Obesity, metabolic factors linked to faster cognitive decline

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People who are obese and also have high blood pressure and other risk factors called metabolic abnormalities may experience a faster decline in their cognitive skills over time than others, according to a study published in the August 21, 2012, print issue of *Neurology*, the medical journal of the American Academy of Neurology.

Metabolic abnormality was defined as having two or more of the following risk factors: high blood pressure or taking medication for it; low HDL or "good" cholesterol; high blood sugar or taking diabetes medication; and high triglycerides (a type of fat found in the blood) or taking medication to lower cholesterol.

The study involved 6,401 people with an average age 50 at the start of the study. Information on body mass index (BMI) and the risk factors was gathered at the beginning of the study. The participants took tests on memory and other cognitive skills three times over the next 10 years.

A total of 31 percent of the participants had two or more metabolic abnormalities. Nine percent were obese and 38 percent were overweight. Of the 582 obese people, 350, or 60 percent, met the criteria for metabolic abnormality. The metabolically normal obese individuals also experienced more rapid decline.

Over the 10 years of the study, people who were both obese and metabolically abnormal experienced a 22.5 percent faster decline on their cognitive test scores than those who were of normal weight without

metabolic abnormalities.

"More research is needed to look at the effects of genetic factors and also to take into account how long people have been obese and how long they have had these metabolic risk factors and also to look at cognitive test scores spanning adulthood to give us a better understanding of the link between obesity and cognitive function, such as thinking, reasoning and memory," said study author Archana Singh-Manoux, PhD, of INSERM, the French research institute in Paris and University College London in England.

Singh-Manoux said the study also provides evidence against the concept of "metabolically healthy obesity" that has suggested that obese people without metabolic risk factors do not show negative cardiac and cognitive results compared to obese people with metabolic risk factors.

Provided by American Academy of Neurology