

# EAGeRly Awaiting

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## Message from Cathie

Greetings from the EAGeR Study once again! We cannot believe this is our third issue of EAGeRly Awaiting!

HAPPY SUMMER! I am sure you are all looking forward to nice sunny, hot weather, long lazy days, some down time, and possibly a vacation or day trip before the fall is upon us. I know I am!

As you may know, I am the EAGeR Study Coordinator. I wear many hats in my new position. I can be found at Tobin Hall doing baseline visits and telephone interviews, at the Moses Taylor Physicians Office Building seeing participants for regular visits, out in the local communities talking to health care professionals about the study, and disseminating brochures and putting up tear-offs in the strangest places. I have been with the study since late October in an unofficial capacity when we started to see participants and full-time since January. I am very happy to be part of the first clinical trial at the new Commonwealth Medical College. It has been great experiences to see the study grow! We currently have enrolled 22 women in the EAGeR Study at the Scranton site. 14 of these women are now pregnant. We are very excited to welcome our first "Scranton EAGeR baby" in September with a few more by the end of 2009. The EAGeR Study family is growing!!!

We were very pleased to have an article and photo in the Scranton Times/Tribune on the Saturday before Mother's Day about the study and featuring two of our participants. THANK YOU and CONGRATULATIONS! to Molly Magnotta and Shannon Maskal for your efforts on behalf of the EAGeR Study.

EAGeR Study staff has been busy in the local communities recruiting participants. We had a table at the Lackawanna County Medical Society Health Fair on June 13, 2009 at Nay Aug Park and on June 21, 2009 at the CYC in Wilkes Barre at the Fiesta Latina de San Juan. We continue to get the word out to seek volunteers. In addition, we held meetings with health care professionals in Honesdale and in Wilkes Barre areas as we extend our outreach.

For the past several months, I have been working on a proposal to offer wellness educational programs for study participants. These would be voluntary, free, and focus on wellness topics for women of child-bearing ages. They would be held at Tobin Hall. We have many valuable resources available to us locally in the health profession areas.

The summer is bringing a few major changes for the Scranton EAGeR Study site. Both of our graduate assistants will be moving on to new challenges in their careers. Randy and Jes were responsible for doing all of the ground work to get the EAGeR Study up and running at the Scranton site. Randy Stark is moving on to a new position at TCMC after completing his MBA at the University of Scranton in May. Jes Pizano leaves us to begin dental school at the Kornberg School of Dentistry at Temple University in August. We wish them the very best! We thank them for getting us off to a great start! They will be missed and Betsy and I will have them on speed dial for quite a while.

I could not miss this opportunity to say thank you to you - our study volunteers. I hope that you realize what an integral role you play in the EAGeR Study here. You are an active participant in your health care. You are making a difference for women in the future. You are the HEROES who are helping our researchers learn more about the effects of aspirin in gestation and reproduction and we applaud you!

Enjoy the summer!

Sincerely,

Cathie McGeehan RN, MSN

# EAGeR Spotlight

## The Past, Present, and Future Women of the EAGeR Study



### Mothers Helping Mothers

An article from the Scranton Times on May 9, 2009 featuring Mollie Magnotta and Shannon Maskal, two of the women who are participating in the study and expecting a child in September.

In the pictures to the right, Mollie is pictured with her sons Sam, 2, and Luke 4 and Shannon and her husband Michael are with their sons, Matthew, 4, and Michael III, 7.

*Women take part in pregnancy study so others might avoid same problems.*

*By: David Singleton*

Mollie Magnotta and Shannon Maskal are stay-at-home moms in their early 30s. Each has two young sons, and each is expecting another child later this year.

But the women share another experience they hope their participation in the Commonwealth Medical College clinical research study will help other women avoid: Each had a miscarriage in 2008.

Mrs. Magnotta, 30, of Roaring Brook Township, and Mrs. Maskal, 32, of West Scranton, are among the first area women to join the study, which will evaluate whether low-dose aspirin is beneficial in helping women become pregnant and maintain the pregnancy to birth.

“I never realized how painful a miscarriage could be until I went through it, and then I was like ‘Wow,’” said Mrs. Magnotta, who was about 10 weeks into her third pregnancy when she miscarried in August. “I talked to my husband about it and said if we can help somebody not have to go through this, we should do it.”

Over the next three years, Commonwealth Medical College wants to recruit 300 women who have had a past miscarriage for its study, known as EAGeR, or Effects of Aspirin in Gestation and Reproduction. Across the nation, 1,600 women will take part in the \$12 million project funded by the National Institute of Health.

The protocol is relatively simple. Once a day, the women take what is either a low-dose aspirin or placebo, along with a folic acid supplement. Because it is a double-blind study, neither the participants nor the researchers will know which women took what until the study is complete.

Mrs. Maskal hopes the research produces a better understanding of why some pregnancies fail and others don't. Her miscarriage in April 2008 was her second; the first was in 1999, shortly before she became pregnant with her oldest boy, Michael.

“You really don't know. Was it something you did? Was it something in the environment?” she said. “If they can figure out what's behind it and why women miscarry, that would be groundbreaking.”

In collaboration with Physicians Health Alliance at Moses Taylor Hospital, where both Mrs. Magnotta's and Mrs. Maskal's obstetricians practice, the medical school has enrolled 18 women in the study since October.

Seven of them are now pregnant, and nine are trying to become pregnant, said Betsy Mead, R.N., clinical research associate for the Scranton study. Two other women became pregnant but have since miscarried.

Anne Sweeney, Ph. D., a Commonwealth Medical College faculty member who is the local study's principal investigator, said there is a decided sense of altruism among the women who have signed up for the study, a feeling that what they are doing will make a difference.

“Almost unanimously they have said, ‘If this will spare another woman from going through what I have been through, I am more than willing,’” Dr. Sweeney said.

Mrs. Maskal, who has a 4-year-old son, Matthew, in addition to 7-year-old Michael, learned she was pregnant on New Year's Day. She is due Sept. 18.

Mrs. Magnotta, whose sons Luke and Same are 4 and 2, respectively, found out she was pregnant exactly a month later – on Feb. 1, Super Bowl Sunday. Her prospective delivery date of Oct. 10.

Both of their pregnancies are proceeding normally, and both are past the point where they would be considered at the highest risk for a miscarriage, which has Ms. Mead and the others associated with the EAGeR study excited and, well, eager.

“We have a bulletin board in our office,” Ms. Mead said. “We are just waiting for baby pictures to fill it up.”

# How Big is Baby?????

## The First Trimester



Weeks 13 :Peach – Average Size: 2.9 in., .81 oz.

Your fetus is forming teeth and vocal cords... savor this, their non-functional phase. Baby is approaching normal proportions, with a head now only one third the size of the body. Intestines are in the process of moving from the umbilical cord to baby's tummy.

Week 14: Lemon – Average Size: 3.4 in., 1.5 oz.

Your adorable little fetus is busy with thumb sucking, toe wiggling, and (not so cute but equally amazing) making urine and breathing amniotic fluid as the liver, kidneys and spleen continue to develop. Lanugo (thin, downy hair) is growing all over the body for warmth.



Week 15: Naval Orange – Average Size: 4 in., 2.5 oz.

Continuing the march towards normal proportions, baby's legs now outmeasure the arms. And, finally, all four limbs have functional joints. Your fetus is squirming and wiggling like crazy down in the womb, though you probably still can't feel the movements.



Week 16: Avocado – Average Size: 4.6 in., 3.5 oz.

Watch what you say... tiny bones forming in baby's ears mean the little one can now pick up your voice. Eyebrows, lashes and hair are starting to fill in, and taste buds are forming. And, if you're interested, an ultrasound might be able to determine gender.



Week 17: Onion – Average Size: 5.1 in., 5.9 oz.

Baby's skeleton is hardening, changing from rubbery cartilage to bone, and fat is finally accumulating around it. The umbilical cord is getting thicker and stronger, and those little fingers and toes are now topped by one-of-a-kind prints.





Week 18: Sweet Potato – Average Size:

Your fetus has become amazingly mobile (at least compared to you), passing the hours yawning, hiccuping, rolling, twisting, kicking, punching, sucking and swallowing. And, baby's finally big enough that you'll be able to feel those movements soon.

Week 19: Mango – Average Size: 6 in., 8.5 oz.

Vernix caseosa, a greasy white substance made of lanugo, oil and dead skin cells (yum) now coats baby's skin, shielding it from the amniotic fluid. (Picture yourself after a nine-month bath, and the need for protection makes sense.) You might actually get to see the vernix at birth, especially if baby is premature



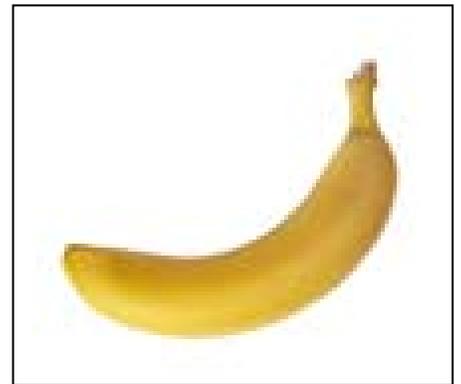
Week 20: Cantaloupe – Average Size: 6.5 in., 10.6 oz.

Baby's digestive system is busy creating meconium (a tarry black substance made of swallowed amniotic fluid, digestive secretion and dead cells), which will fill the first diaper after birth. And, speaking of the diaper situation... baby's genitals are now fully formed!



Week 21: Banana – Average Size: 10.5 in., 12.7 oz.

Baby gulps down several ounces of amniotic fluid every day, both for hydration and nutrition and to practice swallowing and digesting. And, these days, those taste buds actually work! Studies show that after birth, babies are most interested in tastes they've already experienced through amniotic fluid. Meaning, think about what you want your future child to eat as you prepare your own lunch.



Week 22-24: Papaya – Average 10.5 to 11.8 in., 12.7 to 20.8 oz.

Watch what you say -- baby is now able to hear outside noise from down in the womb. Studies show that baby finds gentle music and your own voice most soothing. Nipples are starting to sprout, and that little face is fully formed. And, baby's starting to settle into sleep cycles, snoozing about 12 to 14 hours a day. It shouldn't be hard to figure out when -- just pay attention to those kicks as they start and stop.



# *What is the Real Deal with the Sun?!?!?!*

## What makes the sun so bad and what does it really do to my skin??

I know that you've been lectured by your doctors, the many magazines, even your family about how important it is to use precautions when in the sun, but it can never be said too many times. Here in this article, I'd like to explain in a little more detail why the sun is so harmful to your skin and what type of damages it can occur.

Sunlight, one of the most common forms of ultraviolet radiation, is composed of three different wavelengths (the distance between the peaks in a series of waves) of ultraviolet radiation, UVA, UVB, and UVC types. UVA rays have the longest wavelengths, followed by UVB, and UVC rays which have the shortest wavelengths. While UVA and a small amount of UVB rays are transmitted through the atmosphere, all of the UVC and 90% of the UVB rays are absorbed by the Earth's ozone layer. Therefore, most of the UV rays you come in contact with are UVA with a small amount of UVB rays.

Both UVA and UVB rays are of major importance to human health because small amounts of ultraviolet rays is essential to the production of vitamin D which plays an important role in the maintenance of organ systems. One function of vitamin D regulates the calcium and phosphorus levels by promoting their absorption from food in the intestines, and by promoting reabsorption of calcium in the kidneys, which enables normal mineralization of bone. It is also needed for bone growth and bone remodeling by the cells of the bones, known as osteoblasts and osteoclasts.

Although there are benefits to getting out into the sun and soaking up those rays, it is recommended that everyone get **ONLY** 5-15 minutes of sun a day twice a week. That amount of time in the sun adds up to a total of 30 minutes in the entire week!!!! To me that seems ridiculous because I can sit in the sun for hours on a nice hot, sunny summer day reading a book and lounging by the pool. How can I give up my nice relaxing days!!! The reason is that too much ultraviolet radiation damages the skin.

The damage that the UVA and UVB rays are inflicting is on the skin's cellular DNA causing genetic mutations that can result in different outcomes from a suntan to skin cancer. Below is a list of outcomes that sun exposure can lead to and what causes each of them.

### Sun Tan

Although that we think nothing harmful is happening to us when we have a tan, we are still unsafe because there is no such thing as a safe tan. The increase in skin pigment, called melanin, which causes the tan color change in your skin is a sign of damage.

#### Why Does It Happen?

When your skin is exposed to ultraviolet radiation, it increases the production of melanin in the attempt to protect the skin from future damage. This pigment is also the pigment that colors your hair, eyes, and skin.

Evidence suggests that tanning greatly increases your risk of developing skin cancer, and that contrary to popular belief, getting a tan will not protect your skin from sunburn or other skin damage. The extra melanin in tanned skin provides a Sun Protection Factor (SPF) of about 2 to 4, which is far below the minimum recommended SPF of 15.

### Sunburn

It is one of the most obvious signs of ultraviolet exposure and skin damage, it is most often marked by redness and peeling.

#### Why Does It Happen?

When ultraviolet rays reach your skin they damage the cells in the epidermal layer (top, outer layer) of the skin. In response to the damaged cells, the immune system increases blood flow to the damaged areas. This increase in blood flow is what gives a sunburn its characteristic redness and makes the skin feel warm to the touch. At the same time, the damaged skin cells release chemicals that send messages through the body until they are translated as a painful burning sensation by the brain. White blood cells, which protect you from infection and disease, attack and remove the damaged skin cells which cause the skin to itch and peel.

## Symptoms

The earliest signs of sunburn is that your skin will look flushed, it is also tender and painful, and gives off more heat than normal. If you have a darker skin tone, it may take longer for physical signs to appear. Severe sunburn is often characterized by a large area of red, blistered skin with headache, fever, or chills. Overall, it can take 6-48 hours for the full effects of sunburn to appear.

## Treatment

The American Academy of Dermatology recommends that to treat mild sunburns use cool baths, over-the-counter hydrocortisone creams, and aspirin to ease pain and swelling. If you have severe sunburn, it should be treated as a medical emergency and examined by a doctor as soon as possible.

Studies have shown a link between severe sunburn and melanoma, the deadliest form of skin cancer. Getting even one sunburn can increase your risk for skin cancer, so you must pay careful attention to protecting yourself from ultraviolet rays.

## Skin Cancer

There are two main types of skin cancer, melanoma and non-melanoma. Melanoma is the least common but most dangerous of the two types of skin cancer and accounts for the most of the deaths due to skin cancer each year. This type of cancer that begins in the epidermal cells that produce melanin. According the American Cancer Society, melanoma is almost always curable when detected in its early stages. Non-melanomas (basal cell and squamous cell carcinomas) occur in the basal or squamous cells located at the base of the epidermis, both inside and outside the body. Non-melanomas often develop in sun-exposed areas of the body, including the face, ears, neck, lips, and the backs of the hands.

## Why Does It Happen?

Predisposition to skin cancer can be hereditary, meaning it is passed through the generations of a family through genes. There is also strong evidence suggesting that exposure to ultraviolet rays, both UVA and UVB, can cause skin cancer. Ultraviolet radiation may promote skin cancer in two different ways. The first is by damaging the DNA in the skin cells, causing the skin to grow abnormally and develop benign or malignant growths. The second is by weakening the immune system and compromising the body's natural defenses against aggressive cancer cells.

## Symptoms:

To find and protect yourself against skin cancer, each and every person should be performing regular self skin cancer exams at home. Some of the signs to be looking for in these self exams is any changes on the skin, especially in the size or color of a mole, birthmark, or other dark pigmentation, unexplained scaliness, oozing, or bleeding on the skin's surface or a spot on the skin that suddenly feels itchy, tender, or painful.

## Treatment

Skin cancer treatment varies depending on the type and severity of the cancer. Your doctor will develop a treatment plan based on your needs. According to the American Cancer Society, most of the more than one million skin cancers diagnosed each year in the United States are considered sun-related. Skin cancer occurs in people of all skin tones, though it is less common in those with darker skin tones. Assessing your risk with the help of your doctor, protecting your skin, and performing regular skin cancer checks are the best methods of prevention.

There are other outcomes from too much sun exposure and too much ultraviolet radiation. One of these outcomes is premature aging which causes the collagen and elastic fibers that make your skin strong and malleable to break down causing wrinkles, dark spots, and leathery skin. Damage can also occur to your eyes either resulting in photokeratitis or cataracts. Photokeratitis can be thought of as a sunburn of the cornea which is caused by intense UVC/UVB exposure of the eye. Cataracts is a clouding of the natural lens of the eye which causes decreased vision and possible blindness. Ultraviolet exposure has been proven to increase the incidence of cataracts. Lastly, overexposure to ultraviolet radiation can suppress the proper functioning of the immune system and the skin's natural defenses causing increased sensitivity to sunlight, diminished effectiveness of immunizations and elicit reactions to certain medications.

So, just because I've done all this research and found out A LOT of information about the damaging effects that the sun has on me doesn't mean it's going to stop me from sitting by the pool and enjoying a book on my day off. It just means that I'm going to be much more aware of preventative measures. These include always having at least a lotion or sunblock of SPF 15, wearing sunglasses that block out both UVA and UVB rays, not going out into the sun for prolonged periods of time during peak hours (10 am to 3 pm), wearing a hat that guards my face from constant sun exposure, also, reapplying the sunblock if I've been swimming or sweating.

# Question Corner



## What are the best positions to optimize getting pregnant?

While every couple has their faves, gravity rules in this game. Any position you choose for sex needs to help sperm get to the cervix (and then fallopian tubes) as easily as possible. For example, woman on top isn't going to work and neither is sitting, standing or bending over. Old-fashioned man on top while lying down may just be your best bet, although there is not scientific research to back this up.

Toni Weschler, MS suggests that "if you have a tipped uterus, you may have better luck having intercourse from behind with the female on her hands and knees. Having intercourse in this position it allows the sperm better access to the cervix."

Another tip on optimizing your chances is that you should not be getting up and go to the bathroom or anywhere else for that matter, either. When you're done playing, stick a pillow under your hips and elevate them slightly for 15-20 minutes. You're increasing your odds and sperm swimming to the cervix. You don't have to put your legs in the air and you don't need an expensive "infertility pillow," either – just throw a towel over the pillow and get comfy.

## I've been taking a pre-natal vitamin and eating healthier, should by partner be doing something similar?

Recently there has been research that shows men who eat more fruits and vegetables. The more produce a man consumed, the less sluggish his sperm, researchers reported at a meeting of the American Society for Reproductive Medicine.

Forty-eight infertile men and 10 fertile men who had fathered children in the last year completed questionnaires about their diets. Results showed that 83 percent of the infertile men had a low intake of fruits and veggies, defined as fewer than five servings a day, compared with 40 percent of the fertile men. And overall, men who ate the fewest fruits and veggies had the lowest sperm motility. "We think that sperm quality is affected by dietary antioxidant intake," said study author Dr. Vivian Lewis, a professor of obstetrics and gynecology at the University of Rochester in Rochester, N.Y. Antioxidants, like those found in fruits and vegetables, may help prevent damage to sperm that causes them to become sluggish and lose the ability to fertilize an egg, she said.

In particular, the antioxidants glutathione and cryptoxanthin, which are prevalent in brightly colored produce such as leafy greens, tomatoes, peppers and oranges, were associated with strong, healthy sperm, Lewis said. She recommended that men hoping to father children eat "a variety of fruits and vegetables, at least five servings a day."

Dr. Rebecca Sokol, a professor of obstetrics and gynecology at the University of Southern California in Los Angeles, who was not affiliated with the study, said it's prudent for men trying to impregnate their partners to improve their diets. It could potentially help their sperm, and it certainly helps their overall health, she said.

Men also should avoid prolonged soaks in the hot tub and smoking cigarettes and marijuana, all of which may damage sperm, she said.

## What are Kegel's exercises and should I be doing them?

Kegel exercises help strengthen the muscles that support the bladder, uterus, and bowels. By strengthening these muscles during your pregnancy, you can develop the ability to relax and control the muscles in preparation for labor and birth. Kegel exercises are also highly recommended during the postpartum period to promote the healing of perineal tissues, increase the strength of the pelvic floor muscles and help these muscles return to a healthy state, and also increase urinary control.

To do Kegels, imagine you are trying to stop the flow of urine or trying not to pass gas. When you do this, you are contracting the muscles of the pelvic floor and are practicing Kegel exercises. While doing Kegel exercises, try not to move your leg, buttock, or abdominal muscles. In fact, no one should be able to tell that you are doing Kegel exercises. So you can do them anywhere!

We recommend doing five sets of Kegel exercises a day. Each time you contract the muscles of the pelvic floor, hold for a slow count of five and then relax. Repeat this ten times for one set of Kegels.



# The Next Pregnancy

*Lost loves can never be forgotten or replaced. But if we allow it, the heart grows bigger to make room for new loves.*

Susan White Bowden

*"Everything's fine. Don't worry. That's easy for others to say."*

*"I'm just waiting for the other shoe to drop."*

*"I was afraid to tell our relatives that we were pregnant again. They think we're crazy to keep putting ourselves through this."*

*"My doctor said not to worry. That was his job."*

*"Everytime I go to the bathroom I'm looking for blood."*

Following one miscarriage many women feel pretty safe after they pass the time that they experienced their first loss. They seem able, for the most part, to relax and enjoy their pregnancy. But with each succeeding loss anxiety builds so you are apt to feel more vulnerable and less willing to trust your body in those future pregnancies.

You may feel cheated with a high-risk pregnancy...cheated of the joy of normal pregnancy. You want to feel elated, to experience "the glow of pregnancy", to feel secure browsing in baby stores. You have already learned that lightning does strike twice, so people can't tell you otherwise. Even if you are elated, you are fearful. You allow yourself to be tentatively excited.

Some women think that constant worry protects them from something going wrong. This is magical thinking. "If I worry enough about this event, it will not happen." The desire to have control of an outcome is normal. And the fear of not getting what we so long for can be paralyzing.

When you are just beginning your grieving it is your task to restore hope and trust in yourself, so we offer these suggestions to help with this task:

- Focus on what you can do today rather than what might happen tomorrow.
- Try to stay in the moment rather than allowing your mind to run away with the "what ifs".
- Distract yourself.
- Find a support group, or one or two friends who will allow you to vent your fears.
- Accept that most people won't be able to listen to your fears without giving advice.

*Self pity in the early stages is as snug as a feather mattress. Only when it hardens does it become uncomfortable.*

Maya Angelou

# TCMC

THE COMMONWEALTH  
MEDICAL COLLEGE

If you know someone who has also had a miscarriage and would like to be a part of the study...

Phone: 570-207-1058

[EAGeR@TCMEDC.org](mailto:EAGeR@TCMEDC.org)

Additional information can be found on the study website:

[www.eagertrial.org](http://www.eagertrial.org)



**EAGeR**  
The Effects of Aspirin in Gestation & Reproduction