MESA Air Investigator Collaborates with International Scientists

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In August 2008, the National Institutes of Health awarded continuation contracts to the MESA centers until 2015! MESA is currently planning for its next major effort – Exam 5, which will begin in April 2010. Your continued participation is essential to the continued success of MESA. Thank you!

The work of the MESA study was of tremendous interest to researchers across Europe. In addition to presenting the MESA Air approach to European scientists, Dr. Kaufman worked with investigators to add an air pollution measurement component and a carotid ultrasound test, like those in MESA Air, to an ongoing study in Girona, Spain.

In 2008, the European Union launched a major new research project called ESCAPE (European Study of Cohorts for Air Pollution Effects), led by Dutch investigators, to add air pollution measurements to ongoing health studies in 17 European countries. Due to his experience, Dr. Kaufman was asked to be involved in the study’s launch and remains a major adviser to the project.

Your participation in MESA and MESA Air is helping research be conducted using state-of-the-art scientific methods, and is paving the way for more understanding of the interplay between heart health and the environment both here and abroad.

The study has improved our understanding of how subclinical cardiovascular disease develops and leads to clinical cardiovascular disease – particularly heart disease and strokes.

Please watch your mailbox for a special newsletter describing new opportunities for genetic research in MESA!
In the past five years, several investigations have sought to better understand the relationship between diet and risk factors for diabetes and cardiovascular disease using data you have provided as a participant in MESA.

There are some general similarities across all these studies that show us how we should eat to be as healthy as possible. In these studies, MESA investigators had to use scientific methods to study diet. Because we know that individuals do not eat single foods or single nutrients, several MESA investigators attempted to look at the overall dietary pattern of participants.

In nutrition research, this is referred to as dietary pattern analysis. It results in an estimate of the combination of foods eaten by groups.

Among the many advantages of this approach is that it allows us to make guesses about the nutrients a person has consumed based on the types of food they eat. For example, people who eat whole grains tend to also consume other foods that we consider to be healthy. This includes low-fat dairy and vegetables. Because people eat many different types and amounts of food, it is often difficult to make a clear connection between disease and the intake of a single food.

At the same time, we all know that eating one healthy food along with an otherwise unhealthy diet will probably not have the same effect as eating that healthy food along with an overall healthy diet. A healthful diet is also more effective when you follow other healthy lifestyle practices, such as being physically active and regularly visiting your doctor.

The results of these studies (no pun intended!) have been many. Data from MESA show that persons who eat more whole grains, fruits and vegetables, low-fat dairy foods, and nuts and seeds have lower levels of cardiovascular disease risk factors and a lower risk of developing diabetes or cardiovascular disease.

In contrast, persons who eat high levels of processed foods, red meat, added fats and sugars, high-fat dairy foods (e.g., full-fat cheese), refined grains, and desserts have higher levels of cardiovascular disease risk factors and a greater risk of developing diabetes or cardiovascular disease.

Of course, as you consider which foods to eat, you should consider eating an amount of food that matches your body size and activity level. Eating more of anything will not be the answer to health if that change is not also off-set by eating less of something else (ideally, something less healthy!).

The MESA investigators who use the dietary data that you provided at the baseline examination are very grateful for your efforts and willingness to share information about your dietary habits. While we certainly encourage you to follow good dietary habits, we also greatly value your honesty when you complete questionnaires related to your diet (even if your diet is not so perfect—no one’s is!). The accuracy with which you describe your regular dietary practices provides a sound foundation for our work.

So THANK YOU!!! We look forward to hearing from you again when you return for another MESA examination.