:

- Walking at a moderate pace
- Riding a bicycle
- Ballroom dancing

In her study, Dr. McTiernan found that study participants in the exercise group who worked out at home and at a gym for at least 45 minutes five days a week—an amount similar to current national recommendations—achieved significant reductions in weight, total body fat and intra-abdominal fat compared to the group who only participated in a once a week stretching session. After a year on the program, the exercisers lost between 3.4 and 6.9 percent intra-abdominal fat while maintaining their calorie intake.

"Even if a woman who exercises regularly doesn't see the benefits of dramatic weight loss on her scale, our results indicate that she can feel confident that she

is improving her health," McTiernan said. "Regardless of the amount of weight lost, we now know that exercise reduces hidden intra-abdominal fat, the most dangerous type of fat."

## March 27, 2003: American Cancer Society Hosts Colon Cancer Teleconference



Join the American Cancer Society, Northwest Division, as it hosts its eighth live-by-satellite cancer broadcast. The two-part broadcast is designed for cancer

patients, caregivers and the interested public. It is intended to help people gain the knowledge and skills they need to become informed, active participants in their own or a loved one's cancer care.

- During Part 1 (10:00 am 12:30 pm) expert speakers will cover topics including cancer pain management.
- During Part 2 (1:00 pm 3:00 pm) speakers will discuss colon cancer issues such as screening tools, treatment options, and clinical trials.

To receive additional information on participating sites in your area, please contact Jamie Turpin with the American Cancer Society at **1-800-729-5588**, **option 3**.

#### March-October 2003: Colossal Colon Tour



The Cancer Research Foundation of America kicks off National Colorectal Cancer Awareness Month with the 20-city Colossal Colon Tour! In Seattle, see the

colon at the Seattle Center Parking Lot, July 9-12.

Visitors can crawl through the 40-foot long, four-foot high replica of a human colon or look through viewing windows to see healthy colon tissue and several colon diseases. Additionally, 10 interactive stations provide information on the colon, cancer prevention, treatment and survivorship. Activities will be geared toward visitors of all ages, including children.

The Colossal Colon was developed by Molly McMaster, a 26-year-old cancer survivor, in conjunction with the C.R. Wood Cancer Center at Glens Falls Hospital. The project is dedicated to Amanda Sherwood Roberts, who lost her battle with colon cancer at age 27.

For more information, or to find a Colossal Colon location near you, call our project line at **1-800-276-0127** or visit www.CheckYourInsidesOut.org.

#### Specialist's Corner

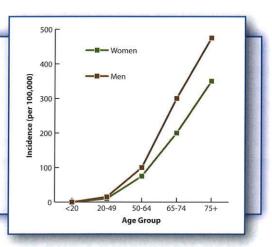
#### Cancer Registries: Essential to Reducing the Burden of Colorectal Cancer

Cancer registries collect data about the occurrence of cancer (incidence) within specific geographic regions. The collected data is used to:

- Monitor cancer trends over time (see graph);
- Determine cancer patterns in various populations;
- Guide planning and evaluation of cancer control programs (e.g., determine whether prevention, screening, and treatment efforts are making a difference);
- Help set priorities for allocating health resources;
- Advance clinical, epidemiologic, and health services research (like CORE Studies); and
- Provide information for a national database of cancer incidence.

## Average Annual Incidence of Colorectal Cancer in the United States, by Age, 1995-1999

*Incidence* is the number of new cases diagnosed during a specific period of time. In this example, the average incidence of colorectal cancer is the average number of new cases diagnosed each year from 1995 through 1999, per 100,000 people. Thus, for every 100,000 men aged 75 and over in the United States, an average of 473 men were diagnosed with colorectal cancer each year.



Required under state and federal law, healthcare providers who diagnose or

treat a patient for cancer must report the cancer case to the local registry. Cancer data are reported to a central statewide registry from various medical facilities including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories. These data include: types of cancer that occur, the cancer's location in the body, the extent of disease at the time of diagnosis (stage), and the kinds of treatment patients receive. Users of these data include local, state, and federal health departments, and accredited researchers.

One of the most important responsibilities imposed upon cancer registry professionals is to protect the security and confidentiality of cancer patient information. State and federal regulations and laws determine to whom cancer information may be reported, how cancer information is reported, and what procedures should be taken to access cancer information. Further, researchers who access cancer data must receive special permission from a designated authority, in our case, our Institutional Review Board. As a result of such policies and procedures, the privacy of cancer patients is protected, a practice vital to our CORE Studies research.

Data collected by state cancer registries enable public health professionals to better understand and address cancer issues. Registry data are critical for the development of cancer prevention programs.

Source: Centers for Disease Control and Prevention

#### **How Can We Improve?**

We'd love to hear from you if you have comments or suggestions regarding **CORE News** articles and features. Let us know what you like, don't like, and what you might like to see in an upcoming edition. Call Amy Cory, toll-free, at **1-800-276-0127** (option 4), or email acory@fhcrc.org.

#### News Flash 🎉

This year marks the 50<sup>th</sup> anniversary of the discovery that genes are made of DNA! James Watson and Francis Crick first described the structure of DNA (deoxyribonucleic acid) in the April 25, 1953 edition of the journal *Nature*. Their discovery is considered one of the most significant of the 20<sup>th</sup> century.

#### On the Web

### Explore the "Science Behind the News"

Part of a series of online tutorials presented by the National Cancer Institute (NCI), these informative, easy-to-use sites are a great way to learn about current health topics.

- **Understanding Cancer** provides illustrations and descriptions of key cancer concepts, including how it develops, how it is diagnosed, and how genes are involved. Find it at: press2.nci.nih.gov/sciencebehind/cancer/cancer01.htm
- Understanding Genetic Testing gives a
  useful overview of genes and gene testing
  for cancer and other disorders, including
  helpful diagrams and illustrations. Go to:
  rex.nci.nih.gov/behindthenews/ugt/ugtframe.htm

#### Eating for Good Health: Black Bean Vegetable Soup



- 1 Tbsp vegetable oil
- ½ medium/large onion, chopped
- 1 clove garlic, minced
- 2 carrots, chopped
- 1 zucchini, chopped
- 2 tsp chili powder
- 1 tsp ground cumin

- 2½ 3 cups vegetable stock
- 2 (15 oz) cans black beans, rinsed and drained
- 1½ cups frozen yellow corn
- ¼ tsp ground black pepper
- 1 (14.5 oz) can stewed tomatoes

#### Directions

- 1. In a large saucepan or stockpot, heat oil over medium heat. Cook onion, garlic, carrots, and zucchini, stirring occasionally for 5 minutes or until onion is softened.
- 2. Add chili powder and cumin; cook, stirring, for 1 minute.
- 3. Add vegetable stock, 1 can of the beans, corn, and ground black pepper; bring to boil.
- 4. In a food processor or blender, puree together tomatoes and remaining can of beans; add to pot. Reduce heat, cover, and simmer for 10-15 minutes or until carrots are tender.

**Serving suggestion:** Sprinkle with finely chopped cilantro or shredded cheddar cheese. Serve with warm corn or whole wheat tortillas. Makes 6–8 servings.

# Genetics 101: Relative Pair Studies — Looking for New Genes Related to Colorectal Cancer

By Ellen Goode, PhD, MPH

It has long been known that colorectal cancer (CRC) occurs more often in some families. In fact, about 8% of all people with CRC have one or more first-degree relatives who have had CRC. Thus, healthy individuals with a family history of colorectal cancer may be at higher risk of developing colorectal cancer than those without a family history.

Currently, we know of a few genetic changes that may cause some families to have a greater occurrence of colorectal cancer. Hereditary nonpolyposis colorectal cancer (HNPCC) and familial adenomatous polyposis (FAP) are two syndromes that can cause many people in one family to have colorectal cancer. However, these syndromes are responsible for only a small fraction of colon cancer cases, leading scientists to believe there are other genes responsible for this disease.

With our collaborators around the world, we recently proposed a new study to examine genes from families with more than one case of CRC. Our goal is to identify new or unusual genes responsible for the disease. Families of interest in this study include those with two or more members with CRC where the relationships between the two affected family members are either siblings (i.e., sister-brother), half-siblings, cousins, grandparent-grandchild, uncle-nephew, uncle-niece, aunt-nephew, or aunt-niece.

In general, the amount of genetic similarity between two family members depends on their relationship; for example, identical twins share all of their genes, where as siblings share about half. By comparing the genes of family members with colorectal cancer, we may be able to determine whether there are new genes that "stand out," and eventually, whether these genes contribute to CRC risk. Please contact Amy Cory at **1-800-276-0127**, **option 4** for more information!

#### **Nutrition Facts for Black Bean Veg. Soup**

Amount Per Serving (makes 8 servings)

Calories	197
Calories from Fat	30
Total Fat	3.3 g
Saturated Fat	0.1 g
Cholesterol	0 mg
Sodium	651 mg
Total Carbohydrate	32.8 g
Dietary Fiber	9.3 g
Protein	9 g

#### CORE Studies Participant Katy Duggan, RN, BSN, M.Ed.

I have been a nurse for almost 30 years and yet I missed the most important diagnosis I should have made in my career—colon cancer! Being a pediatric nurse, I have held dving children in my arms and held their crying parents to my heart as a result of different cancers. I certainly did not imagine I would be the recipient of that same caring. I had always prided myself on my observation skills that kept my patients safe and avoided complications by being vigilant and proactive. I did not imagine I would miss the signs and symptoms of cancer growing in my own body. For the last two years, I have been trying to look back at the series of events that led up to the surgeon finding a large tumor in my sigmoid colon. The following

is my story.

Year 2000 was to begin the new millennium. As a clinical staff educator for a major Seattle medical center, I was on the road quite a bit. For me, the "abnormal" fatigue became the "normal." I was not eating the "right foods" and probably too much of the wrong ones! I was no longer getting the prescribed exercise I used to get when I was taking care of 5 or 6 patients in the hospital!! I thought the occasional constipation was because I was sitting at a desk now. I, like the previous article writer, thought the small amounts of blood on my stool was due to hemorrhoids. I certainly did not imagine I would miss the biggest symptom—my stool was getting smaller in size.

My mother and I accompanied my sister to New York City to see her receive an award for her nursing research. During the trip I became the most constipated I had ever been in my life. It was funny that my mother had a "bad feeling" as we got on different planes to fly—and that she was the worried one not me! I went to the doctor several times and tried all the traditional over-the-counter treatments.

When they didn't work and I became sicker, all signs and symptoms pointed to my "new diagnosis" of a twisted bowel. CANCER never crossed my mind. After all, I was too young!

Thanksgiving 2000 was preceded by emergency surgery to remove the "obstacle" that never crossed my mind—COLON CANCER! The doctor's questions were constant:

- Did I have a family history? Mom knew of no one on either side.
  - Did I have rectal bleeding? As a nurse, my idea of "bleeding" was very different than the small streaks I had seen.
    - Had I been checked at my regular physicals with a hemoccult test?
       Yes, but I was overdue for my annual physical by a few months.
       (Ha! Ha! I was going to schedule it that month!)
    - Had I had a colonoscopy or sigmoidoscopy? At the time, I was too young to meet the screening guidelines that would go into place the next year.

The irony: if I were the nurse listening to this case being discussed, I probably would have asked all these questions and included cancer in my list of possibilities.

After a second emergency surgery I required an ileostomy. That news was followed by the pathology report revealing one positive lymph node qualifying me for chemotherapy. I certainly did not imagine I would be dealing with all these life-changing adjustments. Complications of chemotherapy and dealing with an ileostomy made me want to be one of my pediatric patients. I would rock them through the rough hours and be gentle when I changed their ileostomy bag. The rest of the time I reserved for playing games, reading and laughing about the future! I certainly did not imagine the "child" inside of me would want to be held so lovingly during this ordeal.

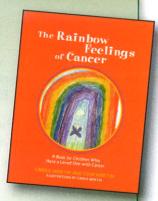
It is now two years later. My ileostomy was reversed, all tests are negative and I am feeling great! I am back doing education—but not just at work! I spread the word wherever I go about being "vigilant and proactive" about colon cancer.

One thing I can imagine—preventing this killer!

Are you interested in sharing your experiences with colon cancer? Do you have a loved one with colon cancer? If so, it would be great to feature you in an upcoming newsletter. Please contact Laurie Lydum at **(206) 667-5393** to discuss this opportunity to help others.

#### The Rainbow Feelings of Cancer: A Book for Children Who Have a Loved One with Cancer

(Hohm Press, 2002, hardcover, \$14.95) was written and illustrated by Carrie Martin, age 10, and her mother Chia, who was diagnosed with colon cancer. This colorfully illustrated book is aimed at children and families who have been touched by cancer. In it, Carrie shares her personal experi-



ences and feelings from the time she learned her mom had cancer. Carrie writes, "Kids whose parents have cancer have lots of feelings... Maybe reading about my feelings can help you with yours." Carrie and Chia hope that this book will help families talk about issues related to cancer, and that children whose lives have been affected by cancer will feel they are not alone.

**Contact us!** Have you moved? Are you planning to move? Do you have comments or suggestions for a future newsletter? Please call the study line at **1-800-276-0127** to keep us updated or to request information at any time.



**Address Service Requested** 



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## Where can I get more information about cancer?



The Cancer Information Service at **1-800-4-CANCER** (1-800-422-6237) will answer your questions about cancer prevention, diagnosis, and treatment, and send you information at your request.