# Southern Community Cohort Study

The Southern Community Cohort Study Newsletter is an annual publication for study participants.



#### Welcome

to... the 2018 edition of the SCCS Newsletter.

We are pleased to be in touch with you again,

providing news of ongoing SCCS research activities and health news which may be of interest to you.

In this issue, we again report on diabetes, which affects a growing percentage of SCCS participants, and describe the diagnosis called "prediabetes". We present some SCCS research findings on risk factors for diabetes, noting how carrying excessive weight conveys greatly increased risk for diabetes. We also describe an exciting new piece of research that your SCCS team is part of: "The Breast Cancer Genetic Study in African - Ancestry Populations".

As always, we include a recipe for a healthy food choice – it was time for some fish... prepared in an appealing but easy method. We also comment on the question "Is sitting the new smoking?" noting that the jury is still out, but that "little movements to break up periods of sitting" may be a wise plan of action.

Thank you again for being an active part of the SCCS. We want you to know that we are indebted to you for keeping in touch with us. Please continue to let us know if you move or change your phone number by calling the SCCS toll free line (1-800-734-5057) Monday-Friday 9 am-5 pm (Eastern Time).

Your Study Team Leaders,
Dr. William J. Blot, Dr. Wei Zheng,
Dr. Margaret K. Hargreaves

### **Diabetes and Prediabetes**

Have you ever been told by your doctor that you have diabetes or prediabetes? As we described in the 2017 Newsletter, diabetes is com-

mon among participants in the SCCS. Further SCCS research since then has shown that new-onset diabetes continues to occur at a high frequency, with risk of developing diabetes rising directly with increasing weight (represented by "Body Mass Index" or BMI). Our findings, just published this January,



show that nearly 20% of SCCS participants who were in the "very obese" weight category at entry into the SCCS developed type 2 diabetes over just a 5-year follow-up period, which is up to 10 times more than those in the "normal" weight category. See the chart below to find your height, and next to it the weight at which you *start* to be "at-risk" for diabetes.

With "prediabetes" blood sugar levels are consistently higher than normal, but not as high as in type 2 diabetes. Prediabetes is defined as a glucose level on a fasting blood test higher than 99 but lower than 126. But the good news is that prediabetes can be reversed with exercise and weight loss... You don't have to get type 2 diabetes!

Like diabetes, being overweight is a key risk factor for prediabetes. So it is wise to be on the lookout for this as well as the other risk factors listed below:

- being age 45 or older
- having a parent or brother/sister with type 2 diabetes
- exercising fewer than 3 times per week
- having given birth to a baby weighing more than 9 pounds or having a history of diabetes while pregnant (called gestational diabetes)
- being African-American.

**Diabetes** is a serious disease that can cause heart attack, stroke, blindness, kidney failure, or amputation of feet or legs. Keeping weight under control, and losing weight if you have reached your "at risk weight", as well as engaging in moderate activity (see page 3 story on "Is sitting the new smoking?"), could reduce your chances of developing this disease which affects too many SCCS participants.

HEIGHT (LBS)         WEIGHT (LBS)         HEIGHT (LBS)         WEIGHT (LBS)           4'10"         143         5'8"           4'11"         148         5'9"           5'0"         153         5'10"           5'1"         158         5'11"           5'2"         164         6'0"           5'3"         169         6'1"	
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	221
5'4" 174 6'2"	227
	233
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5'7" 191	

## Strength in Numbers: Team Science in the SCCS

Why are black women twice as likely as white women to be diagnosed with a serious type of breast cancer called *triple negative breast cancer*? To search for the answer, SCCS scientists have recently joined with two other large health studies to work together.

In 2016, the National Cancer Institute awarded a \$12 million grant to Vanderbilt University, the University of Southern California, and Boston University for a combined research project called "The Breast Cancer Genetic Study in African-Ancestry Populations".

"This is the largest study ever carried out to look at genes as a risk factor for breast cancer in African American women. We believe that this study will provide new information to understand differences in the new case rates and death rates for breast cancer between African and other Americans," said Dr. Wei Zheng, a leader of both the SCCS and the Breast Cancer study.

Working together, we can combine data from several studies, including the SCCS. By gathering clues from thousands of women with breast cancer, we hope to identify which genes are causing this type of breast cancer. In the future, these findings could help with the screening, prevention, and treatment of breast cancer.



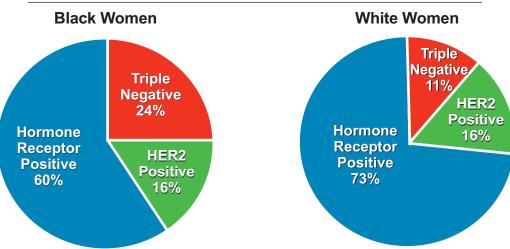
Dr. Wei Zheng, M.D., Ph.D. Vanderbilt University

#### **Breast Cancer Types**

Lab tests done on breast cancer tumor cells can measure the amount of <u>hormone receptors</u> & <u>HER2</u> expression in the tumor. Based on these tests, breast cancer can be described as one of the following types:

- <u>Hormone receptor positive</u> (estrogen and/or progesterone receptor positive) or hormone receptor negative (estrogen and progesterone receptor negative).
- <u>HER2 positive</u> (Human Epidermal growth factor type 2 Receptor) or HER2 negative.
- <u>Triple negative</u> (estrogen receptor, progesterone receptor, and HER2 negative).

### 3 Types of Breast Cancer Cases in the SCCS



## Cod on Roasted Pepper & White Beans

This recipe from "MyFoodAdvisor" – on the American Diabetes Association website – serves 4 and the 4 main ingredients cost about \$5.00 per person. The Nutrition Facts are based on a Serving Size that is ½ cup of the bean mixture and the 3 ounces of cooked fish that will remain after cooking a 5 oz raw filet. Remember that the added salt is very low because Kalamata olives are salty, but worth it for taste. If dried rosemary is used, cut the measurement in half... or use "to taste". (*The full recipe is continued on back page.*)





# "Is Sitting the New Smoking?"

"Sitting is the new smoking" is a slogan you may have heard before. The statement was first used by scientists at the Mayo Clinic in Arizona. Their research raises the possibility that a lack of physical activity, like sitting for many hours during the day, may cause increased health risks equal to the increased health risks of those who smoke. We have long known about the hazards of smoking. It has been over 50 years since the Surgeon General's Office warned of the dangers of smoking. and the evidence of the bad health effects of smoking has become even stronger since then. Within the SCCS study we have seen how smoking greatly increases rates of lung cancer, several other cancers. chronic obstructive pulmonary disease (COPD), heart disease and even diabetes. Among SCCS members who smoke cigarettes, risk of lung cancer is increased up to 20 times, COPD up to 9 times, and our smokers have twice the heart disease risk compared to those who never smoked. If the slogan's claims are true, that many hours of sitting equals the health risks from smoking, this would be troubling.

We point out this issue of the health effects of too much sitting now, even though much more research needs to be done in our SCCS population and in other studies conducted in the US and the rest of the world. We are actively measuring how physical activity, and specifically the lack of physical activity, may have an impact on the risk of cancer, heart disease and diabetes.... and we ask that you stay tuned for future news.

We are also looking into the related question, "Is Obesity the New Smoking?" Results from the SCCS research mentioned on page 1 about rates of diabetes in relation to weight points out that, for diabetes, obesity is a much stronger risk factor than smoking. This type of research, where we can track health outcomes and see how they vary from one individual to another, is made possible by your continued participation in the SCCS and completion of the follow-up questionnaires we mail to you.

While research is still being done to better understand the relationships between sitting, physical activity and obesity and risk of various diseases, it may be wise to consider trying some of the activities listed in the 2013 Newsletter, including:





- Go for a short walk.
- ♦ Stand or walk around while talking on the phone.
- ◆ Stand or stretch during TV commercials (move your arms... touch your toes).
- Walk over and talk to a co-worker or neighbor instead of phoning, emailing or texting.

These are activities most of us can easily do. The Center for Disease Control defines "exercise" as a 30-minute workout of moderate strength, but there is a new definition that we want to share with you. "Non-exercise activity" is the little movements that we can do in short bursts to break up periods of sitting. Staying "active" is important – even a small effort might have a big effect on your health.

## Cod on Roasted Pepper & White Beans (continued from page 2)

#### **Ingredients:**

- FISH: 4 fresh or frozen (unbreaded) fish filets such as cod, about 5 oz each, rinsed and patted dry
- ½ t paprika
- ¼ t salt
- ⁴ ¼ t black pepper
- ◆ 1 t extra-virgin olive oil
- BEANS: 15 oz can no-salt-added navy or great northern beans, drained and rinsed
- ⁴ ¼ cup water
- ◆ 16 pitted Kalamata olives, coarsely chopped
- ½ cup diced roasted red peppers
- 2 medium garlic cloves, minced
- ½ t chopped fresh rosemary
- ♦ ½ t salt
- ◆ 2 t extra-virgin olive oil

#### **Instructions:**

- 1.) In a small bowl, combine paprika, salt and pepper, Sprinkle both sides of filets with mixture. Heat oil in a large nonstick-skillet over medium heat. Cook the filets 4 minutes, turn, and cook 3 minutes or until opaque in center.
- 2.) Meanwhile, in a medium saucepan, bring the water to boil over medium-high heat. Add the remaining bean ingredients. Cook 1-2 minutes to heat through. Remove from heat, cover and let stand while fish is cooking.
- 3.) To serve, place equal amounts of the bean mixture in each of 4 shallow soup bowls or a shallow casserole dish and top with the fillets. Decorate with a sprig of fresh rosemary!

Nutrition Facts per serving: Calories 285, Carbohydrate 21 g, Protein 32 g, Fat 9.0 g, Saturated Fat 1.1 g, Sugars 2 g, Dietary Fiber 7 g, Cholesterol 60 mg, Sodium 505 mg, Potassium 490 mg

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