

## **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

aŧ

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

# **PCOS NEWS**

**MARCH 2002** 

**ISSUE 14** 



# New and Improved Communication!

If you need to reach Vanessa as soon as possible, there is now a pager system available during regular business hours (9am to 5pm), so that you can have your questions and concerns addressed in a more direct manner. Phoning 416-650-6629 will trigger the pager, which will ask you to key in a numeric message (i.e. the phone number you are calling from). As soon as the page is received, your call will be returned as soon as possible (i.e. no more than 5-10-min). Please let us know how you feel this new and improved communication system is working for you.

# Study Update

To date, **75** Women have been enrolled in the PCOS Diet and Exercise Study!



# Words To Live By

"Public opinion is a weak tyrant compared with our own private opinion. What a man thinks of himself, that it is which determines, or rather indicates, his fate".

- Henry David Thoreau

# Medical Forum

#### SHEILA LAREDO, MD

One of the common questions that I am asked, by women in the study as well as women I see in clinic, is whether "low carb" diets will help reduce weight. Many of you who have spoken to me about this will know my thoughts, but since it had been awhile since I'd checked for new research about low carb diets, I thought I would do so.

As you know, there are a variety of low carb diets available. Some of these advocate minimal intake of carbohydrates, whereas others suggest using carbohydrates, but less than is currently recommended as part of a healthy heart diet. Current "Health Heart" and Canada's Food Guide recommendations suggest that a diet contain no more than 30% of calories from fat, over 50% from carbohydrates (primarily complex carbohydrates), and the remainder, about 15-20%, from protein.

I looked for any new clinical studies that involved low carbohydrate diets, and was unable to find any randomized controlled trials that applied. However, I was able to find some interesting information that I thought would be worth passing along. This comes from a 2001 study in the Journal of the American Dietetic Association (Kennedy et al).

In this study, the researchers used data from a survey of food intake called the Continuing Survey of Food Intake by Individuals (CSFII). In this survey, representative samples of Americans of all ages are evaluated for their intake of foods (based on about 7,000 possible food codes) in two non-consecutive 24-hour intervals. For this study, information from over 10,000 adults aged 19 or over (half men, and half women) was included. The ingested foods were then assessed for their nutrient (like fat and carbohydrate) content. The researchers divided up the study group by type of diet into the following smaller groups:

#### Vegetarian

Non-vegetarian - subdivided as follows:

Low carbohydrate (<30% carbohydrate)

Medium carbohydrate (30-55% carbohydrate)

High carbohydrate (>55% carbohydrate) - subdivided as follows:

"Pyramid" group (<30% fat and eating from all major food groups)

"Non-pyramid" group (not eating from all major food groups - subdivided again! Low fat (<15% fat)

Moderate fat (15-30% fat)

#### Here are the results:

94% of the population was non-vegetarian. Those 6% consuming a vegetarian diet ate significantly less calories that those having a non-vegetarian diet, as well as lower total fat and saturated fat. They ate more carbohydrates and a diet higher in weight, and had a lower overall body mass index.

Of the non-vegetarians, the majority, 64% were in the middle carbohydrate group. Those in the high carbohydrate group had the best "diet quality" (based on eating items from all food groups, amount of saturated fats, variety of foods, etc) of the non-vegetarians. Not surprisingly, those on the low carbohydrate diet had higher fat intake, but they also had the percent saturated fat intake twice as high as those on the high carbohydrate diet. Those in the high carbohydrate group ate more food by weight, but less by calories than those in the low carb group. The low carbohydrate group ate, on average, 130 calories a day more than the high group. (This can add up to an additional 13 pounds per year!). The low carbohydrate group had a higher body mass index than the high carbohydrate group.

When comparing those in the "Pyramid" group vs. "non-Pyramid" group among high carbohydrate consumers, the Pyramid group ate less added sugars.

These results contradict some of the popular information suggesting that low-carbohydrate diets are beneficial with respect to lowering BMI. In fact, the low carbohydrate studies that exist are short-term, include small numbers of study participants, and are calorie restricted. What this study tells us is that those who consume low carbohydrate diets are not in fact eating lower calorie diets, and generally have higher weights. They may also be increasing their heart disease risk by having a higher saturated fat intake.

For the time being this tells us that the old-fashioned approach of eating lots of fruits, vegetables, legumes, cutting fat, and eating a variety of foods is the best approach. We at the PCOS Diet & Exercise Study are pleased to see this result, as it confirms the approach that we have used to date. We hope you are having success with this diet as well, and welcome any stories, suggestions, or ideas that you have found useful in your diet.



# Food and Nutrition Pop Quiz Vanessa R. Speers, M.Sc.



Which juice is high in iron? Does trimming the fat eliminate most of the cholesterol from meats? What food contains sulforaphane, a compound thought to protect against cancer? True or false: Limejuice marinade cannot really "cook" raw fish or shellfish and kill all bacteria? True or false: Yogurt is as nutritious as milk. See how savvy you are about food and nutrition by taking this guiz.

- 1. Only one juice is high in iron. Is it (a) orange, (b) prune, (c) carrot, or (d) apricot?
- **2. True or false:** Trimming the fat eliminates most of the cholesterol from meats.
- **3.** Vitamin E is one of the few major nutrients not listed on nutrition labels, in part because only a few foods contain significant amounts. What are the best sources? (a) eggs, (b) wheat germ, (c) safflower oil, or (d) nuts.
- **4.** Sulforaphane, a compound thought to protect against cancer, is found in **(a)** broccoli, **(b)** cabbage, **(c)** tea, or **(d)** kale.
- **5.** If you're looking for the most fiber in a loaf of bread, the operative words are **(a)** unbleached, **(b)** enriched wheat flour, **(c)** wholewheat flour, or **(d)** twelve-grain.
- **6. True or false:** Pink grapefruit usually costs more than white, but it's more nutritious.
- 7. Say "calcium" and most people think milk, but other foods are rich in calcium as well—such as which of the following? (a) dried figs, (b) broccoli, (c) dried beans, or (d) almonds.
- **8.** The label on a frozen dessert tells you that a serving has 110 calories and 3 grams of fat. Is this a high-fat food?
- **9. True or false:** Honey and brown sugar are more nutritious than white sugar.
- **10. True or false:** Despite some rumors, a limejuice marinade cannot really "cook" raw fish or shellfish and kill all bacteria.
- **11. True or false:** Yogurt is as nutritious as milk—often more so.
- **12.** Which of these provides enough vitamin C to meet the daily RDA? **(a)** an ounce of Cheddar cheese, **(b)** a cup of orange juice, **(c)** a cup of broccoli, or **(d)** a medium-size baked potato with its skin.

Turn to the backpage to find our the answers to the above questions.

## Recipe of the Month



# Spring Tea Punch

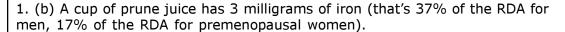
2 cups water
2/3 cup sugar
3 Tbsp. mint, fresh
1 cup orange juice
1/2 cup lemon juice
2 cups strong brewed tea
1 1-liter bottle club soda, chilled
Flower ice cubes or ring, optional

- 1. Place water, sugar and mint in a large pot.
- 2. Bring to a boil. Remove from heat and let steep for 20 minutes.
- 3. Strain mixture through 100%-cotton cheesecloth-lined colander.
- 4. Add orange juice, lemon juice and tea to flavored water. Chill.
- 5. Just before serving, add club soda.

Optional - Serve with flower ice cubes by filling ice-cube trays half full with water and place an edible blossom or petal on water in each cube. Freeze until firm, then fill the tray with water and freeze again.



# Food and Nutrition Pop Quiz - THE ANSWERS!





- 2. False. All animal products contain cholesterol, which is found equally in the lean meat and the fat: about 20 to 25 milligrams per ounce. But it is still important to trim the fat from all meats and discard poultry skin, because the highly saturated fat has a worse effect on your blood cholesterol than dietary cholesterol itself.
- 3. (b, c, and d) Vegetable oils (except olive oil) and products made from them (such as margarine) are the richest sources. Nuts and wheat germ are also good. But most foods rich in vitamin E are very high in fat.
- 4. (a, b, and d) It is found primarily in members of the Brassica group, also known as cruciferous vegetables, such as broccoli, cabbage, kale, and cauliflower. These and other vegetables also contain other protective elements, some of which may not have been identified yet.
- 5. (c) Whole-wheat flour contains the bran and the germ, and thus is rich in vitamins, minerals, and fiber. Wheat flour, whether bleached or unbleached, loses vitamins and minerals when it is refined. Even when it is enriched, only some—not all—of these nutrients are added back in. "Twelve-grain" or "seven-grain" may not mean anything, since the bread can still be mostly re-fined wheat ("white") flour. Most rye and pumpernickel contain little or no whole grain, but if you can find whole-grain versions, they are good, too.
- 6. True. Ounce for ounce, pink and white grapefruits have the same number of calories and amount of vitamin C, but the pink variety has more than 40 times more beta-carotene, plus some lycopene, another important carotenoid.
- 7. (all) Ounce for ounce, dried figs, broccoli, and cooked dry beans have as much or more calcium than milk. Of course, you shouldn't try to get all your calcium from figs and almonds—both are high in calories.
- 8. No. Only 24% of its calories come from fat. (To compute the percentage of fat calories, multiply the grams of fat by 9—the number of calories in a gram of fat—and then divide the result by the number of calories per serving.) As a general rule, a food is considered "high-fat" if more than 30% of its calories come from fat. However, even those foods are not forbidden on a healthful diet. You have to balance them with other foods eaten in the meal and during the entire day so that, all together, fat contributes less than 30% of your daily calories.
- 9. False. Sugar is sugar, and no form of it offers significant nutritional advantages. Brown sugar is white sugar with a little molasses for coloring. Honey is sweeter than table sugar, but any additional nutrients in it are minuscule.
- 10. True. Limejuice may kill bacteria on the surface of fish or shellfish, but it won't kill any dangerous microorganisms below the surface. Eating raw fish or shellfish marinated in lime juice (ceviche) is risky.
- 11. True. Yogurt starts out as milk, which is fermented by bacteria. It is usually thickened with nonfat milk solids. Thus yogurt has more calcium than milk (up to 450 milligrams per cup) and more B vitamins. It can definitely play a role in a healthy diet, if you stick to the nonfat or low-fat kind.
- 12. (b and c) The orange juice and broccoli have about 120 milligrams. (The new RDA is 90 milligrams for men, 75 for women.) A 6-ounce potato has 24 milligrams. Cheese has none.