

# Deseret News

## Mid-age belly fat linked to dementia later in life

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FRESNO, Calif. — Going into middle age with a big belly could set the wheels in motion for dementia in later life, according to a new study.

Scientists have known for some time that belly size is associated with an increased risk for diabetes, stroke and heart disease, but this is the first study to show a connection between mid-life abdominal fat and dementia.

"People need to be concerned not only about their weight but where they carry their weight in mid-life," said Rachel Whitmer, a research scientist at the Kaiser Permanente Division of Research in Oakland, Calif., and lead researcher of the study.

"The person who carries weight around the belly is at greater risk than the person carrying it around the hips," she said.

Kaiser researchers studied 6,583 men and women in northern California who had had their belly-fat density measured when they were ages 40 to 45. Some 36 years later, 16 percent had been diagnosed with dementia.

Dementia can be caused by a number of disorders, including Alzheimer's disease, that affect the brain. On average, it affects 13.9 percent of the American population, according to a National Institute of Health study.

The study found the risk for developing dementia was 2.3 times greater for men and women who were overweight and who had a large belly than for those with a normal weight and belly size.

The chance of developing dementia was 3.6 times greater for people who were both obese and had large bellies than people with normal weight and belly sizes.

Even people of normal weight overall, but who had large bellies, were at greater risk — almost two times higher — than for those of normal weight without abdominal fat.

The study was published in Wednesday's online issue of *Neurology*, the medical journal of the American Academy of Neurology.

The study controlled for high cholesterol, high blood pressure, heart disease and diabetes, Whitmer said. "And we still found an independent effect of belly size on dementia."

Researchers measured the distance from the back to the upper abdomen, midway between the top of the pelvis and the bottom of the ribs, to determine belly fat.

The question remains as to how belly fat affects the brain, Whitmer said. But it is known that belly fat — the fat that wraps around organs — is "a lively fat, a very toxic fat, and it secretes a lot of substances," she said.

More research also needs to be done to determine if reducing belly size can lower the risk factor for dementia, Whitmer said. Researchers don't know if the study participants who had large bellies in their 40s lost the fat before developing dementia in their 70s, she said.

But other studies have found a positive effect on high cholesterol and fasting glucose levels with a smaller belly size, Whitmer said.

Where someone carries weight is genetically determined, Whitmer said. But there is good news for people who have big bellies.

Belly fat is easier to lose than other fat, Whitmer said. "You can get rid of it with moderate exercise and diet," she said. "This is a modifiable risk factor for people in mid-life."

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