

#### 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@sw.ca

#### Registered Dietitian

Christine Mehling, MSc 416-760-8778

#### Research Assistant

Jennifer Marsh, BSc 416-351-3800 ext 2714 pcos@sw.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@sw.ca www.utoronto.ca/miru/pcos

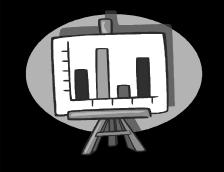
## PCOS NEWS

**SPRING 2003** 

**ISSUE 18** 

## Preliminary Reports...

...will be mailed or e-mailed to all study participants with an interpretation guide as soon as they become available (the next 2-3-months).



# When Do I Get Final Results?



Results will be available within the next year, so please let us know if your mailing address changes.

## 12-month follow-up assessments...



For those of you who completed your 12-month apt while Sheila was away on maternity leave, please contact her to discuss your participation in the study over the last year.

## BEST OF THE WEB...

## www.fitday.com

Check out this free website that allows you to track your nutrition, exercise, weight loss, and other goals online -- it's free!

## **Medical Forum**

#### by Sheila Laredo, MD

Welcome to the second last issue of the medical forum. Watch out for the next one, which will be the big one – we expect to let you know of the study results at that time! Thank you again to all of you for your participation; each and every woman participating has been crucial to the study.

VITA O

In this issue of the medical forum, I wanted to give you an update on an old question, and information on some new material. First the update:

As you know, we have discussed low carbohydrate diets in the past, but since that time, there have been several studies published. One recent one, published in April in the Journal of the American Medical Association (JAMA), was a study that actually reviewed the other studies published to date and analyzed them all together. In all, they were able to look at research on over 3,200 participants in studies published between 1966 and early 2003. This included data on over 700 people who received low or very low carbohydrate diets. The results were very interesting. The lower carbohydrate studies were generally conducted on younger participants, and only a few of the lower carbohydrate studies lasted longer than 3 months.

Overall, the results of the studies indicate that weight loss was associated with the duration of diet, and the degree or calorie intake restriction, but NOT with reduced carbohydrate content. This makes sense. What it means is that, when it comes to weight loss, all calories are created equally. In other words, each calorie affects how much **weight** you gain exactly the same, regardless of which food item it comes from. It is not necessarily the case that all calories are of equal **quality** however (for example, by now you know that 100 calories from a can of pop have less nutrition than 100 calories from a slice of high fibre bread, or a small piece of fish). However, it is the case that 100 calories will affect your weight just the same, regardless of what kind of food you got it from.

It is important to note that none of the studies that reported on very low carbohydrate diets that lasted over 90 days were randomized or even had control groups. This means that we don't know how well the participants would have done on a different diet (better, same or worse are all possibilities). Based on this information, the authors were neither able to recommend in favor of nor against low carbohydrate diets for the purpose of weight loss. The researchers suggested that much more information is needed on these diets before they can be safely recommended. As well, they recommended that further research would be necessary to determine whether there are differences between low carbohydrate and higher carbohydrate diets with respect to effects on blood sugar (particularly in diabetic subjects), high cholesterol and hypertension.

If it does ultimately turn out that all calories are created equally, the question will be which diet is easier to follow (for the same number of calories), since the one that is easier to follow will result in the longest adherence, and lower calorie intake, resulting in better weight loss.

#### That...is another study!

The new material: It has become increasingly recognized that people at risk for heart disease are more likely to have "markers of vascular inflammation". These are molecules that cause inflammation of the lining of blood vessel walls. It is thought that this inflammation leads to changes in the blood vessels, which may ultimately increase risk for narrowing and clotting (which in the heart can cause heart attack and in the blood vessels supplying the brain can cause stroke). There is therefore interest in looking at interventions that can reduce the circulating levels of these markers. Furthermore, because fat tissue produces these molecules, it is thought that people with higher weight will have higher levels of these markers, and thus higher risk.

There was a recent study, also published in the April 9<sup>th</sup> edition of JAMA that is of particular interest to women in our study, because of some of the shared similarities between their population and ours. In this study, 120 premenopausal overweight women had a number of their inflammatory markers measured (which were higher in this group than in non-overweight women). They were randomized to receive a program of intensive lifestyle changes (including detailed advice on losing 10% of their weight, a low-calorie Mediterranean-type diet, and physical activity) or to receiving general information about diet and exercise.

After 2 years, the women in the intensive treatment group had lost more weight (an average of 14kg compared with 3 kg among controls), and had lower waist-to-hip ratios than women in the control group. They also had better improvement in measures of blood pressure, insulin resistance, and had lower levels of vascular inflammation markers. It was thought that this kind of risk factor lowering might ultimately lead to lower risks of cardiovascular risk. Although this study was not specifically conducted on women with PCOS, these were women with similar risk factor profiles. It is once again reassuring to us at the PCOS Diet & Exercise study to see that lifestyle interventions have a significant and measurable impact on important outcomes for women.

We look forward to reporting to you our very own study results in the next issue of the Newsletter. Thank you again to all of you for your participation!



## **Nutrition Corner**

## by Christine Mehling, MSc

Spring has sprung and that means the hibernation period is over!! For those of us who have put healthy eating on the back burner,

spring is a great opportunity to start a new whether your goal is to shed a few pounds or choose more wisely.

Here are some tips to helps balance the scale in your favour:

- 1. Find your Canada Food Guide (CFG) and Menu Plan to reacquaint yourself with the number of recommended portions from each of the food groups. Use this as your reference tool. Knowing your daily limits for each of the food groups will help you to monitor your daily intake.
- **2. Eat more fruit and vegetables (excluding fruit juice).** Fruits and vegetables are low in calories, provide bulk and can help you to feel full (that's key when you are trying to lose weight). If you have reached your daily limit from the other food groups and are still hungry grab some more fruits and vegetables.
- **3. Measure out your portions.** Get your measuring cup out and measure out the food portions you are going to consume. This is the best way to control your intake and make you aware of the portion size that you are consuming. Your eyes may deceive you. You may think you are only having "half a cup" but in actuality the serving could be 1 or 2 cups, which means you are doubling or quadrupling your energy intake.
- **4. Read Nutrition Labels** (see March 2001 Newsletter for more information about label reading or checkout our study website!). Nutrition labels provide a lot of good information such as calories, grams of fat and carbohydrate and serving size. Some key figures to keep at your fingertips are:
- $\Rightarrow$  5 grams of fat is a fat serving (CFG)
- $\Rightarrow$  15 grams of carbohydrate is a serving of bread. (CFG)
- \*\* Remember a "serving" does not always equate to "one of something" or equal to one serving from the Canada's Food Guide. Always read the nutrition label carefully to determine what is considered a serving.
- **5. Prepare it or bring it from home!!!!** No matter how careful you are when buying or eating out, the best control is your own control. Make your sandwich, pasta salad, soup, hamburgers etc. at home where you are aware of all the ingredients that go into making the meal and can better control the portion size.
- **6. Minimize your high-energy snack foods.** Nuts, seeds, cookies, cakes, donuts, muffins, chips, cheesies, nachos, frozen yogurt, ice-cream, specialty coffee drinks are energy dense and can ring up your energy points on your daily limit very quickly. Just look at the food label and portion size to see how energy dense they are. Try having a small portion of your favourite snack item 2-3 times a week. "Never say never" is not a good nor practical motto to live by and may result in failure. Rather "some but not a lot" is a much more practical approach. Try snacking on fruits or vegetables instead. Remember they are low in energy.
- 7. Don't skip meals. Skipping breakfast or lunch does not result in a decreased quantity of food over the day. Skipping meals is not a successful way to lose weight. Eating 3 or more, smaller meals over the day will lead to a feeling of satiety and lead to less binging. I have often heard "if I eat breakfast I am hungry over the whole day". The better question to ask is: if you eat breakfast and eat healthy over the day do you gain weight? Or the flip side: if you skip breakfast do you lose weight over the long term? If you eat a well balanced diet of 3 or more smaller meals over the day and feel satisfied then you may be more equipped at saying no to that tempting donut staring at you from across the table that your work colleague so thoughtfully brought to work to share.

Remember: Control lies within your hands. Take it and run.

## **Sloppy Joes**

Prep Time: 5 minutes
Cooking Time: 15 minutes

#### Ingredients

- 1 pound extra lean ground beef (or chicken, groud soya etc), 7-10% fat
- 1/2 red onion, minced
- 1 stalk celery, minced
- 1/2 green pepper, minced
- 1 clove garlic, minced
- 1/2 teaspoon salt
- 1/4 teaspoon black pepper
- 1/2 teaspoon chili powder
- 1 1/2 teaspoon brown sugar
- 1/4 teaspoon paprika
- 1/4 teaspoon dry mustard
- 3/4 cup chicken broth
- 2 teaspoons Worcestershire sauce
- 1/2 cup ketchup
- 1/4 cup tomato sauce
- 2 teaspoons red wine vinegar
- 6 whole wheat hamburger huns

#### Method

Brown the meat in a large saute pan. After some of the fat is rendered add the onion, celery, pepper, garlic and seasonings. Cook until the vegetables are tender. Add the broth through the vinegar and simmer until thickened and resembles a very meaty tomato sauce. Warm the buns in the oven briefly before spooning the filling into the bun. If you are concerned about the mess, pulling out some of the bread from inside the bottom of the bun creates a trench that holds the sloppy joe sauce in, a little.

Yield: 6 servings
Per Serving (8 oz): Calories 356;
Fat 12 g; Saturated Fat 4.3 g;
Carbohydrate 42 g; Protein 21
g.This recipe is 30% fat.



#### Finding Your Fitness Prescription

By Vanessa R. Speers, M.Sc.

"This above all; to thine own self be true." — William Shakespeare

The approach of summer, and the bathing suit, inspires many people to jump on the fitness bandwagon. While such good intentions are certainly admirable, there is a less settling side —that is, the majority of these would-be exercise enthusiasts will resume their couch potato ways within 6 weeks. Is there any way to escape this doomed fate? Keep a diary? Choose a partner? Set realistic goals? Of course, all of these will help you realize your fitness ideal. But the key to keeping your promise to your body is actually much simpler: Be true to yourself. The secret to reaching your fitness goals are, as Emerson said, "know yourself." Go back to what you enjoyed as a child, as most success with exercise will be achieved when a person is doing what comes naturally to them, not by following



whichever trend is around the corner. So we should be exercising instinctually, or following our body's natural "fitness prescription." In case you need some help figuring out exactly what *your* prescription might be, grab a pen and paper and try taking this "diagnostic" quiz to help you figure it out: Finding your "fitness prescription" is easy. Just add up the number of "a's," "b's," "c's," and "d's" you answered. Now match up your most popular answer with the category below according to this guide:

#### A = Mindful Maiden B = Social Bee C = Nature Girl D = Lone Ranger

Mindful Maiden: "Downward facing dog," "the warrior" and "the hundred" are terms that induce a sweat in you as they roll off your tongue. You value form and flexibility over panting and perspiring. If a balanced body, relaxed mind and steadied soul are your image of "fit," your fitness prescription is best filled with mindful exercise like Yoga, Tai Chi and Pilates. By no means are you alone. Mindful exercise is a fast growing trend in fitness. People are tired and their joints are beginning to hurt, so the gentle nature of mat programs like Yoga and Pilates are good for anyone as they can be as gentle as a person decides. Yoga and other mindful exercise are more likely to work towards weight loss when combined with other forms of training. Cardiovascular work, muscle strength and flexibility should always be part of your exercise routine, so always be open to all forms.

Social Bee: In your opinion, gym is not an ugly three-letter word. It's the place where you can escape the hubby and kids for an uplifting hour of step aerobics with some female bonding. You find that it's better to grunt through "Abs and Thighs" with a little help from your friends than alone. And "Karaoke Spin" is most definitely your idea of a fun time. Social bees like yourself need to look no further than group exercise as the perfect antidote for the fitness blahs. After all, what's the point of working out if you're not having fun? According to fitness trends, you're on to something. More people are joining the neighborhood gym now, despite expensive fitness equipment waiting for them at home. Gyms can be the perfect remedy for the social cravings of some fitness seekers, primarily because of classes. Classes are a good way to go, since when you're in a class, you're with people with the same goals. In addition, we tend to perform more vigorously with people around us, with gyms around the country offering such exciting fitness fare as "Urban Rebounding," "Ballet Boot Camp" and "Broadway Dance Series," what better time to join? One thing the woman who seeks social stimulation to sweat off the weight should keep in mind: Don't limit yourself; the gym isn't the only place to satisfy your fitness cravings. Attending an adult dance class, joining a sports team or forming a running group with friends are also great ways to fill your fitness prescription while having fun.

**Nature Girl:** When it comes to working out, you'll take your fitness outside. The rugged outdoors provide enough of a fitness challenge for you. Who needs the fluorescent lights, social pressure and crowds of the gym when you can be one with nature? Kayaking, hiking, skiing, running, rock climbing and biking are your passion-and therefore your fitness potion. Motivation, for you, is the wind passing through your hair, the sun on your face and the ocean waves coordinating your step, not the clanging of the treadmill or the clanking of the Stairmaster. For you, fitness is an adventure that challenges your stamina and your dedication. Aside from the invigorating challenge posed by facing off to Mother Nature, nature girls enjoy other benefits from working out in the largest gym on earth. Just remember when braving the elements, do it sensibly. Always keep hydrated, even in the winter, wear layers when working out in the cold and protect your skin from the UV rays of the sun all year round. Now get out there and enjoy yourself!

Lone Ranger: For you, fitness is a serious subject. You're not doing this to fool around. After all, this is your health. So when you choose your workout, you cut out the distractions and start off on a solo journey to fitness. Whether you're panting with Billy Blanks of Tae Bo fame in the privacy of your own home, going for an early morning run or pedaling away on the recumbent to the beat of your Walkman, you're your own fitness coach. Who needs handholding when it's *your* body is the best judge of what's right for it? And the best part of your workout? The ability to customize your routine, all without making conversation with your neighbor. One bit of advice: While it's fine to be your own cheering squad, a trainer can really optimize your workout, they can help you stay motivated and avoid injury. Some of the equipment for home use and in gyms are excellent ways to achieve your goals, but it never hurts to learn proper use of them from a trainer. Equipment that can be adjusted according to your level of fitness, like treadmills and elliptical trainers are especially good.

Regardless of your particular "fitness prescription", to accomplish your fitness goals, just remember that it's what inside that counts. Most people who meet their fitness goals don't do it for a partner or others - rather, they do it for themselves. To stick to your goals remember that discipline is the secret to success, and lack of it is the main reason most women abandon their exercise programs. Even more essential, just get to it. That's really the bottom line - just get started with something and then be open to all forms of exercise. So, hit that gym, or that trail, or that class, or your bike, or...well, just get started, you're already halfway there!

#### Finding Your Fitness Prescription: THE QUIZ!!

Read the following questions and choose the most appropriate answer. You can only select one of either a, b c, or d. When you are finished simply add up the number of each, and determine which of the descriptions from the Finding Your Fitness Prescription describes you best.

## 1. With a wind-chill factor of -10 degrees and the snow starting to accumulate on the ground, your workout instinct is telling you:

- a. A good Hatha Yoga class will warm up the body and soul
- b. Time to sweat away the chill with the 10 a.m. Step class
- c. Strap on those cross-country skis and head out to the local trail
- d. It's the perfect day to stay in with your newest Denise Austin tape

#### 2. You pick up your gym's newest schedule and see "Urban Rebounding" is the newest attraction. You think:

- Jumping up and down on a trampoline will hardly harmonize your body
- b. Heck, if 30 other women are willing to try it out, it might be fun
- c. The only rebounding you like to do is off the side of a mountain
- d. Sounds like another fitness gimmick. You'll stick to the treadmill

#### 3. You love the beach. It's the perfect time to:

- a. Relax your mind and meditate to the lull of the ocean waves
- b. Show of the killer abs and glutes you've been working so hard to get
- c. Grab you surfboard or jet ski and get in that ocean
- d. Wait until the sun goes down, the beach empties out and take off for a solitary walk or run

#### 4. You're on a business trip. When you retire to the hotel for the night you:

- a. Unroll your yoga mat and do 30 minutes of stretch and meditation to prep for tomorrow's meeting
- b. Ask your coworker if she wants to join you at the hotel's gym
- c. Ask the concierge is there's any night skiing in the area
- d. Do your own workout in the privacy of your room

#### 5. Your company is recruiting members for a new softball team. You think:

- a. Great idea but competition does little for your inner peace
- b. Start signing up your coworkers. It's a great opportunity to get to know each other better
- c. Have to pass. You have too many hiking and kayaking trips in the spring to commit
- d. Really not into team sports. You'll get more exercise from your weekend jogs

#### 6. Your most cherished workout item is:

- a. Your most comfortable cotton tee shirt and drawstring pants
- b. The matching DKNY top and pants you found at Bloomingdale's
- c. Your water-proof Teva's with summit to surf wearability
- d. Your Sony Sports Walkman- couldn't get motivated on long runs without it

#### 7. You and your partner are planning a ski weekend. You prepare by:

- a. Pilates: three times a week to get your abs and quads in shape and help ward off injury
- b. Heading straight to the mall for a new ski suit with all the trimmings
- c. Inline skating at the park to work the legs
- d. Taking advantage of the hypoxic (low oxygen) room at the gym to improve endurance in low oxygen environment

#### 8. In preparation for wearing the black dress you bought for your coworker's wedding, you banish ab flab with:

- a. Ashtanga Yoga- the best way to develop muscle in the middle
- b. Take as many Spinning classes as you can- the crowd and the music are great motivating factors
- c. Rowing on the lake nearby. After all, it's a great ab challenge
- d. Commit to a 100 crunches each night before bed

#### 9. While browsing the shelf of your local video retailer, your eye is drawn to:

- a. Yoga with Ali MacGraw
- b. Paula Abdul's Get Up and Dance
- c. Everest
- d. The solitary landscapes of Cindy Crawford: The Next Challenge

### 10. For your birthday, your partner offers to take you on an all-expense-paid weekend. You just have to pick the place. Your choice:

- a. The Arizona desert spa Miraval
- b. A cruise to the Bahamas
- c. A wild rafting trip down the Colorado River
- d. A solitary, romantic cabin in the woods





## Getting (and Staying) Motivated for Exercise By Vanessa R. Speers, M.Sc.

Do any of these sound familiar?? "I don't have the time, I'm too tired, It's raining, I don't have anyone to do it with, Where I live, I can't exercise, I don't want to be seen in exercise clothes, I'm too old, I've never been one to exercise, I hate exercise."



People often have these and more excuses for why they don't exercise. Unfortunately, these people are often overweight and most in need of getting out and getting moving. According to one study, fully two-thirds of 1,172 overweight

females were not exercising regularly, and nearly one-quarter indicated that they had no intention of starting an exercise program within the next six months. Of those who had attempted an exercise regimen, only 20% were able to sustain it for more than six months. Yet exercise is a key factor for successful weight management. In addition, it provides many benefits: it elevates metabolism, even beyond the time actually spent exercising, and increases muscle mass (two important factors in successful weight management). Regular exercise also contributes to metabolic fitness. This is defined as the absence of any metabolic or biochemical risk factors associated with obesity. Risk factors include high cholesterol (especially associated with low HDL cholesterol), high triglycerides level, elevated blood glucose, insulin resistance, high blood pressure, and elevated fatty acid synthesis.

Overcoming Barriers to Exercise. Lack of time is the most commonly cited barrier to exercising, followed closely by fatigue. The demands of career and family often leave little time or energy for getting to the gym or even going out for a walk. It is often easier to plop down in front of the TV after a stressful day than to get out and exercise. As one overweight woman explained, "I get up at 5:30 to get ready for work and to get my year-old daughter ready to go to day care. I drop her off and head to work. Usually my husband picks her up in the late afternoon. When I get home from work I start dinner and try to squeeze in some playtime with her. After dinner one of us gets her ready for bed while the other does the dishes. Once she's in bed, we both collapse in front of the TV. Who wants to exercise then? I know I should, but I just run out of time and energy."

It's true that making time for regular exercise can be difficult. One possibility is to schedule exercise on your calendar and treat it like any important appointment. Another approach is simply to increase your daily physical activity in any way you can: parking further away in the parking lot at the grocery store and walking, taking the stairs instead of the elevator, taking a walk break instead of a coffee break, and so forth. Adding 30 extra minutes a day to your usual activities is known to bring important health benefits. Doing exercise at the beginning of the day gets it over with and you won't have to contend with evening fatigue.

Some people worry that they are too old to begin exercising, especially if they have never been athletic. They may worry about injury occurring if they overdo it. Although orthopedic and overuse injuries are possibilities, learning how to exercise and starting out slowly and gradually increase time, distance, and intensity usually prevent such injuries. Unsafe neighborhoods or living on steep hills are barriers to getting out and walking or jogging. Driving to a safer neighborhood to walk or going to a fitness facility may be the best solution.

Concern about appearance keeps some people from exercising, especially those who regard themselves as seriously overweight. They feel self-conscious about their bodies and want to avoid embarrassment of being seen in workout clothes. Although it is possible to engage in exercise in the privacy of your home — using exercise videos, a treadmill, or other equipment — or you can wear large, baggy clothing, ultimately it is better to change your attitude about being seen exercising. Most people who see an overweight person out walking or going to the gym actually admire their effort. Increasingly available are exercise facilities that cater exclusively to large-size people. Many feature pool exercise that is easier on knees, feet, and backs.

Factors that Sabotage an Exercise Routine. Even if you are successful in initiating a regular exercise program, a number of things can disrupt your routine and cause you to stop. Falling ill, sustaining an injury, going on vacation, getting away from your usual exercise routine, getting bored with exercise, and taking on additional commitments that squeeze out time allotted for exercise are just some of them. Planning ahead how to cope with such disruptions is a good idea, and being sure to get back on track sooner than later helps. Reminding yourself of the positive benefits of exercise and remembering how good you feel after a workout are important too. Other motivators include investing in attractive workout clothes that you feel comfortable wearing, working out regularly with a personal trainer, and thinking of yourself as 'someone who exercises.'

Getting and Staying Motivated. Good intentions and an awareness of the benefits of exercise, though important, aren't usually enough to start or stick with an exercise program. More important is having the confidence that you can be more physically active and can overcome barriers to exercising. Your confidence grows when you learn what to do and don't try to do too much too soon.

Getting and staying active are easier if you set reasonable but challenging goals for yourself, keep track of and reward your progress, and commit specific days and blocks of time for exercise. If you have not been exercising at all, begin with easy walking for a reasonable amount of time, perhaps 10 minutes at a time. Increase your time gradually each week. If you have been exercising irregularly, don't try to start at the highest level at which you left off. Pick a moderate goal and give yourself time to work back up to your higher level. Once you are able to sustain a given level of time, distance, and intensity, modestly increase one of these. For example, if you can comfortably walk 10 minutes for a week, try 12 or 15 the next week. If you used to jog two miles but haven't been out for several weeks, drop back to one mile, or reducing the intensity by alternating walking and jogging. Stick with a low-intensity to moderate-intensity activity, especially if you are older or out of shape. It is not necessary to become a marathon runner or fitness champ to reap the benefits of exercise, either with regard to weight management or improvement in health parameters.

Most important, have a variety of activities you enjoy from which to choose. If you have fun or get enjoyment from what you do, you are more likely to stay motivated for exercise over the long run.