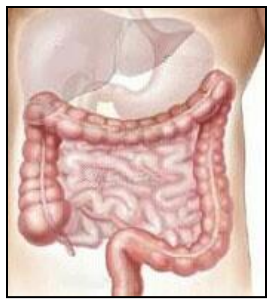
Colorectal Cancer Association of Canada

COLORECTAL CANCER RESEARCH UPDATES

Month Ending July 19th, 2013



The following colorectal cancer research update extends from June 22nd, 2013 – July 19th, 2013 inclusive and is intended for informational purposes only.

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DRUGS / SYSTEMIC THERAPIES

1. Aspirin's Benefits May Depend on Genes (Jun.25/13)

Numerous studies have found that daily low-dose aspirin might help shield against colon cancer. But new research suggests that gene mutations found in different colon tumors may influence that relationship. This study of data from more than 127,000 people in the Nurses' Health Study and the Health Professionals Follow-Up Study in the United States found that the benefits of aspirin used were affected by mutation of a gene called **BRAF**. Specifically, regular aspirin use was associated with a lower risk of colorectal cancers characterized by the "typical" form of BRAF, but not with the risk of colon cancers with mutated forms of BRAF. These findings suggest that BRAF-mutant colon tumor cells may be less sensitive to the effects of aspirin, according to the study. The researchers also found that taking a higher number of aspirin tablets a week -- more than 14 tablets -- was associated with a lower risk of colorectal cancer with typical BRAF, but this was not seen with BRAF-mutated cancers. Importantly, regular aspirin use *after* a diagnosis of either type of colorectal cancer did not improve patients' survival, the team reported. "This suggests that the potential protective effect of aspirin may differ by BRAF status in the early phase of tumor evolution before clinical detection but not during later phases of tumor progression," the study authors wrote.

Nishihara, Reiko, et al., Aspirin Use and Risk of Colorectal Cancer According to BRAF Mutation Status. JAMA 2013; 309(24): 2563-2571

2. Genomic Testing May Reduce Medical Costs for Colon Cancer (Jun.29/13)

Use of the Oncotype DX® colon cancer test to guide treatment decisions may reduce medical costs and improve patient well-being. These results were presented at the 2013 Annual Meeting of the American Society of Clinical Oncology (ASCO). The Oncotype DX colon cancer test evaluates 12 genes in a sample of tumor tissue and generates a Recurrence Score. The Recurrence Score provides information about the likelihood of cancer recurrence, and may help guide decisions about the need for adjuvant (post-surgery) chemotherapy. Previous economic analyses reported that use of the test should both save money and improve patient well-being. To further evaluate these outcomes, researchers estimated costs and outcomes for patients with Stage II, T3 colon cancer before and after knowledge of the Oncotype DX test results. The analysis made use of information from 141 patients in the Mayo Clinic Cancer Research Consortium.

- After the receiving the test results, physicians were less likely to recommend adjuvant chemotherapy.
- Overall, average total direct medical costs decreased by $1,683
- Patients experienced a modest improvement in quality of life

This study confirms that use of the Oncotype DX colon cancer test changes treatment decisions and reduces medical costs for patients with **Stage II, T3 colon cancer**.

Yu T, et al., Real-world comparative economics of a 12-gene assay for prognosis in stage II colon cancer. Presented at the 49th Annual Meeting of the American Society of Clinical Oncology. May 31-June 4, 2013; Chicago, IL. Abstract 3640.

3. Herbal Remedy Interacts with Anti Cancer Drug (Jul.2/13)

The herbal remedy St John's Wort may interfere with the action of a drug used to treat colorectal cancer. St John's Wort is a popular herbal medicine for treating mild to moderate depression.

Previous research has suggested that the remedy might raise levels of an enzyme called CYP3A4, which is involved in the breakdown of drug molecules in the body. In a small study, involving five patients receiving irinotecan, a drug that is used in colorectal cancer, researchers in The Netherlands examined the impact of St John's Wort. The patients received either irinotecan alone, or the drug plus St John's Wort. Blood levels of the active form of irinotecan were 42% lower in those on St John's Wort, suggesting that the herbal remedy does interfere with the drug action. It is probably broken down by excess levels of CYP3A4. This raises the possibility that St John's Wort may interfere with other drugs which interact with CYP3A4. Currently the National Institutes of Health is looking at the effect of complementary and alternative medicine in cancer patients. These therapies are very popular in this patient group and may have many benefits. But patients should also be aware of the potential drawbacks – such as making chemotherapy less effective.

http://www.newsfix.ca/2013/07/02/herbal-remedy-interacts-with-anti-cancer-drug/

4. Immune-Boosting Colorectal Cancer Drug Shows Promise (Jul.2/13)

New data on an emerging treatment that aims to fight colorectal cancer by stimulating the immune system was presented at the ESMO 15th World Congress on Gastrointestinal Cancer. The findings confirm the biological action of the drug called ***MGN1703*** and suggest it may be possible to identify which gastrointestinal cancer patients will benefit most from the treatment. MGN1703 is a small DNA molecule recognized by a receptor --called toll-like receptor 9-- that is expressed in certain immune system cells. The drug is designed to broadly activate all components of the innate immune system to stimulate the destruction of cancer cells. The new data comes from the final analysis of the phase II IMPACT study, which investigated MGN1703 in 59 patients with metastatic colorectal cancer. The IMPACT study was an international, randomized, double-blind trial that was conducted in patients who had achieved disease control after 4.5 to 6 months of chemotherapy. Standard chemotherapy for patients with metastatic colorectal cancer who respond to treatment is often completely or partially discontinued until the disease progresses. It was during this 'maintenance' phase of treatment that the new drug was administered. Patients had been randomly assigned to either MGN1703 (43 patients) or placebo (16 patients). "After a median follow-up of 17.3 months, MGN1703 prolonged progression-free survival from the start of induction as well as start of maintenance therapy, including four patients with sustained progression-free survival who are still on treatment". A pre-planned analysis of immune cell populations showed that the activation of a particular subset of immune system cells, called Natural Killer T Cells, appeared to potentially predict which patients might benefit. "We saw a significant increase of CD14+CD169+ monocytes in all but one of the MGN1703 treated patients but none of the placebo patients, which indicates the drug is having a biological effect". "These data, presented at the 15th ESMO World Congress on Gastrointestinal Cancer for the first time, are showing a highly interesting trend which should be followed-up and confirmed in a larger study," Prof Schmoll said. Since treatment with immunotherapeutic drugs such as MGN1703 needs time to take effect, patients who have a lower tumour burden and a response to prior chemotherapy might be more likely to have a benefit of the treatment with MGN1703, Prof Schmoll said. "The evidence we presented at the 15th ESMO World Congress on Gastrointestinal Cancer is the first to show an immune cell population that might also help identify patients with greater benefit from MGN1703. There is mounting evidence that patients who achieve a response with immunotherapy seem to have a very prolonged disease control. A large confirmatory trial is needed to confirm these interesting findings."

http://www.sciencedaily.com/releases/2013/07/130703101016.htm

5. Exploring KRAS/NRAS Mutations in Colorectal Cancer (Jul.5/13)

Heinz-Josef Lenz, MD, the co-director of the Colorectal Center and GI Oncology Program at the USC Norris Comprehensive Cancer Center, discusses the potential predictive impact of traditionally wild-type *KRAS* and *NRAS* mutations in metastatic colorectal cancer (mCRC). To date, Lenz notes, KRAS testing has been restricted to codons 12 and 13; however, the phase II PEAK trial suggests that testing should now include codons 61, 117, and 146. This trial examined the affects of non-traditional (wild-type) activating *KRAS* and *NRAS* mutations on the clinical activity of EGFR inhibitors such as Erbitux and Vectibix. Overall, Lenz suggests testing for these additional codons could help screen 20% more patients with mCRC for treatment with EGFR inhibitors. PEAK is a phase II trial and this data has not yet been validated, Lenz points out. As such, analyses will be applied to the FIRE-3 and the CALGB 8045 trials to see if these findings can be further validated. If they can, this could have a dramatic impact on how patients with mCRC are screened and treated, Lenz believes. This method could help to more accurately select patients who will benefit from EGFR inhibitors. Click on the link below to view Dr. Lenz' interview.

http://www.onclive.com/conference-coverage/world-GI/Dr-Lenz-Explores-KRASNRAS-Mutations-in-Colorectal-Cancer

6. Avastin Plus Chemo Continued Beyond First Progression in mCRC (Jul.17/13)

This study, ML18147, evaluated continued bevacizumab (avastin) with second-line chemotherapy for patients with metastatic colorectal cancer (mCRC) progressing after the standard first-line bevacizumab-containing therapy. Evaluating outcomes according to KRAS status was an exploratory analysis. KRAS data were collected from local laboratories (using their established methods) and/or from a central laboratory. Of 820 patients, 316 (51%) had KRAS wild-type tumors and 300 (49%) had mutant KRAS tumors. The median progression-free survival (PFS) was 6.4 months for bevacizumab plus chemotherapy and 4.5 months for chemotherapy alone. The median overall survival (OS) was 15.4 and 11.1 months, respectively. In both analyses, no treatment interaction by KRAS status was observed. The investigators concluded that Bevacizumab beyond first progression represents an option for patients with mCRC treated with bevacizumab plus standard first-line chemotherapy, independent of KRAS status.

Kubicka, S. et al., Bevacizumab plus chemotherapy continued beyond first progression in patients with metastatic colorectal cancer previously treated with bevacizumab plus chemotherapy: ML18147 study kras subgroup findings. Ann Oncol 2013 Jul 12. Epub Ahead of Print.

7. Colon Cancer Screening Tied to Better Outcomes (Jun.21/13)

People who are diagnosed with colon cancer after routine colonoscopies tend to have better outcomes and less advanced cancers than people diagnosed based on symptoms, according to this study. Those who were diagnosed with colon cancer as a result of symptoms were three times more likely to die during the study than the patients diagnosed after colonoscopy screenings, researchers found. Researchers analyzed data on all people who underwent colon cancer surgery at their hospital from 2004 through 2011. Their goal was to see whether those diagnosed with colon tumors after colonoscopy screenings had better outcomes than patients diagnosed after going to their doctors because they were experiencing symptoms, such as bleeding from the rectum. Amri and his colleagues had data on 217 people diagnosed after screening and 854 who were diagnosed based on symptoms or other tests. They found that in addition to being more likely to die, patients diagnosed with colon cancer based on symptoms were far more likely to have advanced disease, to have cancer that spread to other parts of their bodies and to have cancer that recurred. Seventy-five percent of patients diagnosed based on their symptoms had advanced disease, compared to about 38% of those diagnosed after colonoscopy screenings. About 11% of the group diagnosed with symptoms had cancer that spread to other parts of their bodies and 12% had recurrences, compared to about 2% and 6%, respectively, in the colonoscopy group. "This further emphasizes the important role compliance to screening colonoscopy guidelines can play in prolonging longevity, improving quality of life, and reducing health care costs through early detection of colon cancer," the researchers write in JAMA Surgery.

Amri, Ramzi, et al., Impact of screening colonoscopy on outcomes in colon cancer surgery. JAMA Surg. 2013;():1-7. doi:10.1001/jamasurg.2013.8.

8. Blood Test Detects Colon Cancer Before it Develops (Jun.28/13)

A new blood test is showing very promising results for finding cancer-related microRNA in the blood before a tumor develops in the colon. The test results are exciting and promising because this simple blood-based test examines the levels of a single microRNA – a small RNA molecule that can be readily identified in a wide variety of bodily fluids, including blood. In this seminal study the investigators studied several hundred patients with colorectal polyps and cancers and reported that measuring levels of miR-21 in the blood can accurately identify up to 92% of patients with colorectal cancer. Even more importantly, not only is this test good for non-invasively identifying patients who already have colorectal cancer, but it can accurately identify up to 82% of patients with advanced colonic polyps, which present the highest risk for developing into colorectal cancers several years later in life. The development of this biomarker is highly encouraging because high mortality rates associated with colorectal cancer is a consequence of late detection of this disease, underscoring the need for improved early detection, prevention, risk assessment and intervention. Early detection of advanced colorectal polyps and cancers is considered the most relevant target for screening strategies and the best approach to improving survival of these patients. This blood-based test could be transformative in how we screen patients for colorectal cancer; it would save lives and could result in major savings of health care dollars. While more testing needs to be done, the findings were enough to warrant an editorial in the highly regarded *Journal* by Heinz-Josef Lenz, MD, associate director for clinical research at the University of Southern California‟s Norris Comprehensive Cancer Center. "MiR-21 may not be 'just another brick in the wall' but rather may be the keystone leading to a molecularly justified, miRNA-based biomarker era in colorectal cancer," Dr. Lenz said in the *Journal*.

http://www.prnewswire.com/news-releases/new-blood-test-detects-colon-cancer-before-it-develops-212108641.html

9. Minimally Invasive Techniques Allow Doctors to Remove Suspicious Polyps (Jun. 19/13)

Millions of people each year have polyps successfully removed during colonoscopies. But when a suspicious polyp is bigger than a marble or in a hard-to-reach location, patients are referred for surgery to remove a portion of their colon - even if doctors aren't sure whether the polyp is cancerous or not. Since only 15% of all polyps turn out to be malignant, many patients are unnecessarily subjected to the risks of this major surgery. Now there is an alternative. A UCLA team of surgeons and gastroenterologists has been performing a new, minimally invasive procedure to remove large and hard-to-reach polyps while keeping the colon intact. The procedure, which combines two minimally invasive techniques, has currently been performed at only a handful of medical centers in the United States. In the June issue of the journal *Surgical Endoscopy*, the UCLA researchers present their experiences using the new technique - known as CELS, short for “combination endoscopy and laparoscopy surgery” - and offer the first comparison of the new technique and standard surgery. "The CELS approach combines the best of minimally invasive techniques and may prove to be a viable option for select patients," said senior author Dr. James Yoo. For the study, the team compared outcomes for five patients who underwent the new procedure with outcomes for nine patients who received standard surgery to remove suspicious polyps between August 2008 and October 2012. The new technique starts out like a colonoscopy, with a gastroenterologist advancing an endoscope inside the colon. The endoscope, a device with a small video camera and a light attached, lets doctors look inside the body cavity. Once a polyp is in sight and the gastroenterologist is ready to remove it, the surgeon uses minimally invasive surgical tools, inserted through two to four tiny incisions in the abdomen, to carefully maneuver and manipulate the colon, allowing the gastroenterologist better access to the polyp. If the polyp is in a tricky location, such as a fold of the colon, the surgeon can gently undo the fold temporarily. If the polyp is large and deeply embedded, the surgeon can monitor the outside of the colon with a tiny camera and, if needed, perform minor wall repair to the colon after the polyp is removed. Once the polyp is removed, it is immediately taken to the lab for analysis to determine if it's benign or cancerous, while the team and patient wait in the operating room. The analysis takes about 30 minutes. If the polyp turns out to be cancerous, the team proceeds with the standard surgery to remove the affected portion of the colon. According to the UCLA report, all polyps were successfully removed with the new CELS procedure, and the complication rate was lower than with standard surgery. Four out of the five patients who had the CELS procedure, and six out of nine patients who received standard surgery, were found to have benign polyps. The procedure time and hospital stay were shorter with the new procedure, the researchers found. Operating time averaged 159 minutes, compared with 205 minutes for standard surgery, and the median hospital stay was one night with the new procedure and five nights with standard surgery. "The majority of patients in the study had a benign polyp," Yoo said. "We found that the new procedure can be performed safely with outcomes that compare favorably with standard surgery for these select patients." In the majority of the CELS cases, findings from the quick lab analysis were accurate. However, one patient's final pathology report, which came back a week later, showed that the polyp was cancerous, so that patient was scheduled for standard surgery. Yoo noted that in the future, newer imaging methods and lab analysis may make it easier to differentiate between a benign and malignant polyp.

http://www.medicalnewstoday.com/releases/262108.php

OTHER

10. What is Genomics? (Jun. 28/13)

You've probably heard of genetic testing for cancer susceptibility, but the more recent and broader field of genomics is also having a wide-reaching impact on patient care. To start with the more familiar term, *genetics* is the study of single genes and their effects. For example, certain inherited mutations in the BRCA1 or BRCA2 genes greatly increase a woman's risk of breast and ovarian cancer. Mutations in these genes can be passed down through either the mother's or the father's side of the family. If a woman tests positive for a BRCA mutation, there are steps that she can take to reduce her cancer risk or to detect cancer at an early stage. *Genomics* generally refers to the study of the entire genome (all of the DNA in an organism). Genomics can consider multiple genes and how they interact with each other and the environment to affect health. Examples of genomic tests are the Oncotype DX test which is now available for use in breast, **colon** and prostate cancer. The Oncotype DX tests evaluate the activity of several genes in a sample of tumor tissue in order to assess the likelihood of cancer recurrence. This information about recurrence risk is then available to help patients make decisions about their treatment in consultation with their doctor. Oncotype DX can help many patients avoid receiving chemotherapy unnecessarily, or provide confidence that chemotherapy is the best treatment option. Similarly, research that combines genomics with pharmacology (pharmacogenomics) is studying how genetic variation affects an individual's response to particular medications. Variability in genes involved with drug metabolism can have a substantial effect on drug response and drug side effects. Progress in this area is likely to contribute to more individualized, more effective, and less toxic drug treatments. In short, research in genomics is expanding at a rapid rate and will have a profound effect on many aspects of disease prevention, diagnosis, and treatment. Diseases such as cancer are remarkably complex; genomics provides researchers and physicians with tools to explore and address these complexities.

http://news.cancerconnect.com/what-is-genomics/

11. Colon Cancer in Women on Hormone Replacement (Jul.7/13)

A study shows that there are fewer colon cancers in postmenopausal women on hormone replacement, but these are more advanced. The Women's Health Initiative Study has been looking at the health impact of hormone replacement therapy (HRT). The latest report concerns the link between HRT and colon cancer. Researchers at the University of Buffalo found that there are fewer colon cancers among women on estrogen plus progestin – so-called combined HRT. But those that do occur are more advanced. Why should this be? It might be that early symptoms of colon cancer are ignored by women on HRT who might think they are linked to the hormone treatment. The analysis shows that among the 8,506 women in the study, there was a 44% decrease in colorectal cancer risk – that's six fewer cases per 10,000 women treated with HRT per year. But 76% of these cancers had already spread, compared to only 49% in women on placebo. The study underlines the importance of all women attending for regular colonoscopy after age 50, whether or not they are on hormones.

http://www.thealmagest.com/2013/07/colon-cancer-in-women-on-hormone-replacement/

12. Inflammation Marker CRP Linked to Colon Cancer (Jul.8/13)

People with higher levels of C-reactive protein seem to be at increased risk of developing colon cancer. C-reactive protein (CRP) is a blood marker for inflammation with previous research showing that raised levels indicate an increased risk of heart disease. There is also a link between CRP and stroke and diabetes. Now a study reveals that those with higher levels of CRP are also more at risk of developing colon cancer. Researchers at Johns Hopkins University studied nearly 23,000 records from adults participating in a cancer study. They provided blood samples and were followed over the next several years. Those in the highest fourth of CRP levels had double the risk of developing colorectal cancer compared to those in the lowest fourth. The link between colon cancer and inflammation now needs to be explored, along with the potentially protective role played by anti-inflammatory drugs, such as aspirin.

http://www.newsfix.ca/2013/07/14/inflammation-marker-linked-to-colon-cancer/

NUTRITION & HEALTHY LIFESTYLE

13. Following Lifestyle Recommendations Reduces Risk of Cancer Death (Jun.29/13)

People who follow the diet and lifestyle recommendations laid out by the World Cancer Research Fund (WCRF) and the American Institute for Cancer Research (AICR) have a 34% reduced risk of dying from several diseases and specifically, a 20% reduced risk of dying from cancer compared to people who don't follow the recommendations, according to the results of a study published in *The American Journal of Clinical Nutrition*. In 2007, the WCRF and the AICR issued recommendations on diet, physical activity, and weight management for cancer prevention on the basis of the most comprehensive collection of available evidence. The 10 recommendations are as follows:

- Be as lean as possible within the normal range of body weight.
- Be physically active as part of everyday life.
- Limit consumption of energy-dense foods. Avoid sugary drinks.
- Eat mostly foods of plant origin.
- Limit intake of red meat and avoid processed meat.
- Limit alcoholic drinks.
- Limit consumption of salt. Avoid moldy grains or legumes.
- Aim to meet nutritional needs through diet alone (by avoiding supplements).
- Mothers to breastfeed; children to be breastfed.
- Follow the recommendations for cancer prevention.

In order to determine whether these recommendations were associated with a reduced risk of death, researchers conducted a study to investigate 378,864 people in nine European countries enrolled in the European Prospective Investigation into Cancer and Nutrition study. Over a period of 12 years, researchers examined the subjects' diet and lifestyle to see how closely they complied with six or seven (for women) of the ten recommendations: body fat, physical activity, consumption of foods and drinks that promote weight gain, consumption of plant foods, meat, alcoholic drinks and breastfeeding. Participants were given a score from 0 to 6 (or 7 for women); higher scores indicated greater compliance with the recommendations. They then compared the group of participants with the strongest adherence to the guidelines to those with the weakest adherence to calculate the level of risk reduction that would come from compliance with the recommendations. When compared to the group with the lowest level of compliance, those who most closely followed the WCRF/AICR recommendations had a 34% reduced risk of death overall—and specifically, a 50% reduced risk of dying from respiratory disease, 44% reduced risk of dying from circulatory disease, and a **20% reduced risk of dying from cancer**. Being lean and eating foods mostly of plant origin appeared to have the greatest impact on reducing the risk of death from disease. Limiting alcohol consumption and eating mostly plant foods had the greatest impact on reducing the risk of cancer death. Women who breastfed for at least six months had a reduced risk of death from cancer and circulatory disease. The researchers concluded that following the WCRF/AICR lifestyle recommendations could reduce the risk of cancer death and death from other diseases.

Vergnaud AC, et al. Adherence to the World Cancer Research Fund/American Institute for Cancer Research guidelines and risk of death in Europe: results from the European Prospective Investigation into Nutrition and Cancer cohort study. The American Journal of Clinical Nutrition. Published early online April 3, 2013. doi: 10.3945/ajcn.11

14. Lycopene May Reduce the Risk of Colorectal Cancer (Jul.4/13)

Many health organizations recommend eating more produce for colorectal cancer protection, but the mechanism for its disease-fighting ability is less well understood. Fruits and vegetables are rich in fiber and antioxidants – compounds that protect cells – and scientists have suspected that both play a role. Researchers from Stuttgart, Germany looked at the relationship of three antioxidants – lycopene, beta-carotene, and alpha-tocopherol – and their association with colorectal adenomas, growths that are possibly precancerous. The 165 volunteers were part of a larger study of lifestyle habits and colorectal adenomas. All had a recent colonoscopy to evaluate hidden blood in the stool, but were otherwise healthy, with no prior personal or family history of colorectal cancer or polyps. Polyps discovered during the colonoscopy exam were removed and classified as adenomatous – growths that might turn cancerous if not removed – or hyperplastic, which tend to be smaller and are thought to be unlikely to ever develop into cancer. A nutritionist questioned the volunteers about their diets, including consumption of alcoholic beverages, and other habits. Blood samples were measured for levels of lycopene, beta-carotene, and alpha-tocopherol. The investigators looked for relationships between blood levels of the antioxidants and colorectal growths. Low blood levels of lycopene and smoking were both associated with an increased risk for adenomas, after other factors were ruled out that can influence colorectal cancer risk, such as age, body fat, and gender. There was no relationship between the presence of adenomas and levels of beta-carotene and alpha-tocopherol. Lycopene is concentrated in tomatoes and tomato products. The researchers concluded that lycopene is in part responsible for the protective effect high tomato intake has against the risk of colorectal adenomas. Other studies have shown that beta-carotene and alpha-tocopherol have a healthful influence too, but this study does not substantiate that. Lycopene appears to protect cells from the damage caused by free radicals, which are by-products from the body's oxygen use and also a result of exposure to cigarette smoke and excessive sunlight. Besides tomatoes and tomato products, other lycopene-rich foods include watermelon, pink grapefruit, pink guava, and papaya.

http://www.newsfix.ca/2013/07/08/lycopene-may-reduce-the-risk-of-colorectal-cancer/

15. Sweets, Fast Food and Fizzy Drinks Linked to Bowel Cancer (Jul.14/13)

Indulging in chocolate and other sweet treats such as biscuits and cakes could increase your risk of bowel cancer, researchers say. It is the first study to link fatty and sugary snacks to bowel tumours, which claim more lives than any other form of the disease apart from lung cancer. However, not all treats are off the menu. The British study also found drinking lots of coffee could have a protective effect. Previous research has blamed processed meat, for example bacon and sausages, for raising the odds of bowel cancer. But the latest study suggests other popular foods fuel the disease as well. Edinburgh and Aberdeen University researchers asked more than 2,000 men and women with bowel cancer to fill in a lengthy questionnaire about what their diets were like before diagnosis. Another group of around 3,000 volunteers of a similar age and from similar areas also answered the questions, which covered more than 170 different foods.   Those who ate the most 'high-energy snack foods', such as desserts, chocolates, biscuits, cakes, sweets, nuts and crisps, were 18% more likely to have developed bowel cancer than those who ate the least. The finding held true even when obesity and lack of exercise – two factors already known to raise the risk of bowel cancer – were taken into account. High quantities of fizzy drinks raised the odds of getting the disease by 12%. The study, published in the European Journal of Cancer Prevention, also linked white fish with the disease. Researchers said this was unexpected but thought it may be because most of the fish eaten by participants was cooked unhealthily. Coffee, however, seemed to help. Those who drank lots of it had an 8% lower risk of developing bowel cancer than those who did not. A previous study credited four cups a day with lowering the risk by a quarter. However, other research has failed to find any benefit. Any benefits could be due to plant compounds in coffee. It may also provide protection by keeping the bowels active. Edinburgh University researcher Dr Evropi Theodoratou said her study stops short of proving that sugary and fatty snacks cause the disease and other, bigger studies are needed. She added that while it is unclear how these foods cause bowel cancer, her findings shouldn't be dismissed. 'It is important to take on board what we've found – especially because people in industrialized countries are consuming more of these foods,' she said.

Theodoratou, Evropi, et al., Associations between dietary and lifestyle risk factors and colorectal cancer in the Scottish population. European J of Cancer Prevention, Online Edition. doi: 10.1097/CEJ.0b013e3283639fb8

16. Compared with Poultry, Red Meat Can Pose a Higher Risk for Colorectal Cancer (Jul.15/13)

The results of this study show that women as adolescents who ate more poultry were at a lower risk for colorectal cancer or colorectal adenomas later in life, compared with those who ate less poultry. The difference in the risk was 20%. The study also found that the risk reduction was particularly significant for distal – left sided -(29%), rectal (49%) and advanced (40%) colorectal cancer. Additionally, replacement of one serving per day of red meat with one serving per day of poultry or fish was found associated with 41% and 35% lower risks for rectal adenomas and advanced colorectal adenomas, respectively. No associations were found between eating red meat and fish and the risk of colorectal cancer. But other evidence from the same study shows that fish and poultry pose a lower risk than red meat.

Nimptsch, Katharina, et al., Dietary intakes of red meat, poultry, and fish during high school and risk of colorectal adenomas in women. Amer J of Epidemiology (2013); 178(2): 172-183.