



COREnews

FRED
HUTCHINSON
CANCER
RESEARCH
CENTER

Colorectal Research in Epidemiology

Spring 2005

CORE Family Studies

1100 Fairview
Avenue North

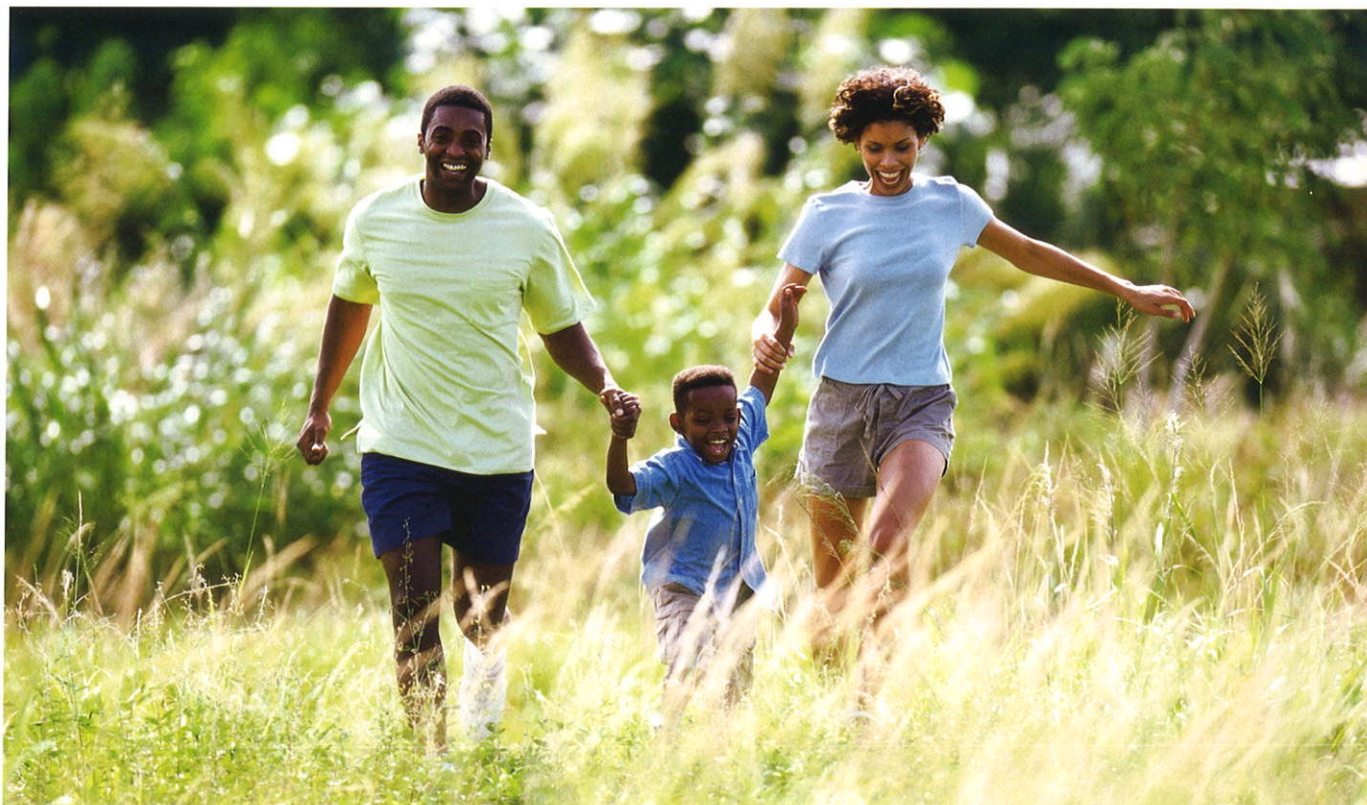
M4-B402

PO Box 19024

Seattle, WA

98109-1024

Study telephone:
1-800-276-0127



Greetings!

March is Colorectal Cancer Awareness Month. We have concentrated on the prevention of colorectal cancer with this issue of CORE News, offering practical suggestions on diet, exercise, and lifestyle choices. We believe these are tactics that are relevant to prevention and improve longevity.

CORE Family Study is part of an international consortium with sites across the US, Australia and New Zealand, and Ontario, Canada. Consortium investigators have regular meetings by telephone and in person. This April, the Seattle site will once again host the bi-annual in-person consortium meeting. We are busy planning for this 2-day meeting and look forward to seeing our distant friends again.

We are excited to report that on February 1, we submitted a new grant application to the National Cancer Institute (NCI) to evaluate "Epidemiology, Genetic, and Epigenetic Factors in Endometrial Cancer", another cancer with a strong genetic component. We hope this research will provide important insight into the complex biology of this common cancer. Keep your fingers crossed for us!

We are also awaiting news of the "NSAIDs and Colorectal Cancer" grant we submitted to NCI last November. In this study, we will use data and blood samples collected throughout our international consortium to examine the differences in the genes responsible for NSAID metabolism. NSAIDs (such as aspirin and ibuprofen) have been found to have a protective effect on colorectal cancer. We hope this research will help physicians improve the diagnosis and prevention of this disease.

Thank you for your participation in CORE Studies!

Warmest regards,

John D. Potter,
MD, PhD

Polly Newcomb,
PhD, MPH

Irritable Bowel Syndrome— A Common Complaint

Irritable Bowel Syndrome, or IBS, is a “Functional Intestinal Disorder,” not a disease. The definition is a condition that upon examination shows no physical evidence of disease or damage to, in this case, the intestines or colon. However, there may be many symptoms.

Pathology and Symptoms

The major function of the colon is to absorb nutrients, water, and salt from the food we eat. IBS affects the movement of stool and gas through the colon causing either an over absorbance of water, causing constipation, or, if muscle contractions cause stool to pass too quickly, fluid is not absorbed, causing diarrhea and cramping. People with IBS often also experience bloating, abdominal pain, cramping and a feeling of urgency to have a bowel movement. Symptoms do not usually include weight loss, loss of appetite or blood in the stool (unless there are hemorrhoids).

Causes

The medical community has not definitively determined the cause of IBS. It appears that the intestines and nerves of an IBS sufferer are exceptionally sensitive as the result of an interaction between the digestive tract, the brain, and the nervous system.

Stress does not appear to cause IBS although it may trigger symptoms. Other triggers include certain foods and drinks, which vary from person to person. Common triggers include: milk products; chocolate; alcohol; caffeine; carbonated drinks; and fatty foods.

Treatment

After a diagnosis of Irritable Bowel Syndrome, your physician may suggest that you make some lifestyle changes to manage your condition. As of yet there is no cure for IBS, but there are medications available that can help lessen your symptoms.

Irritable Bowel Syndrome does not cause colon cancer nor does it increase the likelihood that you will get cancer. Further, there is no established link between IBS and Inflammatory Bowel Diseases such as Crohn's Disease or Ulcerative Colitis.

Researchers at the Mayo Clinic, a member of the CFR consortium, have conducted a study of IBS. They found that the risk of having IBS is doubled in families of people with the disorder suggesting that genetic factors may play a role. These researchers are continuing the research and hope to determine whether the family connection is caused by a gene or is the result of shared environmental factors.

Inflammatory Bowel Disease— Serious Conditions

Inflammatory Bowel Disease, or IBD, refers to two chronic inflammatory diseases in the intestines: Crohn's disease and ulcerative colitis. Chronic means the inflammation lasts a long time, or happens again and again. Inflammation means that the tissues in your digestive system are irritated, often causing swelling and ulcerations (holes in the tissue lining), leaving the colon unable to function properly.

Pathology and Symptoms

Crohn's disease can affect the entire digestive system, from the mouth to the anus, and also usually affects all layers of tissue within affected areas of the digestive system. Ulcerative colitis, on the other hand, only affects the innermost lining of the large intestine and the rectum. Crohn's disease and ulcerative colitis have many of the same symptoms, however they differ in how each disease affects the digestive tract and in treatment options. Symptoms of both Crohn's disease and ulcerative colitis may include: abdominal pain and cramps, weight loss, loss of appetite, fever, rectal bleeding, chronic diarrhea, and irritations in the skin and eye.

Causes

Scientists are still unsure of the link between genetics and IBD. However, only some evidence suggests that IBD may run in some families. It is also thought that some environmental factors, such as bacterial, viral or autoimmune responses, might contribute to the development of IBD.

The body naturally responds to inflammation by going into a “protective state.” Sometimes the body generates new cells to protect existing cells and the excessive cell growth may lead to cancer if the cell growth becomes abnormal. Thus, both Crohn's disease and ulcerative colitis may raise your risk of colorectal cancer. However, only 10% of people with Crohn's or ulcerative colitis do go on to develop colorectal cancer. This increased risk of developing colorectal cancer is tied to the duration of IBD and how much area of the digestive system is affected. For example, a person who has had IBD for 20 years throughout the entire digestive system is at a much higher risk than a person who has had IBD confined to the descending colon for only 5 years.

Treatment

The treatment for Crohn's disease and ulcerative colitis is largely the same: medications and/or surgery. Doctors commonly prescribe anti-inflammatory drugs to reduce the inflammation caused by IBD. Doctors may also prescribe pain relievers and antibiotics to ease the complications of Crohn's disease, such as fissures or fistulas.

Lemon Grilled Halibut

The mellow flavor of this low-fat fish comes from marinating it in vigorous spices. After cooking, it is topped with homemade salsa rich with the flavor of tangy onions, fiery jalapeño peppers, and cool papaya.

- Six 6-ounce halibut steaks, sliced in half lengthwise
- 3 medium bulbs fennel, trimmed and sliced
- 2/3 cup purified water
- 9 black or white peppercorns

Papaya Salsa

- 1/2 cup cilantro leaves
- 1 cup cubed papaya
- 1/4 cup cubed red bell pepper
- 1/4 cup diced red onion
- 1 small jalapeño pepper, seeded and minced
- 2 tablespoons freshly squeezed lime juice

Marinade

- 3 tablespoons freshly squeezed lemon juice
- 1 tablespoon grated lemon zest
- 1 tablespoon olive oil
- 1 tablespoon grated fresh ginger
- 3/4 teaspoon freshly ground black pepper
- 1/2 cup minced fresh cilantro



1. **Make the salsa:** Put the salsa ingredients in a small bowl, mixing with a spoon until everything is thoroughly melded in. Cover and refrigerate until you are ready to use.
2. **Make the marinade:** Stir together the lemon juice, zest, oil, ginger, pepper, and cilantro in a bowl. Let the flavors mingle together for at least 2 hours, covered, in the refrigerator.
3. After the 2 hours, put the fish in a baking pan, pour the marinade evenly over it, and let it sit for 20-30 minutes, covered in the refrigerator.
4. Preheat oven to 400°F. Meanwhile, cook the fennel in the water with the peppercorns in a large, flameproof sauté pan, covered over high heat for about 6-8 minutes, until just tender, adding liquid if necessary. Remove from heat.
5. Remove the halibut steaks from the refrigerator and bake them for 5 minutes on each side. The halibut should be flaky and white.
6. Arrange equal portions of the fennel on each of 6 plates, put the halibut on top, and spoon 1 T of Papaya Salsa on the fish.

Nutrition Facts for Lemon Grilled Halibut

6 servings in recipe

Calories	322
Total Fat	7.1 g
Saturated Fat	1 g
Cholesterol	54 mg
Protein	39.6 g
Total Carbohydrate	24.4 g
Dietary Fiber	7.9 g

Recipe reproduced from The Healthy Kitchen by Andrew Weil, MD and Rosie Daley

More information about Irritable Bowel Syndrome or Inflammatory Bowel Disease



For more information on irritable bowel syndrome visit <http://www.aboutibs.org/> or call About Irritable Bowel Syndrome at **1-888-964-2001**. For more information on inflammatory bowel disease visit <http://www.ccfa.org> or call the Crohn's and Colitis Foundation at **1-800-932-2423**.

Where can I get more information about cancer?



You can call the Cancer Information Service at **1-800-4-CANCER** (1-800-422-6237) and they will answer your questions and send you information at your request.

Staff Spotlight: Bonnie McGregor, PhD, MS



CORE Studies is pleased to introduce our newest investigator, Bonnie McGregor, PhD, to our research staff. Dr. McGregor is a researcher and clinical psychologist here at FHCRC. Her research interest includes studying how psychological factors affect health. In particular, she is interested in how factors such as psychological stress or resilience

affect immune function among cancer patients and those at risk for cancer. She hopes her work will support the importance of psychological intervention by showing how interventions change not only psychological functioning but also biological status and health.

Dr. McGregor will participate in training our study interviewers, developing new research projects, and participating on our Behavioral Working Group of the Colon Family Registry consortium.

Bonnie earned her Bachelors Degree in biology at the Pacific Lutheran University in Tacoma, Washington and her PhD in clinical health psychology at the University of Miami. She served as psychology intern at the Veterans Administration Puget Sound Health Care System in Seattle, Washington before joining FHCRC in 2000. In addition to her faculty position at FHCRC, she is a Research Assistant Professor at the University of Washington School of Public Health and Community Medicine. She also has a clinical practice in psychology, focusing on cancer patients and those at risk for cancer.

Welcome Bonnie!

Exercise Goals

The U.S. Surgeon General, along with the Centers for Disease Control and Prevention and the American College of Sports Medicine, recommend getting a minimum of 60–90 minutes of moderate-intensity physical activity on most days of the week. You can do all 60–90 minutes at once or break it up into 10- or 15-minute periods.

Moderate intensity exercise or physical activity is activity that causes a slight but noticeable increase in breathing and heart rate. One way to gauge moderate activity is with the “talk test”—exercising hard enough to perspire a bit but not so hard you can’t comfortably carry on a conversation.

6 Steps to Lowering Your Risk of Colorectal Cancer

March is National Colorectal Cancer Awareness Month. Talk to your health care provider about colorectal cancer. Colorectal cancer is preventable, and is easy to treat and often curable when detected early. Ask your health care provider what kind of screening test you should have and when.

- Get regular colorectal cancer screenings beginning at age 50. If you have a personal or family history of colorectal cancer or colorectal polyps, or a personal history of another cancer or inflammatory bowel disease, talk to your doctor about earlier screening.
- Eat between 25 to 30 grams of fiber each day from fruits, vegetables, whole grain breads and cereals, nuts and beans.
- Eat a low-fat diet.
- Eat foods with folate such as leafy green vegetables. A daily multivitamin containing 0.4 mg of folic acid may also be helpful.
- If you use alcohol, drink only in moderation. If you use tobacco, quit. If you don’t use tobacco, don’t start.
- Exercise for 30-60 minutes up to 6 days each week. Moderate exercise such as walking, gardening, or climbing steps may help reduce your risk.

To learn more visit www.preventcancer.org/colorectal.htm, or call **1-877-35-COLON**.

From 5-A-Day to 9-A-Day

We have heard about the benefits of 5 servings of fruits and vegetables and some of us have even figured out how to work them into our daily routine. Now governmental guidelines are suggesting up to **nine** servings a day! For guidance, here is an overview of what nine servings actually looks like and how to work it into your daily food intake:

- A total of 2 cups of fruits and 2½ cups of vegetables per day, where ½ cup of fruit or ½ cup of cooked vegetables = 1 serving. Sound difficult? Note that a whole apple is 2 servings.
- Incorporate 2-3 servings at every meal and make up the difference with fruit or vegetable snacks instead of reaching for that cookie.



Let's Get Moving!

Spring is soon upon us! Longer days and warmer weather make this a great time to start thinking about exercise! Regular exercise has been shown to reduce stress, improve cardiovascular health, and reduce your risk of various diseases. Since we are all unique, it is important to tailor our exercise program to match our personality and capability.

Do you like to exercise with other people?

Studies have shown that having an exercise buddy helps people stick to their workout routines. Here are some suggestions for those of you who prefer a more social exercise experience:

- Find a walking group at your local mall.
- Look into walking groups and group exercise classes, such as water aerobics, yoga or fitness classes at your local community center, senior center, gym, or YMCA.

Group exercise is not for everyone and you may prefer exercise by yourself

Here are some solo exercise ideas for the gym or at home:

- Exercise tapes, for example aerobics, yoga, or tai chi
- Take a walk before or after work or on your lunch break. Ten minutes here and there might not seem like a big deal, but every little bit matters!
- Gardening and vigorous household chores count too. All that bending, stretching, pushing and pulling pays off.

Keep to your routine

Be sure that your exercise program is easy to follow. For example, if you are looking into joining a gym, be sure that the gym is in a location that's easy to get to and the gym's hours work with your schedule. Invest in some weather protective gear. You'll be much less likely to skip that wet weather walk if you are well-equipped.

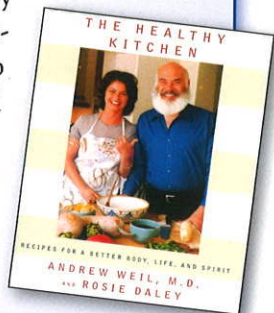
Check with your health care provider

If you have not been participating in a regular exercise routine, it is always a good idea to talk to your health care provider to discuss options best suited to your current physical condition and lifestyle. When starting a new routine it is important to keep realistic goals in mind. Start slow and build your routine. You will be much less likely to become injured or frustrated. While 30-60 minutes daily is the targeted goal for optimal benefit, it may take some time to get there. With patience and persistence, you too can benefit from your regular exercise routine.



The Healthy Kitchen

With the barrage of contradictory diet information dominating the media these days, it can be difficult to choose dietary behaviors beneficial for genuine overall health. Help has arrived! Two of America's most popular authorities on healthy eating and cooking combine their knowledge and talents in *The Healthy Kitchen*. Andrew Weil, a clinical professor of Internal Medicine, offers an understandable, scientifically-based overview of nutrition, exploring important nutrients for healthy living. He explains why various nutrients are supportive and how our bodies metabolize them. Rosie Daley, a talented chef acclaimed for her best-seller, *In the Kitchen with Rosie*, brings her innovative and highly flavorful cuisine to this scrumptious and healthy collection. Her recipes are not trendy, but rather are simple recipes created to offer exceptional nutritional benefits. A sample recipe for Lemon Grilled Halibut is included inside this newsletter.



Study Staff

Investigators: John D. Potter, MD, PhD
Polly A. Newcomb, PhD, MPH

Clinical Psychologist: Bonnie McGregor, PhD, MS

Project Manager: Allyson Templeton, MS

Data Operations Manager: Cara McDermott

Field Operations Manager: Scot Peterson

Genetic Counselor: Ksenia Koon, MS

Administrative Coordinator: Laurie Lydum, MEd

Follow-up Coordinator: Renae Lydum

Clinical Data Coordinator: Bill Wilson

Clinical Pathology Coordinator: Hilina Negede

Biospecimens Coordinator: Amber Wilson

Contact us:

Cara McDermott

Fred Hutchinson Cancer Research Center

P.O. Box 19024, M4-B402

Seattle, WA 98109-1024

1-800-276-0127 · cmcdermo@fhcrc.org



CORE Family Studies

1100 Fairview Ave. N. • M4-B402

P.O. Box 19024

Seattle, WA 98109-1024

Address Service Requested