

PCOS NEWS

OCTOBER 2001

Issue 9

PCOS Study Staff

Project Director

Sheila Laredo, MD
416-351-3800 ext 2721
sheila.laredo@swchsc.on.ca

Physiologist & Coordinator

Vanessa Speers, MSc
416-351-2536
vanessa.speers@swchsc.on.ca

Registered Dietitian

Christine Mehling, MSc
416-760-8778

Research Assistant

Shamali Wickremaarachi, BSc
416-351-3800 ext 2714
pcos@swchsc.on.ca

**Maternal, Infant and Reproductive Health
Research Unit**

at

**The Centre for Research
in Women's Health**

**790 Bay Street, Suite 719
Toronto, Canada M5G 1N8**

**Tel 416-351-3800 ext 2714
Fax 416-351-3771**

**pcos@swchsc.on.ca
www.utoronto.ca/miru/pcos**



COUNTDOWN TO THE FALL FLING: OCTOBER 17TH!

Come out and listen to our guest speaker, Dr. Ellen Greenblatt, of Mount Sinai Hospital, give an informative talk on PCOS. Please feel free to bring a question or two with you, as there will be a brief question and answer period after the talk.

The evening will include a light dinner, and will be held at 790 Bay Street (SW corner of Bay & College), 7th Floor, Suite 702 & 703 at 5pm.

If you have not already done so, please RSVP to Sheila, Vanessa, or our new Research Assistant Shamali Wickremaarachi (pcos@swchsc.on.ca or 416-351-3800 ext 2714), so we can make the appropriate arrangements. We look forward to seeing you there!



WE'RE OVER HALF WAY THERE!!

**Overall, 47 Women Have
Now Been Enrolled!**

**We thank all women who are
helping to answer important
questions by participating!!**



WORDS TO LIVE BY

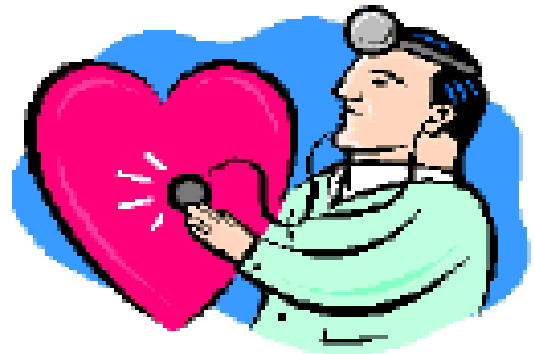
**“There is no
substitute for
hard work”.**

- Thomas Edison (1847-1931)

MEDICAL FORUM

SHEILA LAREDO, M.D.

PCOS and Heart Disease - Am I at Higher Risk?



You have likely already heard that PCOS increases the risk of having a number of heart disease risk factors such as high blood pressure, abnormal cholesterol results, and Type 2 diabetes. Does this mean that there is an increase in heart disease risk too?

In fact, the answer to this question is not that straightforward because the research is conflicting. Studies which “model” risk, based on age, gender and risk factors such as blood pressure and cholesterol suggest that the risk of heart disease is greater for women with PCOS, because they are more likely to have these heart disease risk factors. One study (Dahlgren et al, 1992) suggests that the risk of heart disease could be as much as 7 or more times greater based on these risk factors. Other “modelling” studies also suggest increased risk but to a lesser degree. There is also a study (Birsdall et al, 1997) which looked at women under the age of 60 and who were known to have narrowing of the coronary arteries (which supply blood to the heart) on the basis of angiograms. This study showed that women with documented heart disease had a 40% likelihood of having polycystic appearing ovaries on ultrasound. While women with these polycystic appearing ovaries don’t necessarily have PCOS, they are more likely to have it nonetheless. In the general population, it is thought that about 20% of women have polycystic ovaries on ultrasound. Thus, it appears that women with PCOS may be over-represented in populations of women with heart disease, again suggesting that PCOS the risk of heart disease.

One recent and very interesting study also investigated heart disease risk. The researchers (Kelly et al, 2001) looked at the blood level of a protein called C-reactive protein. This is a protein that increases in the presence of inflammation, and elevations in this molecule are associated with increased risk for heart disease and diabetes. When this group looked at levels of C-reactive protein in women with PCOS, they found that they were more likely to have high levels compared to women with normal menstrual cycles and women with normal male hormone levels.

However, despite the fact that women with PCOS have more reasons to have a greater risk for heart disease, no one has yet demonstrated that women with PCOS are more likely to die from heart disease. In fact, one study (Pierpoint et al, J Clin Epidemiol 1998) which followed women who had a longstanding history of PCOS followed death records and determined that women with PCOS did not appear to be more likely to die from heart disease than would otherwise be expected. There are many potential reasons why this data may not be definitive, but the results are somewhat surprising, and if true, reassuring.

At this time then, it is not clear whether women with PCOS are at increased risk of heart disease, although they do clearly have more risk factors for heart disease. Further research needs to determine to what extent the risk of heart disease can be modified. In other words, if treatments are provided which improve some of these heart disease risk factors, can we reduce risk of heart disease in women with PCOS? The probable answer is yes, although there is as yet no research to substantiate this. The PCOS Diet and Exercise Study is not geared to look at actual heart disease in women with PCOS, but we are very interested in our ability to reduce some of the significant heart disease risk factors, such as blood pressure, body weight, cholesterol levels, and blood sugars. If there is an increased risk among women with PCOS, it is possible that the modification of these risk factors can have a real and long-term impact on the risk of heart disease.

TRICK OR TREAT!!

Vanessa R. Speers, MSc



Not even the most health-conscious among us wants to come across as Halloween's equivalent of the Grinch, but while you don't have to steal the fun from Halloween by refusing to give out sweets to the trick-or-treaters at your door, you can lessen the ill-effects of your generosity by choosing wisely at the candy store.

Whether you're handing out candy, or indulging in the stockpile your child brings home that night yourself, keep in mind that candy such as lollipops or gummy type candies are a better choice than some of the other treats you may find in the treat bag. This is because while all candy has sugar, hard candy or gummy like candies have no fat.

Chocolates, caramels and other soft candy, on the other hand, are loaded with fat. Two pieces of "fun size" Butterfingers have 200 calories, and 8 grams of fat. A 1.5-ounce pack of plain M & M's has 210 calories with 9 grams of fat!

Take a look at the chart below (*grams) to show you what's in your favorite candy, or the sweets your kids bring home Halloween night. I've included an information list on sugar (to the right) to show you how to identify it, even when it tries to disguise itself!



NUTRITIONAL INFO ON SOME COMMON HALLOWEEN TREATS

Brand Name	Variety	Serving	Kcal	Fat*	Sugar*	Carbs*
Almond Joy	Miniatures	3 pcs	200	11	16	23
Baby Ruth	Fun size	2 pcs	190	9	19	25
Double Bubble	Bubble Gum	1 pc	25	0	0	0
Butterfingers	Fun size	2 pcs	200	8	21	23
Hershey's	Kisses	8 pcs	210	12	17	20
Hershey's	No Almonds	2 pcs	200	11	14	18
Hot Tamales	Cinnamon	1 box	60	0	10	15
Jolly Rancher	Hard Candy	3 pcs	70	0	11	17
Kraft	Caramels	5 pcs	170	3.5	27	32
Lifesavers	Assorted	1 roll	40	0	8	10
M & M's	Plain	1.5 oz	210	9	27	30
Milky Way	Dark	2 bars	170	6	23	28
Nestles	Raisinettes	3 bags	210	8	30	34
Planters	Peanuts	2 bags	170	14	1	6
Reese cups	Peanut butter	2 pcs	190	12	4	18
Snickers	Fun size	2 pcs	190	10	20	24
Starburst	Original Fruit	8 pcs	160	3.5	22	25
Whoppers	Malted Milk	2 bags	200	8	29	32

Meanwhile, what are you going to do with all that candy your kids bring home? My advice is to put some limits on the amount of candy you or your kids eat — and stick to your guns. Don't let it sit around for more than a day or two.

Within those limits, you should be able to enjoy the holiday, and then get right back on track!

SUGAR!!



Sugar is another ingredient that can hide under many different names. If you see any of the following words on a label, don't be fooled; it's sugar!

- Brown sugar is sugar crystals in molasses syrup with natural flavor and color.
- Confectioners' sugar is finely powdered sucrose.
- Corn sweeteners are corn syrup and sugars derived from corn.
- Corn syrup is a syrup produced by the action of enzymes on cornstarch.
- Dextrose is an older name for glucose.
- Fructose is also known as fruit sugar or levulose.
- Galactose is part of lactose.
- Honey is sugar formed from nectar (mostly sucrose) gathered by bees.
- Invert sugar is a mixture of glucose and fructose formed by the hydrolysis of sucrose in a chemical process.
- Lactose is also called milk sugar.
- Maltose is also known as malt sugar.
- Maple syrup is a sugar (mostly sucrose) purified from concentrated sap of the sugar maple tree.
- Molasses is a thick brown syrup, left over from sugarcane juice during sugar refining.
- Sorbitol is a sugar alcohol, which can be derived from fruits or commercially produced from dextrose. Sucrose is commonly known as table sugar; beet sugar, or cane sugar.



Feeling Overwhelmed??

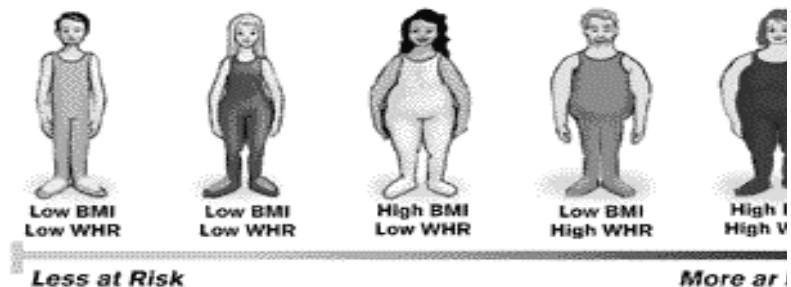


The question is raised from time to time about “withdrawing” or “dropping out” of the study after you have already been randomized to a study group. It is important for all of our study participants to understand that you are still part of the trial, whether you say you are in or out. Once you are enrolled in the PCOS Study, all of the information on you and your assigned group is entered into our study database. Therefore, it is very important that all women understand that agreeing to participate means accepting the assigned treatment group. If you decide after randomisation that you do not want to have the study treatment, we still need to collect all the information and complete all of the assessment tests. Otherwise, if you decide not to do the assessments, there will be a “blank” in the information for your spot in our database, which will severely compromise the questions that the study is trying to answer. There is no circumstance when we will drop your name from our database once you have been enrolled in the study

- it must remain in the database under all circumstances. Therefore, since the PCOS Study contains relatively few women, every one of you is crucial to answering the questions that the study is trying to answer. We appreciate the hard work you are doing to answer these important questions about PCOS. Please keep our study staff apprised of your thoughts and feelings about the study, something can always be worked out for you.

Number Crunching...

Vanessa R. Speers, MSc



During the course of the study, you will complete three assessment appointments. During each of these visits you will have a number of different measures taken by the study physiologist to help assess your physical health. What is the science behind all those numbers that get scribbled down? Glad you asked. This month: The Body Mass Index (BMI) and Waist to Hip Ratio (WHR).

Your BMI and WHR are assessment tools to use in conjunction with the results of the other information (i.e. aerobic capacity, blood work, and nutritional assessment) we gather on you over the year. It is not only important to look at your healthy weight range on the profile, but also to take into account where you carry that weight.

BMI (usually expressed as kg/m^2) is based on the concept that weight should be proportional to height. Although this method does not evaluate the amount of body fat, it is fairly accurate for people who do not have a lot of muscle weight (i.e. body builders). Ideally, you should aim to have your BMI fall between 20-25 kg/m^2 . This range places you at a lower risk for the development of cardiovascular and metabolic disease.

Waist-to-hip ratio (WHR) looks at the relationship between the differences in the measurements of your waist and hips. Most people store their body fat in two distinct ways, often called the “apple” and “pear” shapes. These terms refer to where you carry your weight - around your middle (apple) or around your hips (pear). It is generally accepted that, for most people, carrying extra weight around their middle increases health risks more than carrying extra weight around their hips or thighs. Overall obesity, however, is still of greater risk than body fat store locations or WHR.