New Study on Alzheimer’s Finds Risks May Increase with Higher Intake of Calories and Fat

By MARY WEBB

Researchers at Columbia and the Columbia Presbyterian Medical Center of New York–Presbyterian Hospital suggest that a higher consumption of calories and fat may translate into an increased risk of developing Alzheimer’s Disease (AD) for some people.

The results of their study, reported in the August issue of Archives of Neurology, suggest that this risk may arise in individuals with a variant of apolipoprotein E, known as apo E4. Apolipoprotein E (apo E) is a cholesterol-processing protein responsible for transporting cholesterol in and out of cells. There are different variants of apo E, designated by numbers. People inherit one form of apo E from each parent. Studies have shown that those with two copies of the variant apo E4 are at greater risk of developing AD, while those who inherit two copies are at even greater risk.

According to co-author, Richard Mayeux, Gertrude H. Sergievsky professor of Neurology, Psychiatry and Epidemiology, “The study of the relationship of diet and genes is just beginning—it’s still an area of early development.”

Mayeux said, “Our analyses of these 242 cases showed that the risk of AD is associated with higher total calorie and fat intake, in those individuals with either 1 or 2 copies of the apo E4 variant. In those without apo E4, caloric and fat intake were not associated with AD risk.”

In the study, the role of diet and AD risk in 980 individuals age 65 and older who were enrolled in the Washington Heights-Inwood Columbia Aging Project. Sixty-seven percent of the participants were female; 25 percent were Caucasian, 43 percent were Hispanic and 32 percent were African-American. The mean age of participants was 77.3 years, and 51 percent were women. The mean report of caloric intake was 2200 kcal per day.

The investigators reported 242 cases of AD during the mean observation of four years. “The study of the relationship of diet and genes is just beginning—it’s still an area of early development.”

—Jose A. Luchsinger, researcher at the Taub Institute for Research on Alzheimer’s Disease

Brain, and assistant attending in Medicine at the Columbia Presbyterian Medical Center, cautioned that these early results do not translate into clinical guidance.

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Mayeux said, “We don’t know whether the significant effect on diet risk for apo E4 individuals is an additive or independent effect. More research is needed to fully determine this.”

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NYC’s Decentralized Administration Key to City’s Effective September 11 Response, SIPA Study Shows

By JAMES DIEFST

The decentralization of New York City’s administration was crucial to its response to the attacks on September 11, 2001, according to a case study by researchers at the School of International and Public Affairs (SIPA).

The findings appear in the September issue of Public Administration Review, a journal of the American Society for Public Administration (www.asapnet.org). The study was authored by Steven Cohen, director of SIPA’s Executive Master of Public Administration Program, William Eimeck, director of SIPA’s Center for Executive Education, and Jessica Horan, who received her master’s degree from SIPA in the spring of 2002.

In analyzing the benefits of a decentralized administration during an emergency, the authors noted decisions by the New York City Board of Education, school principals, teachers and city commissioners were made without waiting for clearance from above. They also noted that emergency crews were often asked to prearrange plans, but in other cases came to Ground Zero “out of a sense of duty and responsibility.”

Because the image of a worst-case emergency scenario existed in the minds of many decision makers, they responded to these images with actions that were decisive and clear,” the authors concluded. “In our view, the information-based, complex society has provided a leadership culture that permits and encourages innovation.”

The researchers added that this approach was not without its downside: how the Giuliani administration functioned under normal circumstances. On a day-to-day basis, the administration was a highly centralized structure, but during the crisis created by the events of September 11 attacks, it was “inspired, orderly and creative.”

Among the other findings, the authors concluded that the city’s effective response on September 11 was largely the result of planning put in place long before the attacks—following the 1993 World Trade Center bombing. This included developing back-up systems of communication, which came into play on September 11 when primary means failed emergency response personnel.

“The modern city is a complex, interdependent system,” the authors wrote. “These systems have redundancies, but also great vulnerabilities. Our findings suggest that the fragility of the city’s systems and developed the organization’s capacity for emergency response.”

The authors added that the city’s response to the attacks on September 11 was marked by an “unparalleled effort at inter-agency coordination.” This included daily early-morning coordination meetings, which were crucial to coordination and feedback became routine.

“In this era of email and cell phones, face-to-face communication proved essential,” the researchers wrote.