



## The Atherosclerosis Risk in Communities (ARIC) Study

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## Celebrating the 30th anniversary of the study

On February 23, 2017, the Johns Hopkins Comstock Center in Hagerstown honored the 30th anniversary of the Atherosclerosis Risk in Communities (ARIC) Study by hosting a radio broadcast on WJEJ 1240AM. The event, which was held during February to also pay tribute to National Heart Health Month, featured live interviews between local radio and television personality, Lou Scally, and ARIC study participants, investigators and staff. Radio listeners were also invited to call in with their memories and experiences from the ARIC Study.

ARIC participants who heard the show were excited to learn that their participation in ARIC over three decades led to hundreds of scientific papers on topics such as heart disease, blood pressure, aging, and memory. The event was featured in local television and newspapers, highlighting ARIC participants and staff and further emphasizing the importance of this landmark study based in our community.



## Announcing ARIC Exam Visit 7

Dear ARIC Study Participant,

As we wrap up the successful Visit 6 examination in the next couple of months, we are very pleased to announce the 7th examination of the ARIC cohort! ARIC's Visit 7 examination is planned to start in February of 2018, and we are busy preparing for it. This exam of the ARIC cohort is again funded by the National Institutes of Health (NIH) principally by the National Heart, Lung, and Blood Institute (NHLBI), with participation by other institutes and centers of the NIH.

We are very glad to be able to invite you back to the ARIC center and look forward to seeing you. We will work with you, and with those close to you if you would like, to plan for a pleasant exam visit, scheduled at your convenience. In this newsletter we bring you special greetings from the ARIC staff and a Science Update highlighting some recent contributions made from your ARIC information. As always, we encourage you to share this newsletter with your loved ones, and with those fabulous 'ARIC proxies' who help us stay in touch with you.

*We look forward to seeing you!*

## Being an ARIC Participant

We thank you for continuing to be an important part of ARIC. Your participation is helping scientists and physicians understand diseases of the heart, the brain, and the general health of persons who had life experiences similar to yours. As we like to remind you, as a member of ARIC you represent your neighbors and the residents of communities where the ARIC study is conducted. This amplifies the value of your participation in the ARIC exams over the years, and the impact of your willingness to answer our questions since ARIC started in 1987-89. Each one of our ARIC participants has influenced the lives of many others of their own generation, and of those that follow us.

## > Where is ARIC Visit 7 Happening?

ARIC continues to be conducted in four areas of the United States: the city of Jackson, Mississippi; suburban Minneapolis, Minnesota; Forsyth County, North Carolina; and Washington County, Maryland. You are one of almost 4,000 ARIC participants originally selected to represent your particular study area. Since some of you no longer live close to your ARIC center, it is important that we plan ahead for your exam visit, to select dates that are convenient for you. For those that want to participate but find it difficult to come to the ARIC center, ARIC staff can come to your place of residence if you live in the ARIC study area and conduct a short version of the exam. ARIC staff will be glad to review with you the options that work best.

## > What Will ARIC Visit 7 Look Like?

This new exam will be similar to the previous ARIC visit. We will repeat some of the interviews used during the last ARIC exam to better understand what helps us retain mental capacities through life.

## > Will You Get Any Test Results From This Examination?

As before, the results from your exam will be provided to you, or the person you designate. We will ask you to fast for the first part of the exam. Then a snack and lunch will be provided to you. Transportation and parking will be available, and there will be a small compensation for your time.

## > Options About Participating

If you feel that you need assistance in making decisions about participation in all or part of the exam, please feel free to contact the ARIC Center identified on the reverse side of this newsletter, and to also identify a family member or a trusted proxy to help you with decision making. This person can come with you to the ARIC center for the exam, or can be available to assist you or the ARIC staff over the phone, if preferred. Before your exam visit we will contact you to describe the exam in greater detail, so that you and those near to you can be well informed about the exam.

## > Welcome Back to the ARIC Center

We want you to have a pleasant experience at our exam center and will contact you in advance to schedule a convenient time. If you prefer, feel free to call the ARIC contact person listed on the reverse side to ask our study staff any questions, or to mention any concerns that you may have. At the time of the exam, if you decide that you no longer want to participate in all or part of the exam visit, you may ask the staff to stop any test or procedure at any time. We will look after your needs and answer all your questions. We greatly appreciate your participation in ARIC and hope you will choose to participate in this next exam visit. Appointments for the exam will begin in January of 2017.

## > Science Update

**Thanks to the information you have shared with us over the years by taking part in examinations and many interviews over the telephone, ARIC study participants have made a large and important contribution to science and to the community. Following are a few examples of what ARIC has published just during the last year. In addition to a brief summary the publication's ID number is provided. Using this ID in a search engine such as Google allows you to find that particular publication that makes this information available to scientists all over the world.**

By studying atrial fibrillation, a disorder of the heart rhythm that affects one in four older adults, ARIC investigators reported that a number of modifiable risk factors are present many years before the occurrence of atrial fibrillation. Thus, opportunities for prevention of atrial fibrillation exist and should be further studied. (PMCID: PMC4999250)

Healthy sleep habits are known to reduce the risk of dementia in late life. This was recently confirmed in the ARIC study by observing that short sleep duration, as well as obstructive sleep apnea are associated with dementia of all types, as well as with Alzheimer's dementia. (PMID: 28738188)

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Although restricting the intake of protein in the diet is recommended for individuals with moderate to severe kidney disease, ARIC showed that it is important to consider

the type of dietary protein. Consuming red meat and processed meats was associated with a greater risk of chronic kidney disease in the ARIC study participants, but other protein-containing foods such as nuts, low-fat dairy products, and legumes were protective. (PMCID: PMC5476496).

The cardiovascular health of the ARIC study participants in middle-age, measured by the American Heart Association's Life's Simple 7 score, was found to be predictive of a better physical functioning in older age. A healthier lifestyle in midlife and having few cardiovascular risk factors were strongly predictive of better physical functioning in older age as measured in ARIC Visit 5. (PMCID: PMC5435564)

Some ARIC participants may remember being invited to participate in a study in 1990-1993 in which they enjoyed a large helping of ice cream, to measure how well their body was able to digest foods that are high in fat. ARIC investigators recently published a long-term follow-up that showed no adverse consequences of the fats called triglycerides in their bloodstream after ingestion of a food item with high fat content. (PMCID: PMC5293824)

ARIC recently reported on the continued high level of participation of the ARIC cohort over the course of almost three decades of follow-up. From 1987-1989 through 2013, 54% of African-American and 62% of white members of the ARIC cohort continued to participate actively in the ARIC study. The difference between the two groups is due to a higher rate of disease, disability and death among the African-American members of ARIC. After taking into account health status there was little difference in the rate of dropping out of ARIC by race group. (PMCID: PMC5245606)

An ultrasound examination of the large artery in the abdomen, the abdominal aorta, was done as part of ARIC's visit five examination. It confirmed that cigarette smoking was strongly associated with a person's risk of an enlargement of the aorta in the abdomen, leading to a dangerous condition called abdominal aortic aneurysm (AAA). Importantly, ARIC investigators also showed that quitting cigarette smoking reduced the lifetime risk of AAAs. (PMCID: PMC5397388)