

## News Release

FOR IMMEDIATE RELEASE

Contact: **Rachel Morgan, ADA**  
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# New Tool Can Help Predict Diabetes Complications

*Other Studies This Month: Coffee Helps Prevent Diabetes;  
When You Get Diabetes (Middle v. Old Age) Matters*

**(Alexandria, VA)** – A noninvasive tool that measures the skin’s autofluorescence could help doctors determine whether people with diabetes are beginning to develop serious complications, according to a study published in the November issue of *Diabetes Care*.

Researchers in the Netherlands found that illuminating a patient’s lower arm with a fluorescent tube accurately reflects vascular damage caused by the accumulation of advanced glycosylation end products (AGEs). AGEs are produced in the body when glucose links with protein. They play a role in damaging blood vessels, which can lead to complications, such as nerve damage.

Previous studies have shown that AGEs have fluorescent properties. This study confirmed that those properties could be measured by illuminating the skin, and that high levels of autofluorescence were associated with more severe diabetes complications, such as neuropathy, retinopathy and cardiovascular problems.

“With this tool, doctors could easily check people with diabetes in an outpatient clinic setting to see whether they may already be developing dangerous complications,” said lead researcher Dr. Helen Lutgers, of the University Medical Center in Groningen, the Netherlands. “The sooner complications are detected, the better the chance of preventing progression of damage.”

The technology used in this study is currently commercially available in Europe. Until FDA approval is obtained, its availability in the USA is restricted to experimental use only.

To reach Dr. Lutgers, email [H.L.Lutgers@isala.nl](mailto:H.L.Lutgers@isala.nl) or phone 31-5036-10096.

- more -

### National Office

1701 North Beauregard Street  
Alexandria, VA 22311  
Tel: 703-549-1500

### Diabetes Information

call 1-800-DIABETES (1-800-342-2383)  
online [www.diabetes.org](http://www.diabetes.org)  
The Association gratefully accepts gifts through your will.

### The Mission of the American

Diabetes Association is to prevent and cure diabetes and to improve the lives of all people affected by diabetes.

## News Release

### Autofluorescence/Page 2

### **Study Confirms: Caffeinated Coffee Helps Prevent Diabetes**

People who drink coffee – including those who used to drink it but quit – are less likely to get type 2 diabetes than those who never drank it, according to a study by researchers at the University of California in San Diego.

This should come as welcome news to Americans, more than half of whom drink a cup of joe or more on a daily basis. Previous studies have presented contradictory evidence regarding a protective benefit for coffee, but this new research confirms a “striking” reduction in risk, including, for the first time, for people who already exhibit impaired glucose tolerance.

Numerous studies have been done examining the role that caffeine may play in reducing the risk for type 2 diabetes. One study actually found that drinking caffeinated coffee raised glucose concentrations, but subsequent studies found those levels fell 30 minutes after coffee consumption. Studies in laboratory animals revealed that caffeine stimulates the body’s metabolism and may induce a mechanism that helps to reduce obesity, which is also strongly linked to type 2 diabetes. Other research suggests that a reduction in risk for diabetes may be due to compounds in coffee other than caffeine.

Unlike previous studies, this study included people who were already at risk for diabetes due to impaired glucose tolerance. It found that even among those individuals, the ones who were past or present coffee drinkers were less likely to develop type 2 diabetes than those who never drank coffee. Drinking caffeinated coffee reduced the risk of developing type 2 diabetes by as much as 60 percent.

**To reach lead researcher Besa Smith, MPH, email: [besa@nhrc.navy.mil](mailto:besa@nhrc.navy.mil) or phone: 619-553-7603.**

### **Diabetes in the Elderly: Two Distinct Groups**

Seniors who have diabetes face a very different set of health problems if they are diagnosed during middle age than if they are able to ward off the disease until their golden years, according to a new study by researchers at Johns Hopkins University.

Though researchers have known for years that the risk of developing type 2 diabetes increases with age, little research has been done examining how this disease affects the elderly as compared to other age groups.

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### Autofluorescence/Page 3

The study, which looked at more than 2,800 elderly persons in the 1999-2002 National Health and Nutrition Examination Survey, found that 15.3 percent of Americans aged 65 or older had diabetes, representing 5.4 million people. Another 2.4 million seniors had diabetes but didn't know it (nearly 7 percent).

Those who had been diagnosed with the disease in middle age had far greater problems with microvascular disease (eg retinopathy) and much worse glycemic control than those who were diagnosed in their later years.

“Our study reinforces the need to help adults who are middle-aged take steps to prevent diabetes, and suggests that seniors with diabetes should not be treated as a single group. It may be necessary to develop different treatment guidelines for those who are diagnosed during their 40s and 50s, as compared to those who are diagnosed after the age of 60,” said lead researcher Elizabeth Selvin, PhD, MPH, of the Johns Hopkins Bloomberg School of Public Health.

**To reach lead researcher Elizabeth Selvin, PhD, MPH, email: [lselvin@jhsph.edu](mailto:lselvin@jhsph.edu) or phone: 410-614-3752.**

*Diabetes Care*, published by the American Diabetes Association, is the leading peer-reviewed journal of clinical research into the nation's fifth leading cause of death by disease. Diabetes also is a leading cause of heart disease and stroke, as well as the leading cause of adult blindness, kidney failure, and non-traumatic amputations. For more information about diabetes, visit the American Diabetes Association Web site [www.diabetes.org](http://www.diabetes.org) or call 1-800-DIABETES (1-800-342-2383).

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**Note to Editors:** The first study by Dr. Helen Lutgers will not be published until the December issue of *Diabetes Care* although the embargo for this study has lifted. To receive a copy of the study, or another study mentioned in this release, please contact the American Diabetes Association per the information listed above.

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