

## Life Begins at 90 as Nonagenarians Show Sharp Brainpower

By Allison Connolly

When it comes to brain power, 90 may be the new 80.

Those surviving past the age of 90 today are living longer and are mentally sharper than nonagenarians born a decade earlier, Danish researchers reported.

People born in 1915 were almost a third more likely to reach 95 than those born a decade earlier and on average they performed better on mental tests and in daily living tasks, according to a study published today in [The Lancet](#).

The findings are the latest in a small but growing body of evidence that suggest improved nutrition, vaccinations, health care and intellectual stimulation are leading to a better quality of life for the elderly. Among the most intriguing findings of the Danish study is the notion that, should the trend continue, the care needs of very elderly people may be less than now anticipated.

"There's a fear that getting older means many years of living in bad shape with a rather gloomy outlook," [Kaare Christensen](#), the lead study researcher from the University of Southern Denmark in Odense, Denmark, said in an interview. "I'm looking forward to living longer than 90 myself after this study."

The quality of life for the very elderly is a growing concern around the globe. The number of people living to 90 or older more than doubled in the U.S. from 720,000 in 1980 to 1.5 million in 2010 and may swell to 9 million by 2050, according to a 2011 [report](#) from the U.S. Census Bureau and the U.S. National Institute on Aging.

### Mental Agility

In the Danish study, stronger, sharper mental agility among today's 90 year-olds was marked compared with the earlier group was marked. That's significant because improved cognition at very old age goes against expectations there will be a sharp rise in dementia among people over 80, [Marcel Olde Rikkert](#) and Rene Melis of Radboud University Nijmegen Medical Centre in Nijmegen, Netherlands, wrote in a commentary about the study.

"We have to change our image of aging," Rikkert said in a phone interview. "It's not being old and decrepit at 90; it's being old and active."

Using the Danish Civil Register System to identify subjects, researchers surveyed 2,262 people born in Denmark in 1905 who were still living in 1998 and 1,584 Danes born in 1915 who were still alive in 2010, at ages of about 93 and 95, respectively.

### Daily Tasks

Researchers used physical and mental tests as well as interviews to measure mental impairment, depression and ability to perform daily tasks. About 20 percent of the participants weren't able to respond personally due to physical or mental handicaps and were surveyed through a spouse or caretaker.

While the two groups were about the same in terms of physical strength, those in the 1915 group had a better "daily living score," which was based on being able to walk around the house, get upstairs or live alone. Authors suggest the group was also aided by technology such as walking aids, threshold ramps and swivel seats.

"I think it's something we should follow closely because it has a major impact on elder care," Christensen said. Even after adjusting for education levels, the 1915 group performed better on cognitive tests and had twice the rate of perfect scores. Mental tests included naming as many animals as one can in a minute, repeating a list of 12 words, recalling as many as possible 10 minutes later and repeating four digits forward and backward, Christensen said.

### Conclusive Evidence

The Danish study is the most conclusive evidence yet that the elderly may be in better health than ever. A study from the Netherlands published in the journal [Neurology](#) in 2012 showed that dementia in people ages 60 to 90 was lower in 2005 than in a similar group in 1990, though the decline wasn't statistically significant.

In Denmark, which has one of the lowest life expectancies in Western Europe, the chance of living beyond 90 has increased by 30% per decade for people born in 1895, 1905 and 1915, the authors said, citing the [Human Mortality Database](#).

Funding for the study came from the Danish National Research Foundation, the U.S. National Institutes of Health's National Institute on Aging, the Danish Agency for Science, Technology and Innovation and the [Velux Foundation](#).

While the study suggests people are living better after 90, they have to make it to their 10th decade first, Christensen said. Younger elderly people have more illnesses such as obesity and diabetes, he said.