

Melanoma Awareness Winter Newsletter

January 2009

CELEBRATE 2009 !



Contents

Coffee and Exercise Report	2
"Stay Out of the Sun" Run	2
Risk of Inherited Melanoma	3
MSCC	3
Eat Your Sunscreen	5

Upcoming Events

- ◆ April 2009 - Annual Board Meeting
- ◆ May 2009 - Melanoma Month
- ◆ May 2009 - Free Skin Checks

Melanoma Awareness Begins Year 5!

It's hard to believe that Melanoma Awareness will be starting its fifth year as a non-profit corporation in 2009! So what has been accomplished so far?

Since starting this organization, we have:

*Spoke to thousands of high school and middle school students in Minnesota each semester (see chart on page 4). Students turned in comments on the presentation, and here are some examples:

"Now I'm sure I will stay away from tanning beds", "It is important for the speakers to pass on their knowledge to other teens like us because we're the ones that go to the tanning beds without thinking twice about it", "I didn't know skin cancer could kill you".

*Held three melanoma awareness walks at Lake Harriet, raising money, handing out information and prizes, while being

entertained by bands, masseuses, doctors and clowns.

*Participated in the parade in Plymouth two times, handing out stickers, candy, buttons, jewelry and skin cancer information;

*Participated in several events, including The St. Paul Women's expo, Northwest Sports show, Plymouth on Parade, and more.

*Sent melanoma information to private parties for their school projects, booths, stores, and parades.

*We traveled to other states to help fundraise and attend conferences to improve knowledge of this disease;

The total number of people reached since starting our group is over 20,281. We hope to continue our mission, which is to educate everyone about the dangers of skin cancer / melanoma!

Book Idea - "Men Surviving Cancer"

In 1986, Barry Leigh was 39 when he was diagnosed with life-threatening melanoma. Back then, he didn't know anyone who had cancer, let alone survived it, and felt there was no-one he could talk to about his experience. Not surprising, given that society back then was uncomfortable talking about cancer.

"When I was diagnosed with cancer, it was a really lonely time," says Barry.

"People just didn't talk about cancer and there was a real perception that cancer was a death sentence - that nobody survived.

"I know I would have really benefited from reading about people who had experienced what I was going through but when I looked around there was nothing.

"Today it's much the same story for men. There are a lot of cancer books written for women by women, but apart from Lance Armstrong's *It's Not about the Bike*, there aren't many books covering men's experiences. I wanted to change that."

Today Barry has been cancer-free for more than 20 years and wants to help others by sharing his story. His book, *Men Surviving Cancer*, follows the lives of 13 young men who were diagnosed with and survived cancer - no mean feat in a country where men are historically uncomfortable talking about their health or emotions. ([Life plus](#) winter spring 2008)

"Men Surviving Cancer", Barry Leigh, \$40

Coffee and a Run May Stave Off Skin Cancer

By Hamish Clarke
Tuesday, 31 July 2007
Cosmos Online



*Exercise and Coffee -
What a combination!*

*Studies have shown
that increased
exercise is
associated with a
lower risk of
melanoma, colon
cancer, breast
cancer, and
advanced prostate
cancer.*

SYDNEY: The fight against skin cancer may have found two unlikely allies, with scientists finding that caffeine and exercise work together to decrease the damage caused by the Sun's rays.

Experts from Rutgers, the State University of New Jersey, in the U.S., made the finding after previously revealing that caffeine or exercise alone act to protect mice against cancer caused by the UVB component of the sun's ultraviolet radiation.

"Our studies in mice suggest that ingestion of moderate amounts of caffeine and voluntary exercise will strongly enhance the killing of UVB damaged cells and inhibit UVB-induced skin cancer," said oncologist Allan Conney.

Cancer stopper

Conney led the team that reports the discovery today in the U.S. journal *Proceedings of the National Academy of Sciences*.

UVB light damages our DNA, increasing the risk of affected cells becoming cancerous. Anything that kills off these 'UVB-induced sunburn cells' is actually good news, as it stops pre-cancerous cells from turning nasty.

After initially exposing a special breed of hairless laboratory mice to UVB radiation, Lu and colleagues tested three treatments for their ability to kill off the sun burnt cells. Over a two-week period the mice were given caffeine mixed with drinking water, voluntary exercise on a running wheel, or a combination of both.

On their own, caffeine or exercise killed about twice as many sun burnt cells as mice given

neither treatment. But five times as many sun burnt cells died on the mice treated with both caffeine and exercise in combination, as on the mice treated with neither.

Significantly, the increase in cell death was limited to the pre-cancerous sun burnt cells, with skin cells that were not damaged by UVB radiation unaffected by the treatments.

The mice were given between 0.1 and 0.4 mg per ml of caffeine in drinking water - similar to that in the blood plasma of most coffee drinkers (one to four cups per day). But, intriguingly, the experts found that a combination of caffeine and exercise was more effective at the lower caffeine dose of 0.1 mg/ml.

From mice to man

Previous epidemiological studies have shown that increased exercise is associated with a lower risk of melanoma, colon cancer, breast cancer, and advanced prostate cancer. In other studies researchers have found that caffeine, via coffee consumption, was associated with a lower risk of non-melanoma skin cancer, liver cancer, and breast cancer.

It remains to be seen just how caffeine and exercise interact at the molecular level to kill off pre-cancerous cells. Lu's team now plan on examining the effect of different types of exercise.

The question that needs to be resolved before we can all add a cappuccino to our pre-exercise stretch routine is whether the results will translate from mice to humans.

"We believe that these treatments may also inhibit sunlight-induced skin cancer in humans, but clinical studies are needed to see if we can extrapolate our mouse studies to people," Conney said.

"Stay Out of the Sun" Run

Get ready for May, 2009! The 4th annual "Stay Out of the Sun" run is a family event to benefit melanoma research and patient education. This event is held in Rochester, Minnesota. To get more information, visit their website at <http://www.sosrun.org/site/races>.



Risk of Inherited Melanoma

Inherited melanoma risk: What you do know does help you

June 17th, 2008 in Medicine & Health / Cancer

When people know the results of genetic tests confirming they have inherited an increased risk of developing melanoma, they follow skin cancer screening recommendations more proactively—much like those who have already been diagnosed with the potentially deadly disease, according to results of a study completed at the University of Utah's Huntsman Cancer Institute. and published in the June issue of *Cancer Epidemiology, Biomarkers & Prevention*.

Tests for mutations in the CDKN2A gene can reveal a reason that melanomas "run" in families. The study evaluated the intent to follow, and the actual practice of, skin cancer early detection methods by members of families that carry CDKN2A gene mutations. Study participants were drawn from a group of Utahns who participated in the original "CDKN2A gene hunt" 10 to 12 years ago. They already knew that their family history might put them at increased risk for melanoma, and they had previously received melanoma prevention and screening education.

The results showed that people who tested positive for the CDKN2A mutation followed melanoma screening recommendations more carefully than before, even if they had not had a melanoma. In addition, knowing the test results did not lead family members without the mutation to decrease their screening measures.

"Before these studies, it was unclear whether reporting the results to family members who have been tested was valuable or potentially harmful to patients," said co-principal investigator Sancy Leachman, MD, PhD, director of the Tom C. Mathews Jr. Familial Melanoma Research Clinic (FMRC) and associate professor in the Department of Dermatology at the University of Utah School of Medicine. Leachman specializes in melanoma genetics.

Lisa Aspinwall, PhD, associate professor in the University of Utah Department of Psychology, is co-principal investigator on the studies. "We wanted to know whether learning their results helps people comply better with melanoma screening recommendations. We also wanted to know if people who find out that they are negative for the mutation decrease their efforts as a result of knowing their genetic status."

"People with a family history of melanoma who do not carry the mutation are still at almost twice the risk of developing melanoma as people in the general population," Leachman said.

Melanoma is the most serious type of skin cancer. The National Cancer Institute estimates that more than 62,000 people will be diagnosed with the disease in 2008, and more than 8,000 will die of it. Cancer experts estimate that about ten percent of melanomas are associated with familial or inherited syndromes.

Source: University of Utah



Does melanoma "run" in families?

What is the Minnesota Cancer Surveillance System?

The Minnesota Cancer Surveillance System (MCSS) is the state's cancer registry. One of the legislatively mandated objectives of the MCSS is to "promote high quality research to provide better information for cancer control...." says John Soler, MPH, Epidemiologist.

To find out more about MCSS, go to:
<http://www.health.state.mn.us/divs/hpcd/cdee/mcss/index.html>.

MCSS carries out this mandate by working with qualified researchers who are studying risk factors and causes of cancer. Since 1988, MCSS has participated in numerous epidemiological studies, mainly but not exclusively with researchers at the University of Minnesota and the Mayo Clinic.

What studies are they doing for melanoma?



(Continued on page 4)

Melanoma Awareness Audiences to Date:

Presentations

NAME	Date	# Attended
Armstrong	9/22/06	354
Wayzata	10/12/06	183
Orono	10/16/2006	128
Cooper	10/26/06	340
Cloquet	11/21/06	37
Carlton	11/21/2006	47
Elk River	11/27/2006	150
Elk River / Zimmerman	11/27/2006	120
Mound Westonka	12/20/2006	85
Armstrong	2/6/2007	294
Wayzata	2/23/2007	204
North St Paul	4/13/2007	300
Elk River	4/23/2007	110
Zimmerman	4/26/2007	130
Mound Westonka	5/2/2007	120
St Anthony	9/12/2007	180
Armstrong High School	9/14/07	250
North St Paul	9/21/07	175
Wayzata High School	10/8/07	215
White Bear Teachers	10/12/07	7
St Anthony	10/15/07	96
Orono High School	10/25/07	150
White Bear (North Campus)	10/29/07	107
Elk River High	11/5/07	209
Litchfield	11/12/07	90
Carlton High School	11/19/07	47
Cloquet High School	11/19/07	70
White Bear (North Campus)	11/26/07	120
Mound Westonka High School	12/10/07	120
Zimmerman Middle and HS	1/7/08	128
White Bear North Campus	1/14/08	105
North St Paul	1/15/08	245
Armstrong High School	2/1/08	283
White Bear North Campus	2/11/08	120
Wayzata High School	2/21/08	220
Orono High School	3/7/08	120
St Anthony	3/14/08	100
North St Paul	4/4/08	245
Elk River	4/11/08	187
White Bear Lake	4/18/08	260
Litchfield	4/22/08	90
Mound Westonka High School	5/12/08	100
Zimmerman Middle and HS	5/13/08	130
Armstrong High School	9/19/2008	275
Mound Westonka	10/10/2008	90
White Bear Lake	11/20/2008	120
Cloquet	11/21/2008	30
Wayzata	12/18/08	<u>235</u>
Total		8,163

Events

NAME	Date	# Attended
Minnehaha Falls	5/5/2005	40
Hands on TC	2/1/2006	200
Harriet	5/20/2006	250
Channel 11	12/25/2006	490
Elk River Girl Scouts	1/31/2007	10
Spring Lake Lions	2/1/2007	40
Plymouth JC's	2/5/2007	8
MN Ed. Health Fair	2/5/2007	30
Hands on TC	2/9/2007	200
NW Sports Show	3/2/2007	1200
Harriet	5/20/2007	250
Plymouth on Parade	10/5/2007	3500
Channel 5	10/8/2007	5238
Hands On TC MOA	2/23/2008	400
St Paul Womans Expo	3/15/2008	275
Litchfield Mid School Health Fair	4/5/2008	225
Rum River Sports Show	9/5/2008	350
Plymouth on Parade	10/4/2008	5000
Dakota Electric	11/5/2008	140

**We would like to thank the following
for their support during 2008:**

The Medica Foundation (grant)
Park Nicollet Foundation (grant)
Plymouth Lions
Wayzata American Legion
Dakota Electric Company
Nellie's Sweet Shop
Jian Shen

**Your financial support made it possible for
Melanoma Awareness to reach 9,451 people in
2008 in our efforts to raise public awareness
about melanoma.**

**Melanoma Awareness is a totally volunteer
organization. We could not carry on our work
without our dedicated volunteers.**

Minnesota Cancer Surveillance System

(continued from page 3)

Indoor Tanning Use, DNA Repair, and Risk of Melanoma is a study to assess whether indoor tanning is a risk factor for melanoma, as well as to examine the role of DNA repair in modifying the risks of melanoma associated with ultraviolet radiation exposure. (continued on next page)



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MN Cancer Surveillance System (con't)

Dr. DeAnn Lazovich of the University of Minnesota, Department of Epidemiology, is the principal investigator for this study, which is currently funded by the National Institutes of Health and previously by the American Cancer Society. The study started in 2004 and will continue into 2009. Researchers expect that approximately 1150 persons will be recruited, out of 1800 potentially eligible cases between the ages of 25 and 59. 1150 controls without melanoma will be selected from Minnesota driver's license records. The incidence of melanoma skin cancer has risen dramatically since the mid-1950s. Solar ultraviolet radiation is an established risk factor for melanoma, with the magnitude of the risk depending on patterns of sun exposure, intermittent or cumulative, frequency of sunburn, and inherited susceptibility to

its effects. The Centers for Disease Control and Prevention and other health experts recommend avoidance of all sources of ultraviolet radiation, yet millions of Americans intentionally expose their skin to artificial ultraviolet radiation emitted by tanning beds and booths. Because the epidemiological evidence regarding the relationship between indoor tanning and melanoma is inconclusive, the indoor tanning industry aggressively promotes the benefits and downplays the potential risk of its services. The results of this study will provide important information to the public health community to assist in formulating messages to educate the public, with a goal of reducing the risk of melanoma.

Eat Your Sunscreen! 10 Super Foods for Skin Cancer Prevention

Lynne Eldridge MD, Stillwater, Minnesota

What we eat can have an impact on whether we will ever have to hear those words, "you have skin cancer!"



- 1. Artichokes** - Artichokes are high in silymarin, an antioxidant that has been shown to slow the growth of melanoma cells in mice.
- 2. Green tea** - Epigallocatechin-3-gallate (EGCG), a component of green tea, has been shown to protect the skin of rodents from UV damage. A great treat chilled on the beach!
- 3. Fish** - Omega-3-fatty acids in fish appear to offer protection against non-melanoma skin cancer.
- 4. Carrots** - Foods high in beta-carotene appear to have a protective role against skin cancer.
- 5. Spinach** - Spinach is high in lutein/zeaxanthin, which has been shown to reduce UV induced skin cancer in mice when consumed dietarily.
- 6. Grapes** - proanthocyanidins, present in grapes seeds, have been shown to prevent photocarcinogenesis (cancer caused by sun exposure.)
- 7. Broccoli sprouts** - sulforaphane, which is high in broccoli and especially broccoli sprouts, was shown to substantially inhibit uv induced skin cancer in mice.
- 8. Berries** - berries are high in ellagic acid, which appears to have anti-tumor properties in rat skin.
- 9. Pomegranate juice** - an juice extract of pomegranates was shown to protect against uv damage on a molecular level.
- 10. Pineapple** - pineapple contains bromelain, a compound shown to decrease cancer in animals.