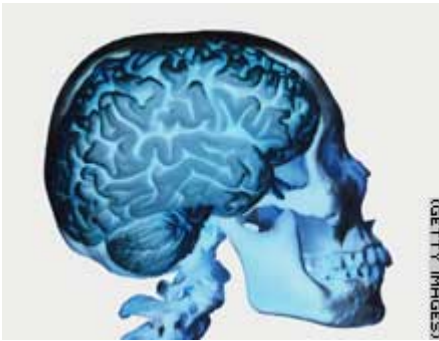




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Life at 140? Longer life spans up for debate



James Canton says a sharp increase in the human life span is one trend that will shape the world in coming decades.

NEW YORK (CNN) -- Imagine a world with no cancer, Alzheimer's disease or diabetes, where people routinely live to be 140 years old.

Although outside conventional medical opinion, that world may be just a couple of decades away, according to James Canton, author of a new book, "The Extreme Future: The Top Trends That Will Reshape the World for the Next 5, 10, and 20 Years."

Canton, who has served as a consultant on future trends for clients including Motorola and the White House

said advances in information technology, biotechnology, neuroscience, and nanotechnology will allow for radical advances in medicine and the treatment of diseases.

"Once medicine becomes boldly proactive, then you're talking about eliminating 70, 80 percent of diseases," Canton said in an interview. "We're just on the edge of this. It's going to happen very shortly."

Canton uses proprietary quantitative and qualitative market research to forecast trends on the future. He currently serves as a senior fellow at Northwestern University's Kellogg School of Management and is an adviser to the National Science Foundation.

Canton believes that the mapping of the human genome will allow doctors to peer into our medical futures, disable disease-causing genes or pinpoint exactly when an organ will fail.

Replacing that organ would be much easier than it is today, he claims, as genetic engineering will allow organs to be grown and harvested, eliminating the need for long waiting lists.

And advances in medications will refresh the brain, warding off ailments like Alzheimer's or other afflictions that have already set in, he said.

"Cancer and diabetes will be managed diseases in a decade," said Canton. Managing those diseases should lead to gradually increasing life spans, he said. Eventually, Canton said, "Birthday parties for people who are 120, 140 will be commonplace."

But there are doubters who say Canton is not presenting an accurate picture of the future.

"I think that's a pretty optimistic assessment," said Michael Smyer, director of the Center for Aging and Work at Boston College. "We're making progress, but ... that progress is not in the next 10 or 15 years."

Anne Newman, a professor of epidemiology and medicine at the University of Pittsburgh, said some genetic manipulation in other animals has led to dramatic increases in life span. But manipulating genes to increase the human life span is not being done, she said. Instead, the emphasis is on treating diseases.

"We feel like we have a revolution going on, but it won't be so extreme," she said. "We've increased the number of people getting old, but we haven't increased the life span of the species. The average [age] has been increasing because more people are being given a chance to get there."

The National Center for Health Statistics, part of the Centers for Disease Control and Prevention, said a man born in 2004 is expected to live 75.2 years, while a woman is expected to live 80.4 years.

The agency stressed these are not projections, but estimates based on current mortality rates.

Canton said the baby boomer generation is the driving force behind advances in medicine. Eyeing the boomer's wealth, companies from across the medical spectrum are pouring money into drugs and technologies of all kinds that will help people live longer lives, Canton said. Whether they will succeed in increasing the human life span appears to be an open question.

"It's quite debatable and fun to argue," said Newman.

Canton believes the human life span will increase and that the ensuing societal changes will be monumental.

"This is the big one," he said. "This makes the Internet seem small."

By Steve Hargreaves
Special to CNN