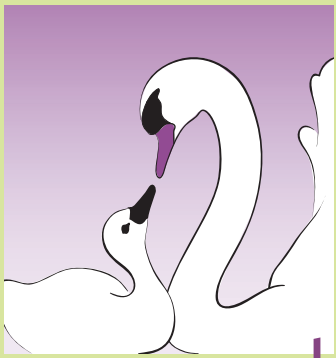


A Project of the Bay Area Breast Cancer and the Environment Research Center

# CYGNET Taking Flight

Cohort Study of Young Girls' Nutrition, Environment, and Transitions

WINTER / SPRING 2008



cygnet

## Greetings from the CYGNET Study

By Lawrence H. Kushi, Sc.D.

We are now well into our third year of data collection and visits. With your continued participation, the information we are collecting is forming one of the most comprehensive studies of environmental influences on pubertal maturation that has ever been conducted. I want to thank you for your involvement, especially to the 414 CYGNETs who came to see us for a second visit and the growing number of you returning for a third visit.

The Bay Area CYGNET Study and its two companion studies in Cincinnati and New York City are funded by the National Institutes of Environmental Health Science and National Cancer Institute to examine reasons for discrepancies in why some girls go through pubertal maturation earlier than other girls. The growing suspicion that girls are maturing at an earlier age than in years past, and that environmental factors may explain some of this trend, is a major focus for this study. While earlier puberty in-and-of-itself is rarely a cause for concern (and not at all for the girls in this study), it may lead to other consequences, such as a long-term modest increased risk of breast cancer. If we have a better understanding of factors related to earlier puberty, it can help us better prevent such diseases.

As you have been with us for three years, you may be wondering what progress we are making towards our scientific goals. We are currently writing scientific papers about our initial experiences in the study. These papers are focused mostly on describing our study and rationale, the research resource this study presents, and the knowledge we hope to gain as we move forward. For example, our observations over the first two years of the study suggest that the age of onset of puberty is occurring earlier than in past generations. The most recent comprehensive survey on this topic was published about 10

years ago, and in that study, at 7 years old, about 15% of African American girls and 5% of white girls had some signs of breast development. In our studies, the proportions of 7-year-old girls showing some sign of breast development is about 20% for African American girls and 7% for white girls, although these proportions are lower in the Bay Area.

As we follow the girls forward, a larger proportion of them will begin pubertal maturation. We will then be in a position to examine how different factors may explain why onset of puberty is occurring earlier. Since we are interested particularly in whether exposure to different chemical compounds may be related to this process, the collection of blood and urine samples are an important part of the CYGNET study. These samples will be analyzed for levels of various chemical compounds that have been suggested to influence hormonal pathways that affect pubertal development. We recently sent to the Centers for Disease Control and Prevention (CDC) in Atlanta approximately 300 blood and urine samples for analysis. Thus, in the next year or two, we will be able to examine the timing of onset of puberty and its relationship with many different types of environmental exposures.

Once again, I want to thank all of you for contributing your time and energy to this study. We greatly appreciate your continued participation and look forward to seeing you and your daughter at your next annual clinic visit. Please join us at the upcoming Tea Talk and Town Hall meeting where you can find out more about the CYGNET Study, meet other study participants and ask questions to the study investigators.

**Lawrence H. Kushi, Sc.D.**, Associate Director, Division of Research, Kaiser Permanente, is the Principal Investigator of the CYGNET Study.

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## Volunteering in Research is Empowering

By CYGNET Community Outreach and Translation Core (COTC)

You and your daughter must be so proud. Your daughter is in her third year of participation in the CYGNET Study – one of three epidemiological studies occurring nationwide—that is investigating certain environmental exposures and their relationship to onset of puberty. The COTC is proud of each CYGNET and their continued participation!

The COTC aims to empower and engage CYGNET Study families about the research by offering a variety of activities and materials to bridge the distance between the annual study visits.

Twice a year the CYGNET Study staff and the COTC host a Tea Talk at diverse locations in the Bay Area. The Tea Talk provides girls and parents an opportunity to meet other study participants and their families as well as CYGNET researchers and COTC members.

Each spring, the COTC hosts a Town Hall meeting to discuss the ongoing research of the Bay Area Breast Cancer and the Environment Research Center (BABCERC). The meeting provides an opportunity for CYGNET Study family members, community members, and other researchers to learn about the Center research. The COTC also invites outside speakers to broaden the audience's breast cancer and environmental health information. This year our invited speakers include politicians and an investigative journalist.

The COTC develops and disseminates breast cancer and environmental health materials. Some materials are specifically tailored to study participants, such as *The Mind-Body Connection – Onset of Puberty in Girls* handout and the clinic poster board. Other materials are tailored to a larger population, such as the *Phthalates – The Everywhere Chemical* handout and *Of Mice and Women: Modeling Breast Cancer and the Environment* education kit. In addition, the COTC has developed a breast cancer and environmental health peer-education program for high schools.

Research is a long process of investigation. Scientists develop a hypothesis to describe what will happen in a study; however, change resulting from research outcomes may take many years. Your continued participation and engagement in the scientific process is an empowering relationship that aims to make a difference in the health of future generations.

The COTC is led by Zero Breast Cancer. For more information or to register for the Town Hall contact Jo Ann Johnson at 415-507-1949 x103 or e-mail [joannj@zerobreastcancer.org](mailto:joannj@zerobreastcancer.org).

A HYPOTHESIS  
IS A POSSIBLE  
EXPLANATION.



## Helping Your Daughter to Remain Physically Active during Puberty

By Barbara Sternfeld, PhD

Participation in regular physical activity during childhood and adolescence is critical for maintaining good health. In addition to decreasing the risk for future development of diseases such as coronary heart disease, diabetes, and osteoporosis, physical activity has many, immediate benefits for young girls and teens. It helps to prevent obesity and excess weight gain, to build self esteem and body satisfaction, to support better academic performance and to protect against the adoption of unhealthy behaviors, such as smoking and early sexual activity.



Unfortunately, physical activity levels in both girls and boys tend to decline with age, with the sharpest drop occurring between grades 1-3 and grades 4-6. At every age, girls are generally less active than boys, with the gender difference becoming even more pronounced during middle and high school.

However, for any individual girl, a decline in physical activity is not inevitable. Because participation in physical activity is a behavior, it can be learned and reinforced. Parents play a crucial role in that learning process.

Here are several suggestions for parents to follow that encourage physical activities:

- 1 Be a role model. Many studies show that physically active kids have physically active parents. If you don't already participate in a moderate intensity physical activity, such as brisk walking for at least 30 minutes a day on most days of the week, make a commitment to do so now.
- 2 Plan physically active recreation for the whole family. At least once a week, schedule a walk, hike, a bike ride, or a game such as volleyball or softball. Incorporate the physical activity into your normal daily routine, such as walking together to the store rather than driving.
- 3 Expose your daughter to a variety of physical activities in a variety of settings. It's important that your daughter find physical activities that she enjoys and feels good about doing. Some children enjoy competitive, structured sports, while others prefer more spontaneous play, like climbing trees or hula hooping.
- 4 Lobby for physical education in your daughter's school, especially a program which emphasizes lifetime physical activities for everybody, regardless of ability.

**Barbara Sternfeld, PhD** is a physical activity epidemiologist with expertise on women's health. She is a Senior Research Scientist with the Division of Research at Kaiser Permanente Northern California and is one of the CYGNET Study co-investigators



## Keep your heart healthy!

**Get ready to jump into Spring!  
Play hard for at least 60 minutes every day  
Spring, Summer, Fall and Winter!**



## Healthy Heart Bookmarks!

Create your very own CYGNET Heart Healthy bookmark to share with your family, friends and teachers! Have fun, be imaginative and presto--you'll have an awesome bookmark! Just gather the materials needed and you're ready to begin.

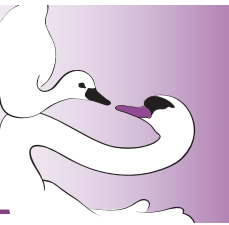
1. Cut the bookmark along the dotted lines.
2. Using a hole puncher, punch a hole through the circle.
3. Cut a 12" string, yarn or ribbon and thread through the hole.
4. Tie a knot. Add beads or yarn to create a tassel. (Optional.)
5. Add your name to make it more personal.
6. Use crayons, markers, stamps, glitter, buttons or stickers to decorate your bookmark.
7. Place in your favorite book!



### Materials Needed:

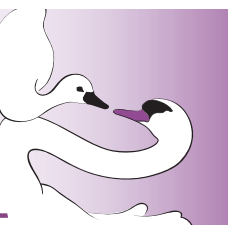
1. Safety scissors
2. Tape or glue
3. Markers, crayons
4. Hole punch
5. Colorful yarn or string
6. Buttons, beads, stamps, stickers

cygnet



**HEART  
HEALTHY  
ACTIVITIES**

cygnet



**HEART  
HEALTHY  
ACTIVITIES**

# Girl's Corner

## Healthy Heart Word Search Puzzle

Test your word-finding skills.

Circle these hidden words that help your heart:

Change, Laughter, Exercise, Motivation, Soccer, Walk, Dance, Play, Enthusiastic, Energy

I H F M P H L J N E R P E F O A  
 S P R N T V O E L A U E K U J S  
 O A M D C C C R A E A E E D N N  
 C H O A Y A L P E T I M E C S F  
 C S T N I P U W C C D Z T V X I  
 E S I C R E X E S R P S O T I H  
 R N V E T C J T M E I J O T S E  
 W E A K L A W C O C T M S T S C  
 C I T S A I S U H T N E A S S R  
 S C I H S B U G W E A N E Q V Q  
 V S O I G V S E E G C E Y Z O F  
 S U N H E U A F E M H R Z Y E G  
 C H A N G E A F S S E G C U E D  
 E H M G H O I L E M X Y S O C I  
 E R H B T S G N W O V B D H E S  
 A B A F H Y E E X H H A C T E A

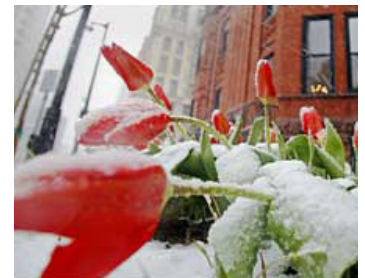


## CHANGING SEASONS

Hi CYGNET's!

Last December, I visited my family in Boston and went ice skating. My nose was cold but I laughed a lot. In

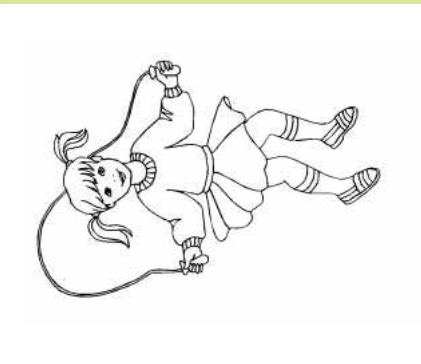
the winter I love to read books, play board games and go ice skating! Now the spring season is almost here! It's that time of the year when the garden looks very colorful, and during the spring I look forward to riding my bike, rollerblading, and playing soccer!



This spring have lots of fun! Play and enjoy the outdoors each season!



**Evelyn Landaverde** is our CYGNET Research Assistant — the person who sees you at clinic visits. She enjoys meeting each CYGNET and hearing about all your fun activities!



**BE ACTIVE!**

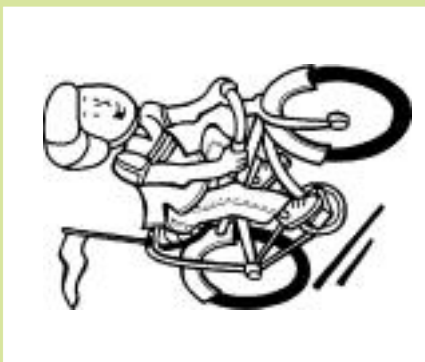
Walk

Bike

Play sports

Skip rope

Take the stairs



**HEALTHY HEART ACTIVITIES**

Break free of the screen!

Read

Play board games

Put together puzzles

Play charades

## Recapping the Fall 2007 Marin County TEA TALK\*

The Tea Talk on October 13, 2007, *Speaking to Your Daughter about Puberty: It's Never too Early to Talk* at the Bay-Delta Model Museum in Sausalito was a great success. The girls explored the museum with a park ranger and learned about the health of the San Francisco Bay while the parents discussed topics related to girls' pubertal development with Dr. Louise Greenspan, a pediatric endocrinologist at Kaiser Permanente San Francisco and a CYGNET Study co-investigator.

During her interaction with the parents, Dr. Greenspan shared that since the CYGNET Study is in its third year, more of the girls will be entering puberty. As a result, many of their daughters may be more sensitive about discussing the changes in their and their peers' bodies. She suggested that the trips to and from the CYGNET Study visits (or the cards and newsletters the girls receive in the mail) provide a good opportunity for parents to ask their daughters if they have questions about their changing bodies. She shared that parents can discuss sexual development with their daughters without talking about sex.

Dr. Greenspan recommended the following ways on how parents may approach the issue of puberty with their daughters:

- Use her interest level in the subject matter as a guide.
- Put the discussion of puberty into the context of general health, growth and development.
- For most girls, using correct anatomical terms can make it easier to talk about.
- For most girls, they just want to know they are normal and what will happen next.

\*CYGNET Study Tea Talks rotate Bay Area locations and topics bi-annually to bring information to participants and their families on a wide range of science and health topics, with a focus on the CYGNET Study.



### A few quotes from parents:

*"The main reason I come to Tea Talks is to bring my daughter, so she can meet and interact with other people in the program and to learn more about what the study is about."*



*"I like to be more aware of what my daughter is going to go through. It makes it easier for me as a mother of a girl to understand and know how to talk to her to make her more aware and what to expect when she reaches puberty."*



## Spring 2008 East Bay TEA TALK for CYGNET's and their Families

**Keeping Physically Active Throughout Life**  
Featured Speaker: **Barbara Sternfeld, PhD**

### JOIN US!

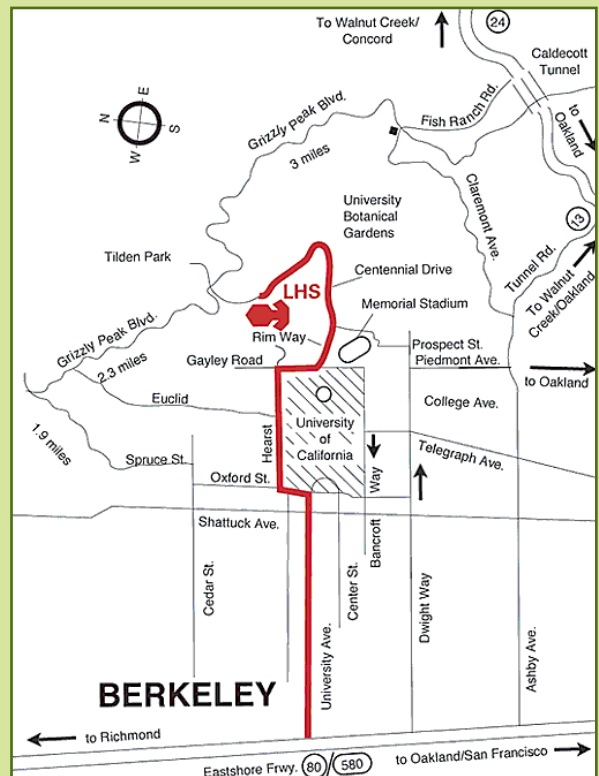
Saturday, April 5, 2008  
9:30 am - 11:30 am  
Lawrence Hall of Science  
Berkeley, California

Kids will explore the new "Speed" exhibit with CYGNET Study staff from 10:00 am — 11:00 am.

Enjoy an all day free admission to Lawrence Hall of Science following the Tea Talk. Free admission is for all family members and friends attending the Tea Talk.

**Please RSVP by April 2, 2008**  
**510-891-3884**

For driving directions please visit the Lawrence Hall of Science website  
[www.lawrencehallofscience.org/generalinfo/directions.html](http://www.lawrencehallofscience.org/generalinfo/directions.html)



## NEW !!

Check the *CYGNET Study Poster Board* at your next clinic visit for clinic news, educational handouts, newsletters, and upcoming events!

### Register NOW!

#### **CYGNET Study Spring Tea Talk**

Saturday, April 5, 2008

9:30 am — 11:30 am

Lawrence Hall of Science

Berkeley, California

Call 510-891-3884 to register

**FREE**

#### **Bay Area Breast Cancer & the Environment Research Center 3rd Annual Town Hall Meeting**

Saturday, March 1, 2008

9:30 am — 2:00 pm

Preservation Park, Nile Hall

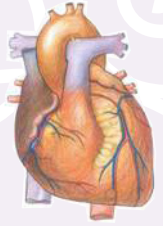
668 13th Street

Oakland, California

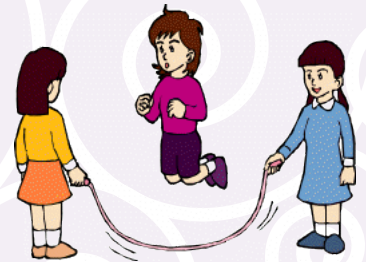
Call 415-507-1949 x 103 to register

**FREE**

# Heart Trivia



- ♥ The heart is a muscle that acts like a pump.
- ♥ It only takes about 20 seconds to pump blood to every part of your body.
- ♥ Every day about 2,000 gallons of blood passes through the adult human heart.
- ♥ The heart is about the same size as your fist.
- ♥ The heart weighs less than one pound.
- ♥ The beating sound your heart makes come from your heart valves opening and closing.
- ♥ The heart beats faster when you are exercising.



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