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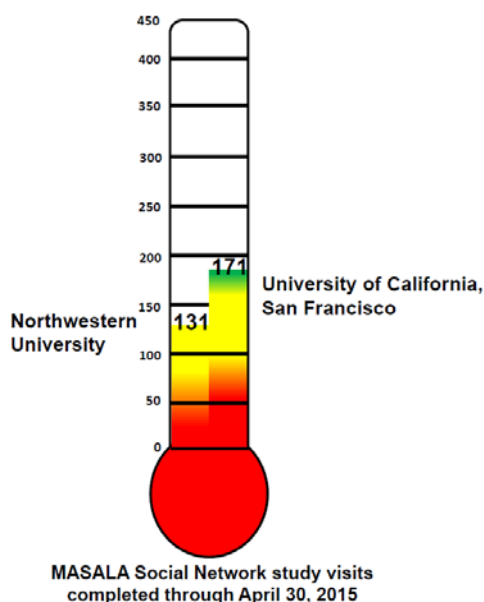
# MASALA PULSE

The Official Newsletter of the MASALA Study  
<http://www.masalastudy.org>

Dear MASALA study participants:

This year has started off with good news for our study and much enthusiasm. We have been scheduling visits with you to ask about your social networks to better understand how they may affect your health. We have completed about 300 out of 900 of these visits already! Last month, the National Institutes of Health (NIH) informed us that they will continue to support the MASALA study with a new grant to conduct a second clinical exam. The NIH knows that MASALA has added new and important information about the health of South Asians, and they want us to find ways to improve overall health and well-being with our study. These successes would not have been possible without your active and continued participation and sup-

## Help us reach our recruitment goal



port of our study's goals. Thank you!

This second clinical examination will begin in Fall 2015 and we will remeasure your cardiovascular risk factors, conduct blood tests and a CT scan of your heart to see if there has been any change in your coronary artery calcium score. Because of the complexity of these tests, we will ask you to return to the clinical site where you did your first study exam visit (at University of California, San Francisco for the Bay Area participants and at the Northwestern University medical center for the Chicago participants). As with the first clinical exam, we will give you the test results to share with your doctors. For those participants who have completed their social networks visit, you can expect a shorter clinical visit just focusing on the blood tests and CT scan.

We hope that you enjoy the articles highlighting our study results in this newsletter. The opportunity to work with data from the MASALA study has led to collaborations with scientists and students from around the world. All of the papers we publish from the study are posted on: [www.masalastudy.org](http://www.masalastudy.org) under the Study News link. We will continue giving community presentations to update you on our study findings.

Thank you for your continued participation in the study and for contributing a wealth of information to improve South Asian health.

Warm wishes,  
Alka Kanaya and Namratha Kandula

## Working Towards Better Blood Pressure Control Globally

Dr. Kandula had the privilege of attending the World Heart Federation's Emerging Leaders Think Tank Seminar in Lima, Peru in March 2015. The Emerging Leaders Program was created by the World Heart Federation to form and develop a long-term group of experts who collaborate, research, and work to reduce premature mortality from cardiovascular disease (CVD) globally by at least 25%. All of the leaders who attended this meeting want to advance both prevention and

*Continue on page 2*



*Dr. Namratha Kandula above.*

## Working Towards Better Blood Pressure Control Globally, continued

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treatments for CVD in their home countries, and also maximize research and knowledge by collaborating globally.

Dr. Kandula and 23 other leaders from around the world met in Lima to **focus on the global problem of high blood pressure**. High blood pressure (hypertension) is the most important risk factor for death and disease burden across the globe. High blood pressure is estimated to be responsible for 9.4 million deaths

per year.

In the MASALA study, 41% of participants had high blood pressure. In the Prospective Urban Rural Epidemiology (PURE) study, hypertension prevalence in South Asian adults aged 35-70 years varied from 31% in India, 34% in Pakistan and 39% in Bangladesh. As part of the program in Lima, Dr. Kandula had a chance to share the findings from the MASALA study and to collaborate on a project proposal focused on controlling high blood pressure in developing coun-

tries. This project will implement the use of home blood pressure monitors in developing countries to help doctors and patients better manage blood pressure with medications and lifestyle changes. Patients who achieve an optimal blood pressure have a much lower risk of heart attack and stroke.

It is our goal that the MASALA study and research on how to improve blood pressure in South Asians in the US and globally, will have a positive clinical and public health impact.

## Mung Beans, Beets and Quinoa Salad

### INGREDIENTS

#### Salad

- ½ cup mung beans, cooked and cooled (sprout the mung first)
- 1 cup quinoa, cooked and cooled (can substitute amaranth or cracked wheat)
- ½ cup red onion, finely chopped
- ½ cup fresh flat parsley, chopped
- 2 small carrots, diced
- 4 small beets, cooked, cooled and diced

#### Dressing

- 1 tbsp white wine vinegar
- 1 tbsp old style grain mustard
- ½ tsp marinated garlic flowers
- 1 tsp dried oregano
- ½ tsp salt
- Black pepper to taste

#### Garnish

- 2 tbsp mint, chopped
- Whole mint leaves

### INSTRUCTIONS

1. Cook quinoa per instructions on the package and boil or steam the mung beans until they are soft but not mushy. Allow to cool completely in the refrigerator.
  2. Mix all ingredients for the salad together in a medium size mixing bowl.
  3. In a separate bowl, whisk all the ingredients for the dressing and pour over salad.
  4. Toss to combine. If you can, allow to marinate for a few hours in the refrigerator, to allow the flavors to fully develop.
  5. Garnish with chopped and whole mint leaves.
- Yield: Serves 2

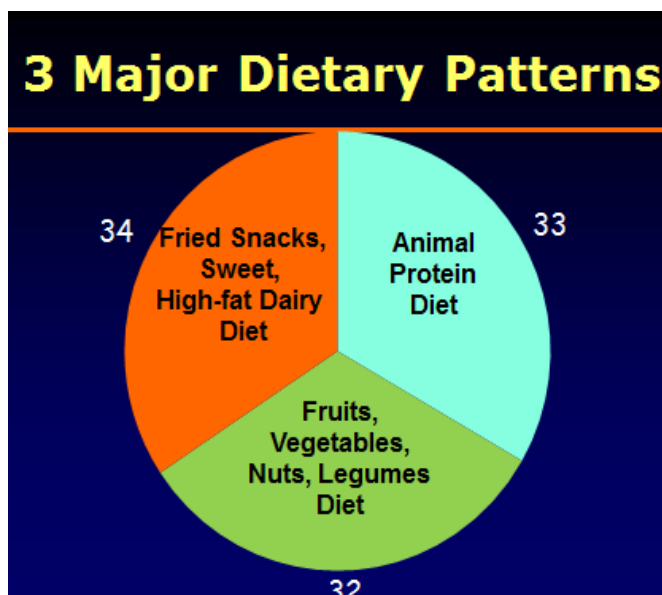
Recipe adapted from: <http://thehealthyfoodie.com/mung-beans-beets-and-quinoa-salad/>



## What does your diet say about your health?

Very little is known about the South Asian diet, how the diet changes after immigrating to the U.S., and how South Asian diets may be influencing health. We have recently published two new papers that focused on the dietary intake data that you provided in the first study examination. The food frequency questionnaire you completed was used to understand the main dietary patterns of South Asians in the U.S. and how these patterns may relate to health.

We found three main dietary patterns with similar numbers of people in the MASALA study consuming each of these three patterns:



1. "Fried snacks, sweets, and high fat dairy" pattern: this was mostly a vegetarian diet, but includes more fried snack, sweets and high fat dairy products. This pattern was linked to more insulin resistance (leads to diabetes) and lower HDL cholesterol (the good portion of cholesterol).
2. "Fruits, vegetables, nuts and legumes" pattern: this was also a mostly vegetarian diet but includes more fresh fruits and vegetables, nuts and lentils. People who ate this type of diet had lower blood pressure and less insulin resistance.
3. "Animal protein" pattern: this diet contains more

Western or non-South Asian foods and more non-vegetarian items. People who consumed this type of diet had higher cholesterol, higher weight and a bigger waist circumference.

Immigration, cultural changes, and the food environment do influence our diet, and we have found that the long-term effects of living in the United States has mixed benefits on dietary choices. We found that those who have lived in the U.S. for a longer period of time (>27 years) were more likely to be eating a diet higher in bad fats (like *trans* fat and

saturated fat) and lower in fiber. However, there were also some healthier choices in the diet for these long-term residents. They were consuming less sugar and sweets, less rice, and less starchy vegetables. As we continue to follow participants in the MASALA study, we will be able to understand how dietary patterns and longer term residence in the U.S. are influencing the risk of developing diabetes, heart disease and stroke.

Our analysis of the MASALA dietary data supports the American Heart Association's Heart Healthy Diet recommendations. The best dietary advice is to eat a dietary pattern that emphasizes fruits, vegetables, whole grains, beans and legumes, nuts and seeds, low-fat dairy products, poultry, fish and limit sugary foods and drinks, sodium and salt, and red meat intake. Our recipe on page 2 is a great example of a healthy salad.



1. **Please call us if you have a major change in your health status, a new address, or a new phone number**, if you were recently in the hospital, or if you underwent a serious outpatient medical test.
2. **Please take part in our phone interviews.** If we don't reach you and we leave a message, please call us back.
3. We sometimes send you forms asking you to give MASALA permission to collect your medical records from hospitals and doctors' offices. **Please quickly return those forms**, so we will be able to get records MASALA needs for its research.

**To contact the UCSF clinic, call 415-236-2725**

**To contact the Northwestern clinic, call 312-841-1967**

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We gratefully accept donations to support our work. To donate, visit our study website at [www.masalastudy.org](http://www.masalastudy.org) and click on the "Support Us" link at the bottom of the "About the Study"

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