

ONCOLOGY NETWORK INFOLETTER

RATHER LATE "FALL" ISSUE

INSIDE THIS ISSUE:

LOW IODINE	1
PHYTO-CHEMICALS	1
TIS THE SEASON	9
GOOD NUTRITION	10
ANGELA MARTENS	12
RESEARCH	12
CONTACTS	16

THE THRY'VORS LOW IODINE DIET (LID) 2009



Written by:
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Charna Gord is a Registered Dietitian working as an Education Coordinator in an Ontario public health unit. In December 2007 she underwent a total thyroidectomy for thyroid cancer. Thry'vors provided critical information and much-needed support during this difficult time.

Although thyroid cancer is rare, representing 2.6% of all cancers diagnosed in Canada, thyroid cancer incidence is increasing the most rapidly of all cancers since 1997 (Canadian Cancer Statistics 2008, p. 12, 26). The most common types of thyroid cancer are highly

treatable however thyroid cancer can have a high recurrence rate, sometimes detected decades after initial therapy. To meet the growing need of Canadians coping with thyroid cancer, the Canadian Thyroid Cancer Support Group (Thry'vors) Inc. was established in 2002 as a non-profit charitable patient organization. Thry'vors has dedicated its activities to developing support and information resources for thyroid cancer patients and their families, and currently serves a patient membership of over 1,100 people.

The main impetus for writing this article was to

raise awareness and open discussion between Thry'vors and Registered Dietitians (RDs) on the merits of the low iodine diet (LID) for thyroid cancer patients.

A list of the "30 Foods and Ingredients to Avoid on the LID" is located on page 7

Patients utilize the diet when they undergo radioactive iodine therapy (also known as RAI, or I-131 remnant ablation) or have a RAI scan for follow up purposes. The objective of the Thry'vors LID project is to develop accurate

(Continued on page 2)

FROM THE EXECUTIVE



Wishing everyone the best of the Season and a Happy New Year!

PHYTOCHEMICAL FOUND IN FRUITS & VEGETABLES INCREASES CHEMOTHERAPY RESPONSE

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Yet another study has come out which supports what dietitians have long been promoting about the consumption of fruits and vegetables. A recently released US study, has evidence that suggests consuming ade-

quate amounts of fruits and vegetables is beneficial in cancer patients who are receiving chemotherapy [1].



Apigenin, an antioxidant flavonoid found in many fruits and vegetables including, apples, cherries, grapes,

(Continued on page 8)

THE THRY'VORS LOW IODINE DIET (LID) 2009 CON'T.

(Continued from page 1)

and patient-friendly resource information on following a LID in Canada. This article will briefly introduce current RAI practices and will describe the LID while summarizing the literature surrounding it. To conclude, the importance of the role of the RD in supporting thyroid cancer patients while they prepare for RAI by following the LID will be discussed.

How is Thyroid Cancer Treated?

Thyroid cancer is typically treated with either a partial or complete thyroidectomy (surgical removal of part or all of the thyroid gland respectively) and often followed by RAI. RAI has been used since 1946 and since the mid-1960's, studies have been conducted to investigate the efficacy of the LID in preparation for RAI. These studies have generally concluded that using the LID before, during and just after RAI improves the effectiveness of the treatment.

How are patients told to prepare for RAI?

Thyroid cancer treatment guidelines vary around the world. The Clinical Practice Guidelines of the American Thyroid Association recommend the use of the LID.

"R38. A low-iodine diet for 1–2 weeks is recommended for

patients undergoing radioiodine remnant ablation, particularly for those patients with high iodine intake—Recommendation B" (The American Thyroid Association Guidelines Taskforce, 2006, p. 12)

This recommendation has importance for Canadians as Canadians have a very high level of daily iodine consumption. One study demonstrated that the daily iodine excretion of the average Torontonians is more than ten times that of an urban European (Delange 2002).

Canadian thyroid cancer patients receiving RAI are not given the same advice across the country on how best to prepare for this treatment. Patients may be told by their doctor to simply avoid salt and some specific foods that are written on a diet sheet (e.g. seafood) or patients



may be told to go on a LID for a week or so before the RAI. Patients seeking on-line information will find that different cancer centres use different versions of the LID.

How does The LID work and is it safe?

Obtained primarily from dietary sources, iodine is an essential mineral which the body uses to make thyroid hormones. Thyroid cells crave iodine. The LID works by emptying the body of its natural iodine stores. When RAI is

administered, it puts radioactive iodine into the body. The thyroid cells pick up the radioactive iodine which accomplishes two outcomes: the radioactive iodine makes any residual thyroid cells visible on the scan and destroys any remaining thyroid tissue, benign or malignant.

The RAI therapy or scan can be compromised if even a relatively minute amount of natural iodine is present in the body when radioactive iodine is given. Any natural iodine that may be present will compete with radioactive iodine for entry into the thyroid cells, and may block uptake and limit the effectiveness of the RAI. Estimated iodine intake levels for Canadians are in excess of 1 milligram per day. Restricted iodine intake on the Thry'vors LID totals less than 50 micrograms daily.

The LID is a safe, short-term diet used to prepare for nuclear medicine thyroid treatment or scan. It is not intended for long-term use. The main foods to be avoided are iodized salt and any foods prepared with iodized salt (for example bread, cereals, crackers, desserts, sweets, nuts or nut butters and prepared foods), fish and seafood, dairy products, egg yolk, cured meats, soybean products, all restaurant food and all foods or products containing red dye #3. It is essential that patients read all labels to determine whether there are any

(Continued on page 3)

THE THRY'VORS LOW IODINE DIET (LID) 2009 CON'T.

(Continued from page 2)

restricted ingredients in the food.

Calcium supplementation is an option as the LID is deficient in calcium; no dairy is included on the LID. If patients take calcium while on the LID, consultation with their doctor, pharmacist or dietitian is necessary to ensure the supplement is iodine-free. This is critical as many calcium supplements contain iodine.



What does recent research tell us?

The 2003 Dutch retrospective study by Pluijmen et al published in *Clinical Endocrinology* looked at two different groups of thyroid cancer patients who had been previously treated during RAI with either a standard diet (those treated from 1986-91) or a LID (those treated from 1992-98). Patients from both groups subsequently followed a four-day LID with dietitian assistance during RAI. The authors concluded that a LID improves the efficacy of RAI as demonstrated by the decreased urinary iodine excretion and increased radioactive uptake. Their findings recommend that a four-day LID is sufficient and perhaps preferable as compliance with the LID is difficult for many patients.

Park and Hennessey published their American research in *Thyroid*, the official journal of the American Thyroid Association, in 2004. They measured the effectiveness of the LID for patients who were taking levothyroxine medication and they examined the effect of varying the duration of the diet. They found that patients who followed the LID for a two-week period were able to achieve the desired iodine deficient status. Furthermore, they determined that a one-week LID may be appropriate for patients under study conditions which rely significantly on dietitians or specific packaged meal plans.

In 2005 Tomoda et al published an article in *Endocrine Journal* which clarified the optimal standardized protocol for patient preparation for RAI in an out-patient setting. Their findings suggest that patients following a two-week LID were better able to reduce their total iodine as compared to the conventional, one-week restricted iodine diet (RID) that had been traditionally used at a Japanese outpatient clinic. The one-week RID prescribed avoidance of seaweed, seaweed soup, iodized eggs and restaurant food. The two-week LID used at this clinic restricted the same foods as on the RID as well as all seafood, fish and shellfish, chicken and viscera of animals, foods and medications containing red food dyes and convenience foods.

In the April 2008 *Clinical Nuclear Medicine*, Hinds et al presented a case study, including clinical history, laboratory values and pertinent imaging, for a 21 year old woman treated for papillary thyroid cancer. The authors conclude that to obtain the best outcomes with nuclear medicine thyroid imaging, it is necessary to use the LID. Adherence to the LID however may be difficult. They recommend that "proper guidance and emphasis on the implementation of the diet needs to be provided to patients. Non-compliance may lead to false negative imaging results, misleading the medical professionals and patient. Potentially inadequate management of the patient's thyroid cancer may follow." (Hinds, 2008, p. 247)

Although there are a variety of conclusions regarding the ideal duration of the diet, and although cultural food practices will impact the advice provided to patients, the LID is a key component of care for patients being treated for thyroid cancer with RAI. More direction is needed for practitioners and patients to effectively implement this practice.

Why did Thry'vors develop a LID?

Since its inception, Thry'vors has been led by volunteer thyroid cancer survivors and supported by a medical advisory

(Continued on page 4)

THE THRY'VORS LOW IODINE DIET (LID) 2009 CON'T.

(Continued from page 3)

panel. The original mandate of Thry'vors was to provide support and information to patients and families affected by thyroid cancer. Thry'vors has met and surpassed that goal. Thry'vors has gone on to develop and distribute new patient resources about thyroid cancer, author a quarterly newsletter, set up and maintain a website which provides links important to patients and practitioners, and to moderate an online patient forum.

The LID has been the focus of about 20% of questions or comments posted on the Thry'vors online patient forum. Thry'vors realized the importance of developing a single version of the LID that was evidence-based and easy to read for patients. In 2004, in consultation with a clear language expert, Thry'vors set out to develop a standardized LID.

Thry'vors had to glean reliable information from approximately 30 versions of the LID found across North America. This endeavour demanded much deliberation and research to ensure that there was scientific basis for each recommendation made. Some of the diets contained out-of-date, irrelevant or incorrect information, including American food products that could not be purchased or were packaged differently in Canada. Thry'vors understood that a LID recommended in Canada

should be based upon the Canadian food market, with particular regard to the widespread use of iodized salt and daily high iodine consumption by Canadians. It is important to note, for example, that while it is possible to get iodine-free salt in the United States, government regulations restrict its availability and use in Canada.

The Thry'vors Low Iodine Diet was completed in 2006. It was reviewed by over 30 experts including patients, RDs and other health professionals, food manufacturing and food labeling industry and government spokespeople. The pamphlet, which opens up into a full-colour food guide for easy reference was made available to cancer centers, doctors, healthcare providers and patients.

In spite of its short-term use, compliance with the LID can be difficult. **As patients prepare to undergo RAI, they may experience the following challenges.**



1. Patients may be simultaneously discontinuing their thyroid replacement medication; therefore they experience the negative effects of being in an induced hypothyroid state ("going hypo").

2. Patients may feel frightened about the upcoming treatment and anxious about the required isolation for several days post-therapy. Patients must take certain precautions to minimize the risk of radiation exposure to others, depending on the amount of RAI administered.

3. Patients may lack confidence to correctly follow the diet, as it requires label reading and meal preparation from scratch and they may feel that they do not have the necessary food skills.

4. Patients may still be coping with the shock of their cancer diagnosis and recovery from surgery.

From a *Clinical Oncology* editorial, "The LID is potentially difficult to follow, a source of anxiety, and time consuming for medical staff to explain. The complexity of the LID also creates potential for guilt on the part of the patient, the family or both, should their thyroid cancer later relapse. Advice regarding a low-iodine diet needs to be accurate and as simple as possible." (Prestwich, 2005, p. 74)

As a response to this ongoing challenge, Thry'vors decided to develop new LID resources to accompany the Thry'vors LID food guide; a shopping guide and menu planner. After another rigorous process, the newly expanded and updated Thry'vors LID pamphlet will be

(Continued on page 5)

THRY'VORS LOW IODINE DIET (LID) 2009 CON'T.

(Continued from page 4)

launched and distributed in early 2009. Thry'vors gathered references and expert opinion to support decisions as to which foods are acceptable and which must be avoided on the current version of the diet. For example, Dr. Jean Pennington, co-author of "Bowes & Church's Food Values of Portions Commonly Used", reviewed the material. In anticipation of questions from health professionals, Thry'vors developed a FAQ document to be used by clinicians as an aid in understanding the LID.

Please refer to Thry'vors website www.thryvors.org for the Thry'vors LID and other related resources, including an order form for bulk orders, at:

<http://www.thryvors.org/Publications.html>

<http://www.thryvors.org/Resources.html>

What is the role for RDs with the LID?

There is still much to be learned about thyroid cancer. Although some medical debate continues about specific as-

pects of treatment, research has proven the important role that the LID can play in patient preparation for effective RAI. Thry'vors is reaching out to health professionals across the country to help advocate for the use of the LID with RAI for thyroid cancer patients.

Thry'vors respects the key role that dietitians can play to increase patient awareness and understanding of, and comfort with the LID in preparation for RAI. Correct adherence to the LID requires patients to be able to plan for and prepare food ahead of time, read labels and cook from scratch. Iodine-free recipes are available on the Thry'vors website and from low-iodine cookbooks. Dietitians have a unique and highly valued skill set that is appropriate to making this challenging experience easier for thyroid cancer patients.

Upcoming education sessions regarding the new Thry'vors LID are being planned with RDs in cancer care centres. If your centre is interested in hosting a presentation, please use the contact information below to let Thry'vors know. As well, Thry'vors

would be pleased to provide copies of the revised Thry'vors Low Iodine Diet 2009, which is now combined with the Low Iodine Diet Menu Planner, and the new Low Iodine Diet Shopping List to any members of the Dietitians of Canada Oncology Network in quantities that would suit your needs. No fee is charged, although Thry'vors will accept donations to help cover the costs of producing and distributing these materials.

Please direct any of your questions or comments on the LID to Thry'vors. Contact information for Thry'vors in side bar. If your workplace hosts an educational session on the LID, let Thry'vors know any questions or comments that arise from discussion with your colleagues.

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(Continued on page 6)

Thry'vors contact information:

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THYR'VORS LOW IODINE DIET (LID) 2009 CON'T.

(Continued from page 5)

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<http://www.thryvors.org/Resources.html>

30 FOODS & INGREDIENTS TO AVOID ON THE LOW IODINE DIET (LID)

1. iodized salt (all table salt in Canada) and sea salt
2. any foods listing salt in the ingredient list
3. all fish and shellfish
4. all sea products such as nori, dulse, seaweed and kelp
5. foods with sea-based ingredients such as alginate, algin, algae, agar, carrageenan
6. all dairy products such as milk, cheese, butter, yogurt
7. foods that contain dairy products or ingredients such as whey, casein and caseinates
8. no more than 2 servings of meat/poultry a day – one serving of cooked meat/poultry is equal to ½ cup or approximately the size of the palm of your hand
9. any meat or poultry prepared with salt or sea salt, such as those prepared in brine
10. cured meats such as ham, bacon, corned beef, lox, wieners and luncheon meats
11. soybeans or soy protein products such as soy sauce, soy milk and tofu (the exception is soybean oil)
12. egg yolks
13. salted nuts
14. no more than 4 servings a day of grain products (one serving = 1 slice whole-wheat bread or 1/2 cup cooked grains, cereal or pasta)
15. fruit with red dye such as maraschino cherries or red/pink fruit punch with artificial colour
16. frozen peas
17. salted peanut butter or nut butters
18. butter or spreadable cheese products
19. desserts or sweets made with salt, egg yolks, dairy products, soymilk, tofu, salted nuts or red dye
20. jams or jellies with red dye
21. milk chocolate
22. soy milk
23. punch, fruit cocktail and other drinks coloured with red dye
24. powdered drinks
25. soft drinks (pop) with red dye (e.g. red soda pop)
26. all restaurant and take-out food
27. red dye (#3/ erythrosine) used in red foods, drinks and medications (e.g. some cough medicine)
28. medications or vitamins that contain salt or milk
29. supplements with iodine or ingredients from the sea, such as kelp, glucosamine, chondroitin, coral or oyster shell calcium
30. skin creams or antiseptics made with iodine, such as betadine



The LID is a safe, short-term diet used to prepare for nuclear medicine thyroid treatment or scan. It is not intended for long-term use.

Canadian Thyroid Cancer Support Group (Thry'vors) Inc.

PHYTOCHEMICAL FOUND IN FRUITS & VEGETABLES INCREASES CHEMOTHERAPY RESPONSE CON'T

(Continued from page 1)

celery and artichokes; as well as in several fresh herbs such as parsley, basil, oregano, tarragon, and cilantro have been shown to improve certain cancer cells' response to chemotherapy drugs. It apparently works by localizing a protein in the cancer cells' nucleus, which is necessary to kill a cancer cell [1]. This is an important finding since tumor cell resistance to chemotherapy, which is multifactorial, is the leading cause of death in cancer patients receiving chemotherapy. Interestingly, apigenin has no effect on noncancerous cells, and thus does not cause death in normal, healthy cells, unlike many chemotherapy agents. For this reason, it is believed that apigenin can be used to specifically sensitize and help kill cancer cells. Unlike some antioxidants, apigenin does not work by neutralizing free radicals and so it will not reduce the effectiveness of chemotherapy. This study used the chemotherapy drug etoposide, which works by blocking certain enzymes needed for cell division and DNA repair.



Researchers were able to demonstrate that only 20% of neuroblastoma cells responded to etoposide and were able to

self-destruct under normal conditions. When 40 μ M apigenin was given pre-treatment, >50% of cells were sensitized to the drug and self destructed [1]. This study published in the *Proceedings of the National Academy of Sciences* has received a lot of attention since its release, and for good reason.

Apigenin has a reputation in traditional and alternative medicine for its pharmaceutical properties, as it has the ability to scavenge free radicals, and possesses anticarcinogenic, tumor inhibition and antigenotoxic properties [2]. This flavonoid is also thought to be able to protect the patients' normal cells and tissues from the negative or toxic effects of chemotherapy treatment. It is also suggested that lower doses of chemotherapy drugs could be given in combination with apigenin, resulting in the same cancer killing ability as a higher dose of chemotherapy [3]. This flavonoid has been shown to have growth inhibitory properties in several types of cancers including breast, colon, skin, thyroid, pancreatic and leukemia [1]. Another study, published in *The Internet Journal of Pharmacology*, discovered that apigenin has antigenotoxic properties, meaning it has the ability to reduce the effects of certain agents that cause a change or

mutation in genetic material [4]. This study found that the use of apigenin, reduced the frequency of chromosomal mutations thereby reducing the chances of cancer development in patients receiving treatment with a genotoxic compound [4]. Ultimately, the practical implications of this study are to continue to encourage cancer patients to consume between 7 and 10 fruits and vegetables per day, as recommended by Canada's Food Guide [5].



At this time, there is insufficient information to change dietetic practices, so following Health Canada's recommendations is suggested. It is important to remind patients to refrain from using antioxidant supplements during cancer treatment, since some studies suggest that they may actually be protecting cancer cells, and that they can interfere and reduce the effects of the anti-cancer regimens [6]. At this time, and until further research has been done, it is thought to be much safer to obtain these compounds naturally through the diet than through synthetic supplements.

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TIS THE SEASON... BUT YOU'RE NOT HUNGRY!

Written by: Daniela Fierini, RD

Clinical Dietitian for the Princess Margaret Hospital Malignant Hematology Program

Published previously in the Princess Margaret Hospital Patient and Family Newsletter



The hustle and bustle of the holiday season is upon us, and with that comes eating, eating and more eating. Food is always a large part of any festive gathering. There is Christmas dinner, brunch on New Year's Day, the Hanukkah party and of course, the office cocktail party. This can be a stressful time and possibly a lonely time if you are undergoing treatment and feeling unwell. You want to spend time with your family and friends but you don't have much of an appetite, food smells make you nauseous and your energy level is in the pits.

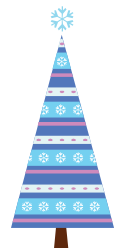
To help you out, here are some ideas on how you can still enjoy the festivities without it being an overwhelming experience.

- If you are invited for dinner but are afraid that the sight and smell of food will make you nauseous, speak with the host about your concerns ahead of time. Maybe you can join the gathering when it is time for dessert. Bring foods you can eat with you such as an angel food cake or gingerbread cookies with no icing. If your mouth is sore, consider plum pudding or an ice-cream cake instead.
- If you want to go for dinner, ask the host if he or she can give you small portions or suggest that you serve yourself. This second option may be best if you have developed taste changes to certain foods.
- If you usually host the holiday meal but are feeling tired, consider asking a relative if they can host this year. Also, give some thought to purchasing ready-made holiday foods instead of preparing everything from scratch. A change from tradition is okay.
- When it comes to family and friends, they only want the best for you. Let them know what you are concerned about and together you can find a solution. They will be happy you asked.

Whatever you decide to do, may you have a peaceful
and happy holiday season!



*Here are some
ideas on how
you can still
enjoy the
festivities
without it being
an overwhelming
experience!*



MAINTAINING GOOD NUTRITION THROUGH THE CANCER CONTINUUM

Submitted by: **Melissa Lachapelle, RD**

Clinical Dietitian for the David Thompson Health Region, in Red Deer, AB.

In October 2008 I had the privilege of presenting at the Inspiring Hope Conference in Calgary AB put on by the Canadian Cancer Society. This conference offered a variety of presentations targeted towards cancer patients, their families and friends, cancer survivors as well as several health professionals in attendance. With such a varied audience I was asked to touch on as many aspects of nutrition care in cancer as possible within a 90 minute talk. As such my presentation "Maintaining Good Nutrition Throughout the Cancer Continuum" tried to touch on nutrition therapy principles during cancer treatment, after treatment, and nutrition for cancer prevention. **If you would like a copy of the complete presentation** I can be reached at mlachapelle.nutrition@gmail.com or by phone at (403) 357-5160.

Maintaining Good Nutrition Throughout the Cancer Continuum

Melissa Lachapelle, RD
David Thompson Health Region
Inspiring Hope Conference 2008



Outline

- Role of a Dietitian
- Goals of Nutrition Care
- Management of treatment-related symptoms
- Family involvement
- Cancer Prevention and Remission
- What's in the news
- Resources

Why is nutrition important?

- Changes in metabolism with cancer, treatment and once in remission
 - Affected by:
 - Prior body composition
 - State of malnutrition
 - Tumor type
 - Disease stage
 - Loss of lean body mass
 - Affects immunity, energy levels, strength, skin integrity, coping with treatments

Goals of Nutrition Care

- Maintain energy balance
- Preserve lean body mass
- Prevent or reverse nutrient deficiencies
- Minimize nutrition-related side effects
- Maximize quality of life



MAINTAINING GOOD NUTRITION THROUGH THE CANCER CONTINUUM cON'T

- Radiation
 - Can cause temporary or permanent damage to healthy cells → Diarrhea, constipation, malabsorption
 - Head and neck cancers → Dry mouth, dysphagia
- Chemotherapy

- Diarrhea
 - Eat small frequent meals and snacks
 - Drink non-carbonated and caffeine-free fluids
 - Limit greasy, fried, spicy or sweet foods
 - Try low-lactose milk if diarrhea triggered
 - Replace salt losses
 - Replace potassium losses
 - Try soluble fibre sources: applesauce, bananas, oatmeal, sweet potatoes
 - Avoid sugar alcohols
 - Avoid natural laxatives

Vitamin Supplements

- Not recommended if already meeting daily needs from food
 - Folate and Methotrexate
 - Avoid exceeding 100% daily needs for antioxidants
 - May prevent cellular damage to cancer cells that is required for radiation and chemotherapy treatments
- More important to supplement during deficiency and malnutrition

Where the family can help!

- Plan ahead
 - Shopping & cooking
 - Keep variety of foods on hand
 - Stock pantry with favorite foods
 - Quick foods:
 - Frozen home-cooked meals
 - Pre-cut fruit, vegetables, dip
 - Puddings, yogurts, cheese snacks
 - Granola bars, drink boxes
 - Ready to heat soups and pastas

Nutrition in Cancer Remission

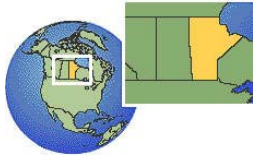
Goals:

1. Prevent development of new tumors and limit possibility of stimulating any tumor cells to grow or spread
2. Prevent other chronic diseases
 - Achieve a healthy body weight
 - Increase vegetable and fruit intake
 - Choose high fibre grain products
 - Limit total fat and saturated fat intake

Reliable Resources

- Canadian Cancer Society www.cancer.ca
- National Cancer Institute www.nci.nih.gov
- Dietitians of Canada www.dietitians.ca
- American Dietetic Association www.eatright.org
- Health Canada www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php
 - “My Food Guide”, Label reading, Health news
- Mayo Clinic www.mayoclinic.com
- Good Nutrition: A Guide for People with Cancer (Canadian Cancer Society Publication)

MEET ANGELA MARTENS—RETURNING TO THE EXECUTIVE



A native of southern Manitoba, Angela attended the University of Manitoba for six years. During that time, she obtained a Bachelor of Physical Education followed by a Bachelor of Human Ecology. She completed the general dietetic internship program at the Health Sciences Centre in Winnipeg in 1992. Her first position

took her to Thunder Bay, Ontario where she was employed as an outpatient dietitian at St. Joseph's Hospital for several years before returning to Winnipeg. She worked as the clinical coordinator of Nutrition Services at the Victoria General Hospital prior to accepting the role of the first oncology dietitian at CancerCare Manitoba in 2000.

Angela has been a previous member of the Executive as well as a

member of the working group who developed the 2004 Canadian Oncology Nutrition Standards of Practice. She currently is one of three part-time dietitians employed by CancerCare Manitoba. Angela has previously served as a volunteer board member of the College of Dietitians of Manitoba. She currently lives in Winnipeg with her husband and two daughters.

We are very honored to have Angela Martens return to the Executive!

The DC Oncology Network is led by volunteer dietitians on the Executive. The Executive consist of a Chair and Regional Representatives from the Provinces and Territories. Contact information for the Executive is on the last page of the Infoletter. We welcome members who would like to join the Executive!

RESEARCH

SELECT – Selenium and Vitamin E Cancer Prevention Trial

<http://www.crab.org/select/>

What is SELECT?

The **Selenium and Vitamin E Cancer Prevention Trial** is a very important research study taking place in the United States, Puerto Rico, and Canada. SELECT is trying to find out if taking selenium and/or vitamin E supplements can prevent prostate cancer.

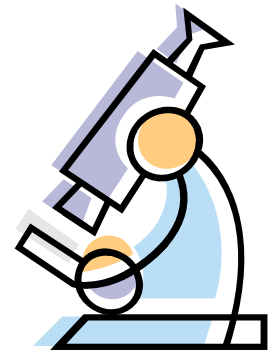
SELECT is sponsored by the U.S. National Can-

cer Institute. The study is coordinated by a group of researchers known as the Southwest Oncology Group. More than 35,000 men have taken part in SELECT.

The SELECT Data and Safety Monitoring Committee (DSMC) met in September 2008 to review the data to date. **The data showed that 200 mcg of selenium and 400 IUs daily of vitamin E do not prevent prostate cancer.** Investigators from the study leadership and the National Cancer Institute agreed with the DSMC's findings. Par-

ticipants in SELECT should stop taking their Study Supplements.

SELECT is not over. There is valuable information to be gained by continuing participant follow-up. The data to date suggest, but do not prove, that vitamin E may slightly increase the chance of getting prostate cancer, and that selenium may increase the chance of getting diabetes mellitus. These findings are not proven. They will learn more about the effects of the Study Supplements as they



(Continued on page 13)

RESEARCH CON'T

(Continued from page 12)

continue to monitor participants' health.

Antioxidant supplements for preventing gastrointestinal cancers. [Review] Cochrane Database of Systematic Reviews. (3) : CD004183, 2008

BACKGROUND: Oxidative stress may cause gastrointestinal cancers. The evidence on whether antioxidant supplements are effective in preventing gastrointestinal cancers is contradictory. **OBJECTIVES:** To assess the beneficial and harmful effects of antioxidant supplements in preventing gastrointestinal cancers.

AUTHORS' CONCLUSIONS: **We could not find convincing evidence that antioxidant supplements prevent gastrointestinal cancers.** On the contrary, antioxidant supplements seem to increase overall mortality. The potential cancer preventive effect of selenium should be tested in adequately conducted randomised trials.

Breast Cancer and Caffeine/ Nicotine

Arch Intern Med. 2008;168:2022-2031.

The **consumption of caffeine is not linked to an overall increase in breast cancer**, according to a report published in the October 13 issue of the *Archives of Internal Medicine*. However, the study does note that that a **high consumption of caffeine might increase the risk for breast cancer in women with a history of benign breast disease.**

Cancer Res. 2008;68:8473-8480.

Separately, a new study published in the October 15 issue of *Cancer Research* suggests a possible role for nicotine in breast tumor development and metastases. **Although the research is very preliminary, the study suggests that nicotine might be a component in the initiation of breast cancer induced by secondhand smoke.**

Kight CE. Nutrition considerations in esophagectomy patients.

[Review] *Nutr Clin Pract.* 23(5):521-8, 2008 Oct-Nov.

The primary indication for an esophagectomy is esophageal cancer or Barrett's esophagus with high-grade dysplasia. Patients undergoing esophagectomy often present with dysphagia, side effects from chemotherapy, decreased appetite, and weight loss. Esophagectomy is a major surgery involving the abdomen, neck, and/or chest requiring 5 to 7 days of NPO status to allow healing of the anastomosis between the upper esophagus and new esophageal conduit (usually the stomach). Placement of a feeding jejunostomy preoperatively or at time of surgery provides enteral access for patients who will experience eating challenges and a slow transition back to a normal diet, challenges that often lead to weight loss in the postoperative period. Supplemental tube feeding given nocturnally can provide a consistent intake while appetite, swallowing, and diet advancements improve during the convalescent period. The postesophagectomy diet advances from liquids to soft solids with restrictions to reduce discomfort and aid swallowing



Attention to nutrition throughout the process of diagnosis, treatment, and postoperative care is essential for optimal care of the esophagectomy patient.

(Continued on page 14)

RESEARCH CON'T

(Continued from page 13)

and digestion. The esophagectomy patient will experience physical, dietary, and social adaptation for several months post-operatively. Attention to nutrition throughout the process of diagnosis, treatment, and postoperative care is essential for optimal care of the esophagectomy patient.

Halfdanarson TR., et al. **Does dietary counseling improve quality of life in cancer patients? A systematic review and meta-analysis.** J Support Oncol. 6(5):234-7, 2008 May-Jun

Results have been mixed as to whether dietary counseling improves clinical outcomes in cancer patients. This systematic review and meta-analysis of randomized trials assessed the effect of dietary counseling on quality of life (QOL). **Dietary counseling does not appear to improve QOL significantly in patients with cancer. However, an observed trend toward benefit underscores the need for further study.**

Hammond E. et al. **Carotenoids and the risk of developing lung**

cancer: a systematic review. Am J Clin Nutr. 88(2):372-83, 2008 Aug.

OBJECTIVE: To conduct a systematic review of the associations between carotenoids and lung cancer. **CONCLUSIONS: beta-Carotene supplementation is not associated with a decrease in the risk of developing lung cancer.** Findings from prospective cohort studies suggest inverse associations between carotenoids and lung cancer; however, the decreases in risk are generally small and not statistically significant. These inverse associations may be the result of carotenoid measurements' function as a marker of a healthier lifestyle (higher fruit and vegetable consumption) or of residual confounding by smoking.

Bosaeus I. **Nutritional support in multimodal therapy for cancer cachexia.** Support Care Cancer. 16(5):447-51, 2008 May.

Malnutrition has since long been known to be associated with adverse outcomes in cancer patients. The wasting in

cancer cachexia involves loss of muscle and fat and reflects a catabolic metabolism induced by an abnormal host response to tumour presence and/or tumour factors. Patients with cancer cachexia frequently develop a chronic negative energy and protein balance driven by a combination of reduced food intake and metabolic change. Thus, alterations in both energy intake and components of energy expenditure may contribute to progressive weight loss. **Though nutritional support alone can improve energy intake to a variable extent and for a variable period of time, it will not address the underlying catabolic metabolism and is thus likely to be of limited efficacy if attempts to attenuate the tumour-induced catabolic response are not carried out at the same time.**

McClement SE., et al. **When advanced cancer patients won't eat: family responses.** Int J Palliat Nurs. 14(4):182-8, 2008 Apr.

A grounded theory study examining nutritional care experiences in advanced cancer from the



Dietary counseling does not appear to improve QOL significantly in patients with cancer. However, an observed trend toward benefit underscores the need for further study.



(Continued on page 15)

RESEARCH CON'T

(Continued from page 14)

perspective of patients, families, and health care providers. A detailed description of one of the major sub-processes of the model regarding family member responses to declining oral intake and weight loss in a terminally ill relative—the sub-process of 'letting nature take its course: it's best not to eat.' **The strategies family members use when letting nature take its course, and the consequences of these strategies for patients, family members and health care providers are reported. Implications for practice and research are provided.**

Kaefer CM., et al. **The role of herbs and spices in cancer prevention.** *J nutr biochem.* 19 (6):347-61, 2008 Jun.

This review focuses on the antimicrobial, anti-oxidant, and antitumorogenic properties of herbs and spices; their ability to influence carcinogen bioactivation; and likely anticancer contributions. **While culinary herbs and spices present intriguing possibilities for health promotion, more complete information is**

needed about the actual exposures to dietary components that are needed to bring about a response and the molecular target(s) for specific herbs and spices. Only after this information is obtained will it be possible to define appropriate intervention strategies to achieve maximum benefits from herbs and spices without eliciting ill consequences.

Huhmann MB., et al. **Review of American Society for Parenteral and Enteral Nutrition (ASPEN) Clinical Guidelines for Nutrition Support in Cancer Patients: nutrition screening and assessment.** *Nutr Clin Pract.* 23(2):182-8, 2008 Apr-May.

This review article, the first in a series of articles to examine the A.S.P.E.N. Guidelines for the Use of Parenteral and Enteral Nutrition in Adult and Pediatric Patients Cancer Guidelines, evaluates the evidence related to the use of nutrition screening and nutrition assessment in cancer patients. This first article will provide background concerning nutrition issues in cancer patients as well as discuss the role of nutrition

screening and nutrition assessment in the care of cancer patients. **The goal of this review is to enrich the discussion contained in the Clinical Guidelines, cite the primary literature more completely, and suggest updates to the guideline statements in light of subsequent published studies.** Future articles will explore the guidelines related to nutrition support in oncology patients receiving anticancer therapies.

Cancer Incidence in Canada – Statistics Canada
<http://www.statcan.ca/bsolc/english/bsolc?catno=82-231-XWE>

The Cancer Incidence in Canada tables provide information on the number of new cases and rates of cancer tumours and patients from 1992 onwards by five-year age-groups and sex for all Canadian provinces and territories as well as information on the primary ICD-O-3 sites of cancer.



While culinary herbs and spices present intriguing possibilities for health promotion, more complete information is needed about the actual exposures to dietary components that are needed to bring about a response and the molecular target(s) for specific herbs and spices.

FIND US ON THE WEB!

www.dietitians.ca/networks/oncology.asp

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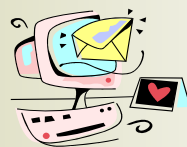
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Please e-mail submissions for

the **next** DC Oncology

Network Infoletter

to

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by

Feb 15, 09

IDEAS FOR THE NEW YEAR



The Infoletter is made up of articles from

the members! For your College Continuing Competencies...why not write an article for the Infoletter!

Information on submissions and eli-

gibility for the stipend is on the DC Oncology Network website: www.dietitians.ca/networks/oncology.asp