

# MESA Messenger

## NHLBI Resources for Heart-Healthy Information

By MESA Project Office, NHLBI

What is a heart attack? Where can I find healthy recipes for my family? Can a different diet help lower my blood pressure? What is a healthy weight? How much exercise should I get? The answers to these and many more questions are literally at your fingertips!

The National Heart, Lung, and Blood Institute (NHLBI; [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)), which provides funding for MESA, is one of 27 research Institutes and Centers that comprise the National Institutes of Health (NIH). Each Institute and Center has its own mission-specific website. The NHLBI website has many resources on health topics related to heart, lung, and blood diseases and sleep disorders, including educational brochures, cookbooks, health fact sheets, and resources for special audiences including African Americans, Asian/Pacific Islanders; Latinos, American Indians/Alaska Natives, children and women. Many of the publications on the website are available in English, Spanish and other languages.

### How do I find this information?

Access the website at [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov). In the upper

left corner, click on Public to access the Health Information for the Public page. The link to Health Topics provides information on specific diseases and conditions; Educational Campaigns and Programs provides information on programs and partnerships designed to help reduce disease risk; and Resources includes publications, cookbooks, and fact sheets that may be downloaded to your computer. If you do not have access to the internet, many of the brochures, cookbooks, and fact sheets can be mailed to your home. To receive materials, either send an email to [NHLBIinfo@nhlbi.nih.gov](mailto:NHLBIinfo@nhlbi.nih.gov) (include a valid return email address in the body of your email message), call the NHLBI at (301) 592-8573 (this is not a toll-free number), or write to the following address to request information:

NHLBI Health Information Center  
P.O. Box 30105  
Bethesda, MD 20824-0105

Please note that items you download to your computer are free and most (but not all) hard copy publications are free of charge. ❤️

The screenshot shows the NHLBI website interface. At the top, there are navigation links for "U.S. Department of Health & Human Services", "NIH National Institutes of Health", "Contact Us", "Get Email Alerts", and "Font Size". Below this is the "NIH National Heart, Lung, and Blood Institute" logo and a search bar with options for "Accessible Search Form" and "Advanced Search". A navigation menu includes tabs for "Public", "Health Professionals", "Researchers", "Clinical Trials", "News & Resources", and "About NHLBI". The "Public" tab is highlighted with a red circle. Below the navigation menu, there are two featured content areas: "Fun Family Recipes" with a description of healthy recipe cards and a numbered list (1, 2, 3, 4), and "Inside NHLBI Featured Fact Sheet" with a sub-heading "Green Fluorescent RNA Helps Reveal the Inner Workings of Living Cells" and a brief description of research from the NHLBI and Weill Cornell Medical College.

# Should CAC score be used to guide decisions on taking daily aspirin to prevent heart disease?

By Michael Miedema, MD, MPH, Minneapolis Heart Institute

Low dose aspirin therapy is currently recommended for many people with known heart or blood vessel diseases and for some at increased risk for heart attack and stroke. Aspirin is often described as a blood “thinner” that reduces blood’s ability to clot. In arteries feeding the heart or brain, aspirin helps prevent blood clots from forming that can block blood flow and cause a heart attack or stroke. Although research has shown that aspirin can reduce the risk for heart attack and stroke, it also increases the risk for internal bleeding.

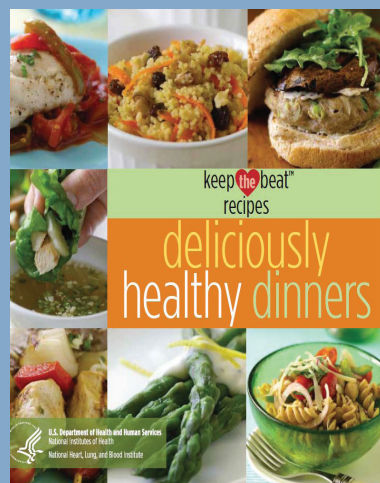
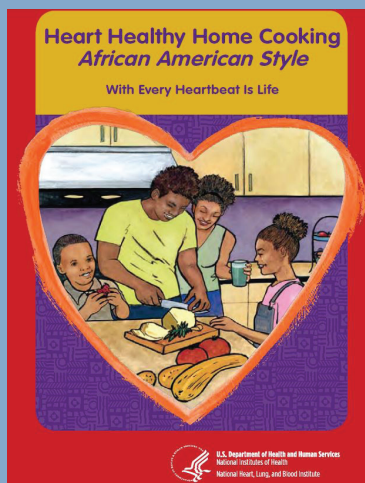
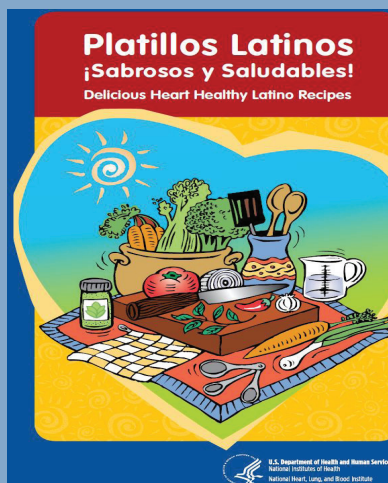
We used data from MESA to estimate who is most likely to benefit from taking an aspirin every day to prevent heart attacks and strokes. We used coronary artery calcium (CAC) scores from CT scans as a measure of the amount of plaque (or blockage) in the coronary arteries, which supply blood to the heart. MESA has shown that this test is a good predictor of future heart attacks and strokes. However, the CAC measure is not currently used by doctors and other health care providers to determine the need for daily aspirin. We looked at whether the CAC score might help identify those at high enough risk that aspirin’s

potential benefits might outweigh its risks.

We discovered that people who have at least a moderate amount of coronary artery calcium (CAC score >100) have a risk of heart attack and stroke high enough that the benefits of taking aspirin outweigh the potential risks. In contrast, we found that those with no coronary artery calcium are at sufficiently low risk of heart attacks and strokes that the potential benefit of taking aspirin may not outweigh the risks.

These findings build on current treatment guidelines about who might benefit from taking a daily aspirin. In the future, based on research results like these from MESA, health providers may consider “personalized” tests like the CAC score to help decide who should take preventive medications. In the meantime, talk to your doctor or other health care provider before starting aspirin. Aspirin has other health effects besides those described here and can interact with other medications, so be sure it is safe for you to take. If you have been told to take a daily aspirin, continue to do so until your health care provider tells you to stop. ❤️

Look for heart-healthy recipe books on the NHLBI website at [www.nhlbi.nih.gov](http://www.nhlbi.nih.gov), including the Chicken Ratatouille recipe found on the back page of this newsletter.



# Where you live and your overall cardiovascular health

By Erin Unger, MD, Northwestern University

Prior studies have shown that where we live is related to certain behaviors, such as smoking, maintaining a healthy weight and exercising adequately. Others have shown that having access to grocery stores close to your house is related to having a healthy body mass index (BMI),



a marker of how healthy your weight is). Still others have reported that if you live in a neighborhood with many gyms, parks, and other places for physical activity, you are more likely to have a healthy BMI. However, no prior study has looked at how your local neighborhood relates to your overall cardiovascular health as measured by a combination of these and many other factors including cholesterol levels, blood pressure and smoking.

Using data from the first MESA exam as well as the MESA Neighborhoods ancillary study, we looked at this question – does your neighbor-

hood relate to your overall health? We used GIS software (a way to look at data by location - think Google Earth!) to help us map the neighborhoods where MESA participants live. In those neighborhoods, we also looked at 1) food store densities, 2) availability of stores that sell healthy food, 3) physical activity resources like gyms and trails, 4) the neighborhoods' "walkability" (based on a survey that included questions about how easy it is to walk in a neighborhood, how often participants see others walking in their neighborhood and how many opportunities there are for walking and exercising in the neighborhood), 5) neighborhood safety, and 6) neighborhood social cohesion (a measure of the relationships and trust between neighbors).

We found that living in a neighborhood with lots of places to exercise and be active and living in a very walkable neighborhood are linked with better cardiovascular health. We did not see an association between cardiovascular health and density of food stores, availability of healthy foods, neighborhood safety or cohesion, though these factors have been shown in other studies to be linked with specific risk factors or conditions.

Overall, we showed that where you live may impact your overall cardiovascular health. A question for future research is whether making neighborhoods more walkable and increasing their opportunities for physical activity will lead to better cardiovascular health among its residents. ❤️

## Questions? Contact your MESA Field Center at:

### Wake Forest:

Catherine Nunn, RN – (336) 716-6650

### Columbia:

Cecilia Castro – (212) 305-9932

### Johns Hopkins:

Imene Benayache – (410) 614-2488

### Minnesota:

Jackie Muñoz – (612) 625-8560

### Northwestern:

Grace Ho – (312) 503-3298

### UCLA:

Anthony Sosa or Sameh Tadros – (626) 979-4920

# chicken ratatouille

Prep time: 15 minutes


Cook time: 20 minutes



it may be hard to say "ratatouille" (pronounced rat-uh-TOO-ee), but this one-dish recipe will show you that it's very easy to eat

1 Tbsp	vegetable oil	½ lb	fresh mushrooms, rinsed and sliced
12 oz	boneless, skinless chicken breast, cut into thin strips	1 can	(14½ oz) whole peeled tomatoes, chopped
2	zucchini, about 7 inches long, unpeeled, thinly sliced	½ Tbsp	garlic, minced (about 1 clove)
1	small eggplant, peeled, cut into 1-inch cubes	1½ tsp	dried basil, crushed
1	medium onion, thinly sliced	1 Tbsp	fresh parsley, rinsed, dried, and minced
1	medium green bell pepper, rinsed and cut into 1-inch pieces	¼ tsp	ground black pepper

- Heat oil in a large nonstick pan. Add chicken, and sauté for about 3 minutes or until lightly browned.
- Add zucchini, eggplant, onion, green pepper, and mushrooms. Cook for about 15 minutes, stirring occasionally.
- Add tomatoes, garlic, basil, parsley, and black pepper. Stir and continue to cook for about 5 minutes. Serve warm.

**Tip:** Serve with a side of whole-wheat pasta.

	<b>yield:</b>	<b>each serving provides:</b>			
	4 servings	calories	266	total fiber	6 g
<b>servicing size:</b>	1½ C chicken and vegetables	total fat	8 g	protein	30 g
		saturated fat	2 g	carbohydrates	21 g
		cholesterol	66 mg	potassium	1,148 mg
		sodium	253 mg		

 MESA and the MESA Messenger newsletter are funded by the National Heart, Lung and Blood Institute (NHLBI). 

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